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CHAPTER 8: INSTITUTIONAL CHALLENGES IN PUBLIC SPENDING:THE CASE OF PRIMARY EDUCATION



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1 Introduction

The provision of public services is one of the most important roles played by the state, and few public services are as important as education. A well-functioning education system is not only an end in itself, as recognised by Sustainable Development Goal 4, but also a means of achieving economic development more generally. Ensuring inclusive, equitable, high-quality education and providing opportunities for lifelong learning is fundamental to generating the skilled labour on which a successful economy depends, as well as to reducing poverty and inequality. Primary education is the foundation on which the education system as a whole is built and has for some time been recognised, both in Bangladesh and internationally, as a key public policy priority.

The provision of primary education is an important institutional issue. It requires effective mechanisms for the recruitment, training, and retention of teachers; the construction and maintenance of schools and other infrastructure; the design and implementation of the curriculum; the monitoring of progress, through inspections and examinations; and the creation of a learning environment. The responsibility for overcoming these institutional challenges lies heavily with the state. An economic rationale is provided by Raihan (2019), who argues that education, as a *merit* good, creates positive externalities when consumed and has spill-over benefits which have a significant effect on social welfare. Externalities and spill-overs imply that markets would fail if left by themselves, and education would thus remain under-consumed. Private market prices for education services could be so high as to prevent individuals from investing in their human capital. In these contexts, governments have a crucial role in allocating resources to education.

The successful allocation of resources involves far more than merely increasing enrolments, which do not in themselves necessarily guarantee learning (Bold and Svensson, 2016). While Bangladesh has been successful in increasing the enrolment rate in primary schools and in reaching gender parity, a growing literature has documented that a large segment of children in Bangladesh learn little and complete their primary education without the expected reading, writing, and arithmetic skills (see World Bank, 2018; Directorate of Primary Education (DPE), 2017; DPE, 2018; and NAPE, 2018). Thus, the remarkable success in enrolment in Bangladesh has meant less progress on quality, and possibly a regress. The education system had to hire more teachers, but could not train them properly and could not pay them satisfactorily, and education infrastructure has remained poor. The point is thus that it was maybe unavoidable that quality today is not at a satisfactory level; this should obviously be the next objective, but there are many obstacles to reaching it. Therefore, rather than focusing on enrolments as an indicator of Bangladesh's educational performance, this chapter provides a detailed investigation of the institutional challenges inherent in the system, which have led to the low-quality result observed.

To this end, the chapter starts with an analysis of the importance of the primary education sector for development in Bangladesh and discusses the trends in major outcome indicators. The chapter explores the challenges related to the coexistence of various actors in the primary education system, the inadequate allocation of resources, the lack of incentives to attract high-quality teachers, the shortage of trained teachers, the low quality of the educational infrastructure, the poor curriculum design, and the flawed examination system.

The chapter further describes the institutional processes and challenges for teacher recruitment, promotion, and transfer in government primary schools in Bangladesh.

While delineating institutional challenges that are specific to the primary education sector, this chapter relates some of these challenges to the public sector in general in Bangladesh. Chapter 4 of this volume, using the survey data of the institutional diagnostic, highlights the poor quality of public services in Bangladesh. Faulty recruitment processes have been found to be one of the main reasons behind the poor quality of public service delivery. While the recruitment and transfer processes of teachers in government primary schools are not fully representative of the processes followed in the Bangladesh Civil Service (BCS), the analysis in this chapter does illuminate more general institutional public sector challenges in Bangladesh. Finally, the chapter recommends relevant measures to overcome the institutional challenges of public spending in primary education and to improve the quality of services.

2 The importance of education (primary education) for development in Bangladesh

Education important for achieving critical development objectives, i.e. enhancing productivity, accelerating economic growth, reducing poverty, reducing fertility, and increasing female empowerment. Efficient investment in education can help increase levels of human capital, and hence represents one of the most effective ways to reduce poverty and increase economic mobility (Bold and Svensson, 2016). As well as playing a key role in terms of ensuring that children acquire basic literacy and numeracy, primary education also creates a strong base for acquiring more knowledge and skills, as it gives access to higher levels of education. Using human capital theory, Psacharopoulos and Patrinos (2004) argued that among the types of education, the returns from primary education are higher, especially in developing countries. Education acts as a catalyst in encouraging the development of modern attitudes and aspirations (Psacharopoulos and Woodhall, 1985). Raihan (2019) highlighted that, as investment in human capital formation is considered a means of improving quality of life and sustaining economic growth, education, together with health, plays a key role in human capital formation. Therefore, maintaining high levels of public spending in these two sectors, as well as ensuring a high quality of services, is very important for achieving the required level of human capital in the economy.

Studies have examined the impact of education on economic growth in Bangladesh. Islam *et al*. (2007), using data for 1976–2003, showed the existence of bi-directional causality between education and economic growth in Bangladesh. A study by Maitra and Mukhopadhyay (2012), with an error correction model, investigated the underlying association between public education spending and economic growth in 12 countries in Asia and the Pacific, including Bangladesh, and revealed a positive association between public education spending and gross domestic product (GDP) growth in Bangladesh. Similarly, Mallick *et al*. (2016) investigated the dynamics of public expenditure on education and economic growth in 14 selected Asian countries, including Bangladesh, by using balanced panel data for 1973–2012. The analysis revealed a positive and statistically significant association between public education expenditure on economic growth in all these countries. The study by Islam (2014), using data for the period 1973–2010, also showed a positive association between public educational expenditure and economic growth in Bangladesh, both in the short and the long term. However, except for Islam *et al*. (2007), it is not clear what causality direction is being captured in these studies.

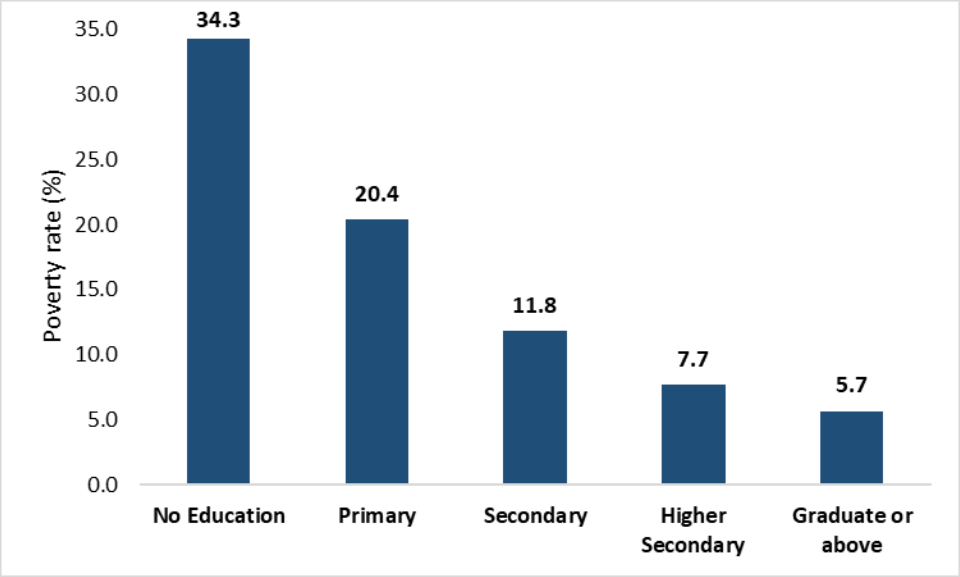
Education contributes to enhanced productivity; examples from Bangladesh confirm this proposition. Fernandes (2006) explored the determinants of total factor productivity for manufacturing firms in Bangladesh and found that, controlling for industry, location, and year fixed effects, total factor productivity improved with the quality of the firm's human capital.[1] Asadullah and Rahman (2009), using a large dataset on rice-producing households from 141 villages in Bangladesh, showed that household education significantly increased productivity in rice production and boosted potential output. The study found that an additional average year of schooling of adults in the household, and the same for the household head, increased rice production by 6.4% and 3.7%, respectively.

[1] Fernandes (2006) measured 'human capital' by the education and experience of the manager, and by using occupation-based as well as education-based measures of workforce skills.

Empirical studies, in the context of Bangladesh, have estimated the return on primary education by reference to 'no education'. Our estimates, using the Labour Force Survey 2016–17 data of the Bangladesh Bureau of Statistics (2018), suggest that an individual with class 1–5 education earns 6.7% more than an individual with no education. Rahman and Al-Hasan (2018), using the Labour Force Survey 2015–16 data, showed that one additional year of schooling increases the earnings of males and females by 7.3% 8.1%, respectively. Sen and Rahman (2016), using the Labour Force Survey 2010 data, showed that the positive impact of primary education on earnings is evident in comparison to no education, and that the average monthly income for individuals with incomplete primary education is estimated to be 10% higher than for individuals with no formal education. The study by Asadullah (2006) estimated the labour market returns to education in Bangladesh using the Household Income and Expenditure Survey data for 1999–2000. The study showed that while an additional year of schooling increased labour market earnings by 7.1%, the overall return on completing primary education compared to no education was 20%. These estimates are consistent with those in Montenegro and Patrinos (2014) for Bangladesh, which, for 2005, were 7% per year of schooling and 24% for primary education, overall. A general conclusion can be drawn from the review of these studies: returns on complete primary education are around 20% or more, and on incomplete primary education are around 10% or slightly less.

Education is also critical for the reduction in poverty in Bangladesh (World Bank, 2018; Majumder and Biswas, 2017; Khudri and Chowdhury, 2013). The higher level of education is associated with a lower level of poverty at the household level (Figure 1). The Household Income and Expenditure Survey 2016 data reveals that, in 2016, the average poverty rate of households if their household heads had no education was higher than the national poverty rate of 24.3%. The poverty rates falls for a household as the household head's level of education rises.

Figure 1: Poverty rate of households by the education status in 2016 (%)



Source: Authors' calculation from the Household Income and Expenditure Survey 2016 database of the Bangladesh Bureau of Statistics.

Education helps women's empowerment in Bangladesh. One of the important contributing factors behind this empowerment is declining fertility. It is argued that educational attainment, especially female education, is a prime determinant of the fertility transition in many developing countries (Mahanta, 2016; Islam and Nesa, 2009; Cochrane, 1979). Bangladesh has seen fertility decline over recent decades, from as high as 6.3 in 1974 to 2.03 by 2018 (World Bank, 2020). Islam and Nesa (2009), with the help of Demographic and Health Survey data, showed that the fertility rate declined considerably with women's education in Bangladesh. Another important factor contributing to women's empowerment is the reduction of the gender wage gap. In Bangladesh, the large participation of girls in education has been instrumental in reducing the gender wage gap. According to Ahmed and McGillivray (2015), between 1999 and 2009, the gap in average wages between men and women in Bangladesh declined by 31%; a key driver of this change was the improvement in female educational qualifications. According to the International Labour Organization (2018), in 2017, the gender wage gap in Bangladesh was only 2.2%, which was the lowest in the world (against the world average of 21.2%). It should be mentioned, however, that the figures given by Ahmed and McGillivray (2015) and the International Labour Organization (2018) concern only 'wage employees', i.e. the formal sector, and therefore refer to, at most, only 15% of the labour force. The employment of young women in the readymade garments sector, paid at the minimum wage, has some effect on lowering this gender wage gap, whereas there might be many fewer young men in formal employment and not necessarily covered by a minimum wage.

In the context of this discussion, despite the fact that Bangladesh has made progress over the past decades in the average years of schooling for the 15+ aged population, the country lags behind many other comparable countries. In 2018, among the 15+ aged population, the average years of schooling in Bangladesh was 6.1, which had increased from as low as 2.8 in 1990. However, in 2018, the average years of schooling for the 15+ aged population for Vietnam, Indonesia, India, Kenya, and Ghana were 8.2, 8.0, 6.5, 6.6, and 7.2, respectively (United National Development Programme, 2019). The distribution of the 15+ aged population by level of schooling from the Barro and Lee database[2] suggests that the main reason for the large change in the average years of schooling is the drop in the number of people with no education. Though recent data is not available, the proportion of people without education fell from 55.6% to 31.9% in Bangladesh between 1990 and 2010. However, Vietnam was well ahead of Bangladesh even in 1990; as in 1990, 13.2% people in Vietnam were without education, and by 2010 the proportion remained at around the same percentage. Indonesia experienced a sharp drop in the proportion of people without education between 1990 and 2010 – from 43.6% to 7.5%. Between 1990 and 2010, the average years of primary schooling among the 15+ aged population in Bangladesh increased from 2.2 to 3.4 years. However, Vietnam started with a higher average, of 3.5, in 1990 and increased it further, to 4, by 2010, while Indonesia experienced a rise, from 3 to 5.1, during the same period. Most countries in East Africa (Kenya, Tanzania, Uganda, and Rwanda) also did better than Bangladesh, which in 2010 was at the same level of 'no education' as Kenya or Uganda were in 1990.

[2] See www.barrolee.com/

All these figures show that Bangladesh suffered from an initial disadvantage in contrast to many comparable countries. But the country has been trying to make up for that gap with huge efforts on school enrolment.

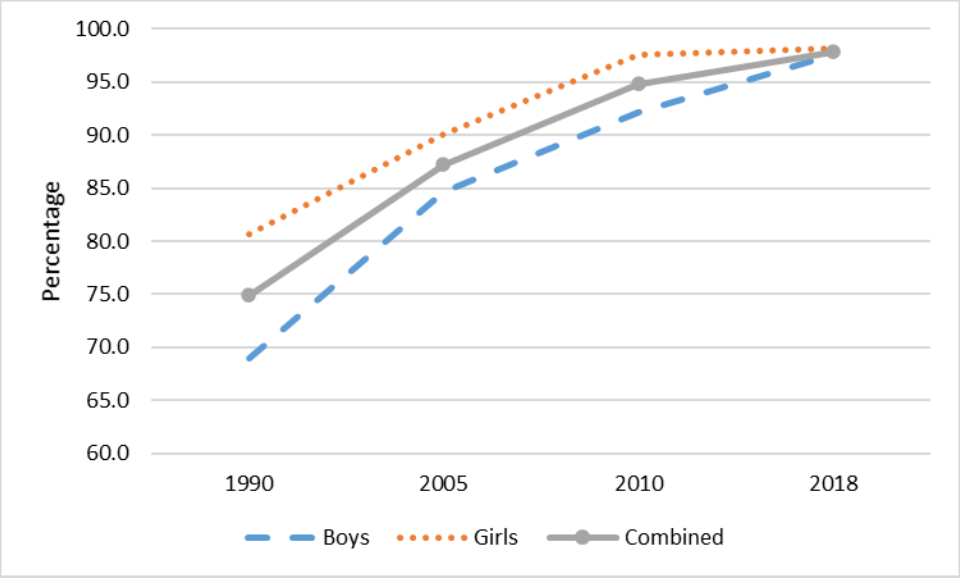
3 The primary education sector in Bangladesh: basic performance

Primary education in Bangladesh is dominated by the public sector (discussed in detail in sub-section 4.1). Therefore, the analysis of the performance of primary education sector provides us with some useful insights about the quality of service delivery in other public sector areas in Bangladesh. It is also true that that a significant advantage of the educational sector is that it is relatively easier to measure, at least for some outcomes.

Bangladesh's population is passing through the 'demographic dividend' phase.[3] The concern is that the country is yet to exploit this. The economic benefit of the demographic dividend is that the population has a higher capacity to save – as the old and the young are less of a burden. Investing these extra savings in human capital formation is a good policy. Raihan (2018) argued that for Bangladesh to make the best use of the demographic dividend, the critical policy areas should include investment in health, education, and skills development. With 9.2% of the population in the 6–10 age group, the investment to be made remains sizeable, however.

Bangladesh saw a large expansion in access to primary education in the 1990s and 2000s. During this period, this expansion was led by non-state providers, and more recently by the Government (Steer *et al*., 2014). In 1990, just over two thirds of its primary-aged children were enrolled in primary school, while today there is near-universal education. In 2018, while the gross enrolment rate in primary education was over 100%, the net enrolment rate was around 98% (Figure 2).

Figure 2: Net enrolment rate in primary education 1990–2018



[3] According to United Nations Population Fund, the demographic dividend is the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15–64) is larger than the non-working-age share of the population (14 and younger, and 65 and older; see www.unfpa.org/demographic-dividend).

Data Source: World Bank, World Development Indicators, and Bangladesh Bureau of Educational Information and Statistics, 2018

The gender difference in primary schooling has been in favour of the girls since 1990 (Figure 2). Between 1990 and 2018, the net enrolment rate for girls in primary schools increased from 80.7% to 98.2%, while for boys the rate increased from 69% to 97.6%. Bangladesh has been a frontrunner in increasing girls' enrolment in primary schools. The well-timed conditional cash transfer programme has played an important role in achieving universal enrolment for girls. There are two cash transfer programmes. One was the girls' secondary education stipend,[4] introduced in 1993, but for secondary school only. The other was the primary education stipend,[5] introduced in the early 2000s but with no gender difference. The advantage of girls over boys in primary schools in the 1990s can be linked to the secondary education girls' stipend. The universal enrolment for girls was in practice achieved 10 years ago, while for boys, it is only today that full enrolment is close to being achieved.

Despite the progress made in the dropout rate in primary education over the past decade, in 2018, this rate was still high in Bangladesh. In 2009, the dropout rate in primary education was 45.1%, which declined to 18.6% in 2018, with boys dropping out slightly more than girls. Along with the dropout rate, the repetition rate has been another concern for primary education in Bangladesh. The repetition rate was 5.4% in 2018, which was higher than the figure for many Asian countries – less than 1% in China, India, and Vietnam in 2017 (World Bank, 2020).

Though Bangladesh has achieved remarkable success in bringing nearly all children into primary school and ensuring gender parity, the quality of education remains a critical concern. The curriculum of its primary education system does not effectively serve the goals of human development. A significant portion of students after completing the primary education do not have the expected skills to read, write, or do basic maths. Though a large numbers of children do successfully pass the Primary Education Certificate (PEC) examination[6] and earn a certificate, 35% of students cannot read Bangla comprehensively even after passing Grade 3 and only 25% of students achieve terminal competencies – a list of skills a student is expected to attain after completing primary education (World Bank, 2018). According to the National Academy for Primary Education (2018), only about 49% of Grade 4 students could properly read sentences from their Bangla textbooks and under 40% of students could read English textbook sentences with proper and understandable pronunciation.

[4] In January 1994, the Bangladesh government launched a nationwide stipend programme for girls in secondary school (Grades 6–10) in all 460 upazilas (subdistricts) of the country with support from the World Bank, the Asian Development Bank, and the Norwegian Agency for Development Cooperation; this programme was known as the Female Stipend Programme. The emphasis of this programme was on closing the gender gap in access to secondary education. See Mahmud (2003) for further details.

[5] Primary Education Stipend Programme started in 2001. Its key objective is to increase educational participation – enrolment, attendance, persistence, and performance – of primary-school-age children from poor families in urban and rural areas. The programme provides a stipend of BDT 100 per month per child to mothers in need of financial support, conditional on their child's school attendance. See DPE (2013) for further details.

[6] The PEC examination, introduced in 2009, is a public examination in Bangladesh to evaluate the performance of class five students. Under the Ministry of Primary and Mass Education (MoPME), the Directorate of Primary Education arranges the year-end examination for fifth graders in public and private schools.

Even the National Student Assessment (NSA) programme reveals that students of primary schools lack skills in Bengali and mathematics.[7] The NSA 2017 results for the Bangla language suggested that 26% of Grade 3 students performed to a level below what was expected in Grade 3. The situation was worse for the Grade 5 students, 89% of whom performed to a level below what was expected in Grade 5. In the case of mathematics, 59% of Grade 3 students performed to a level below what was expected in Grade 3, and 83% of Grade 5 students performed to a level below what was expected in Grade 5.

From this analysis, it is evident that although primary education in Bangladesh has progressed in enrolment and gender parity, performance in terms of reasonable educational achievement norms has remained unsatisfactory. There are many reasons behind the poor quality of the primary education system in Bangladesh, and these are discussed in the next section.

[7] The NSA programme is an initiative of the MoPME. The objectives of this programme are to evaluate achievement in primary education and suggest policies to improve student achievement. The NSA programme assesses the student learning outcomes for the Bangla language and mathematics in Grade 3 and Grade 5 in a nationally representative sample schools selected using a stratified random method. For the assessment, students are drawn from the eight geographic divisions of Bangladesh and seven main types of primary schools (government primary school, kindergarten, ebtedayee madrashah, primary school attached to a high school, Bangladesh Rural Advancement Committee (BRAC) school, Reaching Out of School Children School (ROSC), and newly nationalised primary school) from rural and urban regions.

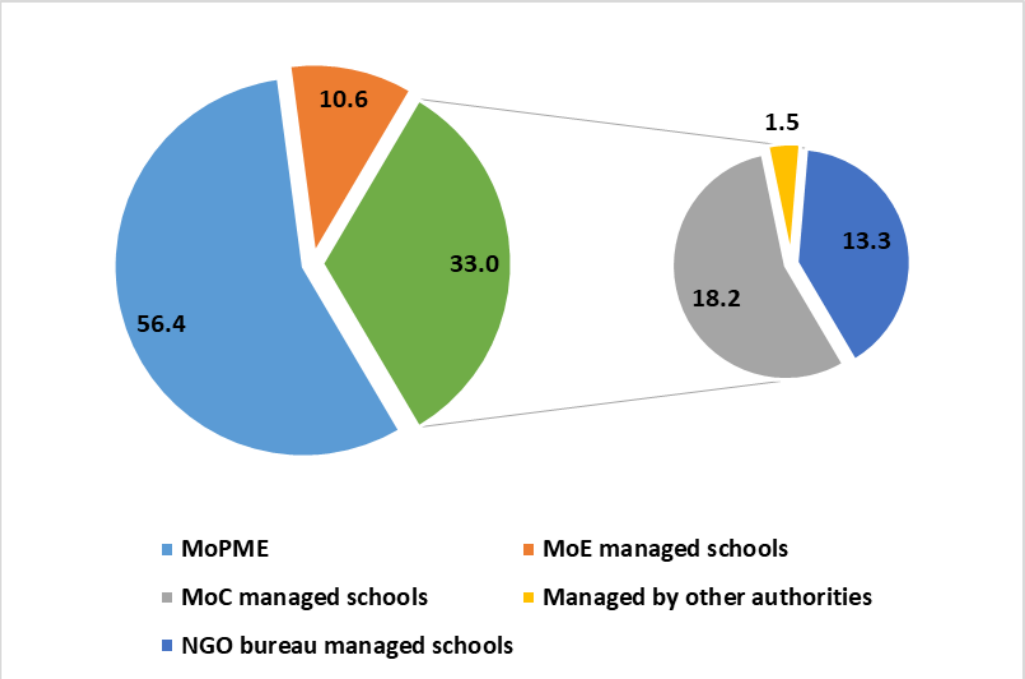
4 Challenges faced by the primary education sector in Bangladesh

A number of institutional challenges that lead to poor service delivery have beset the primary education sector in Bangladesh and contributed to unsatisfactory outcomes. The major challenges can be categorised as: (i) complex coexistence of various actors; (ii) challenges related to resources; (iii) challenges related to teachers and teacher management in government primary schools; and (iv) challenges related to the curriculum and teacher training.

4.1 Complex coexistence of various actors

Bangladesh has one of the largest primary education systems in the world. There are more than 134,000 primary schools; these are run by public, private, non-governmental organisations, and religious providers, and are overseen by a complex bureaucracy involving multiple ministries (DPE, 2018). The primary schools in Bangladesh are managed by the MoPME and the DPE, the Ministry of Commerce (MoC), non-governmental organisations (NGO), the Ministry of Education (MoE), and other authorities (Figure 3).

Figure 3: Share of institutes by type of management authority in 2018



Data source: Education Statistics, Bangladesh Bureau of Educational Information and Statistics

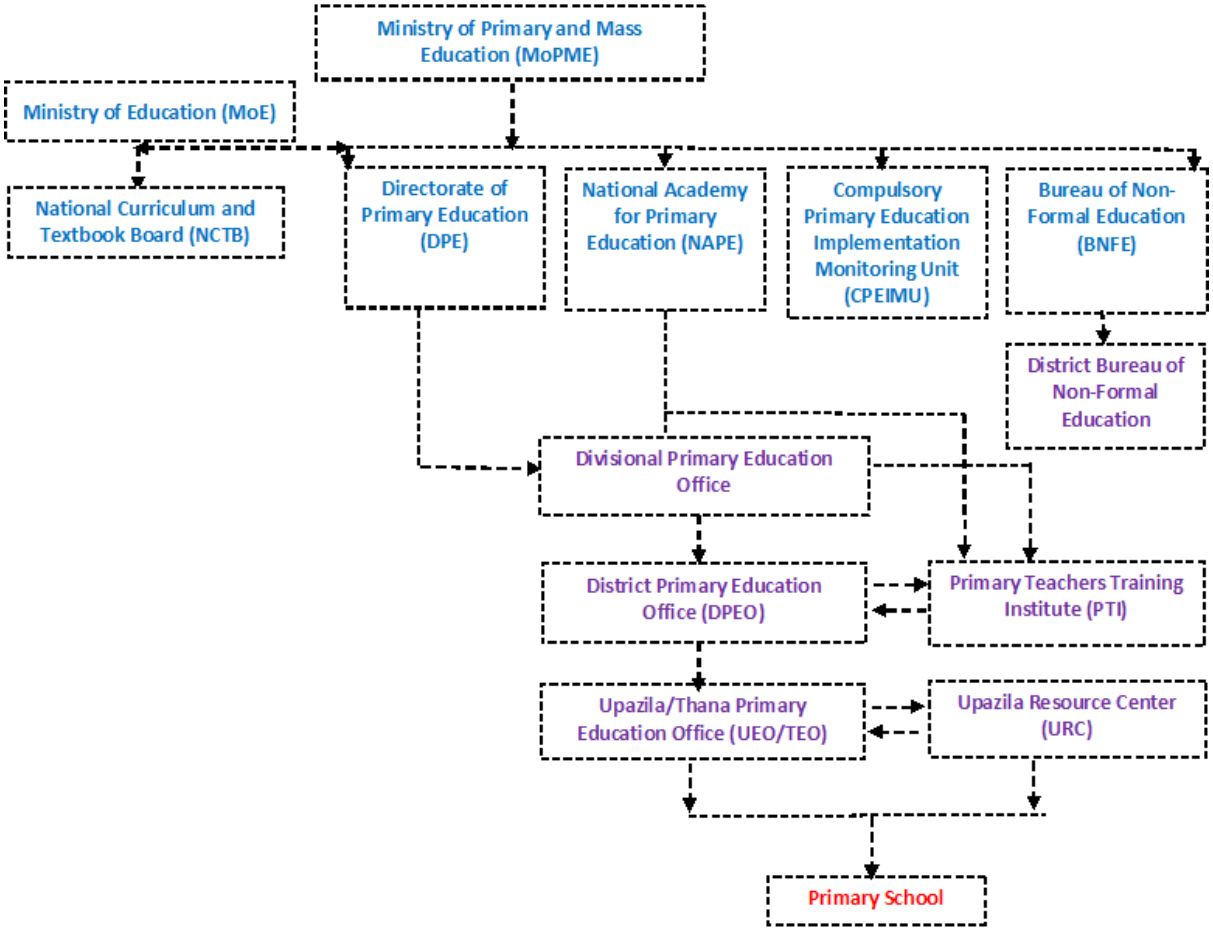
With more than a 56% share in the number of primary schools, MoPME/DPE is the dominant actor in the primary education system in Bangladesh. MoPME/DPE manages eight types of schools, of which Government Primary School (GPS) and Newly Nationalised Primary School (NNPS) are considered as the government primary schools. The Ministry of Education is responsible for three types of formal primary schools and madrasahs. The Ministry of Commerce administers two types of schools and the NGO Bureau oversees two

types of school. Other authorities manage non-aligned institutes (DPE, 2018). A description of these schools is provided in Annex A.

One explanation for the existence of multiple actors in the primary education system in Bangladesh might be that Bangladesh aimed to achieve universal education, reduce dropouts, improve the completion rates, and provide high-quality education in primary schools, but that attaining these targets was a challenge. Shouldering the whole responsibility alone was a difficult task for the Government. The multiplicity of primary schools helped in promoting basic formal and non-formal primary education in the country. It helped to bring more children into primary schools. For example, the engagement of NGOs in providing primary education helped the Government reach the marginalised population of the country.

In this chapter, we focus only on the government primary schools (GPS and NNPS), run by the MoPME/DPE, which constitute more than 50% of the primary schools. The institutional structure of primary education in Bangladesh, operated by the MoPME/DPE, accommodates three major actors – central, regional, and local (Figure 4).

Figure 4: The complex coexistence of various actors in government primary education in Bangladesh



Note: The figure shows the **central**, **regional**, and **local** actors in the MoPME.

Source: MoPME and DPE.

Teachers' recruitment, salary, and contributions to General Provident Fund[8] and pension are conducted by the central authority. However, transfer, promotion, stipends to pupils, school building construction, reparation and reconstruction, school electricity bills or land development tax, the PEC examination, teacher training, and primary school visits are transferred from MoPME to primary schools through regional actors, i.e. Upazila (or Thana) Primary Education Office (UEO).[9] Nevertheless, the presence of many actors in the government primary education system in Bangladesh makes the management of the system difficult. For instance, the transfer of teachers in primary schools involves many steps and multiple actors. This makes the whole transfer process complicated and time-consuming. Further, the involvement of many actors reduces transparency and creates opportunities for rent-seeking activities, e.g. bribes for transferring teachers (see the discussion in sub-section 4.3.3). The overlapping responsibilities may contribute to the poor-quality services and the failure to attain the expected outcomes in primary education.

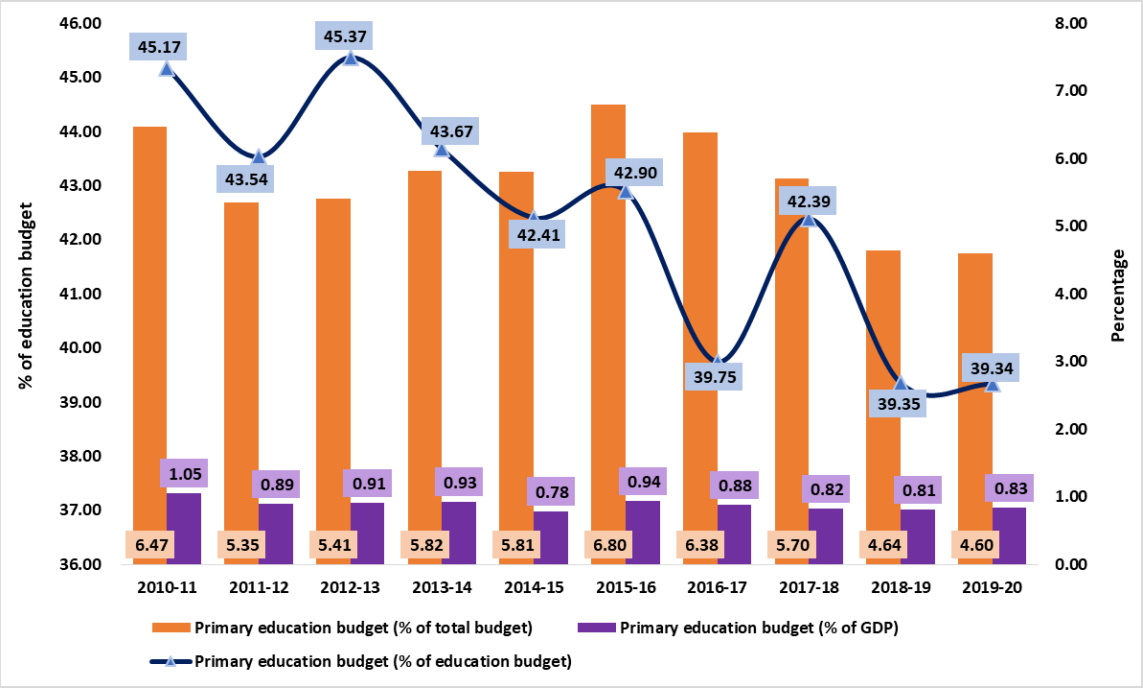
4.2 Challenges related to resources

4.2.1 Persistent low public expenditure on primary education

Low public expenditure on primary education in Bangladesh is a big concern. The primary education budget as a percentage of GDP has been constantly low in Bangladesh (Figure 5). In 2010–11, the share of the allocation for primary education in GDP was only 1.05%; the share declined after that, and by 2018–19, stood at 0.81%. Relative to GDP, public expenditure on primary education in Bangladesh is one of the lowest in the world. The most recent data from the World Bank's World Development Indicator shows that the average ratios of public expenditure on primary education for the South Asia, East Asia, and Sub-Saharan African regions are 1.3%, 1.2%, and 1.6%, respectively. Except for Pakistan and Sri Lanka, all other South Asian countries spend a higher percentage of their public funds on primary education than Bangladesh. Even many Sub-Saharan countries, e.g. Ethiopia, Chad, and Mali, despite having a lower per capita GDP than Bangladesh, spend a higher share of their GDP on primary education than Bangladesh.

[8] The General Provident Fund is a fund that is available only for government employees. It allows all the government employees to contribute a certain percentage of their salary to the fund; the total amount that is accumulated throughout the employment term is paid to the employee at the time of retirement.
[9] See www.dpe.gov.bd/site/page/549915d9-b2f5-49c4-8674-e4c94aa220ff/Introduction-of-DPE

Figure 5: Primary education budget for fiscal years 2010/11–2019/20



Note: 2010/11–2017/18 = Actual budget; 2018/19 = Revised budget; 2019/20 = Proposed budget

Data source: Finance Division, Ministry of Finance, Bangladesh and Bangladesh Bureau of Statistics, Planning Commission, Bangladesh.

Similarly, public expenditure per primary student as a percentage of GDP per capita in Bangladesh is also one of the lowest in the world. Average government spending per primary student, as per the most recent data from the World Bank's World Development Indicator, was 7.5% of GDP per capita for Bangladesh. The averages for South Asia, East Asia, and Sub-Saharan African regions were 10.5%, 13.8%, and 10.6%, respectively. Here too, many poorer Sub-Saharan African countries outperform Bangladesh. As spending on health is also low in Bangladesh, it is the investment in human capital in Bangladesh that is very much below standard.[10]

4.2.2 Insufficient financial incentives to attract high-quality teachers

A lack of resources leads to low financial incentives, and the primary education sector in Bangladesh fails to attract competent, good-quality teachers. Low salaries and the absence of a career path development discourage young and qualified teachers from continuing their career in the primary education sector. Relative to GDP per capita, teachers in Bangladesh are much less paid than in most other developing countries, and much less even than in Pakistan. Primary school teachers are relatively better paid in Africa – the difference is significant here. Figure 6 presents such a comparative picture.

[10] In 2017, according to the data from the World Bank's World Development Indicator, public health expenditure was only 0.4% of GDP for Bangladesh, whereas the averages for South Asia, East Asia, and Sub-Saharan African regions were 0.9%, 4.5%, and 1.9%, respectively. Here too, Bangladesh lags behind many poorer Sub-Saharan African countries.

It is, however, somewhat surprising to observe from Figure 6 that developed countries pay their teachers less, relative to GDP per capita, than developing countries, even compared to the poorest (Ethiopia). This is not true in absolute terms, of course, and can be explained as follows. In terms of education, teachers in advanced countries do not rank very high – typically, they have the equivalent of two to three years of college. The opposite is true in poor countries, where teachers are relatively high up the education hierarchy and where so many people have no education. Thus, finding Bangladesh between the USA, France, Norway, and Austria is really an oddity.

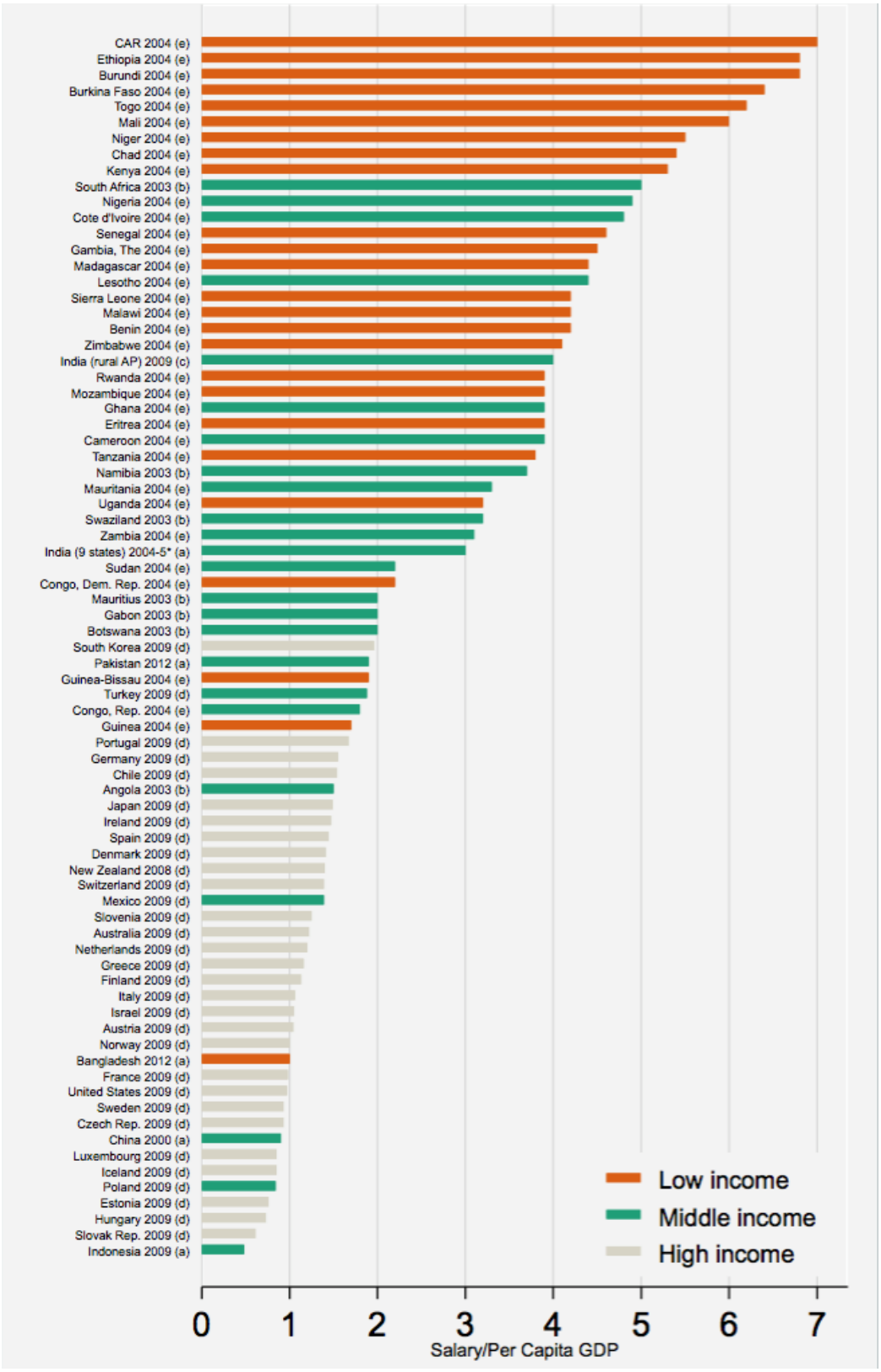
Failure to keep young and qualified teachers in the primary education sector is considered an important challenge in Bangladesh. Historically, the basic monthly salaries for both an assistant teacher and a headmaster were low.[11] However, in February 2020, a notice was issued by the MoPME about raising the salaries of government primary school teachers across the country. According to the new pay scale, the monthly basic salary for an assistant teacher will be BDT 11,000 (roughly equal to GDP per capita, as reported in Figure 6), though no changes were made to the pay grades of the headmasters.[12] These salaries are equivalent to salaries in jobs such as junior accountants, client officers in bank, deputy shop managers, store department managers, and marketing assistants – and these jobs attract barely competent and qualified youths.[13] The fact that a BCS officer gets a basic salary of BDT 22,000 per month, which is twice the salary of a teacher in the government primary schools, helps to explain why qualified and talented people refrain from joining the primary education system in Bangladesh.

[11] See, e.g., Haq and Islam (2005), Chaudhury *et al*. (2004). Also see www.dhakatribune.com/uncategorized/2013/10/04/low-salary-for-teachers-affecting-primary-education

[12] The government elevated the jobs of primary school assistant teachers to Grade 13 on the national payroll. Teachers with training got a starting salary of BDT 10,200 under Grade 14 as their monthly basic pay, while the amount was BDT 9,700 for those without training under Grade 15. Under Grade 13, their basic pay is now BDT 11,000. See https://bdnews24.com/bangladesh/2020/02/09/govt-raises-salary-of-primary-school-assistant-teachers

[13] See www.paylab.com/bd/salaryinfo

Figure 6: Earnings of primary school teachers in different countries (teacher salaries as a multiple of per capita GDP)



Source: www.cgdev.org/sites/default/files/sandefur-teacher-salaries-figure1.png

It is, however, important to note that the minimum qualifications to apply for the jobs of assistant teacher or headmaster in a government primary school and those of BCS officer have some differences. Anyone with Bachelor's degree (either a three-year or four-year degree)[14] and minimum second class or equal Cumulative Grade Points Average (CGPA)[15] from any recognised university[16] or any equivalent degree is eligible to apply to become an assistant teacher or headmaster in a government primary school. In contrast, to sit for the BCS exam, one needs to have completed at least a Bachelor's Honours degree (a four-year degree) from any recognised university and cannot have more than one third class equivalent final grade in the undergraduate and graduate degrees. The BCS exam is attended by over 0.2 million candidates every year and only a small fraction of the applicants having a better degree from a reputed university with better skill and knowledge (demonstrated through the selection process) are finally selected.

Looking at the diversity of primary schools (as discussed in sub-section 4.1), it is important to mention that teachers in the non-private, non-government primary schools are paid even less than the teachers in the government primary schools and their jobs are not as secure.[17] There is a growing demand for the nationalisation of all non-government primary schools so that teachers in those schools also get the benefits of government primary schools.[18] These teachers demand permanent jobs and enlistment in the official Monthly Pay Order (MPO) scheme. The MPO is a pay system for teachers in state-controlled public schools and government-approved institutions. In non-MPO educational institutes, teachers and employees depend on student tuition fees and many of the non-government school teachers do not receive regular salaries; therefore, the quality of education remains poor.[19]

However, there are a few private schools in Dhaka and other metropolitan cities where admission fees, tuition fees, exam fees, and many other regular and irregular fees are so exorbitant that poor families cannot afford to send their children there. The quality of education in these schools is much better than that of most of the government and non-government primary schools. Teachers in these schools are better trained and qualified and better paid (Uddin, 2017).

Teachers in the NGO-run schools are paid much less than teachers in the government primary schools. However, the selection process of teachers in the NGO-run schools is very different from that in government or non-government primary schools. In the BRAC Primary Schools (BPSs), one of the important criteria for selecting a new BPS site is the presence of at least one adult, preferably a woman, who lives within the community, has completed at

[14] A three-year Bachelor's degree refers to Bachelor's pass course and a four-year degree refers to Bachelor's Honours course.
[15] Second class refers to obtaining marks in the range of 45–59%, and the equal CGPA refers to obtaining a grade point equal to or below 2.75 but above 2 on a 0–4 scale. CGPA is an educational grading system which is used in universities to measure the overall academic performance of a student.
[16] Here 'recognised university' means certified by the University Grants Commission of Bangladesh.
[17] Bangladesh has non-government private schools and government-funded private schools. Non-government private schools include schools run by registered non-government primary schools, unregistered non-governmental primary schools, non-governmental organisations, community schools, and Qaumi ebtedayee madrasahs. Government-funded private schools include Aliya ebtedayee madrasahs, schools under the Reaching Out of School Children project, and Shishu Kallyan Trust primary schools (World Bank, 2016). Teachers in the government-funded private schools and registered non-government primary schools, in general, require a similar academic qualification for recruitment as in the case of government primary schools.
[18] For the growing demand for nationalisation of nongovernment primary schools, see www.thedailystar.net/backpage/nationalisation-demand-pvt-primary-teachers-hunger-strike-7-days-1529107.
[19] See www.wsws.org/en/articles/2019/08/05/bang-a05.html

least 10 years of education, is willing and able to teach on a part-time basis, accepts wages much lower than those paid to GPS teachers, and agrees to thoroughly follow the BPS system (see USAID, 2006).[20]

Most of the teachers who continue their careers in the government primary schools are graduates from sub-standard educational institutions, typically from the affiliated colleges of the National University of Bangladesh (NUB), with a very average record of academic achievement. Studies (BIDS, 2019; World Bank, 2019) found that the quality of the graduates of NUB are not up to the mark and, therefore, a good number of graduates from there are deprived of decent jobs and also face the risk of unemployment. Highlighting employers' views, the BIDS (2019) study mentioned that the NUB graduates lagged far behind their counterparts from other public universities in competence and quality as poor educational quality and lack of practical communication skills were prevalent among NUB graduates. The BIDS study also found that absenteeism among teachers in the NUB-affiliated colleges and student politics hamper academic environment and impose a negative impact on their studies. According to the World Bank (2019), around 2 million students are enrolled in over 2,000 colleges affiliated with the NUB, which is about nine times that of the 34 public universities combined and seven times that of 95 private universities. NUB graduates account for 68% of the total students pursuing higher education in Bangladesh. Given the poor performances of the NUB graduates, the World Bank (2019) study suggested reviewing the system of affiliation of colleges to create a higher education system that is more job market-responsive and addresses the need for multi-tier certification of tertiary education entities.[21]

Many government primary school teachers have no subject or pedagogical training, or are demotivated and busy with private income activities (World Bank, 2013; Hossain *et al*., 2019). Many teachers leave their job within the first two years, mainly because of working conditions or low pay (Asian Development Bank, 2017). Focus Group Discussions (FGD) with a group of government primary school teachers also confirms that young and good-quality teachers are de-motivated and not interested in continuing teaching in the government primary schools; for many of them, it a transitional job. A DPE (2017) report showed that a good number of posts in schools always remain vacant as young teachers leave frequently. In 2017, 8,564 government primary schools were facing acute teacher shortages as 79 of them were running with only one teacher, 721 with only two teachers, and 7,764 with just three teachers (DPE, 2017). This has a severe impact on the quality of education in the primary schools. Therefore, a large number of people remain teaching in the primary schools who are not qualified enough or not interested in teaching.

[20] However, the teachers in the NGO-run schools with lower salary levels are observed to be performing better (see Alam, 2000; Asadullah, 2016).

[21] The World Bank (2019) study argued that while it is undoubtedly impressive to see the affiliated colleges provide higher education to a large number of students from the lower socio-economic strata, given the poor graduate employability and low satisfaction over skills acquisition, policymakers might need to take a close look at a range of system features and question some of the basic premises. The study posed a number of questions concerning whether it would still make sense to affiliate the colleges with varying degree of capacity under a single affiliation rule; whether it would be sustainable and reasonable in the long run to continue to affiliate over 2,000 colleges to a single university; or it would make sense to give a greater share of academic autonomy to the affiliated colleges. They study argued that fundamental questions like these would need to be explored to see how the affiliated college system can be reshaped in the mid to long term towards a more flexible, market-responsive higher education system.

The preceding observations suggest that a rise in teacher wages would attract better qualified candidates. If private employers are assumed to be able to infer from observable characteristics, including degrees and universities where they were obtained, the likely productivity of graduates, then candidates for teaching jobs are those that are judged to be at a lower productivity level by employers. They would even probably be hired at a wage below – or not above – the teachers' wage if they were to stay in the private sector. If the teachers' wage were raised, then more higher-level graduates would be candidates than it is the case today – the issue of training them as teachers remaining open, however.

It might appear that the first discrimination among people takes place in the choice of admission to a good university or the sub-standard one. However, as illustrated by the World Bank (2019) study, sub-standard colleges under the NUB enrol a large number of students from the lower socio-economic strata; therefore, the options for choosing better colleges are limited for these students.

Moreover, career progression opportunities are very limited in the primary education sector. The primary school has two types of post – assistant teacher and headmaster. To get promoted to a headmaster's position from that of an assistant teacher, one requires to have an honours degree (a four-year Bachelor degree), at least seven years of work experience as an assistant teacher, and a Diploma in Education (DPEd) or a Bachelor's in Education (BEd) degree. However, since there is no other post between assistant teacher and headmaster, many never get promoted in their entire career, and retire as assistant teachers. During the FGD, some of the participants complained that they had not been promoted to a headmaster's position although they were eligible for this promotion. To solve this problem, the Government is considering creating the position of assistant headmaster.[22] But there has not been any progress on this front yet.

Although the salary and career path do not attract high-quality teachers, still a vast number of people apply for the jobs in the government primary schools. In 2018, more than 2.4 million candidates took part in the examination for 14,096 posts, which means 170 candidates for one job. There are various reasons behind this scenario. As the economy in recent years has been going through a phase of slow job creation, there is a very high demand for government jobs. Also, these jobs are considered prestigious and secure in society. Furthermore, apart from the monthly salary, there are other incentives: teachers can earn from giving private tuition to students or having a second job. Therefore, the scarcity of jobs and the socio-economic factors mentioned above lead to a huge number of applicants for the jobs in the primary schools.

4.2.3 Persistent poor quality of education-related infrastructure

Inadequate budget allocation and a low share of capital budget in the education budget over a long and sustained period has resulted in the poor quality of infrastructure in the primary education sector in Bangladesh. Despite the fact that each year there are thousands of requests for schools to be repaired, many of these requests are ignored due to the lack of

[22] See www.newagebd.net/article/95665/govt-to-promote-65000-pry-teachers-to-asst-head-teachers

funds. Moreover, a huge chunk of the allocated funds is wasted because of the lack of transparency.[23]

Another significant challenge is the high level of student–teacher ratio. There are many primary schools where the student–teacher ratio is extremely high, which creates huge challenges for teachers in terms of giving students enough attention and guidance. According to the Primary School Quality Level 14 standard, under the Third Primary Education Development Programme, there should be maximum of 46 students per teacher in primary schools. However, this ratio is still much higher than the international standard of 30 students per teacher. In 2016, 72.3% of the GPS and 50.3% of the Newly Nationalized Primary Schools (NNPS) met the directive of 46 students per teacher, and all the remaining schools had much higher number of students per teacher (DPE, 2017).

Furthermore, the paucity of classrooms, libraries, and playgrounds is responsible for poor-quality education in primary schools. Another related issue pointed out during the FGD is that the majority of schools do not have an adequate security system or personnel, and this is one of the critical reasons for the rise in the non-attendance of students (especially girl students) in primary schools. As mentioned earlier, according to the most recent data, nearly one fifth of students drop out from primary education; a report by UNICEF[24] pointed out that lack of safety and the high prevalence of sexual harassment and abuse in public places contributed to the dropout rate among girls from schools in Bangladesh. The same UNICEF report highlighted that schools did not have functional water and sanitation facilities responsive to gender or disability, or accommodating menstrual hygiene, which contributes significantly to the performance and attendance of girls.

The poor infrastructural aspect of the primary schools in Bangladesh can be demonstrated by looking at the average class size (pupils per class). As per the latest data, the average class size in primary school in Bangladesh is 60,[25] whereas the average for Organisation for Economic Co-operation and Development countries is 22, and the corresponding figures for China and Indonesia are 38 and 28, respectively.[26] An Asian Development Bank (2017) study highlighted that many primary school teachers in Bangladesh do not get appropriate classrooms to teach their subjects (e.g., science classrooms). Teachers sometimes do not even have their own desks to store materials. Classroom facilities are often inadequate to meet students' needs.[27]

[23] See www.thedailystar.net/opinion/where-our-education-system-has-failed-1525951
[24] See www.unicef.org/bangladesh/en/more-opportunities-early-learning/quality-continuity-primary-education
[25] See Asian Development Bank (2017).
[26] See www.oecd-ilibrary.org/docserver/eag_highlights-2012-25-en.pdf?expires=1588764472&id=id&accname=guest&checksum=FD66583211AFF9E3848F4B4A96B64AD7
[27] This poor infrastructural aspect of the primary schools was aptly delineated by a special feature in a national daily – *The Daily Sun* (see www.daily-sun.com/magazine/details/ 282920/Poor-Condition-Of-The--Schools-For-The--Poor/2018-01-19). The lack of a sufficient number of classrooms, hygienic toilets, and drinking water facilities are some of the problems in government primary schools in Bangladesh. Usually, the classroom environment in government primary schools is not suitable for the perfect development of young children. Teachers often have to take several classes using a single room at the same time. Most of the classrooms remain dark and have damp walls that smell. Plaster from the walls and the ceiling frequently falls on the students and the children studying there feel scared due to a weak, cracked ceiling. Parents from affluent families often feel ashamed to send their child to government primary schools as these schools are considered the schools of the poor people, which encourages the sense of discrimination among the children from different economic classes. In contrast, though poor people are obliged to send their children to these schools, they feel insecure about this.

4.3 Teacher management in government primary schools

4.3.1 Teacher recruitment and related corruption

Recruitment

Of the total number of government primary school teachers, 89% are assistant teachers and 11% are headmasters. Successful candidates are appointed to the vacant posts as per the guidelines issued by MoPME/DPE. It turns out that 60% of the vacant posts are allocated to female candidates, 20% are kept for dependents,[28] and 20% are given to male candidates.

There are distinct and lengthy procedures to recruit assistant teachers and headmasters. In government primary schools, the recruitment of assistant teachers involves four steps – a recruitment circular and application screening, question preparation and a written exam, a viva voce, and final selection.[29] As mentioned earlier, candidates with a Bachelor's degree and minimum second class or equal CGPA from any recognised university (certified by the University Grant Commission) or any equivalent degree are eligible to apply to become assistant teachers in a government primary schools. The candidates, however, do not need to have any teaching degree for the recruitment. Headmasters, in contrast, are appointed either through promotion or direct recruitment. Around 65% of the new headmasters come from the promotion of in-service assistant teachers by MoPME/DPE, whereas 35% are recruited directly by the Public Service Commission, representing non-cadres of the BCS.[30]

The teacher recruitment process in government primary schools provides some insights into the recruitment process in other government sectors. The recruitment process for an assistant teachers in a government primary school comprises a written test followed by a viva voce. Every other public sector, including the BCS, the public commercial banks, the central bank, the autonomous government organisations, etc., follows more or less the same procedure.[31] However, these are jobs at a higher level of salary and qualification, and thus attract a different group of people.

Corruption

As mentioned earlier, the scarcity of jobs and other socio-economic factors (a government job is considered a prestigious and secure job and there is scope for earning extra through private tuition) lead to a large number of applicants for each post. This paves the way for

[28] If children of teachers apply for an assistant teacher position and pass the written test, they will be recruited.
[29] See Annex B for details.
[30] There is a gap between promoted headmasters and directly recruited headmasters. To get promoted to headmaster from assistant teacher, one has to have an Honour's degree, at least seven years of work experience as an assistant teacher and DPEd or BEd degree. On the other hand, directly recruited headmasters need to have an Honour's degree and be 21–30 years old.
[31] For instance, the Bangladesh Public Service Commission arranges a three-stage recruitment examination to select suitable candidates for BCS cadres. The shortlisted applicants sit a 200-mark multiple choice question (MCQ) preliminary test. The candidates who pass the MCQ test are asked to sit the written test. Finally, to determine the suitability of the candidates who pass the written test, the BCS commission constitutes a board of oral examiners as per the provisions of the BCS examination rules. Based on the marks from written test and the oral test, successful candidates are selected for the announced BCS cadre posts (Bangladesh Public Service Commission, 2019). See www.bpsc.gov.bd/site/page/4bc95017-18d6-412b-8c4f-76d3e1599d8e/%E0%A6%AC%E0%A6%BF%E0%A6%B8%E0%A6%BF%E0%A6%8F%E0%A6%B8-%E0%A6%AA%E0%A6%B0%E0%A7%80%E0%A6%95%E0%A7%8D%E0%A6%B7%E0%A6%BE

malpractice: corruption appears in diverse forms, such as question-leaking, bribery, nepotism, favouritism, lobbying, and political influence.[32]

Over the past few years, in the government primary teacher recruitment process, the most discernible form of corruption has been the leakage of questions on the written test. The occurrence of question-leaking has achieved a new dimension with the advent of the advanced technology and the government has not been successful in stopping this prejudicial practice.[33]

Another mode of corruption is bribery. The prevalence of bribery is witnessed during and after the written exam. The candidates are entangled with bribery or are deprived of their rightful employment due to their refusal to give bribes. During the FGD, the participants mentioned that there is corruption and bribery in the recruitment process but that the people who benefit usually do not discuss the details. Corrupt circles run the business by contacting all the viva examinees and demanding a bribe, which they return (to some extent) to those who fail to get through the viva.

Nepotism in the recruitment of teachers is also prevalent. According to the FGD participants, sometimes knowing someone influential helps in securing a post. Therefore, nepotism, favouritism, lobbying, and political influence play an important part in the recruitment process.

As in the primary education sector, corruption in recruitment and transfer in other public sectors is extensively visible. For example, the public health sector in Bangladesh faces numerous corrupt practices, such as bribery and political influence in recruitment, transfers and promotions of healthcare professionals (McDevitt, 2015). In 2019, after a long inquiry, the Anti-Corruption Commission of Bangladesh identified 11 areas of corruption in health sector; these included recruitment, promotion, transfer, and posting.[34] Also, Paul (2017) observed that in Bangladesh, quotas[35] and the viva voce are the two main barriers to fair recruitment in the public services. The provision of giving too much importance to the viva voce breeds nepotism, favouritism, and bribery, and ultimately fuels corruption.

[32] See Annex C for a schematic illustration of the institutional challenges faced in the recruitment of assistant teachers in government primary schools.
[33] The incidence of question-leaking is observed at different stages, such as the preparation of the question papers, printing the questions, and delivering the question sets to test centres. There is evidence that the questions are leaking through coaching centres, teachers, police, politicians, government employees, guardians, etc. During the FGD, the participants have also admitted that the corruption related to question leaking happens in various forms; for instance, supplying questions prior the written exam and sitting with a predetermined person who is appearing in the exam in order to help the examinee by showing answers.
[34] See www.dhakatribune.com/bangladesh/nation/2019/01/31/acc-finds-11-areas-of-corruption-in-health-sector
[35] The quota system was introduced through an executive order in 1972 and has been amended several times since. Under the quota system in the government jobs recruitment process in Bangladesh, 56% of government job entry positions were reserved for specific categories: 30% for the children/grandchildren of 1971 freedom fighters, 10% for women, 10% for districts based on population, 5% for ethnic minorities, and 1% for people with disabilities. As a result, only 44% of the job candidates were able to secure positions on the basis of merit, causing discontent among a large section of general students who held the view that they were being deprived, despite scoring higher than candidates who fell under any quota. During April and August 2018, protests against the quota system erupted at various Bangladeshi universities. Finally, the government, on 4 October 2018, officially issued a circular abolishing the quota system for class I and class II jobs in the civil service. See www.thedailystar.net/country/quota-system-in-bangaldesh-scrapped-officially-1642534

4.3.2 Complex procedures for teacher promotion

The existing teacher promotion structure in government primary schools is complex. It promotes discrimination and generates frustration among the teachers. Since only 65% of the vacant headmaster posts are filled by promoted teachers, many assistant teachers never have the opportunity to be promoted to headmaster. Besides, there are many examples where assistant teachers are promoted to headmaster after serving for 25–30 years. Furthermore, when teachers are promoted through departmental exams the younger cohorts are more successful as they are more acquainted with the new syllabus. Therefore, there is no career progress for the majority of the teachers. Also, the promotion to Upazila Education Officer (UEO)[36] from headmaster has been stopped since 1996, and UEOs have been recruited from outside. During the FGD, the participants stated that the promotion procedures are so complex in this sector that it is almost impossible for a headmaster to ever get promoted to assistant district or thana teaching officer through the normal process. There are cases of bribery, nepotism, favouritism, lobbying, and political influence in the promotion of teachers and headmasters.

4.3.3 Teacher transfers and related corruption

The transfer process of teachers is complicated and involves many intermediate steps.[37] Under the existing system, teachers in primary schools can be transferred during January–March of each year. Given the availability of vacant posts, if a teacher wants to be transferred from one school to another within the same Upazila, the UEO is in charge of that. The District Education Officer does the transfer if it is in the same district. The transfer between districts within a division is done by the Divisional Deputy Director. In addition, the DPE transfers teachers from one division to another and from municipal to metropolitan areas.

This complex transfer process creates rent-seeking opportunities. Bribes are exchanged in majority transfers in metropolitan areas, which disrupts the recruitment rules. In Dhaka, the empty posts are filled via the transfer process instead of via the recruitment process. People want to provide their children with a better education and to help them lead a better life. Therefore, people are keen to be transferred to Dhaka and that is why, in some cases, they are even ready to pay bribes in order to get transferred. The participants in FGD complained that, on average, BDT 0.7 million (around US$ 8,000) needs to be given as a bribe for each transfer. In this process, teachers need to pay at every step, starting from the UEO to the office of the deputy director. Otherwise, the vacancy approval file does not move. Moreover, a candidate may have his or her application file lost if he or she refuses to pay a bribe.

Nepotism, favouritism, lobbying, and political influence are prevalent in the teachers' transfer process. According to MoPME/DPE, in 2019, the last date of transfer of assistant teachers of the government primary schools was March 31. About 20,000 applications were submitted for the transfer, of which around 12,500 applications were submitted for transfer to Dhaka.

[36] Each UEO is in charge of administration and management of education at the upazila level. The UEO with support from an assistant upazila education officer performs overall education management of the upazila. The main responsibilities of a UEO include monitoring, supervising, and reporting on education; performing administrative duties; disbursing the government funds as per government rules; implementing the programmes undertaken by government and development partners; and executing the government orders.
[37] The transfer procedure is presented in a schematic diagram in Annex D.

However, in 2019, the whole transfer process was heavily condemned due to the presence of unjust practices. Lobbying from many senior ministers, members of parliament, and influential individuals were apparent. In fact, the highest level officials of MoPME/DPE were in an uncomfortable position because of the lobbying from powerful persons.[38]

Similar cases are found in the public health sector, too. For transfer or remaining in a privileged facility for longer period, bribing, nepotism, favouritism, lobbying, and political influence are very common (Transparency International Bangladesh, 2014). The Anti-Corruption Commission of Bangladesh also found wholesale corruption in almost every sector of the Bangladesh Land Port Authority. There was an allegation that irregularities were rife in transfer and promotion and in sending officials abroad for training; nepotism played a key role in allowing such irregularities.[39]

4.3.4 Lack of discipline and evaluation

In the context of the government primary education sector in Bangladesh, one indicator of a lack of accountability is the frequency of teachers being absent from the school on a school day. A study by Chaudhury *et al*. (2004) mentioned a unique survey in which the researchers made unannounced visits to some government-run primary schools and government-aided but privately-run secondary schools in Bangladesh. The visits showed that the average teacher absence rate in primary schools was 15.5%; the absence rate in primary schools was highest among headmasters at 20%. Cross-sectional averages masked the extent of this problem: 23.5% of primary school teachers were absent during at least one of the two visits.

One may argue that this 2004 study is dated and that the situation has improved significantly. However, the situation has not changed, and may have even worsened. *The Daily Star*, an English-language daily newspaper in Bangladesh, reported that while visiting a primary school in Chattogram city at around 9 am on a day in January 2019, the Anti-Corruption Commission chief found that only the acting headmaster was present in the school, while seven other teachers were absent. Due to the absence of teachers, the students were spending idle time on the school premises.[40]

Another English daily newspaper – *The Bangladesh Post* – reported that the teachers in different primary schools in different regions remain busy in other, non-teaching activities. In *haor* (large bodies of water) areas, teachers remain busy harvesting in paddy fields, or in hill regions, the attendance of primary teachers decreases during the cultivation season. Apart from this, the allegation has also been raised against the primary teachers that they come to school late and only sign the attendance sheet. In some schools, it was also found that many teaches have hired teachers (called para-teachers) who provide proxy attendance for the actual teacher. Taking all those issues into consideration, the Government in July 2019

[38] See www.banglatribune.com/national/news/443933/%E0%A6%98%E0%A7%81%E0%A6%B7-%E0%A6%93-%E0%A6%9C%E0%A7%8B%E0%A6%B0%E0%A6%BE%E0%A6%B2%E0%A7%8B-%E0%A6%A4%E0%A6%A6%E0%A6%AC%E0%A6%BF%E0%A6%B0-%E0%A6%A8%E0%A6%BE-%E0%A6%A5%E0%A6%BE%E0%A6%95%E0%A6%B2%E0%A7%87-%E0%A6%AB%E0%A6%BE%E0%A6%87%E0%A6%B2-%E0%A6%97%E0%A6%BE%E0%A7%9F%E0%A7%87%E0%A6%AC

[39] See www.newagebd.net/article/100642/acc-finds-wholesale-corruption-in-bangladesh-land-ports

[40] See www.thedailystar.net/city/acc-chief-iqbal-mahmud-visits-chattogram-schools-finds-most-teachers-absent-1693567

decided to introduce biometric attendance to stop these irregularities.[41] However, little progress has been made on this front so far.

4.4 Curriculum and teacher training in primary education

4.4.1 Poorly designed curriculum and faulty examination system

The introduction of the PEC examination at the primary level since 2009 has encouraged the students to drill and memorise rather than gain a proper understanding of the material being taught. Students do not get the chance to understand the content or find any scope to create something on their own. Education experts, researchers, teachers, and guardians have questioned the value of this examination. This examination even does not contribute to improving the teaching–learning process. Manzoor Ahmed (an education expert in Bangladesh) argued that, 'The effects of PEC have been to encourage drills and rote memorization, neglect understanding and creativity, disregard basic content of the curriculum, and discourage thinking and reasoning. Formative assessment is needed to evaluate students' learning. In educational terms, this is more important than the summative assessment like PEC. The PEC has taken away time and effort from formative evaluation and regular teaching–learning.'[42]

According to the Ministry of Education (2010), the National Curriculum and Textbook Board is in charge of changing the content of the syllabus as well as the question pattern to assess students' creativity. However, the teachers at primary school level are not capable enough to comply with the plan. The key findings[43] of a survey carried out by Research for Advancement of Complete Education in 2016 showed that around 55% of teachers in primary schools did not understand the creative system; more than half of 100 primary school teachers who took part in a survey were still unclear about the creative education method introduced about five years ago; about half of the teachers surveyed relied on guidebooks[44] to prepare lessons; around 92% of students used guidebooks to understand their lessons; there was a reliance on private tutors and coaching centres among learners; and the PEC exam was perceived to be the root cause of the mushroom growth of coaching centres as well as the publication of guidebooks.[45]

[41] See www.bangladeshpost.net/posts/biometric-attendance-for-primary-teachers-7609
[42] For details, see http://m.theindependentbd.com/arcprint/details/43527/2016-05-12
[43] See www.thedailystar.net/editorial/most-teachers-ignorant-the-creative-education-method-207763
[44] Guidebooks refer to the books that contain ready-made answers to questions in the textbooks prepared by the National Curriculum and Textbook Board. The heavy dependence by teachers and students on guidebooks to prepare lessons and understand the lessons, respectively, has been a real concern in education, in particular, primary education in Bangladesh. The guidebook culture damages the creativity and innovative ability of students. Students lose their interest to know more about a topic and think differently. Guidebooks encourage students to memorise without understanding the topic. Thus, guidebooks limit the thinking capacity of students as they copy from the guidebooks. Education experts, academicians, researchers, teachers, parents, and officials from education offices have expressed their concern about the rampant use of guidebooks and have asked for immediate action to stop the widespread use of these in the classroom and home. See www.theindependentbd.com/arcprint/details/43527/2016-05-12
[45] Guidebooks have become the principal instrument for studying for most students, school teachers, private tutors, and coaching centres. The appeal of the guidebook lies in their ready-made answers to likely exam questions. So, the learners have no need to read textbooks, learn the content, or figure out own answers. The schools also prepare the question papers for half-yearly, yearly, and test exams following guidebooks.

A survey of 216 teachers by Amin and Greenwood (2018) found that teachers felt pressured by headteachers, parents, and particularly by students, to teach in ways that would lead to good marks in the examination. Teachers largely agreed that they actively prepared students for the examination, not only by arranging mock class tests but also by teaching answers to expected questions; interestingly, a majority acknowledged that their teaching style would have been different if there was no examination. Nearly 90% of the teachers agreed that reading and listening tests needed to be included in the national examination process; these are absent in the current system.

4.4.2 Shortage of trained primary school teachers

The primary education sector in Bangladesh suffers from the lack of enough qualified and trained teachers; the proportion is roughly the same for man and women. According to DPE (2017), in 2016, 21% of the total government primary school teachers had no professional qualification. In addition, most of the teachers are not adequately trained to adopt modern teaching methods, such as computers, in classrooms, which works as a barrier to ensure high-quality primary education (Asian Development Bank, 2017). There is a serious lack of university-based teacher training programmes. Primary Teachers Training Institutes (PTIs) are the only institutions in the country that train primary school teachers. For untrained teachers serving in GPSs, NNPS, and Registered Non-GPSs, PTIs provide one-year, in-service training programmes leading to the Certificate in Education. However, there is no pre-service teacher education programme in PTIs in Bangladesh, unlike in other countries. Teachers receive training after their appointment and a placement in a school.

5 Summary and conclusion

Primary education plays an important role in development in Bangladesh. Though Bangladesh has been successful in ensuring a close-to-universal enrolment rate in primary education, poor outcomes in primary education remain a major concern. This chapter has analysed major challenges related to the poor performance of the primary education sector in Bangladesh. Further to this discussion, the chapter suggests some measures to improve the performance of the primary education sector in the country. These include: enhancing the budgetary allocation for the primary education sector; better salary and career paths for primary teachers; improving the recruitment process for primary teachers; initiatives to improve the quality of school infrastructure; initiatives to improve facilities to increase school attendance; improving the curriculum and examination system; ensuring accountability and transparency in evaluation of both teachers and learning achievement; and the harmonisation of the coexistence of various actors.

5.1 Enhancing the budgetary allocation for the primary education sector

As discussed earlier, the primary education budget has been historically low in Bangladesh. This budget in Bangladesh has two expenditure components: the recurrent budget and the capital budget – at present around 70% of the budget is spent on teachers' salaries (recurrent expenditure). In proportion to GDP, Bangladesh should significantly increase the allocation to the primary education sector in line with the average allocation observed in many comparable countries. This will result in an increase in the salary of the teachers and will attract qualified and talented graduates to government primary schools. Along with enhancing the budget allocation to the primary education sector, attention should also be given to ensure the effective utilisation of the budget. Also, a significant part of the additional budget should be allocated to the capital budget so that infrastructure development, essential maintenance, and repair works can be undertaken.

5.2 Better salary and career paths for primary teachers

It has been pointed out that the low salary and the lack of career path do not attract young and qualified teachers and discourage them from continuing their careers in the primary education sector. There was a major pay hike of government job salaries by 91–101% in December 2015, but, by both international and national standards, teacher pay remains largely unsatisfactory. This will remain the case unless further pay hikes are implemented.[46]

The FGD with government primary school teachers also confirmed that many talented teachers continued teaching only for 6–12 months before switching to better jobs. Moreover, career progression opportunities are very limited in the primary education sector. In this context, part of the additional budget allocation should be allocated to the higher salary and facilities for the primary school teachers so that the sector attracts qualified teachers.

The lack of promotion or progression to a higher post after some years of service is another adverse factor in the primary education system. The following new posts may be created in

[46] See https://thefinancialexpress.com.bd/economy/govt-employees-may-get-25pc-pay-raise-1551497233

the primary education sector to encourage talented teachers to pursue this career: (i) senior assistant teacher (proposed); (ii) senior teacher (proposed); and (iii) assistant headmaster (proposed).[47]

5.3 Improving the recruitment process for primary teachers

As discussed earlier, the recruitment process for government primary school teachers is a huge undertaking in Bangladesh. Further, as we discussed, corruption is prevalent in the recruitment process. It should be re-emphasised that high-quality teaching and effective learning at schools, among others, critically depend on the recruitment of high-quality teachers. In this context, several initiatives may be considered. First, at present, graduate degree holders from any recognised university with a minimum second division/class are allowed to apply for the post of assistant teacher. MoPME/DPE may contemplate modifying this requirement by adding teaching degrees, such as Diploma in Education, Bachelor in Education, etc. to the prerequisites list. Second, written examinations at centres that are identified with question leaks may be scrapped, which may discourage this type of malpractice. Third, currently, the written examination is the MCQ type, which to some extent is open to question leaks. Thus, the current format may be modified with 30 marks for MCQ and the rest of the marks, 50, on essay-type questions. Finally, districts may not be allowed to take a viva or interview candidates from the same districts. Rather, a different district within the same division may be given the responsibility of taking the viva and interview, or some random allocations, at the last moment, between candidates and recruitment committees can be made. This move may discourage bribes from being paid.

5.4 Initiatives to improve the quality of school infrastructure

The state of infrastructure (i.e. school building, classroom, functional water, sanitation, and security) in most of the primary schools has been reported as poor. Inadequate budget allocation and the low share of capital budget over a long and sustained period has resulted in the poor-quality infrastructure of the primary education sector in Bangladesh. It is alleged that the paucity of classrooms, libraries, and playgrounds are responsible for poor-quality education at primary schools. Therefore, there is a need to allocate part of the additional budget allocation to the improvement of the infrastructural quality of the primary education school system. The MoPME/DPE may undertake a special development project under the annual development programme for the wholesale improvement of the primary school infrastructure, with a special focus on classroom amenities, water and sanitation, and security.

5.5 Initiatives to improve facilities to increase school attendance

MoPME/DPE is providing more than 33,000 students of 175 primary schools with cooked food. By 2023, DPE aims to provide cooked food to all the schools in the country. An internal assessment by MoPME/DPE shows that school attendance increases by up to 11% if students are provided with cooked food, whereas when supplied with only biscuits, the

[47] As mentioned before, the government is considering creating this post, but no progress has been made so far. If created, this post may be considered only for schools with a large number of students.

attendance rate increases only up to 6%.[48] MoPME/DPE also plans to provide each primary level student with BDT 2,000 for their uniform on the understanding that students with new uniforms, and nutritious and delicious food in their schools will feel more attached to their institutions. These initiatives are perhaps policies moving in the right direction. But there is uncertainty about the full implementation and sustainability of these initiatives. Thus, the attempt should be to ensure full implementation and sustainability through the allocation of sufficient resources.

5.6 Improving the curriculum and examination system

Given the large gap between acquiring the certificate and actual learning, the emphasis should also be given on reforming the entire primary education system in Bangladesh. In this context, the Government should implement the National Education Policy 2010, which suggested extending primary education to Grade 8. This move will transform the exam-centric education system into a dynamic, learner-centric one. Primary level students should not be assessed through public exams; rather, they should be assessed through continuous academic performance. The Government needs to improve the classroom environment, the training of teachers, and pay more attention to co-curricular activities.

5.7 Ensuring accountability and transparency in the evaluation of both teachers and learning achievement

As discussed earlier, institutional challenges in the education system and the resultant corruption are not significantly different from those seen in other public sectors in Bangladesh. Therefore, a more accountable education system needs to be built as part of an overall accountable public service. The ways to achieve effective accountability in the primary education system include hefty penalties for bribery, establishing rules for conflict of interest and codes of conduct, delinking the administration from political influence, merit-based recruitment and career development rules, access to information, and complaint mechanisms for students and parents.

Technology may be used for assessing the accountability of the teachers. Technological advances and improved accessibility of devices such as digital cameras, tablets, and smartphones have facilitated the ability of communities to hold teachers accountable. Most use of technology focuses on reducing teacher absenteeism. However, as mentioned earlier, though the Government has considered introducing biometric attendance to reduce the absenteeism of teachers, so far there has not been any progress in this case.

A UNESCO (2017) report highlighted that in Udaipur, India, students used cameras with tamper-proof dates to photograph their teachers at the start and close of the day. Initial research suggested that this, jointly with the financial incentives provided, helped decrease absenteeism. Also, a Ugandan project to raise teacher attendance in 180 rural public primary schools distributed mobile phones equipped with software to report teacher absence to education officials. The phone monitors were headteachers or parents from the school management committee. In Pakistan, to monitor the attendance of over 210,000 education

[48] See www.thedailystar.net/star-weekend/spotlight/news/primary-education-bangladesh-all-exams-and-no-learning-1798843

staff in 26,200 schools, biometrics – fingerprints and photos, coupled with Global Positioning System coordinates – were introduced. As at February 2017, 40,000 absent teachers and 6,000 absconders (employed but long absent) have been disciplined. India's 2016–17 economic survey recommended the use of biometrics to tackle teacher absenteeism in primary schools. However, overuse or improper use of technology may have negative consequences. UNESCO (2017) report also mentioned that thousands of classrooms in China were livestreamed, allowing parents and the public to monitor and comment on teaching practices and student behaviour. However, critics were concerned that continual surveillance violates teachers' and students' privacy rights and could negatively affect instruction.

A performance pay programme for primary school teachers can also be effective in reducing teacher absenteeism and enhancing learning achievement. Muralidharan and Sundararaman (2011) presented the results from a randomised controlled trial of a programme which was employed in rural schools in the Indian state of Andhra Pradesh. The programme, administered by an NGO, provided teachers in government-run primary schools in rural India (Grades 1–5) with financial bonus payments of about US$ 14 for each percentage point gain in their students' maths and language test scores. The bonuses were designed to address the interrelated problems of low teacher effort in rural India, such as pervasive absenteeism, minimal teaching activity even among many of those present (as shown in Kremer *et al*., 2005), and low student achievement, as reflected in the findings from an all-India survey of rural households that approximately half of students enrolled in Grade 5 cannot read at a Grade 2 level (as shown in Annual Status of Education Report Centre, 2014). Muralidharan and Sundararaman (2011) showed that the programme produced gains in all four subjects measured (maths, language, science, and social studies), increasing the average achievement score by between 6 and 13 percentile points in performance pay schools compared to control schools, over a two- to three-year period.

Parents and communities may also be involved in monitoring teachers' presence in the schools. A review of the national education plans of 40 mostly low- and middle-income countries by UNESCO (2017) found an increasing role of parents and communities in teacher accountability. In the absence of clear guidelines, participatory approaches can be organised in a bottom-up manner, relying on community motivation to monitor teaching. Other forms may also be used in this regard. Representatives of local communities can visit classrooms, for instance, to ensure that teachers are present. The UNESCO (2017) study also suggests that community-led surveys concerning teachers have been used in several low-income contexts, especially in rural or disadvantaged regions.

Following these global experiences, Bangladesh may adopt a properly designed technology-powered accountability system in the primary education system. This will enhance accountability and transparency for the evaluation of both teachers and learning achievement in primary schools in Bangladesh.

5.8 Harmonisation of the coexistence of various actors

Finally, in the case of the coexistence of various actors in the primary education system in Bangladesh, there is a need to bring all schools under a single umbrella. The MoPME/DPE

can create that umbrella so that many institutional challenges are addressed, and high-quality of education is ensured across all schools.

References

Ahmed, S. and McGillivray, M. (2015) 'Human Capital, Discrimination, and the Gender Wage Gap in Bangladesh'. *World Development*, 67, 506–524.

Alam, M. (2000) 'Development of Primary Education in Bangladesh: The Ways Ahead'. *Bangladesh Development Studies*, 26(4), 39–68.

Amin, M. A., and Greenwood, J. (2018) 'The Examination System in Bangladesh and its Impact on Curriculum, Students, Teachers and Society'. *Language Testing in Asia*, 8 (4). https://doi.org/10.1186/s40468-018-0060-9

Annual Status of Education Report Centre (2014) Annual Status of Education Report (Rural) 2013, Provisional 15 January 2014. Annual Status of Education Report Centre. http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER_2013/ASER2013_report%20sections/aser2013fullreportenglish.pdf.

Asadullah, M. N. and Rahman, S. (2009) 'Farm Productivity and Efficiency in Rural Bangladesh: The Role of Education Revisited'. *Applied Economics*, 41(1), 17–33.

Asadullah, M. N. (2006) 'Returns to Education in Bangladesh'. *Education Economics*, 14(4), 453–468.

Asadullah, M. N. (2016) 'Do Pro-Poor Schools Reach Out to the Poor? Location Choice of BRAC and ROSC Schools in Bangladesh'. *IZA Discussion Paper No. 10326*. http://ftp.iza.org/dp10326.pdf

Asian Development Bank (2017) 'Innovative Strategies for Accelerated Human Resource Development in South Asia: Teacher Professional Development with Special Focus on Bangladesh, Nepal, and Sri Lanka'. Manila: Asian Development Bank.

Bangladesh Bureau of Educational Information and Statistics (2018) 'Bangladesh Education Statistics 2018'. Dhaka: Bangladesh Bureau of Educational Information and Statistics.

Bangladesh Bureau of Statistics (2017) 'Households Income and Expenditure Survey 2016'. Dhaka: Bangladesh Bureau of Statistics.

Bangladesh Bureau of Statistics (2018) 'The Labour Force Survey 2016–17'. Dhaka: Bangladesh Bureau of Statistics.

Bangladesh Institute of Development Studies (2019) 'Baseline Satisfaction Survey of College Education Development Project'. Dhaka: Bangladesh Institute of Development Studies.

Barro, R. and Lee, J.-W. (2013) 'A New Data Set of Educational Attainment in the World, 1950–2010'. *Journal of Development Economics*, 104, 184–198.

Bold, T. and Svensson, J. (2016) 'Education, Institutions and Economic Development'. https://edi.opml.co.uk/wpcms/wp-content/uploads/2017/06/EDI-PF-PAPER-8.2-Svensson.pdf.

Chaudhury, N., Hammer, J., Kremer, M., Mularidharan, K., and Rogers, H. (2004) 'Roll Call: Teacher Absence in Bangladesh'. Washington, DC., USA: World Bank.

Cochrane, S. H. (1979) 'Fertility and Education: What Do We Really Know?' *World Bank staff occasional papers no. OCP 26*. Baltimore, USA: The Johns Hopkins University Press.

DPE (2013) 'Bangladesh Primary Education Stipends: A Qualitative Assessment'. Directorate of Primary Education, Power and Participation Research Centre, and UNICEF Bangladesh.

https://reliefweb.int/sites/reliefweb.int/files/resources/Bangladesh_Primary_Education_Stipends_survey.pdf.

DPE (2017) 'Annual Sector Performance Report 2017'. Dhaka: Directorate of Primary Education.

DPE (2018) 'Annual Primary School Census 2018'. Dhaka: Directorate of Primary Education.

DPE (2018) 'The National Student Assessment Report 2017'. Dhaka: Directorate of Primary Education.

Fernandes, A. M. (2006) 'Firm Productivity in Bangladesh Manufacturing Industries'. *Policy Research Working Paper Series No. WPS 3988*. Washington, D.C., USA: World Bank.

Haq, M. N. and Islam, M.S. (2005) 'Teacher motivation in Bangladesh: A situation analysis'. www.tdi-bd.com/aricles_presentations/Teacher%20Motivation%20Study%20report.pdf.

Hossain, N., Hassan, M. M., Rahman, M. A., Ali, K. S. and Islam, M. S. (2019) 'The Politics of Learning Reforms in Bangladesh'. In Hickey, S. and Hossain, N. (eds.), *The Politics of Education in Developing Countries from Schooling to Learning*. Published by Oxford Scholarship Online. DOI: 10.1093/oso/9780198835684.001.0001.

International Labour Organization (2018) 'Global Wage Report 2018'. Geneva: International Labour Organization.

Islam, M. R. (2014) 'Education and Economic Growth in Bangladesh – An Econometric Study'. *IOSR Journal of Humanities and Social Science*, 19(2), 102–110.

Islam, S. and Nesa M. N. (2009) 'Fertility Transition in Bangladesh: The Role of Education'. Proceedings of the Pakistan Academy of Sciences, 46(4), 195–201.

Islam, T. S., Wadud, M. A. and Islam, Q. B. T. (2007) 'Relationship between Education and GDP Growth: A Multivariate Causality Analysis for Bangladesh'. *Economics Bulletin*, 3(35), 1–7.

Khudri, M. M. and Chowdhury, F. (2013) 'Evaluation of Socio-Economic Status of Households and Identifying Key Determinants of Poverty in Bangladesh'. *European Journal of Social Sciences*, 37(3), 377–387.

Kremer, M., Muralidharan, K. Chaudhury, N., Rogers, F. H., and Hammer, J. (2005) 'Teacher Absence in India: A Snapshot'. *Journal of the European Economic Association*, April–May 2005, vol. 3, no. 2–3, pp. 658–667.

Mahanta, A. (2016) 'Impact of Education on Fertility: Evidence from a Tribal Society in Assan, India'. *International Journal of Population Research*, vol 2016 (article ID 3153685), https://doi.org/10.1155/2016/3153685 .

Mahmud, S. (2003) 'Female secondary school stipend programme in Bangladesh'. Paper commissioned for the EFA Global Monitoring Report 2003/4, The Leap to Equality, United Nations Educational, Scientific and Cultural Organization (UNESCO).

Maitra, B. and Mukhopadhyay, C. K. (2012) 'Public Spending on Education, Health Care and Economic Growth in Selected Countries of Asia and the Pacific'. *Asia-Pacific Development Journal*, 19(2), 19–48.

Majumder, S. and Biswas, S. C. (2017) 'The Role of Education in Poverty Alleviation: Evidence from Bangladesh'. *Journal of Economics and Sustainable Development*, 8(20).pp: 151-160

Mallick, L., Das, P. K., and Pradhan, K. C. (2016) 'Impact of Educational Expenditure on Economic Growth in Major Asian Countries: Evidence from Econometric Analysis'. *Theoretical and Applied Economics*, 23(2), 173–186.

McDevitt, A. (2015) 'Bangladesh: Overview of Corruption and Anti-Corruption with a Focus on the Health Sector'. Berlin, Germany: Transparency International.

Ministry of Education (2010) 'National Education Policy 2010'. Dhaka, Bangladesh: Ministry of Education.

Montenegro, C. E., and Patrinos, H. A. (2014) 'Comparable Estimates of Returns to Schooling around the World'. World Bank Policy Research Working Paper No. 7020. The World Bank, Washington D.C.

Muralidharan, K. and Sundararaman, V. (2011) 'Teacher Performance Pay: Experimental Evidence from India'. *Journal of Political Economy*, 119(1), 39–77.

NAPE (2018) 'Identifying the Reading Ability of Bangla of Class Four Students in Government Primary Schools in Bangladesh'. Dhaka: National Academy for Primary Education.

Papageorgiou, C. (2003) 'Distinguishing between the Effects of Primary and Post-Primary Education on Economic Growth'. *Review of Development Economics*, 7(4), 622–635.

Paul, B. P. (2017) 'A Fair Recruitment Policy for a Stronger Government'. The Daily Star. www.thedailystar.net/opinion/fair-recruitment-policy-stronger-government-1472953

Psacharopoulos, G. and Woodhall, M. (1985) *Education for Development: An Analysis of Investment Choices*. New York, USA: Oxford University Press.

Psacharopoulos, G., and Patrinos, H. A. (2004) 'Returns to Investment in Education: A Further Update'. *Education Economics*, 12(2), 111–134.

Rahman, M., and Al-Hasan, M. (2018) 'Returns to Schooling in Bangladesh Revisited: An Instrumental Variable Quantile Regression Approach'. *Bangladesh Development Studies Journal,* 41 (2), pp: 27-42.

Raihan S. (2018) 'Structural Change in Bangladesh: Challenges for Growth and Employment Creation'. In Raihan, S. (eds.), *Structural Change and Dynamics of Labor Markets in Bangladesh*. South Asia Economic and Policy Studies. Springer, Singapore.

Raihan, S. (2019) 'Prioritise Investment in Human Capital'. The Daily Star. www.thedailystar.net/opinion/economics/news/prioritise-investment-human-capital-1741192

Sen, B. and Rahman, M. (2016) 'Earnings Inequality, Returns to Education and Demand for Schooling: Addressing Human Capital for Accelerated Growth', background paper for the Seventh Five Year Plan of Bangladesh. The Planning Commission of Bangladesh. Dhaka

Steer, L., Rabbani, F., and Parker, A. (2014) 'Primary Education Finance for Equity and Quality: An Analysis of Past Success and Future Options in Bangladesh'. Washington, DC, USA: Brookings Institution.

Transparency International Bangladesh (2014) 'Health Sector: Governance Challenges and the Way Forward'. Dhaka, Bangladesh: Transparency International Bangladesh.

Transparency International (2020) 'Corruption Perception Index 2019'. Berlin, Germany: Transparency International.

Uddin, N. (2017) 'Bangladesh: Generation, Education and Nation'. In: Letchamanan, H. and Dhar, D. (eds.) *Education in South Asia and the Indian Ocean Islands*, Bloomsbury Academic.

United Nations (2019) 'World Population Prospects 2019'. New York, USA: United Nations.

United Nations Development Programme (2019) 'Human Development Index Report 2019'. New York, USA: United National Development Programme.

UNESCO (2017) 'Accountability in Education: Meeting Our Commitments – Global Education Monitoring Report'. Paris, France: United Nations Educational, Scientific and Cultural Organization.

USAID (2006) 'Meeting EFA: Bangladesh Rural Advancement Committee (BRAC) Primary Schools'. www.epdc.org/sites/default/files/documents/BRAC%20Primary%20Schools.pdf

World Bank (2013) 'Seeding Fertile Ground: Education that Works for Bangladesh'. Education Sector Review 80613. Washington, DC: World Bank.

World Bank (2016) 'Bangladesh SABER Country Report'. Washington, DC: World Bank.

World Bank (2018) 'World Development Report 2018: Learning to Realize Education's Promise'. Washington, DC, USA: World Bank.

World Bank (2019) 'Graduate employability of affiliated colleges: New evidence from Bangladesh', Report No: AUS0000633. The World Bank, Washington DC.

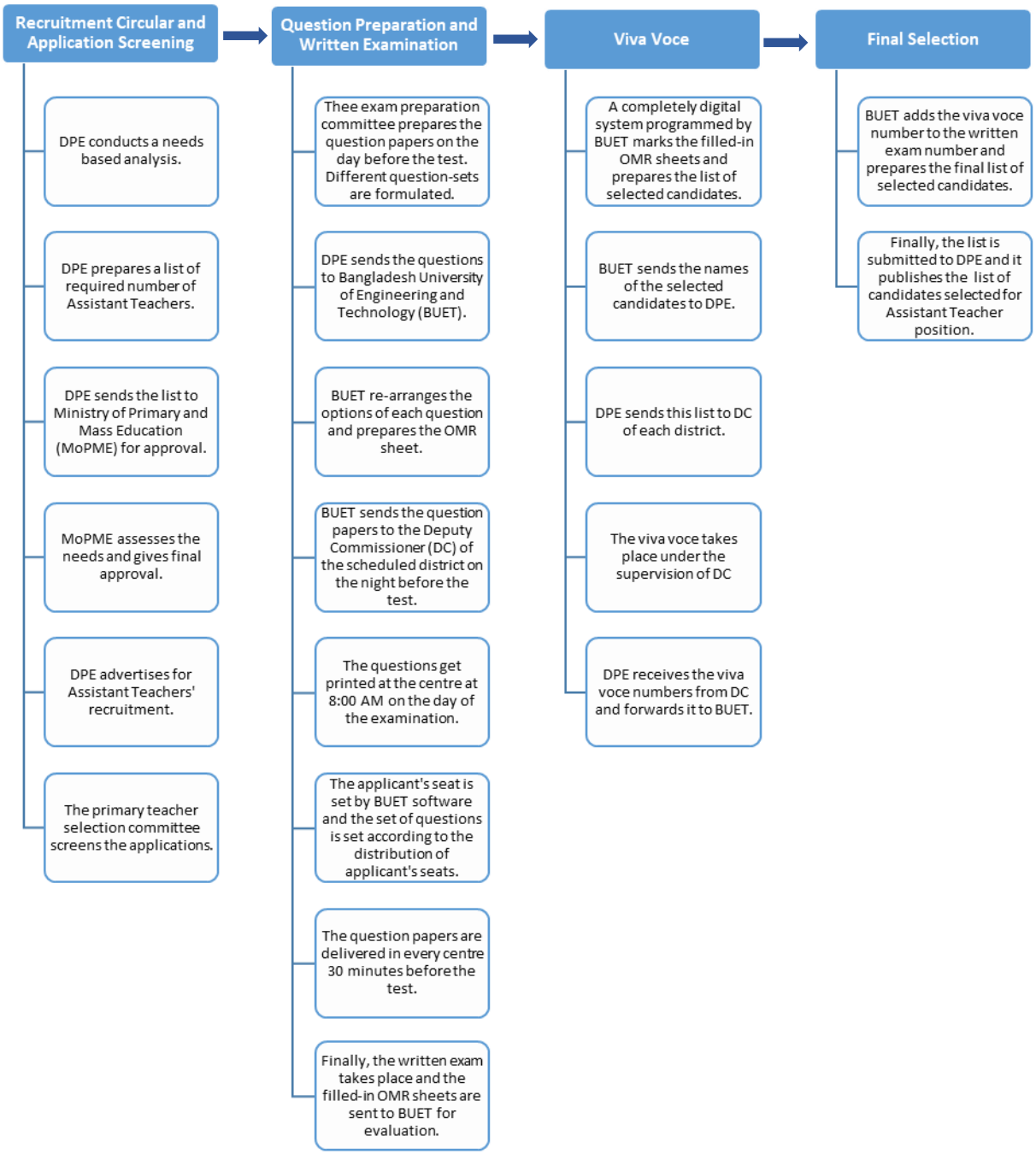
World Bank (2020) 'World Development Indicators Database'. https://databank.worldbank.org/source/world-development-indicators.

Annex A Types of primary school in Bangladesh

Overseeing authority	Type of school	Description
MoPME/DPE	GPS	Primary school run by the Government.
MoPME/DPE	NNPS	Primary school nationalised recently by the Government and run in the same way as the government schools.
MoPME/DPE	Registered Non-Government Primary School	Private primary school registered under government authority.
MoPME/DPE	Non-Registered Non-Government Primary School	Private primary school not registered under government authority.
MoPME/DPE	Experimental School	School attached to PTI and supposed to be used as a laboratory school.
MoPME/DPE	Community School	Publicly funded school that serves as both an educational institution and a centre of community life.
MoPME/DPE	Reaching Out of School Children School	School under the initiative Reaching Out of School Children, undertaken by the Government of Bangladesh in 2013. These schools aim to provide a second chance to education for disadvantaged children aged 8–14 years who never had the chance to enrol in the primary schools or who had to drop out for other reasons.
MoPME/DPE	Shishu Kollyan School	School run by Shishu Kollyan Trust under the administration of MoPME/DPE to provide education to underprivileged children.
Ministry of Education	Ebtedayee	Educational institution that has similar core courses as in the primary schools but has an additional emphasis on religious studies.
Ministry of Education	High Madrasah attached Ebtedayee	Attached to high madrasahs. The syllabus and subjects taught in high madrasahs are the same as that of high schools, except for two subjects: Arabic and Introduction to Islam.
Ministry of Education	High School attached Primary Section	Primary school attached to high schools.
Ministry of Commerce	Kindergarten	Pre-primary school for the children aged below six based on playing, singing, practical activities, such as drawing, and social interaction as part of the transition from home to school.
Ministry of Commerce	Tea Garden	School for the children of tea garden workers.
NGO bureau	BRAC school	BRAC primary school offering non-formal education to disadvantaged and school dropout children in Bangladesh, with a particular emphasis on girls.
NGO bureau	NGO Learning Centre	Most NGOs offer three to four years of schooling in a learning centre. This is more on a

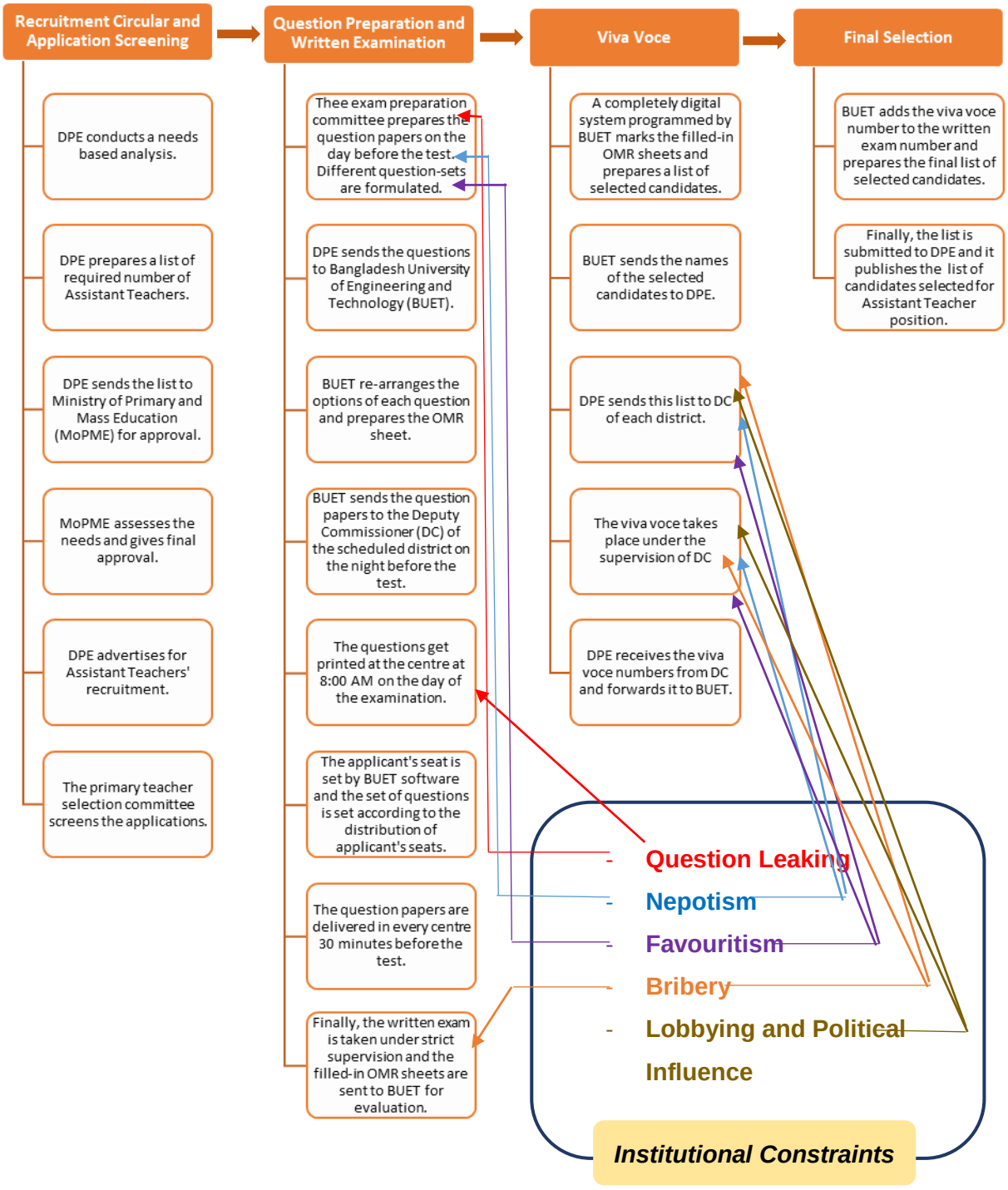
		temporary arrangement for the delivery of basic education to over-aged out of school children.
Other authorities	Non-aligned institute	School for blind, deaf and dumb, jail attached schools, social welfare-based learning centres, mosque and temple-based learning centres, Chattogram Hill Tract schools, etc.

Annex B The assistant teacher recruitment process



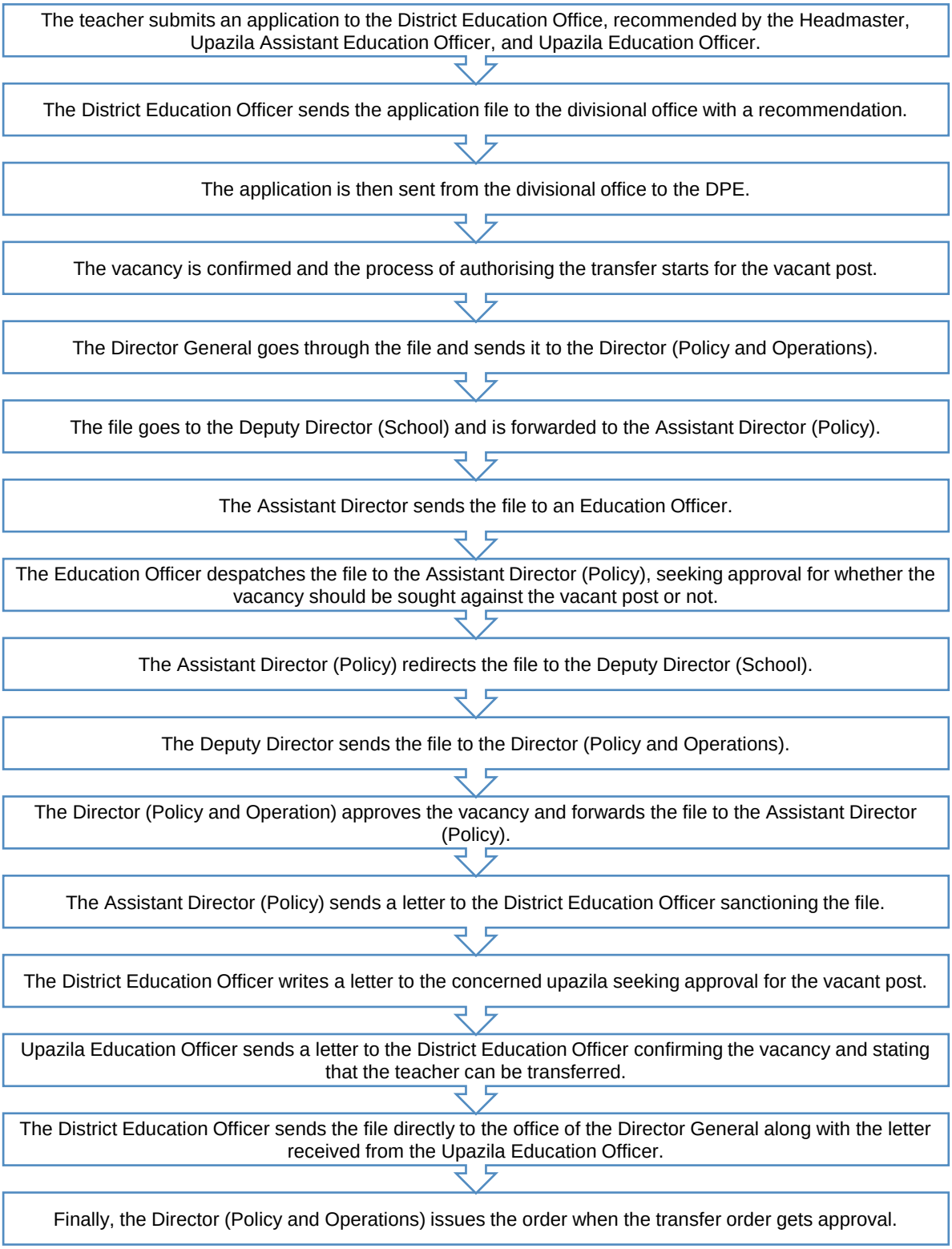
Source: Government Primary School Teacher Recruitment Order 2019; Government Primary School Teacher Recruitment Order 2013; Primary Education Development Programme 3; National Education Policy 2010; and Key Informant Interviews.

Annex C Institutional challenges in the assistant teacher recruitment process



Source: Government Primary School Teacher Recruitment Order 2019; Government Primary School Teacher Recruitment Order 2013; Primary Education Development Programme 3; National Education Policy 2010; and Key Informant Interviews.

Annex D Transfer procedure for primary school teachers from one division to another, or to the capital city



Source: Primary Teachers' Transfer Guidelines 2018, Ministry of Primary and Mass Education, Directorate of Primary Education, and FGD.