Is the education sector in Bangladesh ready to take the challenges of the coming decades?

Selim Raihan

Goal 4 of the Sustainable Development Goals (SDGs) is on Quality Education. The difference between the Millennium Development Goals (MDGs) and SDGs on education is that, while MDGs talked about ensuring enrollment and completion of primary education of all children, Goal 4 of the SDGs emphasizes on ensuring inclusive and quality education for all and promoting lifelong learning. The targets of Goal 4 of SDGs include ensuring complete free, equitable, quality primary and secondary education for all girls and boys, access to quality early childhood development, ensuring equal access for all women and men to affordable and quality technical, vocational and tertiary education, increasing substantially the number of youth and adults with relevant skills, eliminating gender disparities in education, ensuring equal access to all levels of education and vocational training for the vulnerable, ensuring all youth and a substantial proportion of adults achieve literacy and numeracy, ensuring that all learners acquire the knowledge and skills needed to promote sustainable development, building and upgrading education facilities that are child, disability and gender sensitive, and increasing substantially the supply of qualified teachers. Education is critically important for economic growth and overall development of the society. Education directly enhances human capital and contributes to economic growth. The 7th Five Year Plan of Bangladesh envisages to achieve 8% growth rate in GDP by 2020. Also, government’s other vision documents project for a 9-10% growth rate in GDP by 2030. Despite the fact that Bangladesh made considerable progress in gross-enrolment in primary education both for male and female, the country is seriously lagging behind in ensuring quality education for all. In the context that data for many of the targets related to the Goal 4 of SDGs are not available, here we have studied few available indicators which are consistent with the Goal 4 of SDGs. If we consider the ‘average years of schooling’ as an indicator of the status of education of any country, during the years between 2010-2015, the ‘average years of schooling’ in Bangladesh was only 5.1 which was higher than Pakistan (4.9) but lower than India (5.8). However, Bangladesh was far behind Sri Lanka (10.9) and some of the leading Southeast Asian countries like Malaysia (10.1), Thailand (7.7) and Vietnam (7.8). Two of the important indicators related to the quality of educational infrastructure are ‘percent share of trained teachers in total teachers in primary education’ and ‘pupil-teacher ratio in primary education’. During the years between 2010-2015, in the case of trained teachers, Bangladesh (53%) performed very poorly compared to India (77.2%), Pakistan (83.7%), Sri Lanka (79.1%), Malaysia (97.2%), Thailand (100%) and Vietnam (100%). In the case of pupil-teacher ratio, though Bangladesh (39.8) performed better than Pakistan (42.8), it performed worse than India (32.5), Sri Lanka (23.8), Malaysia (11.9), Thailand (16.1) and Vietnam (19.4). Regrettably, Bangladesh is among the bottom list of countries in the world with the lowest ratio of public expenditure on education to the GDP, which is only 2.1%. Such ratio is 3.7% in India, 5.4% in Malaysia, 4.3% in Thailand, and 5.3% in Vietnam. This is one of the reasons why the private spending on education as a share of household monthly expenditure is much higher in Bangladesh compared to those of other South Asian countries. According to the latest available Household Income and Expenditure Surveys of five South Asian countries, the share of private expenditure on education in the average monthly household expenditure in Bangladesh is around 5.5%, which is 2.6% in India, 4.8% in Nepal, 2.5% in Pakistan, and 1.9% in Sri Lanka. This suggests that the responsibility of education expenditure heavily falls on households in Bangladesh, and the government’s role is yet to be ideal. It is important to mention here that Bangladesh’s education sector also suffers from huge disparities. The disparities are observed between regions and between rich and poor. There is a high degree of inequality with respect to the access to quality education as poorer people and people in the remote rural areas have limited access to higher education and better quality educational institutions. The existing education system is also not very conducive to develop a strong base in the education sector, as quality, access and opportunities vary considerably across English medium, Bangla medium, and Madrasa system, as well as between public and private educational institutions. What needs to be done? Some major reforms in the education sector are much warranted, which should include improvements in the quality of institutional mechanism in the education sector, modernization of curriculum, substantial increase in the supply of trained teachers, harmonization among different educational systems, reduction in disparities and unequal access to education by improving and expanding educational infrastructure across regions, and putting due emphasis on secondary and tertiary education, vocational training, and skill development. For this, there is a need for a substantial rise in the ratio of public spending on education in GDP from its current level of 2% to at least 4% in the coming years, and make such spending more efficient.

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The state we're in global education
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Education is crucial for enhancing human capital in an economy, which in turn increases workers’ productivity and thus contributes to economic growth. The importance of investing in human capital has been discussed in the economic literature for long. Probably, the strongest argument for investment in human capital came from the endogenous growth theory which highlights that investment in human capital together with innovation, and knowledge are important contributors to economic growth.

As the global market moves towards accelerated automation, increasing the investment in human capital is now more important than ever. What often causes the difference between the ability of workers in the developed and developing countries is the poor performance of the education system in the developing countries.

Ensuring access to education is one of the main targets of development agenda in the world. The new global education goal - Goal 4 of Sustainable Development Goals (SDGs), focuses on promoting quality education and providing inclusive and equitable learning opportunities for all. The 10 targets under Goal 4 of SDGs highlight the importance of early childhood development, technical and vocational skills, qualified teachers at all levels of education and reducing all sorts of disparities in education by ensuring equal access for women and vulnerable groups. However, while the targets and indicators under SDG 4 are comprehensive and include all major aspects of quality education, the lack of available data for the newly proposed indicators poses a problem for monitoring the progress in these targets, especially in the developing countries.

In this article, keeping in mind the data limitation, we have looked into cross-country differences in two major indicators of education – ‘average years of schooling’ and ‘pupil-teacher ratio in primary education’. The first indicator relates to the outcome of education, while the second one indicates the status of educational infrastructure. In the following analysis, we have listed the top and bottom 10 countries in terms of these two indicators, using the data from UNDP and World Development Indicators of World Bank. ‘Average years of schooling’ is the average years of schooling for adults aged 25 and above, expressed in the number of years. The ‘pupil-teacher ratio in primary school’ is the average number of pupils per teacher in primary school. The rankings are based on the average values of these indicators during the period 2010-2015 for the countries with available data.

Table 1 shows that Switzerland has the highest average years of schooling of 13.4 years, closely followed by United Kingdom (13.2), Germany (13.1), Australia (13.1) and United States (13.1). On the other hand, Burkina Faso has the lowest average years of schooling of 1.4 years. All top 10 countries are among the high-income countries while 9 out of the bottom 10 countries are from Sub-Saharan Africa, with the exception of Bhutan.

Figure 1 shows the distribution of countries in average years of schooling among 187 countries. While looking at the data we found that the countries with average years of schooling of 10 and above are mostly from the developed economies; the countries with average years of schooling between 7 and 9 are mostly from the advanced developing countries, and the countries with poor average years of schooling in this case, what policy instrument can be an effective tool to change the aforementioned situation? Empirical literature and evidence show that public expenditure on education has a positive impact on the long run economic growth of a country through improvement in educational indicators leading to accumulation of human capital.

Table 3 presents lists of top and bottom 10 countries in terms of public expenditure on education as a percentage of GDP, based on the average values for the period 2010-2015. The analysis of the data depicts that, among 157 countries (for which data is available), Cuba has the highest percentage of GDP (12.8%) devoted to public expenditure on education, closely followed by Micronesia (12.5%). Four of the top 10 countries are in the high-income group, while the remaining 6 are in the middle-income group. Among the bottom 10 countries, Central African Republic has the lowest ratio (1.2%). All the bottom 10 countries have public expenditure on education between 1-2% of GDP. Of these, 8 are from Sub-Saharan Africa.

Figure 3 illustrates the distribution of countries in public expenditure on education as the percentage of GDP. Out of the 157 countries, 58 have ratios less than 4% of GDP, and most of these countries are the low-income countries from Asia and Sub-Saharan Africa. The only exception in the bottom list is Sri Lanka, which currently has a low ratio, though this country had high ratios during the early years of educational development. While 37 countries have ratios between 4 and 4.9% of GDP, only 10 have ratios more than 7% of GDP.

Therefore, countries which are lagging far behind in educational infrastructure and outcome must consider using the public expenditure on education as a critical tool to achieve the targets. These countries should reevaluate their prioritization of public spending, and reorient such spending more towards social sectors like education and health. It should also be kept in mind that the increase in the ratio of public expenditure on education to GDP should coincide with the improvement in the quality of institutional arrangements in the education systems in these countries.

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“...For education to be a source of productivity growth it is also important to not just look at the quantity of education but also the quality...”

Dr. Vqar Ahmed is Deputy Executive Director at Sustainable Development Policy Institute (SDPI). He is former Advisor, UNDP and has undertaken assignments with Asian Development Bank, World Bank, and Ministries of Finance, Planning and Commerce in Pakistan. He was the Head of Macroeconomics Section in Planning Commission of Pakistan. He was a technical associate and member in the task forces constituted by the Government of Pakistan. He is a visiting faculty member and researcher at the University of Le Havre in France, National University of Ireland, IMT Institute of Advanced Studies in Italy and Pakistan Institute of Trade and Development.

SANEM: What are the channels through which education can contribute to economic growth?

VA: Human capital is a very broad concept, however we now know from scientific evidence that role of education and training is extremely important for productivity growth across the economy and in all sub-sectors of agriculture, industrial manufacturing and services.

For education to be a source of productivity growth it is also important to not just look at the quantity of education but also its quality. This is extremely important as most of the policies aimed for boosting educational outcomes in South Asia focus on getting children to school, and not retention however much less focus is devoted in comparing where South Asian children stand in for example, science, technology, engineering and mathematics (STEM), vis-à-vis children from other regions. Recent empirical research also shows that learning objectives and outcomes explain the cross-country differences in productivity growth, perhaps more than any other factor.

SANEM: South Asian countries are lagging behind in educational development. What are the reasons behind this?

VA: There has been low levels of budgetary allocation to education sector. Historically, this sector used to face several budget cuts during a single fiscal year. The competing priorities had a more short term urgency in the eyes of those at the helm of affairs. Second, in many cases where the administration of public expenditure on education was devolved to sub-national administration, it has taken time for the decentralized offices to build capacity to manage and implement education reforms. This has also given rise to the issue of uneven standards of teaching and learning achievements across most countries of South Asia.

Third, while public sector remains the largest provider of education in South Asia, there are weak incentives to introduce modern teaching methods in state-run schools. The school administration and teachers lack motivation to go that extra mile and adopt technologies that can improve student comprehension. This situation can be addressed if social accountability tools are used at the grass roots level, and parents and communities are empowered for greater engagement with education administrators at the school, municipal and district levels.

Fourth, there are weak efforts to curb drop out rates. This is particularly true for ‘female student’s in South Asia. Unfortunately, there is a lower perceived returns to education of a female child particularly in rural communities, which is not true in the light of scientific evidence. To alter this situation the South Asian economies were slow to put in place mass outreach programmes that can over time bring a behavioural change in the rural communities. This is important as the poorest of the poor would even attach low value to the education of a male child, given myopic and short term expected gains if the same child is working as a daily wage laborer.

Fifth, the programmes to reach the excluded and marginalized communities in South Asia are still met with mixed results. This is primarily attributed to the weak monitoring and evaluation systems at the sub-national level. Most programmes are managed by the existing civil service on ground which is not accustomed to using key performance indicators to monitor their programmes. Keeping this in view, the Sustainable Development Policy Institute (SDPI) has recently initiated a series of capacity building initiatives for development sector professionals, providing them with hands on training in organization- and programme-level monitoring, evaluation, accountability and learning (MEAL) methods.

Another way to reach out to the marginalized communities is to develop strong linkages between social safety nets and household-level education. This is perhaps one key reason why our students are finding it hard to compete with the educated from East and Southeast Asia. Most of the programmes we currently see in South Asia which aim to make quality a key objective are either donor-funded and may lack sustainability, or are managed by the private sector.

Finally, we understand that in the short term it will remain difficult to improve the dropout rates. Hence the importance of improving Technical and Vocational Education and Training (TVET) institutions across South Asia and ensuring that those who drop out from schools should land in to TVET facilities. Currently a criticism on the performance of TVET institutions is that they are not demand-driven and may lack sustainability, or are managed by the private sector.

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SANEM: Are countries in South Asia on track to achieve the SDG 4 on education?

VA: It is unfortunate that, according to the United Nations Sustainable Development Knowledge Platform, until last year only 4 out of 10 children were in primary education across the least developed countries of South Asia. These countries will require a lot of external support in achieving SDG 4. Currently the official development assistance (ODA) targeted towards SDG 4 has not increased in numbers envisaged while all countries had vowed to embark on SDGs during 2015.

There are also serious data scarcity issues which will prevent monitoring of this goal. Research conducted by Robert J. Barro around a panel of 100 countries for the years 1960 to 1995 explains that performance of students in science subjects has a particularly positive relation with growth. However, the challenge across South Asia was lack of data on learning outcomes in science subjects due to which new and more insightful research is difficult to produce.

The lack of reform of civil service managing large education support programmes at the national and sub-national level is a concern. A key reason for South Asia’s lagging performance in social sector goals (including education sector) was the weak willingness and ability to reform the governance and institutions in these sectors.

SANEM: Thank you very much.

VA: You are welcome.
SANEM organized a Training Program on Gravity Modeling in Applied International Trade for the second time at SANEM conference room during October 27-29, 2017. Dr. Selim Raihan, Professor, Department of Economics, University of Dhaka and Executive Director, SANEM along with SANEM’s Research Associates facilitated this training program. Researchers and faculties from different universities participated in the training program. The training module consisted of lectures and hands-on sessions on advanced issues of international trade and tools to analyze trade flows with a focus on gravity modeling for trade policy analysis.

SANEM Press Briefing on Boosting Bangladesh-India Bilateral Trade held in Dhaka

Press Briefing on ‘Boosting Bangladesh-India Bilateral Trade: Are Benapole and Petrapole Land Ports Ready to take the Challenges?’ was held at SANEM Conference Room on October 17, 2017. SANEM conducted an explorative study on Benapole and Petrapole land ports. Dr. Selim Raihan, Professor, Department of Economics, University of Dhaka and Executive Director, SANEM facilitated this press dissemination program and Md. Nazmul Avi Hossain Senior Research Associate, SANEM; Md. Jahid Ebn Jalal, Research Associate, SANEM and Md. Sadat Anowar, Research Associate, SANEM gave their views. Journalists of both electronic and print media were present in this press briefing.

Roundtable Discussion on Advancing BBIN Sub-Regional Cooperation held in Dhaka

A Roundtable Discussion on Advancing BBIN Sub-Regional Cooperation was held during October 15-16, 2017 at BRAC Centre Inn, Dhaka. Delhi Policy Group organized this roundtable discussion. Experts from Trade and Economic Issues, Energy- hydropower and Water Resource Management, People to People Connectivity and Transit and Multimodal Connectivity (Roadways, Waterways, Railways and Aviation) were the discussants at the roundtable discussion. Dr. Selim Raihan, Professor, Department of Economics, University of Dhaka and Executive Director, SANEM was the Trade and Economic Issues expert at the roundtable discussion.

SPS/TBT National Validation Meeting held in Dhaka

ADB - SASEC National SPS and TBT Diagnostic Study for Bangladesh: National Validation Meeting was held on October 26, 2017 at Dhaka. Following a national consultation meeting in September 2016, the Bangladesh Ministry of Commerce, together with the Asian Development Bank (ADB), launched a national diagnostic study process on sanitary-phytosanitary (SPS) measures and technical barriers to trade (TBT), under the trade facilitation agenda of the South Asia Subregional Economic Cooperation (SASEC) Program. Dr. Selim Raihan, Professor of Economics, University of Dhaka and Executive Director, SANEM; chaired the session “Critical Analysis of Standards, Regulations and Obstacles Facing Bangladesh Exports in SASEC” at this Trade Facilitation advocacy meeting.

Impact Bangladesh Forum 2017 held in Dhaka

Impact Bangladesh Forum 2017 was organized by UNDP Bangladesh and Dhaka Chamber of Commerce and Industries. Dr. Selim Raihan, Executive Director, SANEM and Professor, Department of Economics, University of Dhaka was the panel discussant for the session “Regional Connectivity Integration and Logistics Track”.

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SANEM is a non-profit research organization registered with the Registrar of Joint Stock Companies and Firms in Bangladesh. Launched in January 2007 in Dhaka, it is a network of economists and policy makers in South Asia with a special emphasis on economic modeling. The organization seeks to produce objective, high quality, country- and South Asian region-specific policy and thematic research. SANEM contributes in governments’ policy-making by providing research supports both at individual and organizational capacities. SANEM has maintained strong research collaboration with global, regional and local think-tanks, research and development organizations, universities and individual researchers.