Challenges for Bangladesh in achieving the Goal 3 of SDGs

Selim Raihan

Sustainable Development Goals (SDGs) have 17 goals and 169 targets. The Goal 3 aims to ensure health and well-being for all at all ages by improving reproductive, maternal and child health; end the epidemics of major communicable diseases; reduce non-communicable and environmental diseases; achieve universal health coverage; and ensure access to safe, affordable and effective medicines and vaccines for all by 2030. There are 13 targets and 26 indicators under the Goal 3.

Better health of the population is important since it contributes to the development of human capital and promotes economic growth. Also, as population becomes healthier, people enjoy higher expectancy, become more productive and save more. The cross-country evidence suggests that income and health are highly correlated. Countries with higher per capita income tend to also have the higher life expectancy at birth, and improvements in numerous other health-related indicators. Access to better health facilities affects the inequality status between countries as well as within country.

If we look at the state of some leading health indicators, Bangladesh has made considerable progress between 1990 and 2015 (Table 1). Especially, the progress in maternal mortality, infant and child mortality and life expectancy are noteworthy. In 2015, Bangladesh’s status was better than India and Pakistan in the cases of child mortality, infant mortality and life expectancy at birth. In the case of maternal mortality, Bangladesh was better than Pakistan. However, in all these indicators, Bangladesh was considerably lagging behind Sri Lanka, China, and Malaysia.

To achieve the targets under the Goal 3 of SDGs by 2030, Bangladesh has to reduce the maternal mortality ratio from 176 to less than 70, reduce the under-5 mortality rate from 37.6 to 25, and reduce infant mortality rate from 30.7 to 12. Also, since Goal 6 (clean water and sanitation) of SDGs is closely linked to Goal 3, we see that despite notable progress between 1990 and 2015, Bangladesh was far behind Sri Lanka, China, and Malaysia in 2015. However, in the case of improved sanitation facilities, Bangladesh was ahead of India. In order to achieve 100 percent access to improved water and sanitation facilities by 2030, Bangladesh has to make definite progress in the next 13 years.

There are numerous challenges for Bangladesh in achieving the aforementioned targets by 2030. The public health expenditure as the percentage of gross domestic product (GDP) is only 0.8 percent in Bangladesh (Table 2) which is one of the lowest in South Asia. For this reason, the share of out-of-pocket health expenditure in total health expenditure in Bangladesh is one of the highest in South Asia. In 2015, this ratio was as high as 67 percent in Bangladesh in comparison with only 32 percent in China or 35 percent in Malaysia. In South Asia, Sri Lanka has the lowest ratio of 42 percent. This suggests that the burden of health expenditure heavily falls on the households in Bangladesh where the government has taken much lesser share.

Table 1: Health indicators in Bangladesh in a comparative perspective

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Bangladesh</th>
<th>India</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
<th>China</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality ratio (per 100,000 live births)</td>
<td>569</td>
<td>176</td>
<td>174</td>
<td>178</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>Under-5 mortality rate (per 1,000 live births)</td>
<td>143.7</td>
<td>37.6</td>
<td>47.7</td>
<td>81.1</td>
<td>9.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>99.7</td>
<td>30.7</td>
<td>37.9</td>
<td>65.8</td>
<td>8.4</td>
<td>9.2</td>
</tr>
<tr>
<td>Life expectancy at birth years</td>
<td>58.4</td>
<td>72.2</td>
<td>68.3</td>
<td>66.3</td>
<td>74.9</td>
<td>76.1</td>
</tr>
<tr>
<td>Improved sanitation facilities (% of population with access)</td>
<td>34.4</td>
<td>60.6</td>
<td>39.6</td>
<td>63.5</td>
<td>95.1</td>
<td>76.5</td>
</tr>
<tr>
<td>Improved water source (% of population with access)</td>
<td>68.1</td>
<td>88.9</td>
<td>99.1</td>
<td>91.8</td>
<td>95.6</td>
<td>95.5</td>
</tr>
</tbody>
</table>

Data source: World Development Indicators, World Bank

Table 2: Health expenditure in Bangladesh in a comparative perspective

<table>
<thead>
<tr>
<th>Country</th>
<th>Public health expenditure (% of GDP)</th>
<th>Out-of-pocket health expenditure (% of total health expenditure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>0.8</td>
<td>67.0</td>
</tr>
<tr>
<td>India</td>
<td>1.4</td>
<td>62.4</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.9</td>
<td>56.3</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2.0</td>
<td>42.1</td>
</tr>
<tr>
<td>China</td>
<td>3.1</td>
<td>33.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.3</td>
<td>35.3</td>
</tr>
</tbody>
</table>

Data source: World Development Indicators, World Bank

One interesting question could be, with the low ratio of public health expenditure in GDP how could Bangladesh make some noticeable achievements in some health-related indicators? There is evidence that over the past few decades, Bangladesh opted for low-cost solutions to some vital health-related problems. Also, widespread activities of NGOs created some necessary awareness. The large inflow of remittances too played an important role in increasing the capacities of the households for high out-of-pocket health expenditure.

However, in future, such options are likely to be limited as health systems in Bangladesh are increasingly facing hard and multifaceted challenges. This is due to the new pressures originating from aging population, rising prevalence of chronic diseases, and the growing need for intensive uses of expensive still critical health-related equipment. Furthermore, financing health-related problems through out-of-pocket expenditures increases inequality within society, as this places a huge cost burden on the poorer people and thus keeps the vicious cycle of disease-poverty alive. Investment in health is thus not only a desirable but also an essential policy priority.

Therefore, Bangladesh has to increase public health expenditure as the percentage of GDP from its current meager level of 0.8 percent to at least 2.5 percent in the coming years and make such spending more efficient. Also, efforts need to be in place to deal with growing expectations of the people and to reduce persistent inequalities in the access to better health facilities. The second article titled “How does health affect economic growth?” emphasizes on the links between health and economic growth. A cross-country panel regression analysis for 192 countries for the years 1970-2010 shows the association of different health indicators (infant mortality rate, maternal mortality rate, and real public health expenditure) with economic growth. The fixed effect panel regression results suggest that coefficients of all three health-related indicators are statistically significant with expected signs. The article advocates for increasing public health expenditure and its efficient uses. It is also argued that without significant improvements in infant mortality rate and maternal mortality ratio, economic growth is bound to be constrained. In this issue, SANEM interviews Dr. Rumana Huque, Professor of Economics at the University of Dhaka. Dr. Huque identifies the major challenges Bangladesh is currently facing in the health sector. The final page draws attention to the events that took place in the month of September, 2017.
How does health affect economic growth?
Selim Raihan and Sunera Saba Khan

In developing countries, nearly half of the population suffers from multidimensional poverty with deprivations in health and other living conditions. It is the poor who suffer from ill-health, malnutrition, communicable and non-communicable diseases, lack basic amenities of healthcare, and as a result are not able to contribute effectively to the economic growth of a country.

Health has an important role in achieving sustainable economic growth. There exists a two-way relationship between health and economic growth. Improved health increases productivity of the labor force, and thus promotes economic growth. On the other hand, economic development leads to improvements in nutrition, better sanitation, innovations in medical technologies; all of which help increase the life expectancy and reduce the maternal, child and infant mortality rates.

According to the Goal 3 of Sustainable Development Goals (SDGs), good health is a vital component of well-being. Good health increases human capital levels, which in turn enhances economic productivity of individuals and drives economic growth. A healthy workforce finds it easier to adopt new technologies, has low rates of absenteeism and helps to raise output.

As maternal mortality ratio, infant mortality rate and life expectancy at birth are among the key indicators of health, we have ranked the top and bottom 10 countries in terms of these indicators for the year 2015 using a sample of 192 countries (for which the data is available). The maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. Finally, life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. All data have been obtained from World Development Indicators of the World Bank.

Table 3 shows that Finland, Greece, Iceland, Poland have the lowest maternal mortality ratio of 3, whereas, Sierra Leone has the highest maternal mortality ratio of 1360. 9 out of the top 10 countries are from Europe. In contrast, all the bottom 10 countries are from Sub-Saharan Africa. However, the Goal 3 of Sustainable Development Goals (SDGs) has a target of reducing global maternal mortality ratio to less than 70 by 2030. Table 3 depicts that Luxembourg is the leading country in terms of the lowest infant mortality rate (1.5) and Angola has the highest infant mortality rate (96). 8 out of the top 10 countries are from Europe, and again, 9 out of the 10 bottom countries are from Sub-Saharan Africa. The Goal 3 of SDGs has a target of reducing infant mortality rate to as low as 12 by 2030. Table 3 shows that Japan has the highest life expectancy of 84 years and Sierra Leone has the lowest life expectancy of 51 years. Again, 8 out of the top 10 countries are from Europe, and all 10 bottom countries are from Sub-Saharan Africa. All these suggest that still a number of countries in the world have to make some dramatic progresses to achieve the targets of SDGs by 2030.

Table 4 illustrates the positions of the South Asian countries among those 192 countries in terms of the aforementioned health indicators. It is observed that both Sri Lanka and Maldives are doing well in terms of all the three health indicators. In South Asia, Maldives has the highest life expectancy of 77 years and the lowest infant mortality rate of 7.4. Sri Lanka has the lowest maternal mortality ratio of 30. In cases of infant mortality rate and life expectancy, Bangladesh performed better than India, Pakistan, Nepal, Bhutan and Afghanistan. Also, in the case of maternal mortality ratio, Bangladesh performed better than Pakistan, Nepal, Bhutan and Afghanistan. Afghanistan has the worst performance in all three indicators among the South Asian countries.

In order to explore the relationship between economic growth and health, a cross-country panel econometric analysis is conducted using a panel data of 192 countries for the years 1970-2016. In this analysis, the dependent variable of the model is the log of real gross domestic product (GDP). The explanatory variables are log of labor, log of capital stock and three health related indicators (infant mortality rate, maternal mortality ratio, and public expenditure on health) in three separate regression models. All data, apart from the labor and capital stock, are from World Bank’s World Development Indicators. The labor and capital stock data are obtained from Penn World Table 9.0. The fixed effect panel regression results suggest that coefficients of all three health related indicators are statistically significant with expected signs. 50-unit decline in infant mortality rate is associated with the increase in real GDP by 1 percent. Furthermore, 50-unit decline in maternal mortality ratio is associated with the increase in real GDP by 0.01 percent. Finally, one percent increase in the real public health expenditure is associated with the rise in real GDP by 0.3 percent.

It is thus observed that a country’s collective health status affects the country’s economic growth rate. Improvements in the health status of a nation has a positive impact on economic growth rate. Therefore, the health sector needs to be included as a vital part of the development strategy of a country as illness and disease can act as strong barriers to economic growth. Investment in health should be included as an important component of economic policy in order to sustain and improve on economic and social outcomes. Governments need to consider spending on healthcare as an investment and not a cost. Therefore, there is a need to raise the level of public health expenditure and its efficient uses. Without significant improvements in infant mortality rate and maternal mortality ratio, economic growth is bound to be constrained.

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Sunera Saba Khan, Senior Research Associate, SANEM. Email: suneraecond@gmail.com
RH: Bangladesh is facing in the health sector?

Dr. Rumana Huque is Professor of Health Economics at the Department of Economics, University of Dhaka, Bangladesh. Dr. Huque graduated in Economics from University of Dhaka, Bangladesh and obtained her MA and PhD in Health Economics from University of Leeds, UK. She specializes in health system and health economics with special focus on health care financing, resource allocation and budgeting, and economic evaluation. She is also particularly interested in research and advocacy in the field of tobacco control. Dr. Huque has wide experience of working with the Ministry of Health and Family Welfare of Bangladesh, local NGOs and international donor agencies since 2002.

SANEM: What are the major challenges Bangladesh is facing in the health sector?

RH: Bangladesh has made commendable progress in major health indicators over the last two decades including maternal and child health, life expectancy at birth, and contraceptive prevalence rate. Despite the success, we must recognize that demographic and epidemiological transitions are taking place. Tackling the rising burden of Non-communicable diseases (NCDs) and the burden of established and new communicable diseases would be a challenge to move towards universal health coverage. I would mention a few major challenges for sustainable health financing. Share of health in the national budget is declining (less than 1% of GDP), and there is a possibility for several development partners (DP) of leaving the sector. Incremental approach of resource allocation and budgeting leads to health spending disparities across wealth quintiles and geographic areas. Currently, Ministry of Health and Family Welfare (MOHFW) allocates resources to health facilities based on number of beds and staff in post for salary. This mechanism does not consider the health care need of the population living in the area or the service utilization at the facility. Lack of coordination between the revenue and development budgets also creates problems. A common example is: often a vehicle is procured through the development budget but the salary of a driver, or cost of fuel or regular maintenance are not considered in the revenue budget. Future liabilities arising from investing in infrastructure development are often not considered due to this demand and development approach. Lack of coordination of pocket expenditures for health care is high (67% of Total Health Expenditure as of BNHA-5). There is an inadequate pre-payment mechanism to protect the population from catastrophic spending. Inefficiency in resource use is a challenge. Inappropriate procurement of medical and surgical requisites and equipment, and construction of infrastructure (about 25% of the total budget of the third health sector programme) through both the revenue and development budgets remain major sources of inefficiency. Procurement is being done through multiple channels without adequate coordination. For example, medical and surgical requisites are procured through government revenue and development budgets, through pool funding and through non-pool funding. Thus, some medical and surgical requisites are purchased in excess quantity, such as x-ray films, while some are supplied in inadequate quantity. Under spending of budget also results in ineffective use. Absenteeism in the health sector is common and vacancy in the workforce is around 20%. There remains shortage of nurses, midwives, and medical technologists. There is no post as ‘Public health expert’ within the ministry. Capacity of financial management is also a concern. Another challenge is- inappropriate input mix. In some public facilities, equipment is available but the post of technician is vacant. In some facilities, the post of an anesthetist remains vacant for long periods of time. Urban health is also a major concern, and there remain gaps in primary health care coverage in urban areas. Urban health is operating under a different Ministry and there is limited coordination between these two ministries. Quality of care needs greater emphasis. Unregulated private sector including informal providers are providing services with varying quality. In addition, there are multiple reporting channels in the health sector, and several routine data collection systems operate in parallel.

SANEM: Bangladesh is said to perform well during the MDG period in certain areas of healthcare. How did this happen?

RH: Yes, Bangladesh is on track to achieve the Millennium Development Goals related to the Total Fertility Rate (TFR), Maternal Mortality Ratio (MMR), reducing child under-nutrition and mortality. Bangladesh performed better on health indicators than India with per capita gross domestic product (GDP) around half of India’s. Overall socioeconomic development during the last two decades and better access to communication, education and socio-economic status contributed in improved health outcomes in Bangladesh.

RH: Bangladesh witnessed heath sector reforms in 1998. As part of the reform, Sector Wide Approach (SWAp) was adopted in the health sector, called the Health and Population Sector Programme (HPSP; 1998-2003). This shift from a multiple project approach to a single sector program resulted in better harmonization and alignment in planning, budgeting and budget execution. Under SWAp, an Essential Service Package (ESP) was designed, with the aim to prioritizing Primary Health Care for increased budget allocation, that is, to allocate 60-65% of total health care resources to the primary level (upazila and lower level). There was a high level of commitment to bringing health care as close to the communities as possible by establishing 14000 community clinics (CC) nationwide. CCs have become popular among rural populations to access care for general illnesses. Another major step under SWAp was mainstreaming the ‘nutrition’ programme. MOHFW created a mechanism in four sub-districts to enable community health services and nutrition services to address poverty and improve coverage of health services. These sub-districts were selected after a participatory approach, considering the state of the communities, the need to focus on health care, the availability of infrastructure and the potential of communities to participate. The pilot initiative resulted in better health outcomes in the pilot areas and the need to scale up was identified.

RH: The overall budget for health sector in absolute terms also increased considerably. Though proportion of health budget in the overall national budget is declining, in absolute terms, health sector budget has increased from Taka 11,520 crore in the first SWAp (HPSP) to Taka 115486 crore in the fourth SWAp (Health, Population and Nutrition Sector Programme). The private sector (for and not-for-profit) played a complimentary role through public private partnership. ‘Chougachha Model’ is a good example of active community participation in operating hospitals and community health programmes. All these resulted in good promotive services and life style change interventions.

Health Care Financing Strategy (HCFS) was approved and has been embedded in the approved National Social Security Strategy (NSSS) 2015. The HCFS suggests to initiate innovative financing mechanism such as the Shasthryo Shoroshka Karmsuchi (SSK), a health protection scheme for the poor and the Ready Made Garment Workers’ scheme to strengthen financial risk protection. These pilot initiatives need to be properly evaluated, and scaled up later only if found effective and efficient. Scaling up the active community participation in operating hospital and community health programmes in a structured way following the Chougachha Model can be considered.

Governance should also regulate the private sector including laboratory and clinical service provision, medical education for doctors, nurses, midwives, paramedics and other categories of technicians, and the production and supply of pharmaceuticals including alternative medicine. Financial management, especially on planning and budgeting, and procurement capacity need to be markedly improved, especially under the current disbursement mechanisms (‘Results-based financing’ or ‘Disbursement Linked to Indicators-DLI’) which are relatively new systems in the country.

SANEM: Thank you very much.

RH: You are welcome.
SANEM’s Quarterly Review of Bangladesh Economy

SANEM’s Quarterly Review of Bangladesh Economy (QRBE) on September 20, 2017 at Silver Room of The Westin Dhaka. SANEM successfully organized three QRBEs in 2017. This September 2017, QRBE presented SANEM’s reflections on the major challenges of the Bangladesh economy. Through this program, SANEM shared its views on the contemporary global and domestic economic issues, focusing on post-flood management, soaring rice price, Rohingya refugee crisis and the growing balance of payment (BOP) deficit, and offered policy suggestions based on the existing scenario of the economy. Dr. Selim Raihan, Executive Director, SANEM and Professor, Department of Economics, University of Dhaka presented the keynote presentation, followed by a vibrant interactive discussion session. Dr. Bazul Haque Khondker, Chairman, SANEM and Professor, Department of Economics, University of Dhaka, Dr. Sayema Haque Bidisha, Research Director, SANEM and Associate Professor, Department of Economics, University of Dhaka and Dr. Farazi Binti Ferdous, Research Fellow, SANEM exchanged views with economic researchers, academicians, students and journalists present in the event.

A special training program for the university teachers titled “The WTO Antidumping Agreement and Regional Perspective” was held in September 24, 2017 at Faculty of Business Studies, University of Dhaka. This program was organized by Business Studies Faculty of Dhaka University. Dr. Selim Raihan, Executive Director, SANEM and Professor, Department of Economics, University of Dhaka conducted the session on “Role of International Trade in Economic Growth and Development” in this training program.

An International symposium on “Women’s Labour Market Participation and Gender Norms: Cases of India and Bangladesh” was held in BRAC Centre Inn, Dhaka on August 30, 2017. The program was organized by Centre for Gender and Social Transformation (CGST), BRAC Institute of Governance and Development (BIGD) and University of Manchester, British Academy. Dr. Selim Raihan, Executive Director, South Asian Network on Economic Modeling (SANEM) and Professor, Department of Economics, University of Dhaka chaired a session in this symposium titled “Methodological Innovations for Assessing Labour Force Participation”.

A Dissemination on “Rapid Assessment of Hazaribagh Tanneries” was held on August 28, 2017 at Policy Research Institute (PRI) conference room in Dhaka. The event was organized by South Asian Network on Economic Modeling (SANEM). The chief guest of the program, Dr. Zaidi Sattar, Chairman, Policy Research Institute (PRI), opened the discussion floor with brief and insightful opening remarks. Dr. Bazul Haque Khandoker, Chairman, SANEM and Professor, Department of Economics, University of Dhaka presented the key presentation and discussed the outcomes of the research conducted earlier this year. Dr. M. Abu Eusuf, Chairman, Department of Development Studies, University of Dhaka was present as the designated discussant for the discussion and interactive session.

A presentation on “Women Cross Border Labour Migration: From Restrictions to Promotion. Social Responses to shifting policies and narratives”, organized by SANEM was held on September 28, 2017 at SANEM conference room in Dhaka. Anthropologist and Researcher Thérèse Blanchet, Director, Drishti Research Centre presented on Women Cross border Labour Market Participation and Gender Norms: Cases of India and Bangladesh was held in BRAC Centre Inn, Dhaka on August 30, 2017. The program was organized by Centre for Gender and Social Transformation (CGST), BRAC Institute of Governance and Development (BIGD) and University of Manchester, British Academy. Dr. Selim Raihan, Executive Director, South Asian Network on Economic Modeling (SANEM) and Professor, Department of Economics, University of Dhaka chaired a session in this symposium titled “Methodological Innovations for Assessing Labour Force Participation”.

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.