Does institution matter for human capital development?

Selim Raihan

A fundamental proposition of new growth theories is that human capital is a key driver of economic growth. Development of human capital for the people of a country encompasses not only the diffusion and assimilation of available knowledge, but also the generation of new knowledge—the source of innovation and technological change—which boosts economic growth.

It is rather a challenging task to measure a country’s stock of human capital. Popular indicators, used to measure human capital, include adult literacy rate, school enrolment rates, average years of schooling, quality of schooling etc. The Penn World Table version 8.1 provides a dataset on an index of human capital (HCI) for 134 countries over a period of 6 decades. HCI is an index of human capital per person which is related to the average years of schooling and the return to education. In 2010, United States had the highest HCI value (3.62) and Mozambique had the lowest one (1.27). In that year, among the 134 countries, 33 countries had HCI values higher than 3; 48 countries had values between 2.5 and 2.99; 28 countries had values between 2 and 2.49; and 25 countries had values less than 2. In South Asia, in 2010, the HCI values for Bangladesh, India, Nepal, Pakistan and Sri Lanka were 2.07, 1.93, 1.71, 1.99 and 3.16 respectively.

Why do some countries have higher level of human capital than others? Empirical literature have looked at different factors such as spending (both public and private) on education and health, and differences in income levels; but hardly there has been any emphasis on differences in institutional capabilities among the countries. However, quality of institution, as it affects economic growth process, can also have a bearing on the quality of human capital. Therefore, a valid question can be asked: does institution matter for human capital development? Of course there could be a bi-directional causality between human capital and quality of institution, where quality of institution could also be influenced by the level of human capital. Nevertheless, leaving aside the causality, here we are more interested to know about the association between these two.

The scatter-plot, as presented in the graph, has been generated using the data of index of human capital and index of institution for 93 countries over a period of 1984-2010 with over 2500 observations. We have constructed the index of institution using the data of six major ICRG (www.prsgroup.com) variables, namely bureaucracy quality, control of corruption, investment profile, democratic accountability, government stability, and law and order. As values of these six ICRG variables have different scales, we have rescaled them between 0 and 10. The aggregate institution index is the average of these six indicators with the range between 0 and 10, where 0 and 10 respectively indicate the lowest and highest levels of quality of institution.

The scatter-plot suggests a very strong positive association between quality of institution and level of human capital, which signifies the importance of better institutional setup for higher level of human capital. Interestingly, if we compare Bangladesh with Malaysia, levels of both institution and human capital of Bangladesh in 1990 (1.62 and 1.52 respectively) were much lower than those of Malaysia in 1990 (6.05 and 2.31 respectively). Despite the fact that during 1990 and 2010, Bangladesh made some notable progresses in both fronts, by 2010, the levels of these two indices of Bangladesh (5.52 and 2.07 respectively) were below what Malaysia had in 1990! Results from a more sophisticated cross-country panel econometric regression reinforces this association. In this regression, the index of human capital has been considered as the dependent variable. We have also created two institutional indices: economic institution and political institution. The economic institution index is comprised of three ICRG indicators - bureaucracy quality, control of corruption and investment profile; whereas the political institution index consists of other three ICRG indicators - democratic accountability, government stability and law and order. Other explanatory variables include initial GDP per capita, public expenditure on education as a percentage of GDP, and under-five mortality rate. The regression results indicate that after controlling for initial GDP per capita (which has a positive significant association with human capital index), public expenditure on education has a statistically significant positive association and under-five mortality rate has a statistically significant negative association with the human capital index. The highly significant and positive coefficients of both economic and political institution indices suggest strong positive associations between these institutional variables and human capital index. The z-score regression analysis, however, refers to larger importance of political institution over economic institution in human capital development.

The aforementioned analysis points to the fact that better economic and political institutions matter for human capital development. While countries need to make critical spending for human capital development, improvement in institutional environment is unequivocally essential.

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How pervasive is regional disparity in primary education in Bangladesh?

Selim Raihan and Mansur Ahmed

Sound knowledge on educational performances of different regions across the country can be helpful in the decision making process for better resource allocation and policy formulation. A multidimensional composite measure of educational development, that captures many dimensions such as access, inputs, quality, gender-parity, and outcome, would enable policy makers to target and to channel scarce resources in lagging regions more efficiently.

This paper develops a multidimensional composite index for the primary education development for 483 upazilas (sub-districts) in Bangladesh and identifies the lagging regions for potential policy intervention. More specifically, this paper constructs the Education Development Index (EDI) for the primary education sector of Bangladesh. This index facilitates cross-sectional analysis of the levels of attainment in education among different regions of Bangladesh. Furthermore, it draws policy attention to crucial parameters for achieving equity in access and attainment in educational development.

Bangladesh has one of the largest primary education systems in the world with an estimated 16.4 million primary school-aged children (6 to 10 years). This study uses the data from a census which was carried out in 2011, which covered all 11 types of primary schools with a total number of more than 80,000 schools. Education Management Information System (EMIS) division of Directorate of Primary Education (DPE) under Ministry of Primary and Mass Education (MoPME) undertook the census.

Five broad parameters and 19 sub-parameters (individual indicators) are used in the construction of EDI. The broad parameters are (i) Access, (ii) Infrastructure, (iii) Quality, (iv) Gender Equity, and (v) Outcome. This study has applied the Principal Component Analysis (PCA) method for each broad parameter and calculated weights for each of the indicators within the broad parameter. (For detailed methodology of EDI construction and list of indicators, see Raihan and Ahmed, 2016). The objective of PCA is to reduce the dimensionality (number of indicators) of the data set but retain most of the original variability in the data. The overall EDI constructed for this analysis is again a weighted summation of five broad EDIs - access EDI, infrastructure EDI, quality EDI, gender equity EDI and outcome EDI, with weights derived from the PCA on these five EDIs. The index value of 1 indicates the highest educational development with 0 as the lowest development. Analysis of the aforementioned census data suggests that, despite indicators related to accessibility of schools showed good scenarios, still about 20% schools were not easily accessible to the neighboring residents. Astonishingly, only 20% of schools enjoyed electricity access. Class rooms at the primary schools in Bangladesh were quite crowded as the student-room ratio was 38. Student-teacher ratio was also very high, implying crowded class rooms with low degree of interaction between students and teachers. Still a significant proportion of teachers in primary schools were without bachelor degree. In terms of gender parity in primary school enrolment, not all upazilas achieved gender parity. Though Ministry of education set a target that the ratio of female to male teachers should be above 60%, the observed female to male teachers ratio in the census data was about 53%, which suggests need for renewed efforts to reach that goal. Another important indicator related to gender equity is the percentage of schools with girls’ separate toilet. The census data shows that only 40% of schools had separate toilets for girls. Despite Bangladesh achieved remarkable success in primary school enrolment, average pass rate at grade V and school attendance rates were 87% and 85% respectively with wider variations among the upazilas. On average, 1 out of 10 students needed to repeat the same class and 1 out of 20 students dropped out from school.

In terms of access EDI (constructed using two sub-parameters - schools per thousand populations and accessibility of schools), most upazilas performed in the mid-range (0.4 - 0.6), suggesting a significant scope of improvement in terms of accessibility of schools. However, the upazilas around the ‘haor’ (large water bodies) regions in Sylhet division and in Mymensingh division and the upazilas from Chittagong Hill Tracts (CHT) lagged behind other upazilas badly in terms of accessibility. Some other upazilas along the Jamuna River and the Padma River (the ‘char’ lands) also performed poorly. While improvement of accessibility of schools is necessary for most upazilas, these lagging upazilas warrant special attention for their geographical locations. Upazilas located in the metropolitan areas, in contrast, performed well in terms of accessibility.

The patterns of infrastructure EDI (constructed using five sub-parameters - school with safe water, school with electricity, school with toilet per 100 students, average room condition of the school, and student-room ratio) were similar to those of the access EDI. However, the performance of upazilas in terms of infrastructure EDI was worse than that of access EDI. A large number of upazilas were in the lower mid (0.2 - 0.4) of infrastructure EDI, while most of them belonging to the Chittagong Hill Tracts and Mymensingh division. Upazilas in the south west of Bangladesh were quite crowded as the schools were not easily accessible to the neighboring residents. All the bottom ten upazilas were either from the ‘haor’ region or from the CHT. Though the population density in the CHT is low, the upazilas in the ‘haor’ region are home to a sizeable portion of population of the country. Thus, these lagging regions warrant special attention to improve the overall development of primary education in Bangladesh.

The aforementioned analysis suggests that despite many achievements during the past decades, major improvements are still needed in Bangladesh in order for all children to receive the benefit of quality primary education. Opportunities for good quality primary education in Bangladesh are limited by inequalities associated with wealth, location, ethnicity, gender, and other factors. The major challenges thus include addressing poor quality of education, high dropout rates, promotion of equity and accessing education, and targeted programs for lagging regions.

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SA: Inclusive growth means that the benefits of any growth or economic transformation must be shared by all segments of the population; particularly the poorer, underprivileged class and the ethnic minorities, that is, all be benefited from economic growth. To attain inclusive growth we need to give priority to human capital development. By human capital development we mean enhancing the capabilities of people, developing marketable skills, and educating them so that they can enjoy the fruits of economic development. Education is the only way to enable people to move ahead in the society. To attain inclusive growth we have to ensure access to quality education for everyone in the society. Poor must have access to free education.

SANEM: What are the government policies to accrue the benefits of the demographic dividend?

SA: We can say that the actual phase of demographic dividend began 6 to 8 years from now. As we understand, the benefits of demographic dividend will start to decline from 2035-36. From then on the inclusive growth we need to give priority to human capital development. By human capital development we mean enhancing the capabilities of people, developing marketable skills, and educating them so that they can enjoy the fruits of economic development. Education is the only way to enable people to move ahead in the society. To attain inclusive growth we have to ensure access to quality education for everyone in the society. Poor must have access to free education.

SANEM: How is human capital development incorporated in the 7th Five-year-plan of Bangladesh?

SA: The economy is transforming rapidly, businesses are expanding and industrial sector with infrastructural development, energy-security etc. This year the highest amount of budgetary allocation went to education sector; also, the health sector budget has been increased substantially. In the Five-year-plan we laid out several strategies that should be followed in achieving the Plan-goals. Particularly emphasized on demand led technical skill development. Skill development will help the poorer class most. As they cannot afford higher education, skill development will help them get better jobs with higher remuneration. We also need to develop marketable skills for our growing industries. Over the last couple of years, the Government has established myriads of technical institutes, technical schools and colleges, and even technical universities. Many nursing institutes have been established - marine academies as well. Therefore, all major kinds of technical education that relate to the market demand have been emphasized in the 7th Five-year-plan.

SANEM: How can skill development programs influence the process of improving the quality of employment?

SA: If education is linked to industries, then technical education that relate to the market demand then they will get quality jobs. It is essential that skill development programs be closely linked to industries.

SANEM: Does the government have any plan to improve the skills of expatriating labor?

SA: Skill development programs should be provided and courses should be offered as per the demand of the industries and the market. Providing technical education which, do not have any market demand will be useless. We need to increase the percentage of technically educated people. At least 20% of the population should receive technical education and skill development training during the 7YF. If education is linked to market demand then they will get quality jobs. It is essential that skill development programs be closely linked to industries.

SANEM: What are the government policies to accrue the benefits of the demographic dividend?

SA: As we understand, the benefits of demographic dividend will start to decline from 2035-36. From then on the inclusive growth we need to give priority to human capital development. By human capital development we mean enhancing the capabilities of people, developing marketable skills, and educating them so that they can enjoy the fruits of economic development. Education is the only way to enable people to move ahead in the society. To attain inclusive growth we have to ensure access to quality education for everyone in the society. Poor must have access to free education.

SANEM: What are the major challenges for human capital development in Bangladesh?

SA: In moving forward, five things need to be focused and pursued. First, draw from the lessons of yesterday’s knowledge. And, the nexus can be seen from the perspective that better human capital formation, can contribute to more efficient and effective institutional framework – so critical for realizing the SDGs. Better educated people can also make more informed decisions, which may affect SDGs through the environmental, economic, and social routes. Human development, through enhancing economic, social, political and environmental choices of people, can also impact the SDGs positively. Furthermore, the analytical foundation of the SDGs is deeply anchored into the human development paradigm, which is linked to human rights, human security and human freedom. Measures of human development can also inform and influence the measurement of the SDG indicators.

Challenges for countries like Bangladesh: In terms of human capital development, the three main challenges in Bangladesh are the quality of education, inadequate and relevant skill formation leading to a mismatch between skills demanded and supplied and lack of higher-level innovative and creative human capital, which can compete globally in future years. We have to remember while focusing on human capital development, first, we have to be futuristic and shall have to look globally, beyond our borders; second, we must not discriminate against women and third, we cannot compete in tomorrow’s world with yesterday’s knowledge.

From the human development perspective, the three main challenges are: first, consolidate and accelerate the impressive progress that Bangladesh has made on different fronts of human development over the years; second, remove the unevenness and disparities in human development progress on various planes (e.g. rural-urban, men and women, various regions); and third, reduce the human deprivations that still persist in various areas of human lives.

Way forward: In moving forward, five things need to be focused and pursued. First, draw from the lessons of successes and failures of past initiatives; second, identify the constrains that hinder or slow progress; third, formulate a policy matrix, through broader dialogues with different stakeholders, conducive to human capital development and human development with the necessary resource framework and clear implementation mechanisms; fourth, develop or strengthen institutions and develop an alliance with different development actors; and finally, create a monitoring and evaluation system with necessary benchmark surveys, indicators, data and reporting mechanisms.
A seminar on the ‘Evolution of Department of Economics, University of Dhaka’ was jointly organized by Department of Economics and Economics Study Center (ESC), University of Dhaka on June 22, 2016. The seminar was conducted by Professor Selim Jahan, PhD, Director, Human Development Report Office, UNDP, New York. The main discussion included the history as well as culture of the department and emphasized on the motivations one should have to be a good academic personnel. The seminar was chaired by Professor Dr. Nazma Begum, Chairperson, Department of Economics, University of Dhaka. The seminar was attended by faculties and students of the department. Dr. Selim Riahman, Professor, Department of Economics, University of Dhaka and Executive Director, SANEM, Dr. Farazi Binti Ferdous, Research Fellow, SANEM and Mahtab Uddin, Research Associate, SANEM were also present at the seminar.

A Global Conference on “Prosperity, Equality and Sustainability: Perspectives and Policies for a Better World” was held on 1-3 June, 2016 at India International Centre, New Delhi, India. The conference was jointly organized by Institute of Human Development (IHD) and World Bank. Participants from around 40 countries attended the conference. 90 papers were presented in overall 8 sessions. The event featured diverse issues of global development policy spanning over areas such as employment and livelihood, health, food security and nutrition, social inclusion, social protection, governance and institutions, gender etc. Dr. Selim Riahman, Executive Director of SANEM, presented a paper on “Managing Growth for Social Inclusion in South Asia: The Bangladesh Perspective” in plenary session 2 chaired by Dr. Deepak Nayyar, Emeritus Professor, Jawaharlal Nehru University. Dr. Selim Riahman portrayed issues related to Bangladesh and prescribed policies for inclusive growth. Ms. Andilip Afroze and Mr. Md. Jillur Rahman, (Research Associates), also attended the conference from SANEM.

The SANEM family, this month, welcomes Ms. Iffat Anjum and Mr. Zubayer Hossen as Research Associates and Ms. Taznina Tareq Nitol as a Communication Intern.

A budget dialogue arranged by the Centre for Policy Dialogue (CPD) was held on 19 June, 2016 at the Lakeshore Hotel in Dhaka. Honorable Minister of Planning, Mr. A. H. M. Mustafa Kamal, MP attended as the chief guest at the dialogue. As the special guest Mr. M. A. Mannan, MP, Honorable State Minister for Finance and Planning attended the event. The keynote discussion on budget focused on the point of views of investors, consumers as well as citizens. From SANEM, Research Fellow Dr. Farazi Binti Ferdous and Research Associates, Mr. Mahtab Uddin and Mr. Wahid Ferdous ibon attended the program.

The First SANEM Training Program on Cutting Edge Methods in Applied International Trade

The First SANEM Training Program on Cutting Edge Methods in Applied International Trade (previously scheduled to be held from 8-11 August, 2016) has been rescheduled to be held from 5-8 August, 2016 at Hotel Sea Crown, Cox’s Bazar, Bangladesh. The training module will consist 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. For further queries please visit our website at www.sanemnet.org.

The Regional Workshop on the Adaptation of the 2030 Agenda and the Istanbul Program of Action at the National Level for the Least Developed Countries in Asia and the Pacific jointly organized by ESCAP and the Government of the Lao People’s Democratic Republic placed on 28-29 June 2016 at Vientiane, Lao People’s Democratic Republic. The objectives of the workshops were to review the key outcomes of the Midterm Review of the Istanbul Program of Action, synergizing the IPoA with the 2030 Agenda, identifying financing strategies for graduation and formulating analytical frameworks to support the integration of the social, economic and environmental dimensions of sustainable development, which will serve as peer learning platform for policymakers. Participants included policymakers from relevant ministries in the region, representatives of the private sector, civil society, think tanks, regional institutions, development partners, United Nations agencies, and eminent experts. From Bangladesh Dr. Selim Riahman, Executive Director, SANEM attended the workshop as a panelist of session four on the topic ‘Analytical framework for the integration of goals and targets of the 2030 Agenda’.

The Regional Capacity Building Workshop on SDGs Modelling for the Least Developed Countries in Asia and the Pacific placed on 30 June, 2016 jointly organized by ESCAP and the Government of the Lao People’s Democratic Republic. The major objective of the program was to provide a peer learning platform for policymakers from the Asia-Pacific least developed countries to exchange knowledge and share experiences related to building Sustainable Development Goals consistent models. The workshop also offered policy simulation analysis with a selected number of methodological tools to enhance the understanding of the participants of data management of the Sustainable Development Goals indicators. From Bangladesh, Dr. Selim Riahman (Executive Director, SANEM) attended the workshop.

Regional Workshops held in Lao PDR