Education Priorities for Human Resource Centered Development in Bangladesh

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Abstract

A number of countries from Korea, to Singapore and Ireland, India, China, and others, have crafted strategies for economic and social development based largely or substantially on utilization of the skills of their people. With its large population, Bangladesh would seem well suited to a growth strategy organized around the utilization of human resources. Education is a core component of such a strategy. This paper examines the current status, challenges, and prospects for education in supporting a human resources oriented development strategy over the next 20 years.

The paper begins with a "horizon scan" for Bangladesh in 2030 and an overview of the present education scene. Available information on disparities in education is placed in the context of broad contours of social divisions and inequality and discussed in some detail.

Inequalities are examined in light of competing theories of the linkages between education and equality:- a) social reproduction theory, b) neoliberal doctrines of educational reform based on a partnership of state and other stakeholders, with a role of the market forces, and c) a "pragmatic" middle ground of state-led partnership to mitigate forces of social reproduction to ensure human resource development characterized by quality, relevance and equity in the education system. A series of necessary steps to reaching such a vision in the context of Bangladesh is introduced.

I. Introduction

What will Bangladesh look like just over two decades hence, in 2030?

One of the most striking features about Bangladesh in 2030 is the sheer number of people in the country. The population is just under 200 million, and almost 40 percent is under the age of 15.

Environmental refugees from rural areas form part f the huge number of people who have moved to the cities… With flood defences concentrated on the cities, and the hope of alternative livelihoods, over 80 million people now live in urban settings. Dhaka has become one of the world's largest mega cities, with 30 million residents.

Climate change has affected the whole country in a variety of ways, including rising sea levels and flooding leading to an increase in vector-borne diseases… increased incidence of non-communicable diseases such as diabetes is an additional pressure on the health system.

In education state provision is inadequate to meet all the needs. While Government is still the main provider at the primary level, most secondary schools are privately run. Increasing numbers of poor parents are sending their children to madrassahs where education and food are free, but educational opportunity limited.

Bangladesh is now a Middle Income Country thanks in part to a more diversified economy which is no longer completely reliant on the RMG [ready-made garments] sector. However, while it has achieved MIC status, its neighbours in the region have grown their economies more quickly with the result that Bangladesh still lags behind its immediate trading partners and competitors.

Bangladesh is also exporting more labour to services markets globally. This was held up for a time due to a mismatch of skills with those required on the international job markets. But numbers of people traveling abroad is now increasing again, following provision of more appropriate training and credit schemes… Bangladesh has realized that it has to maximize the potential of its human resources. Despite these opportunities, unemployment has remained stable due to rise in population.

The issue of inequality is highlighted in these conditions. 28 percent of urban dwellers are poor, and 14 percent are extremely poor. But the richest also live in the cities. In an increasingly polarized society, social exclusion is very visible, and large numbers of people are "left behind" in urban slums.

And Bangladesh is more at risk from extremism, partly because of the lack of access to quality education. These social drivers are combined with growing links to international terrorism

Lack of planning is one of the things that led to the major problems in Dhaka and other urban centres, and the Government has learnt from this and has now improved its planning processes to prepare better for the future.

- Excerpts from *" Bangladesh in 2030: A DFID horizon Scan,"* UK Department of International Development, Dhaka, 2007

The challenge is how this potential *de ja vu* scenario can be altered with foresight and determination, and by adopting appropriate education priorities with a human resource centered development strategy.

The premise that fighting poverty, promoting human development, creating the conditions for life with human dignity for all, and facing the challenges of the 21st century are major inter-connected goals of national development begs the question – How should the education system be redirected to contribute to these goals?

II. An Overview of the Education Situation

With independence, Bangladesh inherited an education system composed of a small number of elite schools and a larger number of lower quality institutions, some public, many private and organized by religious organizations. Still, the majority of the population received little or no education. In working to educate its people, the Bangladesh government greatly expanded education in terms of both the numbers of institutions and enrollments at all levels, especially in the last decade. In addition, the country has overcome a substantial gender gap in primary and secondary school participation. Girls are now as likely as boys to enroll at those levels.

However, the key considerations in understanding and assessing the role of education in poverty alleviation and enhancement of human development and human dignity are (a) access to education, (b) quality and relevance of education, and (c) equity in access and participation so that the poor and the disadvantaged are indeed the beneficiaries.

Nominal enrollment in school that fails to equip children with basic skills of literacy and numeracy or skill training that does not lead to employment or better income cannot do much to change people's life or their economic status. Education and training in different sub-sectors have to function at an acceptable level of performance before their impact on poverty and human development can be realized.

The education system in Bangladesh, as will be seen below, is not equitable and the quality and content of education do not effectively serve the goals of human development and poverty reduction. Despite rhetoric since the colonial days and the constitutional pledge of an independent Bangladesh, effective participation in basic education – primary education for children and functional literacy and continuing education for youth and adults – remain beyond the reach of a large proportion of the population. The numbers of

institutions and enrollments have grown at all levels, but it is generally agreed that quality of education has deteriorated and remain seriously deficient, especially in institutions in which the children of the poor predominate. Even in the public sector in education, equity and service to the poor are not explicit criteria in financial provisions and budget allocations. The education system has failed to make the grade in respect to access with quality and equity.

The linkages between education and human development and poverty reduction can be examined in light of three broad policy domains: the state of *access with equity and quality*, the effects of *education governance*, and *the provision and use of resources in education.*

A. Access with equity and quality

Access to universal primary education and the opportunity to acquire literacy and numeracy by youth and adults are regarded as a matter of citizens' right under the constitution and under international human rights treaties. This is also a national development imperative. However, realities of today's world relentlessly demand wider access to increasingly higher levels of education. These realities include rising expectations of people, need for an increasingly broader and higher base of knowledge and skills of the population in the knowledge and technology-driven economy, and competitiveness in the global market. The secondary level of education is now regarded as a part of basic and compulsory education in many developing countries. Other imperatives for educational development are the expansion of relevant vocational and technical skill development, increased access to high quality tertiary and professional education, and vastly expanded opportunities for life-long learning for all ages.

Primary Education

Two positive aspects of primary education development in the past decade are noteworthy. First, the slowing down of population growth rate from around 2.5 percent in 1990 to 1.5 percent in 2005 (according to Bangladesh Bureau of Statistics) has resulted in a decline in eligible numbers of children in the age group for primary education. It is, therefore, now possible to pay attention to improvements in quality rather than simply expanding services. Secondly, girls' enrollment has grown at twice the rate of boys', resulting in gender equality in enrollment. Government policy priority, greater economic opportunities outside home for women, and social awareness-raising have contributed to this development.

Still, at the primary level, one in six children does not enroll in school and nearly one in two of those enrolled does not complete primary education. This adds up to more than half of the children not having the benefit of a full cycle of primary education. This does not take account of what is actually learned by those who complete primary education. Available studies suggest that a large proportion of children are essentially deprived of primary education, although they are enrolled in school. One third of children after completing five years of schooling are reported to be without functional skills of literacy

and numeracy (Ahmed M., et al., 2003). Other studies have supported these disappointing findings. The explanation lies in the low average attendance in class by enrolled students, and what one can observe about the crowded classrooms, lack of learning materials, untrained and often unenthusiastic teachers and short contact hours in schools which mostly operate in two shifts.

While enrollment has increased, serious problems of access to primary education remain. Access is often narrowly defined only as initial enrollment. Given the realities of the system, a meaningful definition of access and participation in primary and secondary education needs to take into account at least four kinds of exclusion: i) non-access at the age of entry and not being ever enrolled, ii) dropout before completion of the particular stage, iii) nominal enrollment but non-engagement in learning, therefore, virtual exclusion and vulnerability to drop out, and iv) failure to progress to the secondary level after completion of primary education (Ahmed M., et al., 2007).

It is generally agreed that poverty hinders participation in education. The proportion of population in poverty is estimated to be around 40 percent, half of whom can be categorized as hardcore poor (Ministry of Finance, 2007). The number of primary school-age children in the hardcore poor category (about 4 million) is double that of the number of children never enrolled (about 2 million). The pertinent questions, therefore, are: a) To what extent is there an overlap between the non-enrolled and the hardcore poor children? b) Why do some children from the extremely poor families enroll in school and others do not?

Available information suggests, expectedly, that poverty overlaps and interacts with other conditions of disadvantage and vulnerability, such as:

i) Women-headed families – 5.8 million families according to population census 2001 (Bangladesh Bureau of Statistics, 2003a). About 1.45 million children of primary school age are estimated to be from poor female-headed households (Ahmed M., et al., 2007);
ii) Working children – 5 million in child labour including 1.3 million in "hazardous work" in the 5-14 age range, according to the National Child Labor Survey, 2002-3 (UNICEF, 2005);
iii) Street children – over 400,000 in six metropolitan cities according to a survey of the Bangladesh Institute of Development Studies in 2002 (Department of Social Services/Bangladesh Institute of Development Studies, 2004);
iv) Children with special needs – no accurate estimates are available. Applying the WHO ratio of 10 percent of the population with mild to severe disabilities to the primary school age children would indicate that the number of children with special needs is about 1.8 million.
v) Ethnic/language minorities – the indigenous minorities constitute fewer than 2 percent of the population with a primary school age group of 350,000. All indigenous community children are not in the same situation in respect of education services. It is necessary to assess the different aspects of education access of these children.

vi) Inhabitants of remote and accessible areas – Groups of population live in isolated and remote areas, such as *chars* (land mass formed by alluvial deposits), *haor/baor* (large inland water bodies) and coastal and island areas. Numbers in these areas and the state of their educational services have not been assessed.

The socio-economic conditions described above are obstacles to children's enrollment in school as well as their continuation and effective participation in education. Dropout, virtual exclusion from learning in school, and failure to continue into post-primary education are all affected by these factors. Most children deprived of education are affected by a combination of factors and are victims of multiple disadvantages.

It has become clear that access to and participation in primary education, especially of the poor, is not simply a matter of providing schools within physical reach. In fact, with nearly 80,000 primary level institutions in the country, almost every village has a primary school. Yet, as the demand for non-formal primary education and attendance of at least 1.3 million children show, the functioning of the school has to be responsive to the specific circumstances and needs of children in various ways. These include the daily time-table and annual calendar of the school, the learning materials and the pedagogic approach, the ways the teacher relates to the children, affordable costs which do not burden the family with the cash cost of exercise books and pencils, rapport of the teacher with the parents, as well as the proximity of the school, especially for girls. Above all is the assurance to parents and the children themselves that the teacher is present every day on time and that the children indeed learn. Poor parents in particular need assurance that their children will learn without a private tutor outside the school, which the parents cannot afford.

Contrary to government policy, parents usually have to bear unofficial payments of various kinds (for sports, transport of government-supplied textbooks, terminal examination fees etc.) in "free and compulsory" primary schools. In addition, any expenses for private tutoring outside the classroom present additional obstacles to poor families. According to one estimate, families spent on averageTaka 1,000 per child per year for private tutoring (Chowdhury, AMR, et al., 2001; World Bank, 2000). Because of deficient school instruction, parents find this expenditure necessary to ensure that their children will complete primary education and continue to secondary school.

The primary school system faces serious problems in essential inputs to quality such as sufficient numbers of teachers, their training and supervision, and learning materials, all of which have a legitimate claim on scarce resources. There are also problems of rational distribution of schools and classrooms according to where the children live.
The primary education centers of NGOs, which serve the poor population-–dropouts from regular schools and the "never-enrolled"-have demonstrated that the problem is mostly about adequate and appropriate supply of services rather than demand. Children from poor families attend these primary education centers and do not drop out, even without the incentives of stipends offered in formal schools. The NGO schools, on the other hand, ensure that there is no cash cost to families to send their children to school.

Secondary Education

Transition from primary to secondary level (defined as proportion of grade 5 students enrolled in grade 6 in the following year) was estimated at 83 percent in 2004 (Ahmed M., et al., 2007). This relatively high transition rate does not mean a high enrollment ratio at the secondary level because of the high cohort dropout in primary school. Thus, while progress has been made in expanding enrollment, net enrollments is still at 45 percent.

There are four major types of provision in secondary education–general Bangla medium schools, government-assisted Madrasas, vocational/technical institutions, and different types of private and government-assisted English medium schools. The system lacks a unified approach to curricular standards and quality of educational provision and outcomes, and thus reinforces existing divisions and inequities in society.

Enrollment in government-assisted madrasas has almost doubled in the decade since 1995, whereas in the mainstream schools the increase has been under 50 percent (Bangladesh Bureau of Educational Information and Statistics, BANBEIS , 2006). The *quomi* madrasas run privately, and the government exercises no oversight over them. Reliable data are not available, and are thus not included in these madrasa statistics. This raises the policy question about whether public preferential funding should support a large educational program of questionable value, quality and relevance.

At the secondary level, 80 percent of the children starting class 6 do not pass the SSC examination (BANBEIS 2006). The same problems of inequity and quality as in primary education plague secondary education. *Education Watch 2005,* which focused on secondary education, found that:

- Those who do not enroll in school or do not complete secondary education are largely the poor, extreme poor or other disadvantaged groups.

- On average, about two-thirds of the enrolled students are present in classes. Intermittent and irregular attendance is a widespread and commonly accepted practice.

- Besides open exclusion of children who do not enroll or drop out, *silent or virtual exclusion* –children who are nominally enrolled in school, but who attend classes irregularly and do not learn anything–is a serious problem. This problem remains unquantified and uninvestigated.

- The public examination (SSC, HSC etc) pass rates have shown large variations from year to year, which raises question about reliability of the tests and whether these properly measures competence and knowledge of students (Ahmed et al., 2006).

Currently, secondary schooling serves essentially as a screening device for disqualifying the large majority of young people and selecting a small minority for tertiary education,

rather than having an educational purpose of its own. The curriculum and teaching are geared to preparation for higher education, to which only a fraction of students can aspire. Secondary schooling currently offers students little in relation to prospects for gainful employment, entrepreneurship or practical skills–none of which, of course, need be a disqualification for further education (Asian Development Bank, 1998).

As at the primary level, the closing of the gender gap in secondary school enrollment is a positive development, in spite of overall inequities. Incentives such as stipends and elimination of tuition for girls in rural areas have made a difference. Although desirable in its own right, this outcome does not compensate for the structure of inequity that characterizes the system. More girls, in absolute numbers, are benefiting from education, but girls from the poorest families, from remote rural areas, from urban slums, and from ethnic minorities remain deprived as do their male counterparts. Stipends again do not fully compensate for the vulnerabilities of girls from the poorest families.

As noted earlier, most developed countries and an increasing number of developing countries count at least ten years of education as compulsory education. Clearly, Bangladesh must greatly increase access and participation rates in secondary education to raise the basic level of education of the population. To be meaningful, this has to be done by increasing access with quality and equity. An important strategic question in this respect is how to balance the increase and maintain "parity in quality" among the different major streams of post-primary education: general secondary schools, madrasas, proprietary English medium schools and vocational-technical institutions.

Vocational and Technical Education (VTE)

The vocational/technical (VTE) subsector is characterized by very limited opportunities for organized development of vocational and technical skills for the size of the population in Bangladesh. This is in contrast to the informal skill development through on-the job experience and traditional apprenticeship.

A recent survey showed that for each person in the workforce with VTE , there were 104 graduates of secondary school and 34 college or university graduates (Bangladesh Bureau of Statistics, 2003b). Does this mean that there are too few workers with vocational-technical qualifications? Should the government establish more vocational and technical institutions? Should secondary students be encouraged to move in large numbers to VTE? Given the way the system is currently organized, these policies would improve learning and reduce inequalities only with major qualifications and caveats.

The overall education and skill level of the workforce is very low. According to the 2002-3 Labor Force Survey, 55 percent of the work force lacks any education, 17 percent has some education at primary level or below, 25 percent has some secondary education, and only 3 percent has education at the degree or higher level (Bangladesh Bureau of Statistics, 2003b).

There is a mismatch between skill training offered, especially in the public sector, and the skill demands of the employers. For example, less than 10 percent of the graduates of VTE institutions are employed in their areas of training soon after graduation. The rest are divided equally between unemployed and enrolled in other education or training courses (World Bank, 2006). It should also be noted that eighty percent of the workforce in Bangladesh is employed in the informal sector. The VTE system has little link with informal employment and has not considered ways of catering to the needs of this sector.

Traditional informal apprenticeship and on-the-job experience create most of the skills that keep the bulk of the economy and production running. A master craftsman, himself inheriting the skill from his father or another "master," trains his assistants in exchange for free labor or a reduced wage in such skills as welding, turning, bricklaying, carpentry, furniture making, electrical maintenance, plumbing, bicycle repair, motor repair and so on. Not enough is known about this system and its strength and weaknesses. Bringing the system under official regulation is not necessarily a good idea. However, gaining an understanding of the informal system and considering how the more formal training programs of the government and the private sector can complement and supplement the informal system could enhance the effectiveness of the nation’s capacity to generate skills.

Stated government policies and goals are to increase substantially the proportion of post-primary students enrolling in vocational and technical education (VTE). The equity effect of this expansion is dependent on three inter-connected questions: (a) the extent to which the programs are accessed by the disadvantaged and poor segments of the population, (b) the effectiveness of the programs in imparting marketable skills, and (c) the impact of the training programs on increasing employment opportunities and raising income of the poor.

The impact of public sector VTE on poverty alleviation is undermined in two ways. It serves mainly *young males* who have completed at least the eighth grade. This rules out those who do not survive in the education system up to grade 9, mostly the poor as well as the majority of girls. Secondly, failure to diversify its clientele and to make the program more flexible, adaptable and responsive to market needs and geared to the informal economy means that VTE is failing to help the poor improve their income and employment prospects.

A wider clientele including the poor and girls can be served to the extent that skill development activities adopt more non-formal, flexible and variable-duration approaches with eligibility criteria not strictly tied to formal education. In addition, there are many questions about the internal efficiency and external effectiveness of programs and their actual contribution to poverty alleviation, a few of which are discussed below under the governance of education.

Nonformal Education (NFE)

In the early 1990s a broadly conceived non-formal education program known as the Integrated Non-Formal Education Program (INFEP) was initiated to serve the diverse learning needs of the population. It envisaged extensive involvement of non-government organizations in developing and carrying out NFE activities. Since the mid-1990s, however, the government has chosen to concentrate on a narrowly conceived non-formal education program confined to basic literacy courses carried out through a campaign approach (called the Total Literacy Movement or TLM) managed by the government administrative machinery in each district. TLM was initiated in 1994 with the ambitious aim of eliminating illiteracy from the country within a decade. According to the now-defunct Directorate of Nonformal Education (DNFE), 17 million people participated in literacy programs between 1994 and 2002. It was claimed that, as a result of all these activities, two thirds of all adults in the country acquired literacy skills. However, independent observers were skeptical about the literacy outcome and its functionality. Various independent studies indicated that the adult literacy rate was in the range of 40 to 50 percent with a high degree of gender disparity (Ahmed M., et al., 2003; Bangladesh Bureau of Statistics, 2003a).

Currently, the main public-sector NFE activity under the Ministry of Primary and Mass Education is the Post-Literacy and Continuing Education (PLCE) project funded by a group of donors including World Bank and ADB. It aims to serve 1.3 million adults who went through the TLM course. The content focuses on consolidating literacy skills and short training to teach income-earning skills.

Other than the PLCE projects, there are no substantial adult literacy efforts at present. This is in part due to lack of agreement about where the country stands in terms of the literacy levels of the population, and what realistic goals and targets would be. Without a workable strategy and a clearly defined national goal, progress cannot be made towards EFA goal on literacy (Box 1). To avoid falling back into the shortcomings and difficulties that characterized earlier literacy and NFE efforts, it is essential that lessons learned from past failures be fully taken into account in developing literacy and NFE programs and implementing current and future programs, including the on-going PLCE projects.

A comprehensive vision for non-formal education has to be a major component of building a learning society. A policy framework for non-formal education, adopted in 2005, takes a broad view of the role of non-formal education (Bureau of Non-Formal Education, 2006). However, the organizational structure established to implement the policy is a scaled- down version of the former Directorate of Non-formal Education, which was closed down in 2003, in the face of complaints about widespread mismanagement and corruption. This situation, therefore, leaves a vacuum in respect of an appropriate mechanism with oversight and overall responsibility for non-formal education in the public sector.

Box 1. Status of Progress on Six EFA Goals

(Adopted at World Education Forum, Dakar, 200)

Goal 1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Status: Roughly 25 percent of eligible children, not necessarily the most disadvantaged, have access to preschools. A national plan, objectives, targets, policy framework and quality standards need to be developed.

Goal 2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.

Status: Fulfillment of goal is unlikely at present rate of progress. A specific and targeted plan has to be adopted urgently and implemented seriously.

Goal 3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programs.

Status: An overall operational plan has not been adopted. The draft NPA based on Dakar Goals has not been finalized.

Goal 4. Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Status: Not on track. Debate about the baseline for literacy level and appropriate definition and measurement of literacy skills have not been resolved. Independent research suggests that there has been insignificant progress in literacy level since 2000. There is a wide gap in literacy level between rural and urban populations and between men and women.

Goal 5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Status: Gender disparity in enrollment by 2005 has been achieved. Full gender equality with "full and equal access … and achievement in basic education of good quality" by 2015 calls for effective strategies for these purposes with a workable implementation process and mechanism.

Goal 6. Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Status: A comprehensive plan, strategy and program with objectives and targets are not in place.

Source: BRAC University Institute of Educational Development (BU-IED), "Brief on Literacy and Non-formal Education," Thematic Forum, Dhaka, 26 April, 2007; UNESCO, EFA Global Monitoring Report, 2005.

Tertiary Education

In 2005, the major components of tertiary education network were 21 public general and specialized universities, 53 private universities, 1,597 colleges of different kinds affiliated with the National University as well as the Bangladesh Open University. Just over a million students were enrolled in higher education, which was four percent of the age-group 17-23 years. The equivalent proportion for India is 12 percent, 29 percent in Malaysia and 37 percent in Thailand (University Grants Commission, 2006). The University Grants Commission (UGC) is the regulatory body for university level institutions.

Historically, the University of Dhaka, and degree colleges in the old district centers of the eastern part of Bengal had earned a reputation for high academic standards and as centers of intellectual pursuit. A massive expansion of the system and the demands of time have altered the character of Bangladeshi higher education over the last half century. In numbers of institutions and enrolment, tertiary education has recorded over five-fold growth since independence in 1971. Yet, participation of only 7 out of every 1000 persons in higher education in today's "knowledge economy" and "information society" has to be considered meager.

Students and teachers in higher education, with percentages in parentheses, as reported by UGC in 2004-5, are shown below:

Enrollment in public universities	112,430	(10.9%)
Enrollment in private universities	62,856	(6.1%)
Enrollment in colleges under National University	773,492	(74.9%)
Bangladesh Open University	84,271	(8.1%)
Total	1,033,049	(100.0%)

(Source: UGC, 2006, Table 1)

The government has followed an expansionist approach , particularly, in the sphere of degree colleges under the National University and in liberally approving the charters for private universities. Private universities have grown rapidly in number and enrollment since the Private Universities Act was adopted in 1992. Between 1998 and 2005, the number of students and institutions has increased more than seven times. The rapid growth and the absence of effective self-regulation or regulation by the University Grants Commission (UCG) have raised concerns about quality and protecting consumers from unscrupulous "entrepreneurship."

While the need for growth in tertiary education is not in dispute, the overwhelming challenge is to establish and maintain quality standards as the expansion takes place. A recent review notes:

> The public universities, except the top few, do not have the facilities needed for quality teaching. The faculty is not up to an appropriate standard, and student quality is also poor… A large number of private universities are operating in makeshift arrangements…They have failed to meet the

> minimum requirements of physical infrastructure, full time qualified faculty, libraries, teaching aids and other facilities… National university colleges are even worse. Teaching quality is generally unsatisfactory. Logistics and facilities are also poor. In Bangladesh the higher education institutions and the programmes they offer largely operate without any sustained and periodic critical review that is needed for quality maintenance and enhancement. (UGC, 2006, p.14)

Colleges under the National University cater to over three quarters of the higher education students. They largely supply the teachers for primary and secondary schools. Improvement of quality in the colleges is critical for reversing the decline in the entire education system including universities, which draw their students from the school system.

There is intense competition for the limited places in the universities and a few prestigious colleges and for fields which are seen to have a high market value. While private universities have widened the door of higher education, the high tuition set to make them self-financing also puts them out of reach of the poor or even the middle-class. Moreover, the quality of instruction in most of them is regarded as uneven at best.

The main issues regarding access to tertiary education are two-fold: (a) equity of access to universities and prestigious institutions leading to potentially high private returns from higher education, and (b) the balance of enrollment in different fields.

A highly inequitable system of higher education results from two processes: the culling-out process in secondary education, which allows only a small proportion of students to complete the secondary stage, and the diversion of a large majority of higher education aspirants, often the ones from poor and lower middle class families in rural areas, to low quality degree colleges. Selectivity based on merit is not the issue. The problem arises when general colleges become an expedient way of meeting social and political pressures rather than offering a credible education program.

Inequity is compounded by high public subsidy for higher education. The ability to compete on the basis of equal opportunities and educational provisions at the basic education stage is not ensured. This inequality is multiplied progressively through higher stages of education, reflected in selectivity which is urban and wealth-biased.

Gender disparity persists in higher education, despite progress at the primary and the secondary levels. About a third of the students in degree colleges are girls and less than a quarter are girls in universities. The ratio of girls is lower in most specialized professional institutions (Japan Bank for International Cooperation, 2002, pp. 53-54).

Balance among disciplines in tertiary education as a whole remains tilted towards humanities and social sciences at the cost of science, technology, and applied subjects. In degree colleges, the balance is even more skewed than in universities, mainly because of the lower costs of offering instruction in the humanities. Over 80 percent of the students in public universities were enrolled in general studies rather than in applied sciences or specialized professional courses. A hard formula cannot be prescribed for distribution

among disciplines, but the present balance would be generally regarded as inappropriate (Japan Bank for International Cooperation, 2002, p. 54).

B. Governance and management of education

Governance and management issues can be said to bring out in sharp relief the problems of the education system. All of the major problems of the education system can be attributed directly or indirectly to governance and management of the system. The administration and management procedures and processes are ruled by regulations and practices based on tradition, custom and precedence rather than responsiveness to changing needs and conditions.

The Chief Adviser of the Care-taker Government, in inaugurating a national conference on governance in education, said:

> We are all aware of instances where weaknesses in governance, including corruption, waste, mismanagement and inefficiency, undermine the initiatives for reform in education and prevent achievement of intended outcomes... Weaknesses in capacity and professional skills, structures and custom of centralised decision-making, culture and mindset that undermine transparency and accountability, are obstacles to reform in governance of education programmes… We should devise an optimal arrangement now for all education-related service-providers in a geographic unit, such as an upazila, to function cohesively. They should work together through a mechanism of local coordination to ensure that every child can participate in an institution which meets the minimum agreed standards of instruction, whoever the service-provider may be. The mental barriers between government and non-government programmes must be bridged in order to fully utilise existing social capital and achieve educational goals (Governance in Education Conference, 2008a).

Concern has been expressed in the Education Commission reports of 2000 and 2003 about rampant lack of discipline, student unrest and other adverse influences of the politicization of education decision-making (Government of Bangladesh, 2003). The related problems of corruption and mismanagement, spawned and nurtured by partisan politics, when disciplinary and remedial action cannot be taken, have become the most serious obstacle to educational reform and change. Pro-poor changes in the education system proposed in the PRSP cannot succeed unless the political obstacles to change can be removed or at least mitigated. The poor mostly suffer from this failure of the system, because the rich and the elite can opt out of the system and go to private institutions or abroad, as many have (Government of Bangladesh, 2006).

The assumption of power by a caretaker government in January 2007 after the declaration of a national emergency, led by the caretaker government's agenda of political and governance reform, and the preparations for return to democracy through parliamentary election offer the hope that rampant politicization and corruption in the governance of education (and other sectors) will be put in check.

Overall sectoral policy-making, coordination, and oversight. An important systemic concern is how the education system as a whole and its sub-sectors function to help meet key social goals. It is a question of vertical and horizontal linkages and articulation

within and among sub-sectors of education and the possibility of taking a systemic view of the organizational structures and function of the system and its sub-systems.

The overall organization and management of education, for example, show critical disjunctions and discontinuities. For example, at the primary level, the four major streams–the government and non-government registered schools, the madrasas, non-formal primary schools run by NGOs, and the proprietary English medium schools–operate with differing learning objectives and academic standards, with little opportunity for horizontal movement of students, and no interaction among organizational authorities running these different streams. The same applies to the secondary level, in respect of the parallel streams in general secondary education, madrasas, proprietary schools and post-primary vocational and technical education.

At the tertiary level, there is no system-wide view, embracing colleges, universities, professional and specialized education under public and private management, the potential for specialized training by professional bodies and ways to link these together to match the demand for high level skills.

These concerns about horizontal and vertical links among subsystems point to the need for rethinking the organizational structures, functions, and roles in the education system. A systemic approach has to contribute to overall education system goal defined by society's overarching priorities, such as poverty alleviation. The systemic view will have to address broader human resource development issues, going beyond the parochial concerns of particular education sub-sectors. India, for example, has opted for a super-ministry for human resource development, which coordinates the work of different ministry and department level agencies and organizations involved in various aspects of building human resource capacity. Thailand and Indonesia have permanent statutory commissions with similar functions.

The Education Commission Report of 2003 has suggested a permanent and independent National Education Commission as an institutional mechanism for public debate and scrutiny of educational policies and priorities and for protecting education from undue political interference. The need has been expressed for a strong and autonomous body, replacing the weak University Grants Commission, for coordination of higher education, serving national development needs, setting and maintaining standards in higher education (University Grants Commission, 2006).

Allocation of authorities and functions at the central level. The distribution of authority, functions and capacities among central entities—Ministries, directorates, and other support institutions–has been identified as a serious management issue. A need expressed by many is to redefine the division of roles and responsibilities between the secretariat of MOE and MOPME and the Directorates–ceding more of the responsibilities for planning, initiating policy reforms and overseeing policy implementation to the professional staff of the Directorates. A consequence of the present situation is that insufficient time and effort can be devoted to the critical functions of strategic policy development, inter-sectoral and intra-sectoral coordination and general public interest watch at the Ministry level (Ahmed, M et. al., 2004).

Decentralization and devolution of responsibility and authority. The centralized structure of management of both government and government -assisted institutions has not changed over the years despite the rhetoric about decentralization. In recent years, increased politicization of education management has led to greater centralization. Many small and large decisions, which should be disposed of at the Directorate, district or Upazila level, end up at the highest level in the central Ministry. Salary subvention and *ad hoc* grants paid to non-government institutions by the government, and enforcement of compliance to regulations for this purpose, have provided an avenue for exercising various forms of central control over these institutions (Ahmed, M et al., 2004b).

At the primary education level, the Primary Education Development Programme (PEDP) II Macro Plan states,

> Fundamental to the process of quality improvement in primary education is the principle of decentralization and devolution of authority and responsibility to middle and local levels of the education system… A distinctive thrust of the PEDP II is to increase authority and accountability, and enhance resources at school level to achieve quality improvement in learning with equitable access. In line with this approach, key outreach support mechanisms will be developed at the upazila level… additional functions will be assigned to schools and upazilas, which will be strengthened in terms of infrastructure and staff." It is important to ensure that these promises are actually fulfilled (Government of Bangladesh, (2003a, pp. 48-49)..

The quality of education can be enhanced and schools can be held accountable for performance when individual institutions take responsibility for managing their own learning program. In the case of vocational and technical training institutions, for instance, this is the only way to assess and respond to skill demands from the local economy and adapt to specific opportunities and circumstances.

Even in the current general bleak picture, exceptional institutions which have earned a good reputation actually take greater responsibility for their own management, usually through good leadership of the head of the institution and support of an enlightened managing committee. These can serve as the model for a gradual move towards greater institutional responsibility and accountability.

C. Education financing

An anomaly of both under-resourcing and waste characterizes the financing of education in Bangladesh.

It is a *low-cost and low-yield system*. Per student primary education expenditure is about $13 and for non-government secondary education it is $16 (Bangladesh Bureau of Educational Information and Statistics, B2003). The low per capita and low overall costs are no reason for satisfaction, because educational quality–judged in terms of learning outcomes, the pedagogic process and essential inputs–is clearly the victim of this situation.

There is a *mismatch of financing and objectives.* Total national education expenditures, especially the public budget allocation, which is currently around 2 percent of GNP, has to increase substantially in the medium term to meet national goals and priorities regarding expansion and quality improvement of education. The share of government budget for the education sector would need to rise under one scenario from under 15 per cent in 2000 to 26 per cent in 2008 in order to achieve essential quality improvement (World Bank, 2000, Vol I, pp. 58-108).

Staff compensation dominates the recurrent budget (97 percent of the total) in primary education and comparably high at other levels. This leaves very little funding for other essential quality inputs such as learning materials, upgrading of teachers and academic supervision.

There are *high incentive expenditures* in primary and secondary education. Development expenditure is dominated by incentive payments in the form of stipends both at the primary and secondary levels. Stipends at the primary level amount to two thirds of the estimated development budget from the government's own resources and one third of the total primary sector development program (PEDP II). The important policy question that has arisen is whether the benefits in terms of participation, equity and quality improvement would not be better achieved by spending the funds directly on improving inputs and performance in school (Knowles, 2001).

Experience with the NGO's NFPE program shows that the problem is one of supply–offering quality schooling at the right time and place and in the right way without a direct cost burden on families for unofficial fees–rather than one of creating demand by offering stipends. Stipends may in fact defeat the purpose of increasing learning, if resources cannot be provided for essential quality inputs.

In principle, the generous system of public subvention for non-government institutions at all levels could be an important lever for maintaining and enforcing quality standards in the non-government institutions. In practice, it fails to work this way because of the weak capacity of the regulatory and supervisory organizations in the government, and intrusion of partisan politics in educational management.

Education Watch studies and other reviews have shown that at the primary level, average direct costs to households are comparable to per student public expenditures, although primary education is supposed to be free and compulsory. At the secondary level, depending on the type of institution, households spent multiples of per student public expenditure (Ahmed M., et al., 2004a; Ahmed M., et al., 2006).

The *significant household contribution for education* is not taken into account in government public financing strategy for advancing policy objectives such as equity and quality improvement. Education finance arrangements reinforce *the pattern of inequity* in the education system. The share of benefits from public spending in education enjoyed by households rises with income levels of households at all stages of education, but especially in secondary and tertiary education (World Bank, 1998). In primary education, the expenditure roughly corresponded with the income distribution of the population. But

considering actual effective spending and benefits, counting who actually completes the primary stage, it is clear the distribution is far from equitable.

III. Commentary on the Bangladesh Education Scene

As discussed, the great achievements of expansion of access and gender parity in Bangladesh have not translated into substantially greater social equality. At the low end of the socio-economic (SES) continuum, some of the very poor lack access to any education. Among low to medium SES families, available primary schools are often of poor quality. As a result, some students begin school but are unable to complete the primary cycle. Others complete primary school but fail to acquire functional literacy. Still others, often children from poor schools and low SES families, find difficulty competing with students coming from better schools, as entrance and completion requirements grow more stringent with higher levels of education.

Rural children have lower secondary pass rates than urban children, girls have lower pass rates than boys, and pass rates in non-government secondary schools are lower than in government secondary schools. The poor tend to predominate in non-government secondary schools and in rural areas. Higher SES children are better prepared for university, and again predominate, especially in the more prestigious fields and in Dhaka University. Even so, unemployment rates are growing among degree holders, while employers in some fields cannot fill available positions. Thus, while the education system has greatly expanded, it continues to manifest, reinforce, even create, great inequalities in access to high quality schooling as well as to higher levels of education. The economy fails to provide employment for many, even among the educated, yet schools cannot produce sufficient manpower in some fields. Expansion of education has not yet played the transformative role in national development is promised by what might be called the "optimistic view" of education and development.

A. The Role of Education: Human Capital Formation or Social Reproduction?

What we are calling the "optimistic view of education and development" sees expansion of education as fostering economic and national (and individual) development. The optimistic view can be understood in terms of three propositions:

1) Human capital is fundamental to national economic development. Increases in human capital should lay the groundwork for, or (in the strong form) lead to economic growth.
2) Expansion of education permits individuals to improve their economic status.
3) Expansion of education reduces social inequality—by fostering mobility among individuals of disadvantaged social backgrounds and through meritocratic allocation of positions in the economy (Hannum, 2006).

In this view, as the population increases its knowledge, attitudes, and skills—its stock of human capital—productivity increases, enlarging the economic pie and increasing per

capita income. As meritorious individuals from disadvantaged backgrounds increase their human capital, they should improve their economic standing, and inequality should decrease. Education policies driven by human capital would foster the acquisition of needed skills among individuals and the match between outputs of the education system and needs of the economy. “Wise” education policies would be paralleled by wise economic decisions—in the neoliberal economic view, liberalization of markets, opening of the economy, and so forth. Strong proponents of human capital theory tend to find sympathetic ground with neoliberal approaches to economic development.

While few would disagree with the importance of education and skills in economic development, critics see a much less deterministic role for education. Patterns of inequality and unequal power relationships frustrate the workings of meritocracy. Differences in the quality and availability of schooling, which often vary along socioeconomic lines, result in unequal accumulation of human capital. Questioned in particular is the relationship of schooling to the reduction of social inequalities, economic mobility, and the meritocratic basis for allocation of socio-economic opportunities. Social reproduction theorists claim that education serves primarily to reproduce the social order, including existing inequalities and power relationships. In many cases, schooling plays an active role in (re)creating inequality, by claiming to allocate socio-economic opportunities on the basis of merit (meritocracy), while actually doing so primarily on the basis of social background. Formal education is claimed to develop the skills and human capital of capable individuals. In fact, educational credentials provide a queue for opportunities, while legitimating both the order in which individuals find themselves and the validity of queue itself. Children of means start out ahead of the children of the poor, and their resources help them maintain a more favorable place in line. Rather than certifying the skills of individuals, credentials signal an individual’s place.

All but the most fervent social reproductionists reject a deterministic view of education as social reproduction. Instead, they would claim, some individuals do manage to overcome the handicap of poor background and do well. Individual agency plays a role in addition to social structure. Such individuals, however, are generally exceptions, and do not obviate the larger processes at work. Proponents of social reproduction emphasize the persistence of inequalities and the failures of schooling to overcome them. Increasing the stock of human capital is not sufficient. Policy prescriptions focus on measures to address inequalities, in the larger social context and in schools. Proponents of social reproduction tend to support critical theories of economic development.

Empirical evidence is mixed. Considering the role of human capital in national development, it is clear that high-income countries have high levels of human capital. Indeed, a number of national-level studies have found that educational participation rates and stocks of human capital are positively associated with higher rates of economic growth (Barro, 1991; Petrakis & Stamatakis, 2002). Investment in education as measured by prior educational expenditures is also positively associated with economic growth rates (Poot, 2000; Sylvester, 2002).

However, associations cannot determine the direction of causality. It may be that causality moves in the other direction—that growth in national income leads to increases in educational investment and participation. Additional wealth may "cause" higher income countries to consume more education. Alternately, some third factor may be involved, causing both expansion of education and economic growth. Indeed, the causal mechanisms and factors underlying national economic growth are complex and not well understood. Finally, some research has questioned the empirical link between education and economic growth (Krueger & Lindhall, 2000; Levine & Reneld, 1992).

The research provides no definitive basis for deciding between competing theories. Human capital theory could account for weak correlations between education and economic growth if the school system failed to convey the knowledge and skills needed for economic growth, either through mismatch between the knowledge acquired and needs of the economy or low quality of schooling. On the one hand, social reproductionists could claim that countries where educational expansion has been followed by economic growth are advantaged in other ways that are ultimately more determinative, their core or peripheral status in the world economy, for example.

Counter-intuitively, if labor markets do not grow, educational expansion may be associated with increases in educated unemployment and deflation in the value of credentials. Similarly, expansion of education may not result in economic growth to the extent that significant segments of the population lack access to the wage economy, e.g., rural poor, women, ethnic minorities. It may also be the case that the national returns to educational investments are long term, measured in decades rather than years (Krueger & Lindhall, 2000). Finally, technological change may shift the relationship between the quantities or qualities of education and economic growth, tightening the linkage between some types of education and economic growth, while loosening the linkage in other cases (Hannum, 2006).

In terms of the second claim, that educational expansion permits individuals to improve their economic status, there is strong evidence at the individual level supporting the importance of education as a determinant of occupational outcomes. Education is associated with higher wages even when statistical controls are used to account for the effects of ability and social background (Brint, 1993). Most rate of return analyses suggest positive returns to education at the individual, and often, social levels (for a summary, see, for example, Psacharopoulos & Patrinos, 2002).

At the same time, there are substantial variations within and between countries in the linkages between schooling and occupational attainment and the rates of return to various levels education in different times and locales. These differences suggest the substantial role of context (or at least other factors) in mediating educational outcomes. Returns to education are often lower in areas of high poverty, due to a combination of lower quality schools, less cultural capital, and fewer home resources to support schooling. Returns to education also vary according to local economic conditions. Returns are generally higher where technology and market conditions support innovation. Moreover, the value of a

given set of credentials appears to vary to some extent on the credentials held by others in the area. The greater the credentials possessed by peers, the less the relative value of a given level of credentials.

In a context such as Bangladesh, where growth in the number of credentials is outpacing growth in labor markets, and where there are substantial variations in the relative value of credentials from different institutions, credential inflation has its greatest albeit negative effect on individuals at less prestigious institutions, primarily the already disadvantaged. Of course, the occupational attainment research does not address the question of who gets education in the first place. The question posed by "credentialism" remains: Does schooling actually increase the productivity of educated individuals, or does it simply select some individuals to be first in line?

The large body of research finding a robust educational effect suggests that the strong version of credentialism is unlikely to be true. Still, to the extent that schooling is valued for its scarcity rather than content—whether scarcity is defined by years of education or institution—schooling is likely to play a greater sorting function (Shavit & Mueller, 1998). We conclude that in many contexts, education does add value, doing more than simply sorting individuals into queue. At the same time, the economic and educational playing fields are not level. Initial advantages give a substantial lead. In absolute terms, education improves the opportunities and economic welfare of individuals, but some individuals are more likely to get access to education than others. The extent to which education improves economic opportunities and economic welfare is variable, context-dependent in substantially unknown ways.

The third proposition, that educational expansion reduces social inequalities, can be understood in terms of traditionally disadvantaged groups such as the poor, women, and people living in rural areas. Considerable research suggests that expansion of education does little to change the relative status of different groups (see, for example, Shavit & Blossfeld, 1993; Brint, 1993; Hannum, 2006). As educational opportunities expand, higher socioeconomic groups tend to capture the most advantageous types and levels of schooling.

Increased participation of girls in education may result in gender parity at lower levels of education, while higher levels of education remain predominately male. Increasing gender participation in schooling does not necessarily translate into increased occupational opportunities, which depend in large part on labor market conditions of supply and demand (Cameron, Dowling, and Worswick, 2001; Brinton, Lee and Parish, 1995) and cultural norms.

Indeed in Bangladesh, expansion of education has permitted greater numbers of disadvantaged groups—the poor, women, and rural dwellers—to attain schooling. However the differentiations of schools by quality and at higher levels by type and quality closely follow the larger societal patterns of disadvantage. Poor children and those in rural areas are much less likely to attend a high-quality school than middle class

or wealthy children and children in urban areas. Gender parity has been achieved at the primary level, a remarkable achievement in fact. However, gender equity remains elusive at higher levels of education and in the labor market. Educational expansion, while arguably increasing the well-being of individuals now being educated, does not appear to have narrowed social inequalities.

In a context of limited existing opportunities and limited potential expansion of opportunity, the facts of educational expansion with continuing inequalities of access to the most advantageous opportunities often leads to greater differentiation among credentials. Credentials may be of greater or lesser value in terms of absolute learning or in terms of relative prestige. In a differentiated system with relatively static employment, individuals with less valued credentials may have more difficulty than their predecessors in cashing in on their education. Individuals without credentials are even further disadvantaged. Much of the effect of education on earnings, and economic growth, is dependent on contextual factors outside the school system.

B. Human Resource Oriented Development Strategies in Practice

Independently of theoretical debates on the effects of education, some countries, poor in natural resources, have relied substantially on their human resources to develop economically and socially. The experience of these countries suggests some of the elements in what might be termed a human resource oriented development strategy. These countries, we would argue, adopted a pragmatic strategy, combining prescriptions arising from both human capital/neo-liberal and social reproduction/critical analyses of development.

The objection could be raised that conditions in the countries briefly considered here—Japan, Korea, Singapore, Finland—are hardly representative of those in developing countries and substantially different from conditions in Bangladesh. While none of these countries represent Bangladesh's current conditions, none was predicted to develop as they did. While all started off from higher levels of development than did Bangladesh at Independence, Korea, as widely cited, had a per capital income in the 1950s slightly lower than that of Ghana, and with substantially few natural resources. When Singapore separated from Malaysia in 1965, it had little in the way of natural endowments to sustain itself. Japan was the first non-Western country to industrialize. With the breakup of the Soviet Union, Finland found itself without its principal trade partner, heavily reliant on natural resources and with a falling economy. All four began with little but their people and their know-how. And while strategies developed in one context should be applied very carefully if at all to another, the comparison is interesting.

First each country is discussed in a brief case study. Then, suggestive elements of a human resource oriented development strategy are laid out in a series of somewhat speculative propositions. The intent is to provoke discussion and lay an initial groundwork for later empirical work.

Japan

Closed until forced by armed US ships to open itself to international trade in 1853, Japan modernized rapidly, transforming what had been a largely feudal society into an industrial competitor of the West in less than 60 years. The Japanese experience of industrialization challenged the inevitability of the Western experience to national development. Though lacking a modern school system prior to opening, Japan began with relatively high rates of literacy as a result of temple schools. The Meiji government saw education as a powerful means of national unification and competition with militarily more powerful countries in the West. In part to avoid the colonial fate of China and later as part of its modernization process, a national system of formal education was rapidly developed in the second half of the 1800s. By 1900, Japan had achieved nearly universal primary education and universal literacy. Education was seen as a means of teaching "Western science and Eastern values," including loyalty to the Emperor and a range of Confucian and national values. Education was intentionally used as a lynchpin in national development strategy. Government played a role in guiding development of secondary and tertiary education. National universities were created to prepare for manpower needs of the civil service and other national priorities.

After World War II, the US occupation led reform of the education system, resulting in a structure modeled on the American system and the teaching of democratic values. Demand for secondary and higher education increased dramatically as the country grew economically, and as employment in white collar jobs became tightly linked with education. To meet excess demand, government allowed the proliferation of private schools, but regulated the private system closely. These private schools complemented the public schools and national universities already in place. From the end of the Occupation in the early 1950s and with the stimulus of the Korean War, the Japanese economy grew rapidly up to the early 1990s, by which time it was among the largest economies in the world.

The rapid growth of the Japanese economy can be attributed to a number of factors, including and beyond human capital—high rates of savings; strong institutions and (mostly) wise governance; high levels of literacy and skills in the workforce; a highly disciplined and cohesive people; and conditions and policies that fostered cohesiveness—broad distribution of economic benefits of development; ethno-linguistic homogeneity (though arguably less so than was emphasized during the formative period). Finally, Japan had both good luck and the capacity to take good advantage of opportunities.

Korea[1]

Since the end of the Japanese occupation and the Korean War, the Republic of Korea has adopted a strong state-centered education development strategy as part of its nation building efforts. The historical context of Korea's modernization period necessitated development of a strong state and rapid economic development as a means of survival. Much of Korea's rapid development has been attributed to the country's supply of well-

[1] We are grateful in this section to Jamie Oberlander, who researched the material presented here.

educated workers. The education system linked national and economic development by introducing an ideology of modernization in conjunction with a national spirit, patriotism-imbued workforce preparation and education. As a result of government economic policy and international market conditions, South Korea has transformed itself from a developing nation into the world's 11th largest economy within the last four decades (Sorenson, 1994; Brender and Jeong, 2006).

In the 1960s, the Park Chung-Hee administration initiated a series of five-year economic plans which emphasized an export-orientated strategy well-suited to Korea's abundance of manpower and limited domestic market. Much of Korea's growth has been based on huge government-sponsored conglomerates. Until the late 1980s, when growth began to slow, the fruits of economic growth were, for the most part, shared equitably through the creation of new jobs, higher wages, increased educational opportunities and expanded housing and health care programs (Morris, 1996).

The rate of economic growth, however, placed considerable pressure on both the Korean government and industry to prepare a workforce equipped to handle increasingly sophisticated jobs. Initial development plans focused on laying a framework for industrialization, beginning with light industry and expanding into heavy and chemical industry in the late 1970s and early 1980s. The education system grew concomitantly with these industrialization needs. As initial state-driven policy focused on the development of primary and then secondary education, increased demands for higher education followed. Moreover, as the education level of parents increased, so did expectations for increased educational opportunities. In the 1970s, the South Korean government expanded tertiary education as public demand for higher education grew. The result was establishment of a number of private colleges. Expansion of the high-tech industry necessitated further investment in higher education in the 1980s. In the late 1980s and early 1990s, government education policy, in an attempt to respond to industry needs for more production workers, expanded technical high schools and occupation training institutes. However, given its higher prestige, students and parents (and employers) have opted to pursue the traditional academic track because of its higher prestige (Morris, 1996).

Socio-cultural forces within Korea enabled the education system to take root. Influenced by the Confucian tradition, the high status placed on educational achievement is manifest in myriad social institutions. After reconstruction, education became the key mechanism for upward mobility, which has resulted in Korea becoming an educational "testocracy." Parental support for education has prompted parents to sacrifice their own resources to pay for additional educational opportunities, often contributing as much as two-thirds of their child's educational costs. This has enabled the Korean government to devote a relatively small amount of its national budget to education (roughly 4.5% of GNP) (Sorenson, 1994).

Singapore[2]

[2] Here we acknowledge with gratitude the research assistance of Sarah Palacio-Wilhelm.

With independence in 1965, Singapore found itself poor in natural resources and with a large low-skilled population. The People's Action Party (PAP) government initiated an ambitious development strategy focused on foreign investment and the accumulation of human capital through skills formation. This strategy became one of the world's most successfully managed development efforts. Human resource development in Singapore can be understood as paralleling four stages of economic development.

During Stage 1, basic manufacturing (1965-1979), PAP economic strategy focused on developing "cheap and disciplined labor" along with a "strong and stable political system" to attract foreign investment. The work was labor rather than skills intensive, and so the primary education level of most workers was not inhibiting. However, in order to create more skilled workforce, training programs were developed and workers' skills systematically linked to economic development (Sung, 2006).

In the 1960s Singapore's education system followed the British model, producing a highly trained, university-educated elite and a much larger percentage of secondary school completers with limited labor force skills. In Stage 1, the PAP sought to replace the community-based education system with a more centralized state system that was less sharply fragmented along race, language and habitat lines. Education was viewed as "an important national project in which the workers in Singapore would have to cultivate a set of 'collective values' necessary for industrialization" (Sung, 2006: p 56). At the same time, development of streaming and technical training helped ensure that workers had the skills needed by international and national firms.

Stage 2 involved skill upgrading, from 1979 to 1991. In the 1980s, Singapore faced increased competition from other countries with lower labor costs and protectionist policies among developed countries. As a result, the country launched its 'second industrialization,' focusing on value-added manufactured goods. This required a more skilled labor force, in response to which the government made substantial investments in education and industrial training. In addition, the government invested in overseas high-tech companies, in part to acquire their skills and knowledge. These new skills were to accelerate industrial restructuring. Mother tongue instruction and the development of mathematics skills were also emphasized (Sung, 2006).

Stage 3, 1991-1999, focused on high value-manufacturing. By the 1990s, Singapore set ought to achieve "the Swiss standard of living" by 2020-2030. To remain competitive, the country needed to move Singaporean companies to markets with lower labor costs. At the same time, the government worked to further upgrade skills in three areas, the basic/core skills required to participate in an advanced industrial society, enhancement of intermediate level technical skills, and expansion of higher education.

Stage 4 refers to participation in globalization and a knowledge-based economy (1999-present). The focus now is on developing a workforce with knowledge-based, conceptual and adaptive skills to allow Singapore to compete in the knowledge economy and globalized markets (Sung, 2006).

A critical part of Singapore's economic success was formation of the development worker: "A developmental worker is any worker who, by virtue of his/her participation, helps to deliver the economic vision of the developmental state whilst their continuing participation is maintained in exchange for current, but more importantly future, benefits for themselves and their family" (Sung, 2006: p. 47). The PAP was able to link education to individual economic success as well as other social programs to increase the individual worker's stake in success of economic reforms.

Also critical were the linkages between education systems and the economy: the role of education in developing skills; a technology transfer model that used foreign expertise to train local workers; inducements to the private sector in partnership with government to assume a key role in skills training; and incentives to firms to invest in training of their workforce. A high human capital base and a trained, disciplined bureaucracy were essential (Kuruvilla et. al., 2002).

Singapore benefited from broad acceptance of government policies, continuity of policy and consequent macro-economic stability, relatively low levels of corruption, and the (authoritarian) government's ability to implement policies conducive to growth. The government was also relatively free of influence from special interest groups. Interestingly, the country is now at a point where economic development is necessary to legitimize and perpetuate the government (Huff, 1995).

Finland[3]

Prior to the 1990s, Finland was highly dependent on the Soviet Union. With the collapse of the Soviet economy, Finland's economy fell as well. In the early 1990s, unemployment rose from 2% to more than 15%. Government debt rose to over 60% of GDP. Inflation pushed up interest rates and the collapse of the Soviet Union took away 15% of Finland's foreign trade. Finland's real GDP dropped more than 10% between 1991 and 1993. Forestry was Finland's main export.

During the 1990s, Finland's economy transformed itself from a resource-driven economy to one driven by knowledge and innovation. Since 2000, Finland has ranked No. 1 in the World Economic Forum's competitiveness index; top in the OECD's Program for International Student Assessment studies of learning skills and educational attainment; and consistently among the highest scoring countries on the Knowledge Economy Index (Dahlman, et. al, 2007).

Finland grew its economy through diversification of exports and growth of knowledge-based industry. Finland based its social and industrial policy on the principle that knowledge and expertise are the basis of economic competitiveness. The country knew it had to raise the education level of the population in general and that of the labor force. Accordingly, emphasis was placed on general, secondary, vocational, adult, and higher education. Education is free through university level and has a strong focus on equality. In these ways, the education system played a crucial role in economic restructuring. With

[3] In this section, we are indebted to Kaylea Happell for her research assistance.

a high base of educational attainment, the country was able to respond quickly to economic opportunities.

The country has given a "persistent emphasis … to higher education, linkages and spillovers among various industries and the emergence of new knowledge based industries" (Dahlman, et. al, 2007: p. 3). Finland increased its investment in research and development, which now accounts for 3.5% of GDP, third highest in the world. When the government liberalized trade and capital in the 1990s, privately-funded research and development increased rapidly, significantly driven by Nokia.

Economic development was fostered by several education policy initiatives. The higher education system was expanded. Plans were made to double participation in higher education by 2000. An extensive adult vocational and technical education system was expanded and upgraded. Finnish companies focused on training. In the latter half of the 1990s, Finnish companies invested about 3% of their personnel budgets in training.

By expanding higher education and increasing higher education's capacity for research and development, the government sought to increase ties between higher education institutions and industry, decreasing the time for innovation transfer between researchers and industry. The number of Finns with PhDs has doubled since 1985. Around 35% of higher degrees are in science and technology.

Planned in the 1980s, adult education became a focus of Finland's national educational policy and planning in the 1990s. Adult education is now available in over 1000 institutions, universities, polytechnics, public and private vocational institutions, adult education centers, summer universities, adult upper secondary schools, study centers, sports institutes, and music institutes. The 2000 Adult Education Survey found that 41% of the population aged 18-64 participated in adult education related to their job or vocation.

Some of the elements of Finland's success are: a strong rule of law; strong governance and accountability; stable macroeconomic policy and strong financial sector; openness to outside ideas and a free trade regime; domestic competition; strong welfare state, particularly a very strong focus on education; coordination of policies among key government agencies, and between government and the productive sector; a focus on R&D and innovation; a new type of industrial policy, and an "independent spirit of self-reliance and a 'can-do' mindset" (Dahlman, et. al, 2007: p. 1).

C. Implications for Poverty Reduction and Improvements in Human Welfare

These cases suggest some of the ways development of human resources has played a central role in economic and social transformation in several countries. Of course, definitive conclusions cannot be drawn from short description of select cases. Still, it may be useful to articulate some of the patterns seen here and contrast them with the situation in Bangladesh.

Propositions on the role of human resources in country cases

- In all these cases, human resources were placed at the center of national development strategy. National decisions were made to do what was necessary to develop, and to rely on human resources as a core element. In several cases, these decisions were made, or at least framed, as a matter of national survival. These national decisions, while the forms and formality varied, were spearheaded by a core group of "enlightened" leaders, who placed national interests first.

- Most of these strategic decisions were made before international consensus had coalesced around the critical core importance of human resources.

- There was nothing inevitable about development in any of the countries examined. There were few predictions that the countries would develop as they did. Indeed, much of the literature prior to take-off focused on the handicaps they faced in developing. However, local policy elites did not rely on international conventional wisdom regarding their prospects for growth.

- Prior to economic expansion, each country had developed a strong human capital base of broadly-based literacy and skills.

- The initial literacy and skills base was subsequently developed and enhanced in parallel with economic developments in each of the countries.

- Less clearly, social institutions (family/community, business, and/or public social welfare institutions) provided good health and a social safety net. The fruits of development were broadly shared, giving workers a stake in the national project. Educational opportunities were expanded in line with the needs of the growing economy and aspirations of the people. Economic opportunities were broadly distributed as the economy grew—new jobs, higher wages, increased educational opportunities, expanded housing and health care programs.

- Ways were found to link educational provision with larger needs of the economy. Generally, government took the lead in designing policies aimed at upgrading the breadth and depth of skills in the workforce, fostering expansion of increasingly higher levels of education, and focusing attention on needs of the economy, in parallel with economic expansion.

- Despite its centrality, the human capital and skill base was regarded as necessary but not sufficient but for sustained economic development. "Sound" economic policies, "strong institutions," and "good" if not always democratic governance were also emphasized. The result has been virtuous cycles of: reduced population growth; provision of broad, equitable, basic education; high rates of literacy; expansion of the economy; distribution of the benefits of economic growth—improved income distribution, expansion of the middle class, increased economic value on education and corresponding family valuing of education; widespread

public support for education and investments in children. Policies were supported by good governance; wise government decisions and interventions; high rates of saving; export-oriented economies; and strategic wisdom in the capacity to take advantage of opportunities. As a result, rates of absolute and then relative poverty dropped.

- In the process, there were increases in what might be called "social productivity." Human beings came to produce more, socially and economically, than they cost.

More specifically in terms of education,

- Provision of high quality basic education for all children was made a priority.

- Ways were found to expand opportunities for higher level training in secondary and tertiary institutions. In Japan and Korea, government provided a select number of public institutions, at least one in each region, and permitted development of private institutions under government regulation, to meet public demand. In Finland and Singapore, government took the lead in provision of secondary, vocational/technical, tertiary, and adult education systems.

- Mechanisms for selection of students for higher levels of education have been widely regarded as tough but fair. By and large, the legitimacy of selection mechanisms has not been widely questioned. In Japan, Korea, and Singapore, students and their families have assumed responsibility for preparation for examinations, often through after-school cram schools or tutoring.

- Expertise in science and technology has been emphasized through provision of specialized schooling at secondary and tertiary levels, high levels of training by large firms, research and development, particularly in the private sector, and selective international study.

- Schools teach values more or less explicitly. In the Confucian countries, values have tended to emphasize national identity as well as loyalty, hierarchy, hard work, and a future orientation highly compatible with the needs of a cohesive nation and a growing economy. In the East Asian cases, educational imports such as science and technology are often taught alongside "Asian values" (Cummings & Altbach, 1997). In Finland, values were less explicitly conveyed, but tended toward the communitarianism of a benign welfare state.

- Education has tended to reinforce social cohesion—through expansion of occupational and educational opportunities, loyalty to the nation or collective whole, as well as relatively transparent and widely accepted selection mechanisms.

- Education is associated with mobility. There is sufficient actual opportunity that the social contract is credible, even if particular institutional arrangements are

challenged as unfair or failing to abide by the terms of the contract. As a result, processes for allocating opportunities are regarded as fair. In East Asia, there is a perception that individual effort can overcome disadvantage (Rotberg, 2004; Cummings & Altbach, 1997).

- A strong role has been emphasized for actors at three levels of the education system—parents/community, school teachers and school leaders, and central education authorities. Parents have largely supported the work of schools, reinforcing the importance of study and covering many private costs associated with support and direct costs (Bray, 1996). Central education authorities have tended to play a strong guiding role in setting of standards, provision of inputs, enforcement of regulations, and setting of strategic directions for the system. The state is responsible for the framework. At the same time, teachers and school directors are recognized as important implementers, highly professionalized, and empowered to play a strong role in instructional leadership (Cummings, forthcoming).

- Initially, in Asia at least, substantial bodies of knowledge were "imported." Over time, the knowledge was adopted, localized, and adapted to "local" national contexts.

In all of these cases, global conditions have permitted development of export industries. Even so, each of the countries cases was prepared to take advantage of opportunities that arose. Given the combination of economic, social, and educational policies, and the timing of development, it seems that these countries adopted a pragmatic approach, following principles rather than a template. In hindsight, this process is likely to appear much more systematic and planned than at the time.

In contrast, Bangladesh has not placed education and human resources at the forefront of development strategy in budgetary or political terms. Education, like other areas of public activity, has become mired in politics. Despite expansion of number of enrollments and educational institutions, Bangladesh still has a weak human capital base of literacy and skill. Much of the expansion of schooling has been of insufficient quality to effectively develop the human capital needed. Literacy and skills development are less broadly-based than they are determined by location and class. Much of the social safety net in Bangladesh depends on family and community rather than larger public institutions. Poverty, though reduced, remains pervasive.

Educational offerings are weakly linked to economic needs. Science and technology are not emphasized. While Bangladesh has enjoyed some of the benefits of reduced rates of population growth and lower levels of poverty, this potential is bounded by institutional limitations. Expansion of education has not led to large-scale changes in patterns of inequality. In some ways, inequity has been strengthened as selection mechanisms and disparities in quality reinforce social inequalities. Education contributes little to social cohesion. Decision-making is highly centralized, with little responsibility or

accountability at the school or upazila levels. Sub-sectors within education are poorly coordinated, and there is weak articulation among different providers of education.

IV. Recommendations

In working to realize the potential, context-specific policies must be adopted. A good starting point for the journey to 2030 and beyond are the ten recommendations called "a framework for action on education governance" adopted in a national conference held in March 2008 to achieve better outcomes in education. These are listed below (Governance in Education Conference 2008b).

1. Decentralization of authority with accountability in educational management to local level and individual institutions

A structure of decentralization of education management should be developed which will assign central authorities such as the Ministry, Directorates and Boards broad policy and regulatory responsibilities, while empowering zilla and upazilla education offices, training institutes and schools to make decisions regarding activities, institutions and personnel.

Development of a mechanism for coordinating, planning and managing primary and secondary education involving all service providers at the local level should be given high priority. To do this effectively and to strengthen the capacity and resources at the local level, development and trial of decentralised planning and management should be undertaken in a number of districts, before introducing it nationally.

2. Policy-making and coordination structures

A permanent National Commission on Education for pre-tertiary education composed of distinguished and respected representatives of the major stakeholders – the civil society, the academic community, and the government education establishment – answerable directly to the National Parliament should be established. The Commission should be a statutory body with functions and status specified in a national education law. It should have a secretariat with technical capacity for policy review and evaluation of the performance of the education system. The Commission may provide an overall report on the national education system and a specific aspect or sub-sector of the system in alternate years.

In keeping with the goal of education "to build successful globalized citizens for the 21st century," the quality parameters need to be redefined for every level including primary, secondary, technical and vocational education. Recruitment and promotion rules need to be revisited for education administration, teachers and members of management committees, and enforced transparently and objectively.

3. A comprehensive law for national education

A national Education Law should be enacted as a comprehensive legal framework for implementing the constitutional provision of providing free and compulsory education to all boys and girls. Such a law would spell out rights, responsibilities and obligations of citizens and government agencies at different levels, principles of decentralization and accountability, regulatory framework for different types of education programs and institutions, and principles of defining and protecting public interest in education. The Citizen's Charter initiative, espoused by the Chief Adviser, may be enforced through this law for all educational administrative and service provider institutions.

4. Adequate resources for education with quality and equity

Measures should be taken to double the share of GNP and of government budget for education in the next ten years. Medium term budgetary framework (3 to 5 years) needs to be developed for both development and recurrent expenditures in education in order to achieve the target for ensuring adequate resources for education. Public subvention and incentives to educational institutions should be linked to commitment and fulfillment of agreed performance criteria and targets; greater autonomy and control of resources can be offered to institutions that prove their capability to use resources effectively. Schools may be given incentives to generate local funds.

5. Education governance freed from partisan politics

A consensus has to be built regarding political parties restraining themselves from involving teachers and teachers' organizations in partisan politics; educational decision-making including those on appointments, transfers and promotion should be protected from extraneous political influence; appropriate legal provisions and rules for election for the parliament and other people's representative bodies should help protect education institutions from undue political influence. Codes of conduct for teachers and students should be developed and enforced.

6. School as the locus of action

The locus of action for purposeful governance to address issues of quality and equity in education should be the school, since only at the school, the education authorities can reach the child, and the parents and the teachers can work out appropriate measures to act upon specific circumstances of disadvantage.

Strategy to promote greater authority with accountability at school level. This aim can be supported by the government by inviting and encouraging schools to take responsibility and demonstrate their capacity to do so on the basis of agreed criteria. Schools which perform well, based on Key Performance Indicators (KPIs) which are localized to the specific needs of the community, can be rewarded, exempted from control and allowed to develop and follow their own higher standards, as the incentive for nurturing self-regulation and greater school-level responsibility with accountability.

Making managing committees responsive and accountable. Modification of regulations, awareness raising and active encouragement on the part of political and education

authorities are needed to make the selection of the chairperson and members of the managing committees less beholden to local political personalities and more a genuine choice of the community so that this key responsibility is given to those genuinely interested in education.

Gender balance in managing committees. The School Managing Committees should have better gender balance with more than symbolic participation of women in school management.

7. Supporting development and use of professional capacity

Human resource policy and practices in education including career structure should allow and facilitate professional development and professional staff to rise to management and decision-making level. Institutions including IER of Dhaka University, IED of BRAC University, NAPE, NAEM and NCTB should be supported to work together on developing strategy and plan for professionalization and professional capacity development in primary and secondary education. The elements of this effort should include institutional and organizational analysis of primary and secondary education management, establishment of a primary education cadre, development of short and longer specialised training and professional development courses, rethinking and redesigning pre-service and in-service training for teachers and members of school management committee, including refresher training, and action research to cope with huge needs in terms of quality and quantity.

ICT tools such as TV, VCD, mobile phone, and computer may be leveraged for "anytime-anywhere" training thereby saving time and cost and allowing flexible learner-centered schedules. A dedicated educational BTV channel for interactive educational programs should be a reality without delay, as suggested by the Chief Adviser.

8. Career growth and better remuneration for teachers

A workable approach to increase remuneration for teaching and linking it with performance is to design remuneration structure to allow for more differentiation in teaching positions (for example, entry-level assistant teachers, teachers, senior/master teachers/ team leaders/ assistant headmaster and headmaster) with promotion and salary raise tied to clearly established and enforced performance criteria. Some special rewards or bonuses can be tied to group performance at the institution. The key role of the head master of the primary and secondary school as an educational leader and manager with enhanced authority at the school level should be recognized and commensurate status and salary granted.

9. A greater voice of stakeholders at all levels

Openness and sharing of information and dialogue in public forums (including posting the "Citizen's Charter" publicly) should be the norm at school, *union parishad* and upazila education offices regarding objectives, plans and progress, and budgetary

allocations in the school, and for the upazila. Monitored results of the Citizen's Charter should also be posted publicly in the form of Citizen's Report Cards.

Participatory planning process at the school and *union parishad* levels yearly and evaluation of execution based on Key Performance Indicators (KPIs) on a half-yearly basis need to be instituted.

10. Partnership building

In local-level planning and management, formulating goals and strategies at national and local levels, and monitoring and reviewing progress, genuine partnerships have to be built for the government authorities and the non-governmental bodies to work together. Initiatives are needed on both sides to change mind-set, perceptions and attitudes in order to foster the spirit of genuine partnership for working towards the common goals in education.

In the present circumstances, the Chief Adviser of the Caretaker Government, who inaugurated the conference, the Finance Adviser, the Adviser for Primary and Mass Education and other high officials attended the conference and expressed their support for the key items in the recommendations. These indeed can be the starting point if the education authorities and the leadership of the present interim government and the future political government choose to pursue the proposed action points purposefully.

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