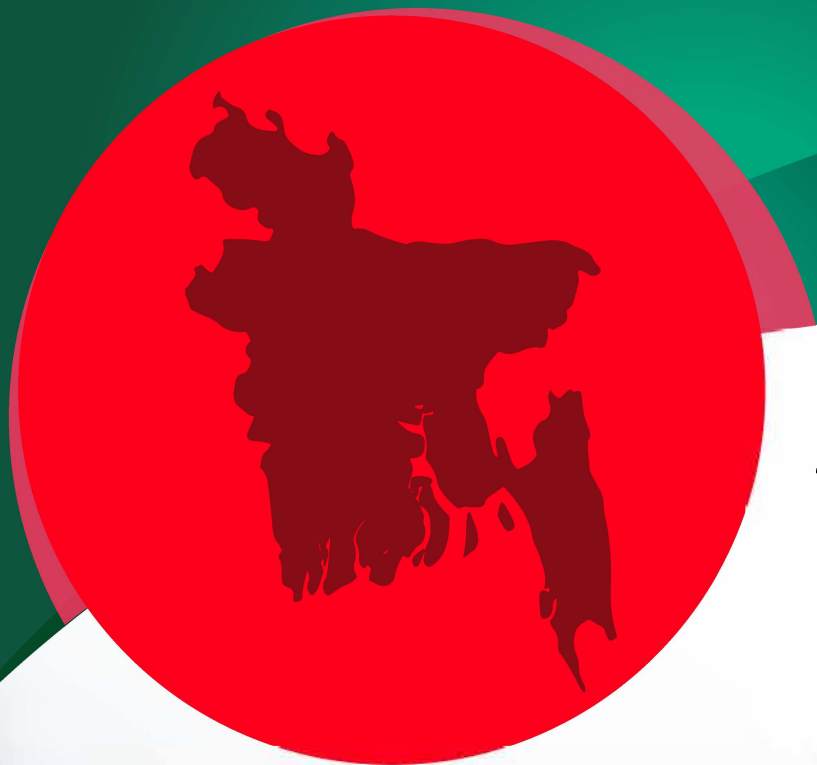


Volume 10  
Number 1  
Year 2008  
ISSN 1529-0905



Journal of  
**BANGLADESH  
STUDIES**





*Journal of Bangladesh Studies*  
Volume 10, Number 1

## CONTENTS

- *Editorial*
- *Bangladesh in the 21<sup>st</sup> Century: The Harvard Conference Recommendations*  
— Syed S. Andaleeb
- *The Untapped Energy Mine: The Revolutionary Scope of Renewable Energy for Bangladesh*  
— Sajed Kamal
- *Education Sector in Bangladesh: A Review of Developments Since Independence (Primary and Secondary Education)*  
— Muhammad Masum
- *Socio-cultural Environment for Entrepreneurship Development in Bangladesh*  
— M. Tahlil Azim
- *Significance of Employability Factors: Bangladesh Perspectives*  
— Rubina Ahmed and Joanna Crossman

Editor: *Dr. Syed Saad Andaleeb*

As partners in knowledge generation and dissemination, JBS is supported by Pennsylvania State University-Erie, Bangladesh Development Initiative, American Institute of Bangladesh Studies, and Bangladesh Enterprise Institute.

Annual subscriptions of two issues are \$15 for individuals and \$50 for institutions in the United States. In Bangladesh, subscriptions are Tk. 300 per year. For individuals in all other countries, subscriptions are \$25 per year. Please contact *Dr. Sukomal Modak* ([Sukomal\\_Modak@yahoo.com](mailto:Sukomal_Modak@yahoo.com)) for subscription inquiries.

## *FROM THE EDITOR*

With this issue, we are pleased to present Volume 10, No. 1, of the Journal of Bangladesh Studies (JBS) to our readers, marking the beginning of the 10<sup>th</sup> year of its publication. It has been an arduous and challenging journey, but we have continued to push hard for quality articles in the intensely competitive arena where new thinking, theories, and policy matters are being constantly pitted against each other in a bid to reshape some part of our universe. The selected writings in JBS, based on a double-blind review process, have also led to compiled editions of books in two major domains: political and economic. We look forward to publishing additional insightful essays that are expected to address important aspects of our social, political, and economic world to ultimately influence key policy matters.

As this issue heads for the press, the political environment in Bangladesh appears to be turning somewhat murky. Conversations with various segments of the society reflect an ambivalence in their ranks that does not augur positive changes to result from the elections. When the Caretaker Government (CTG) took over last year, there was a sense of euphoria that substantial and positive changes would follow in its wake, given how statecraft was systematically utilized in self-serving ways by a small but powerful segment of the political-bureaucratic-business clique. That euphoria has been whittled away and, with the release of various elements from incarceration, believed to be a part of that clique, the new dynamics have led to an erosion of trust in the entire system and a sense of deep uncertainty about the election outcomes that await the nation.

While this editorial certainly does not support the long-term continuation of any unelected government, it does raise the question of what the present election fervor means. We know nothing about either the candidates or their positions and promises. We do not know what new things they will bring to the table. We do not know what their priorities are. We have no sense of direction from the various political parties except that they want to participate in the electoral process. There is no public debate among the contenders and there is no way to whet who should represent the people. Under the circumstances, what do the people of the land have to go by to shape their expectations that would ultimately influence their votes? Sadly, there are no opinion polls either that would reflect the thinking that prevails among the public about their choice of leaders.

It is a valid question to ask, therefore, whether the mere holding of an election has anything to do with the much vaunted and cherished term “democracy.” From the evidence, it would appear that the reins of power would be going to the “same old” band of politicians that have run the country for the past thirty-seven years. There is nothing new here. And if history is any indicator, what they are likely to contribute to the status of Bangladesh requires little conjecture.

That does not mean, however, that all is lost; neither does it mean that these politicians have not realized their folly, having set the nation back by their brand of leadership, and that things will not change for the better. But it is high time that they offer some clear signs. Otherwise, holding the elections in the time frame promised by the CTG would merely represent an exercise whose outcome is hazy and perhaps would not bear much fruit. Some pundits argue that that is the way democracy progresses – in fits and starts and involving some convulsions that society must be willing to bear and endure. But there must be a better way, a way that relies on a precursor: an enlightened nation. Unfortunately that too poses a predicament. Which comes first—an enlightened people who would shape good politics or good politics that would build an enlightened nation? Posed as the proverbial chicken and egg problem, it is a matter of contemplation that requires answers.

Assuming that the elections will take place as a natural progression of how things have evolved over the past months, what then? An attempt was made in June 2008 to establish the priorities at a congregation of experts and well-wishers at the Harvard Conference: Bangladesh in the 21<sup>st</sup> Century. Organized by Bangladesh Development Initiative, Democracy and Development in Bangladesh Forum, and the Ash Institute of Democratic Governance & Innovation at the Kennedy School of Government, Harvard University, various priorities were established in the areas of governance, economic policies, foreign policy, infrastructure, education, healthcare, and social policies. These priorities are documented in the first article of this issue as a record of what was suggested and as a platform for further dialogue to embellish and advance the case for Bangladesh and its place and priorities in the 21<sup>st</sup> Century. We hope the policy prerogatives offered in the article will gain the attention of policy makers and their advisers so that appropriate strategies are devised to guide the nation.

It may be pertinent to note that such conferences do not go unnoticed in Bangladesh, because the follow-up in the country was overwhelming and filled with enthusiasm. There were TV and newspaper interviews. Presentations were invited at the National Defense College, Bangladesh Enterprise Institute, Banker's Association, Universities, Tiger Capital Investments and a variety of other smaller groups. Summaries of the papers presented at the conference were solicited by two of the nation's largest circulating newspapers: Prothom Alo and Daily Star. All in all, it was an influential event at Harvard that was supported by many individuals and groups including the Bangladesh Embassy in Washington D.C., The US Embassy in Dhaka, American Institute of Bangladesh Studies, Citibank, Prime Bank Ltd., MGH Group, and other organizations. There have been numerous inquiries about a follow-up. Plans are already shaping up for another similar event, again designed to debate policy perspectives and provide support to those in the helm of affairs after the elections.

In this issue we present four additional essays that are varied in their focus, but deeply relevant for policy makers and social scientists in the country.

Energy priorities as we all realize are becoming the focal point of debate globally in view of the looming shortages, high prices, and usage consequences. In this vein, Sajed Kamal addresses energy issues pertinent to Bangladesh and makes the case for how and why policy makers must focus their attention on renewable sources of energy, pointing to their plentiful availability in the country. Presented also at the Harvard Conference, this paper garnered multifaceted discussions. M. Masum addresses the challenges and opportunities in the education sector,

especially primary and secondary education, which can serve as platforms for national development and emancipation. Tahlil Azim highlights the cultural milieu, religion, security, social marginality and entrepreneurship education and training that have a bearing on entrepreneurship development in the country. The author observes that Bangladesh is at a crossroads where both positive and negative socio-cultural forces prevail to explain the development of entrepreneurship in the country. It behooves policy makers to understand the influence of these factors to adopt appropriate measures that would foster greater entrepreneurship activities in Bangladesh. Finally, Rubina I. Ahmed and Joanna Crossman explore the idea of employability and its relevance in the context of private university business education in Bangladesh. Given the rapid rise of private universities and the consequent number of graduating business students, the authors explore graduate attributes developed by these institutions. It may be emphasized that enhancing employability may be better served following discussions between employers and business education curriculum developers so that the skills of the graduates align better with the needs of the employers.

As always, bringing out each issue of the journal relies on unremunerated assistance of various individuals with a diverse array of skills to whom we owe our deepest gratitude. These include our reviewers, editors, typists, printers, messengers, friends and well-wishers. Special thanks are due to Shahnaz Y. Andaleeb who edited the manuscripts scrupulously and to Sue Pennington for her untiring efforts at putting everything together by packaging the materials for public consumption. To all these contributors, I offer my sincere thanks.

Syed Saad Andaleeb, Ph.D.  
Editor, JBS  
Professor and Program Chair, Marketing  
Sam and Irene Black School of Business  
Penn State Erie  
Erie, PA 16563-1400 – USA  
ssa4@psu.edu

# Bangladesh in the 21<sup>st</sup> Century: The Harvard Conference Recommendations

Syed Saad Andaleeb

## Preamble

On June 13-14, 2008, an international conference was organized by Bangladesh Development Initiative, Democracy and Development in Bangladesh Forum, and the Ash Institute of Democratic Governance at Harvard University's Center for Government and International Studies (CGIS) to address the theme: *Bangladesh in the 21<sup>st</sup> Century*. The purpose of the conference was to bring together scholars, practitioners, students, and well-wishers as a community to contemplate the opportunities and challenges facing Bangladesh. The response was overwhelming. About ninety papers were submitted from four continents covering topics as diverse as foreign policy and infrastructure to health care, education, politics, and even shrimp culture. From the submitted papers, about sixty were ultimately chosen for presentation. In addition there were two panel discussions on foreign policy and the accomplishments of "BRAC at 35." The conference sessions were embellished by luncheon and dinner speakers who, in their own rights, added further dimension and richness to the already star-studded list of participants. A cultural program was also organized by the Boston community that struck a deep chord with the theme of the conference. Highlights of the conference and key recommendations are summarized here for various stakeholders: the political leadership and its administrative wing to contemplate, adapt and adopt; for researchers and scholars to embellish and build upon; and the general reader to be informed of the policy options.

## Introduction

Bangladesh has made remarkable progress with economic growth reaching almost 7% in FY 2006-2007. This has been termed as the Bangladesh Paradox in spite of the country's unstable political environment and widespread poverty. Bangladesh has also been grouped in the Next-11 by Goldman Sachs, while global banks and multilateral institutions such Citibank, JPMorgan and others see Bangladesh as a key investment opportunity. This opportunity stems from its large base of low-cost labor pool, a domestic market of 150 million consumers, and being a potential gateway to another 3 billion people in the Asian region. Other contributors to the growing potential of Bangladesh include the globalizing environment, proliferation of information technology and connectivity, the advancement of democracy—albeit in fits and starts—and a growing resilience among the population born of battling prolonged adversity. The recent advancements and accomplishments in Bangladesh that were particularly noted include a tripling of food production, doubling of per capita income, population control, steady manpower exports, growing shipbuilding and pharmaceutical industries, global peace-keeping operations, contributions of the NGOs, and educational opportunities -- especially for women.

However, Bangladesh has also had to weather many a storm: civil unrest, assassinations, culture of corruption, incompetence, strong egos, an identity

crisis, external pressures, economic downturns, debilitated institutions, weak infrastructure, widespread poverty and related challenges since its cataclysmic birth. For challenges of such mammoth proportions the solutions are neither easy nor immediate; yet there was a positive ethos at the conference that hope is alive, progress is possible, and there is a dogged determination among the people to succeed by reinventing their image and identity as a modern and progressive state, despite the state of misrule in the country for several decades.

What also emerged from the conference was a critical need to reform the political and administrative structures, policies and processes that have hindered the nation's physical advancement; rethink the nation's foreign policy prerogatives and options; build the nation's infrastructure to serve as a platform for accelerated growth; initiate economic policies that address the needs of both rural and urban economic groups by empowering them to pursue entrepreneurial ventures that span SMEs to large industrial ventures to support value-added production; recast the education system by envisioning an unified (not uniform) system from bottom-up by aligning each stage of education with the next higher stage within a global vision and by allowing flexibility of movement from one stream to another to enable the citizenry to build upon their strengths; and address population, health and NGO activities that drive productivity and individual growth.

To attain the above, the need for visionary and enlightened leadership was highlighted to lift the nation's spirit, pride, and sense of purpose and to address both individual and community needs. At the conference, a confluence of many hearts and minds interested in the future of Bangladesh, there was also a felt need to kindle the desire in those who are able and willing, including the Bangladesh Diaspora, to help steer the nation to more vibrant shores through collective efforts and contributions in a spirit of partnership.

What follows is a series of substantive recommendations that were proposed by six breakout groups that were assembled on the final day of the conference. Participants were urged to make serious recommendations designed to establish priorities, to initiate further discussions and dialogue, to motivate researchers and thinkers to embellish on the ideas, and to urge practitioners to adopt and adapt any or all of the recommendations to forge the path forward. As a record and for posterity, the recommendations summarized by experienced team leaders, are offered next in six segments.

### **Recommendations of the group charged with: Democracy, Nation-building and Governance**

#### ***Justice, Due Process of Law and Human Rights***

Being the seventh largest and the most densely populated nation in the world, leaders of Bangladesh are faced with a myriad of human rights challenges, which are more likely to be met in a democracy. Finding the appropriate strategy to effectively utilize the nation's vast human resources in a climate of "freedom from hunger" could be the greatest challenge facing its leadership. Only during the liberation war were those human resources utilized to the extent that the Bengali struggle for freedom and justice approximated a People's War. And as a result Bangladesh emerged as the only Muslim majority country whose successful struggle for independence became rooted to democracy and justice. The new nation ensured its newly won sovereignty when Bangabandhu Sheikh Mujibur Rahman persuaded Indian Prime Minister Indira Gandhi to withdraw Indian troops from Bangladesh within three months of the surrender of Pakistan army before the joint command of Indian Army and Bangladesh Liberation Force. The peaceful withdrawal of Indian troops in a record time would have been much more difficult without effective diplomacy, which is more likely to happen in a democratic environment tempered by justice. Justice, defined as fairness in multidimensional interactions involving humans and

their institutions, balances democracy with the striving for security.<sup>1</sup> Thus the fairness principle contributes to societal stability and helps to create a common ground on which political communities with the nation states being their highest expression can build an ideology of understanding and cooperation. Bangladesh's success in charting out a close strategic relation with India and Pakistan's failure to accommodate legitimate demands of the Bengalis could be premised on this principle of fairness. In this context freedom and political autonomy become integral parts of justice that "specify the fair terms of cooperation they [citizens] give themselves when fairly represented as free and equal persons."<sup>2</sup> The emergence of Bangladesh epitomized the dismal failure of Pakistan's leadership to understand and act on this fundamental human value of justice. It would be equally applicable to relations between and within nations, which captures the spirit of SAARC.

Issue Elaboration: Justice has been the driving moral force that led to a "people's war," creating a sovereign democratic Bangladesh with immense possibilities. But without a deep commitment of the leadership to justice as the basic principle of fairness in both policymaking and policy implementing, i.e., governance, most potential for advancement would remain static. Ensuring human rights and the due process of law—two most important dimensions of justice—could transform the static into a dynamic state of just policies and good governance. In that context the legal system, which still carries the baggage of colonialism, must be reformed. Repealing the Special Powers Act, which blatantly violates the due process of law, could be the top priority of reformers. Justice also demands giving everyone his due; and, therefore, reparations are due to those who bore the brunt of the liberation war and subsequent human rights violations. By the same token, punishment must be meted out to those found guilty of committing "selective genocide"<sup>3</sup> in open court trials. Those found guilty as abettors but repentant and seeking forgiveness could be considered for mercy. Upon the recommendation of a "Repentance and Mercy Commission"—call it by any other name—the president could exercise his/her constitutional authority to grant pardon.

#### ***The Right of Dissent***

The right of dissent captures the basic freedoms, providing the essence of democracy, without which a democratic state cannot properly function. This core human value has different dimensions encompassing freedom of speech to press to assembly to religion enshrined in most of today's constitutions, including

Bangladesh's. But in the name of security most states have infringed this basic democratic right and Bangladesh is no exception. In November-December 2002, 44 arrested individuals died in custody during the government's Clean Heart Operation. The same year unsubstantiated sedition charges were leveled against a leading intellectual and two journalists. In December-January 03, Professor Muntasir Mamun and journalist Shahriar Kabir, Reuter's Bangladesh representative, were arrested and re-arrested. Both have sued the government for damages for their illegal imprisonment and torture. On December 27, 2003, Secretary General of Amnesty International (AI) formally charged the government for denying custodial deaths. AI Secretary General alleged that some of the arrests were politically motivated. AI chief also regretted that the government did not respond to her urgings to repeal the "repressive laws", including the Special Powers Act enacted in 1974 to ratify the Convention against Torture and to investigate and take action against all incidents of torture.<sup>4</sup> Bangladesh born AI chief, Irene Khan, alleged that police and prison authorities had ignored court orders for bail, undermining the judicial system because those who had been released on bail or by court order declaring the detention illegal "are still being harassed or re-arrested on similar charges."<sup>5</sup> A recent case involved an investigative journalist working for the English language newspaper The Daily Star. According to a Human Rights Watch report, he was picked up from home in the dead of night on May 11, 2007 and tortured by a security agency for his dissenting blog and press coverage of serious human rights violations. He was released after recanting his reports. But he became so afraid for his personal safety that he sought and received asylum from Sweden.<sup>6</sup>

Issue Elaboration: Indeed the right of dissent is the heart of democracy. Without it meaningful dialogues and negotiations between individuals and groups to resolve conflicts could not occur, which would lead to intimidation and suppression of those holding different views on policy matters and governance. Here the underlying principle of justice as fairness could bridge the gap between national security and individual freedom. The recent verdicts of the US Supreme Court on five cases, including the right of Habeas Corpus of alleged terrorists being held at Guantanamo Bay, Cuba, have reinforced this right for a working democratic country despite its many shortcomings<sup>7</sup>. In order to ensure the right of dissent a fledgling democracy like Bangladesh might seriously consider establishing a high powered Human Rights Commission with direct links to the President or Prime Minister depending on who holds

the portfolio of defense at a given time. Also, implementing the constitutional provision of Ombudsman could significantly mitigate the alleged inhuman treatment some citizens have reportedly received while in custody of civilian law enforcement and military intelligence agencies. Both the current caretaker and future elected governments must consider whether or not these Commissions will be authorized to hold hearings on grievances from aggrieved citizenry. The fact is without having subpoena and contempt powers, and most importantly without full support of the government, these Commissions would be toothless.

### ***Right of the Opposition Parties in a Functional Democracy***

Anchored to the basic democratic value of the right of dissent, opposition parties serve an important function in a functional democratic government by providing a different perspective to problems being addressed and solutions considered. Without it, majority rule turns into a tyranny of the majority.

Issue Elaboration: In order to make a democracy more functional, serious efforts must be undertaken by elected leaders to build stakes for opposition parties to meaningfully participate in parliament. It could involve, for example, apportioning time to opposition parties in parliamentary deliberations and committee assignments in proportion to their representation, i.e., seats in parliamentary. Also for a balanced approach to assuring the main opposition party a meaningful role in parliamentary deliberations, an important institutional change could be considered whereby the Deputy Speaker of Parliament as well as Associate Chairs of Parliamentary Committees would be selected by the opposition. This strategy might prevent future deadlocks caused by intransigence of the ruling party to give the opposition enough time to actively participate in parliamentary deliberations. More often than not this has resulted in boycott of parliamentary deliberations by the opposition followed by street agitations and general strikes that have had adverse effects on the national economy and political stability.

### ***Devolution of Power to the Rice-roots***

The decentralization of administrative power to the local level of government can have a positive impact on motivation to develop from bottom up. Home rule empowers local government to create/modify their charters and run their affairs without approval of central legislature or bureaucracy, subject to the

constitution of the state. For example, the movement for devolution of power to local government, culminating in the “Home Rule Act,” following the American Civil War, changed the destiny of the United States of America for the better. It gave more power to local governments, e.g., village, city and county councils, school boards, municipalities and corporation, in choosing their form of governance relating to education, law enforcement, taxation, and other substantive matters, which created a powerful force for self help and development.<sup>8</sup>

**Issue Elaboration:** Empowering local self government—politically and fiscally—through free and fair elections would reduce dependence on the bureaucracy, thereby helping the people at the rice-roots level to take initiative in defining and solving a myriad for local problems. The self-help and creativity thus engendered could become a major force of nation building. It could also lead to greater economic development in rural areas, setting perhaps a new trend of reverse migration from urban to rural areas, significantly narrowing the urban-rural divide and the resulting socio-economic-political problems facing many of today’s developing countries, including Bangladesh.

### ***Peaceful, Free and Fair Elections***

To select legislators and governors, the highest policymakers of a nation, through open, free and fair elections provides the hallmark of a democratic state. The legitimacy of a democratic government is assured by free, fair and accessible elections. An unquestioned, above-board election gives elected leaders the legitimacy to mobilize public support, even among supporters of opposition parties, for a myriad of important policies which can make a difference in the quality of life of the citizenry.

**Issue Elaboration:** A firm institutional framework of the electoral process needs to be created to prevent electoral fraud and violence, which routinely claims lives in elections in most developing countries. It could include stringent guidelines for fiscal accountability of candidates, impartial monitoring of polling stations, heavy fines and imprisonment for fraudulent voting. A non-partisan Election Commission with Subpoena and Contempt authority, headed by a strong willed, politically neutral Chief Election Commissioner would have the constitutional authority to cancel elections of constituencies for gross violations of electoral rules and/or electoral violence. Such a framework could significantly strengthen the “Justice as Fairness Principle” of the electoral institution.

### ***Reducing Dependency on the Bureaucracy***

Bureaucracies in ex-colonial developing countries like Bangladesh still carry the vestiges of a colonial mindset. They tend to hold on to the values underlying colonial rule. With increasing effectiveness they became strong buffers between the rulers and the ruled. As a result, the bureaucracies became highly developed to the detriment of indigenous representative institutions during the colonial era, and the colonial glitter continued unabated following independence, undermining natural growth of electoral processes and institutions. An equitable sharing of power with elected representatives at different governmental levels could bridge the gap between colonial exclusiveness of merit-cum-social status based power—meritocracy—and participative inclusiveness and accountability in a post-colonial democratic country.

**Issue Elaboration:** Values connected to bureaucratic power and electoral legitimate authority need to be reassessed and reprioritized. Here the civil society must play a crucial role. Different segments of that society must develop their own expectations and the ways they can be met to help the society as a whole become more humane, responsive to needs and accountable for its decisions and actions. These values must be reflected in the recruiting, selecting and promoting guidelines of the Public Service Commission and departmental committees dealing with career evaluation and advancement. To this end interactive, inter-sectoral decision making and implementing institutions could be formed for different purposes. For example, the charge of one such institution could be to publicize dangerously counterproductive delays of policy implementation in specific cases and the degree of duplication, inefficiency and corruption, if any, involved. Such mobilization of support from the civil society could help increase responsiveness, cut red tape and remove unexplainable bureaucratic barriers against policy implementation for good governance. In this context the constitutional provision of “Ombudsman” could be implemented, at least on an experimental basis.

### ***Renewing the Spirit of Social Contract***

Social contract theories espoused by political philosophers such as John Locke, Thomas Hobbes, and Jean Jacques Rousseau, among others, make consent of the governed as the basis of a legitimate government.

Issue Elaboration: Such a renewal would contribute to a vital socio-economic-political balance by mixing human rights with accountability at every societal level. It would call upon institutional reformers to become transforming change agents, striving to be leaders and teachers at the same time, raising the consciousness of their followers to a higher level at which spontaneous mobilization of human and material resources could happen. The value of the great leap “from status to contract” must be inculcated through a reformed, progressive education system and a deep political commitment to change of the mindset of leaders at every level in every field from the self-centered transactional relationships to public interest based transforming ones between themselves and their constituents. In this regard fundamental reforms of religious institutions, particularly Quami Madrassas mostly funded by Wahhabi charities of Saudi Arabia, are in order for reviving the spirit of Islam about an open quest for knowledge and peace. Buttressed by returning Bangladeshi Jihadists from Afghanistan, Iraq and Pakistan, the radicalized Mullahs and their pupils continue unabated to distort Islam in these private Madrassas to justify violence against secular minded Muslims, disadvantaged women and religious minorities in Bangladesh. It is important for justice and security to bring the private (Quami or Nationalist) Madrassas under the purview of existing directorate of primary education, the same way the Directorate of Public Instruction brought dysfunctional private primary schools under its jurisdiction in 1973. Through such public incorporation and curricular reforms Madrassas could achieve a balance between religious education and liberal arts education. This would help Madrassa students to broaden their horizons and appreciate democratic values of mutual tolerance of opposing ideas, accommodation and compromises in search of common grounds for problem solving and conflict resolution, inclusive-participatory decision making and implementing processes. This would also make them more competitive in the job market. It could also make them less hostile towards Non-Government Organizations (NGOs) committed to empowering the disadvantaged women through an increasing number of novel community development systems, such as BRAC’s Non-Formal Education, GRAMEEN’s Micro-Lending banking and GONO SHASTYA’s healthcare. These three largest Bangladeshi NGOs and other smaller ones such as NIJERA KORI have raised a new set of aspirations among millions of poor Bangladeshis. As an important part of general education reform political leaders regardless of their party affiliations must consider de-linking organized labor and student

groups from partisan politics and allocate significantly more resources to human resource development, particularly for R&D initiatives at different universities and institutes of science and technology. The de-linking will contain militia politics, which causes socio-political unrest not only in Bangladesh but most other developing countries as well.

### ***Ensure the Right of Information***

Free flow of information is vital to any functional democracy, helping to create an open society in which transparency and accountability of policy making and implementing processes become a part of the political culture. Research shows that free flow of information and open communication provide the foundation of not only good policy making process but also effective governance.

Issue Elaboration: This important value of democracy must be institutionalized through an enforceable Freedom of Information Act. Unless the government can demonstrate that any piece of information being sought by a citizen is likely to compromise national security, it must be accessible to the concerned citizens. Institutionally a non-partisan Information Commission with Subpoena and Contempt powers could be put in place to enforce the guidelines of the Information Act and hold hearings, if and when needed. Free flow of information engenders transparency and accountability in decision making and implementing processes in public and private sectors. Future elected representatives might seriously consider utilizing strategies to ensure accountability of policy makers by utilizing strategies of “Recall” whereby corrupt elected officials could be voted out of office in special elections. By the same token citizens could be empowered to propose and ratify important public policies through respectively “Initiative” and “Referendum” in special and/or general elections.

### ***Reiterate and Reinforce the Spirit of Panch Sheel***

In a regional power struggle Beijing reasserted its historical claim over Tibet by forcibly incorporating it in China as a “national autonomous region” in 1951, nominally under the traditional authority of the Dalai Lama. Although lodging a formal protest against China’s “aggression,” Nehru realized that India could do little to overturn Chinese control of Tibet. With a strategic shift from adversarial to cooperative mode, both Nehru and Chou En Lai engaged one another in a peace offensive, culminating in Sino-Indian Treaty in 1954. The

preamble of the treaty contained five principles or PANCH SHEEL: respect for each other's sovereignty and territorial integrity, non-aggression, non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. It became the template for peaceful cooperation celebrated at the 1955 Bandung Conference, which led to the Non Aligned Movement (NAM). The spirit of PANCH SHEEL once helped provide a middle ground in the bi-polar struggle in a "Cold War" environment having a stabilizing effect. Despite periodic lapses in 1959, 1962, 1998, the spirit of PANCH SHEEL has survived. Particularly for the emerging ex-colonial nations in a tense international environment it seemed to start a positive trend of mutual cooperation and respect—a reinforcement of the ideology of regional cooperation.<sup>9</sup>

Issue Elaboration: To what purpose and extent does the spirit of PANCH SHEEL apply to the environment of a fledgling Democracy like Bangladesh? Applied to domestic power relations PANCH SHEEL could have a stabilizing effect by creating a middle ground on which rational cooperation and compromises could replace traditional all or nothing approach to politics. This could be achieved through a series of cooperative endeavors involving representatives from the government, professional-occupational groups, minorities, women's associations and the civil society at large. Hopefully within a new institutional framework any interested segment of any cooperatives could lawfully participate in a policymaking and/or policy implementing process in domestic and foreign affairs as non-voting members with the power of persuasion. This would prevent the screening of negative feedback from those adversely affected by a given policy and/or the way it is being implemented, reasserting autonomy of individuals and groups—an important dimension of Justice as the principle of fairness.

Team Leader: Zillur R. Khan, Ph.D.  
 Rosebush Professor Emeritus, University of Wisconsin, U.S.A.  
 & Chair, RC 37, International Political Science Association.

### **Recommendations of the group charged with: Bangladesh Foreign Policy**

In the years to come, Bangladesh's major priorities in building and maintaining its foreign relations should focus on improving the image of Bangladesh in the international community by promoting

multilateralism in South Asia and harmonious bilateral relations with India, focusing on economic diplomacy, improving the diplomatic service, monitoring the ministry of foreign affairs and missions abroad, promoting remittance and bridging the diasporas, encouraging national consensus based policy formulation and addressing issues of global climate change.

### ***Improving the Image of Bangladesh in the International Community***

The primary task of Bangladesh foreign policy should be to establish a positive image of the country. Bangladesh's reform and opening up, the growth of the media and cable television, the rapid expansion of the cellular phone network (the subscriber base should cross 50 million by the end of the year), and technological improvements and reforms in the communications and the ICT sectors constitute significant positive developments, as do developments in the ship building, pharmaceutical, textile and RMG sectors that need to be projected. It is also important to transmit messages to the appropriate groups regarding the on-going initiatives to combat corruption, regulatory reforms and improvement in the business climate in the country.

### ***Sustainable Improvement in Bangladesh-India Bilateral Relations***

Bangladesh occupies an important geo-strategic location in South Asia; therefore it must strive to maintain a strong relationship with the other countries in the region. India occupies an important portion in the formulation of the foreign policy of Bangladesh. There are still many unresolved issues in the Bangladesh-India bilateral relations. The proper way to mitigate these problems is to pursue an effective and consistent foreign policy. Apart from the regular diplomatic initiatives such as arranging regular summit level meetings, public diplomacy can also play an important role to solve many of these problems. The government of Bangladesh should try to promote public diplomacy; that is, to promote interaction among the people of both the countries. This can solve a number of broader problems existing between these two countries. However, problems between these countries cannot be solved overnight; it must be resolved on the basis of mutual trust and respect.

### ***Strengthening Regional Cooperation in South Asia***

Among the most noteworthy achievements of Bangladeshi diplomacy has been the creation of

SAARC. As such, our diplomacy should continue focusing on strengthening SAARC as a platform for peace and prosperity in the region. A major diplomatic initiative needs to be undertaken to improve cooperation between SAARC, ASEAN, and China. Apart from SAARC, energy cooperation in the region and realizing the aims of the South Asian Free Trade Agreement (SAFTA) require strong, sustained support from institutional and financial sources. Regional cooperation in the energy sector has become vital for maintaining security and development in the region. A comprehensive and integrated trade facilitation framework needs to be adopted in our foreign policy by promoting integrated transport infrastructure including transit and transshipment of goods; facilitating development and modernization of Chittagong and Chalna sea ports as regional hubs; pursuing economic diplomacy to remove non-tariff barriers in trade between Bangladesh, India, Pakistan, Nepal, Bhutan, and Sri Lanka; promoting regional customs cooperation; and promoting regional energy cooperation.

### ***Economic Diplomacy***

The importance of economic diplomacy has become a vital issue to pursue effective diplomatic objectives in the post-Cold War era. As a developing country, Bangladesh should pursue this trend of diplomacy by which it can gain the most out of the international economic flow, thus ensuring the overall development of the country. Bangladesh should seek out market access in different parts of the world. Through economic diplomacy, Bangladesh should use its geopolitical influence and relationships to attain effective results in the areas of maintaining a balanced relationship with the regional countries and member states of SAARC and BIMSTEC; developing and maintaining close linkages with the OIC, ASEAN, EU, and the Commonwealth; strengthening relations with the global powers - USA, Japan, Britain, Russia, and China; and actively espousing non-proliferation and disarmament. Besides, an effective structure of economic diplomacy should address securing unimpeded entry of its products into foreign markets through WTO mechanisms; attracting FDI; promoting international and intra-regional trade; expanding and improving the functioning of markets; developing regional telecommunications, energy and transport networks; and consolidating the right political climate to facilitate these objectives.

### ***Improving the Diplomatic Service***

Due to absence of a coherent foreign policy,

Bangladesh has not traditionally held periodic reviews of the operation and effectiveness of its Ministry of Foreign Affairs (MoFA) and diplomatic services. The whole of the Foreign Service should be doubled in size with a cadre of at least 600 professional diplomats. Each diplomat should be fluent in at least one foreign language other than English. Area specialists will be the norm along with a pool of multilateral specialists, including a pool of experts in the field of trade negotiations and the WTO. Foreign postings/ assignments should be made on the basis of their demonstrated skills, knowledge and expertise. Diplomats should be properly trained in the fields of language, culture and related areas. The need for international subject expertise within the MoFA is compelling. Extensive and periodic training on subjects such as international negotiations, trade, security, and economic regions should become a standard and integral part of the Foreign Service.

### ***Monitoring the Ministry of Foreign Affairs and Missions Abroad***

There is a need to establish a functional and separate parliamentary committee to monitor and evaluate the performance of the Ministry of Foreign Affairs and diplomatic missions abroad. It should be neutral to evaluate the performance of the aforementioned ones. This evaluation and monitoring should be done on a regular basis so that there should remain a balance in the policies pursued abroad by different diplomatic missions. The Committee should review strategies to achieve effective policy objectives and their performance costs, and also to provide a strategic perspective on the functions of the ministry. The Committee should also take initiatives to improve linkages between the MoFA, various trade bodies and the private sector in order to expand export promotion.

### ***Remittances and the Diaspora***

Remittances from economic migrants play a critical role in the Bangladeshi economy. MoFA should be instrumental in facilitating contributions and also attracting investments from the Bangladesh Diaspora. There is a dire need to focus on boosting foreign remittances and attracting tangible and intangible investment from the non-resident Bangladeshis (NRBs). It is, therefore, important to include measures to build a bridge with the Non-Resident Bangladeshi (NRB) population. NRBs can contribute most significantly to the national economy of Bangladesh, especially in terms of investment. The foreign policy of Bangladesh should promote the

investment facilities of the NRBs. These types of investments can result in the increase of the foreign reserves of the country, as well as promote its gross productivity. It is highly likely that if the policies are convenient to the NRBs, they will be more keen to invest in Bangladesh. Moreover, the Diaspora population could potentially allow access to the global economic and financial chain, as they may have linkages with foreign trade channels. These further opportunities should also be exploited to further the development of the country. These efforts should be well-coordinated and implemented as a top priority.

### ***National Consensus on Foreign Policy***

In most cases, foreign policies are formulated arbitrarily, without political consensus. As a result, policies may seem fragmented and inconsistent. In the formulation of Bangladesh's foreign policy, it is important to uphold national interests above any other consideration. The policies should be directed to achieve national goals rather than regime interest. A well-coordinated and consistent foreign policy is important to promote the national image of Bangladesh to the international community.

### ***Global Climate Change***

The rapid change of the environment has now become the focal point of many countries, mainly the coastal ones. The impact of global climatic changes are already having major effects on the economic performance of Bangladesh and on the lives and livelihoods of poor people, acting as severe economic shocks. Climate change is clearly not just an environmental issue but one with severe socioeconomic repercussions. Bangladesh's diplomacy should focus on creating an enabling regional and international environment that mitigates the risks and aftermaths of environmental challenges. One such initiative was undertaken in the recent Bali Conference where a specific set of proposals aligned to the position of the G-77 and the Least Developed Countries was presented by the Bangladeshi representatives.

### ***Migration and Refugee Policy***

Bangladesh lacks an effective and up-to-date migration and refugee policy. Bangladesh should ensure effective measures to uphold the rights of Bangladeshis working abroad and improve the remittance facilities for them. Bangladesh is burdened with the Rohingya refugees from Myanmar for decades. Though international bodies are

providing some support to deal with the issue that does not seem to be enough to solve the problem. It is evident that due to the lack of proper migration policies, many of the people who wish to migrate are unable to go abroad. At the same time, the refugee problem is hampering the national economy of Bangladesh to a great extent. This problem is to be settled with due importance. The foreign policy should be effective enough to project these problems to the international community.

Team Leader: Farooq Sobhan  
Former Foreign Secretary of Bangladesh  
President, Bangladesh Enterprise Institute  
House-20, Road-05  
Gulshan-1, Dhaka-1212  
Bangladesh.

### **Recommendations of the group charged with: Economic Issues**

The themes on the economy that were discussed may be categorized as follows:

- developing rural economies and related sectors
- capital flows
- domestic financial development (FDI, aid, and remittances) as well as domestic saving mobilization through more efficient financial intermediation
- growth and employment

During the discussion session on economics, it was recognized that despite the existence of the shorter term problem of inflation management, the longer term objective of growth and employment would be a more appropriate focus for this conference.

It is true that currently inflation is an acute problem, causing hardship for many because of escalating food prices and transportation costs. However, supply side inflation is a problem that causes a dilemma for policymakers and simply becomes a matter of deciding which must be sacrificed – growth or price stability. The distributional aspects of these policy choices were not discussed at the session.

### ***The Rural Economy***

The role of NGOs in poverty alleviation and employment generation suggested that:

- The current emphasis on micro-credit does not reflect earlier trends that helped instil democratic institutions which would encourage foreign investment.
- NGOs do not provide adequate funding for smooth consumption in disaster prone areas in an effective manner because there is an overemphasis on making such provisions for their own client base.
- NGOs fail to extend entitlements, capacity building, health, education and skill development training, which aim at inducing long lasting benefits. Instead the focus is simply on how many loans are made and what the repayments happen to be. NGOs should function as more than banks.

Most of Bangladesh is rural and employment provision as well as sustainable growth can come from farm and non-farm activities in the rural areas. The prospects of increased migration are not very sustainable for the economy given the excessive and concentrated urbanization that has occurred in Dhaka and Chittagong and the inability of the existing infrastructure to handle such urban growth. Power and water shortages are only two aspects of the pressure on resources while such migration continues.

The creation of non-farm employment opportunities represents the possibility of a more sustainable option that can absorb labor locally without the need for outmigration into urban areas.

Very little emphasis has been placed on developing non-farm enterprises (NFEs) in rural areas. More credit, infrastructure, and support services need to be provided. Women need to be encouraged to start NFEs.

It is seen that better educated households live in safer areas and rely more on NFEs, while relying solely on farming leads to vulnerability in both income and housing. Provisions to allow safe-distance farming so that people can reside in safe areas while they farm on chars could be done without large scale interventions.

### ***Capital Flows***

Bangladesh's share of aid from development finance institutions is expected to fall because of the excessive emphasis of Development Finance Institutions (DFIs) on Heavily Indebted Poor

Countries (HIPC) Foreign Direct Investment (FDI) is currently higher than aid, and it is remittances that are the largest source of finances. FDI within EPZs are increasing at a very rapid pace showing that the right conditions allow Bangladesh to be a recipient of such investment when wages and other costs have risen to comparatively high levels in East Asia.

The remittances inflow worldwide is estimated at US\$ 318 billion in 2007 of which developing countries would receive US\$ 240 billion (World Bank 2007). Bangladesh is among the top five receivers of worker remittances among developing countries. Over 70% of these remittances come from the Middle East, Saudi Arabia being the largest source. The following suggestions were offered to smooth the flow of remittances into the country:

- Setting up counseling centers at District Manpower and Employment Offices with automated arrangement of data base of potential migrants and complete information on overseas job markets, costs, benefits, tenure and name of recruiting agencies having valid offer of exporting manpower.
- Making arrangement for legal and transparent contracts between recruiting agencies and job seekers in the presence of officials of BMET including a clause of receiving money through a scheduled bank account of recruiting agency and mandatory submission of a copy of deposit slip to the BMET.
- Providing training for skill development and undertaking programs for language learning.
- Making recruitment fee and transfer cost of fund rational.

### ***Domestic Financial Development***

Loans and Deposits/GDP is very low in Bangladesh compared to low-income countries as a whole. The same is true of branch penetration per capita and ATM use per capita.

Financial deepening is low as is the use of formal market finances for investment purposes. The government should move from its role as an operator and arbiter in the financial system to a facilitator role.

The licensing process should be denationalized and depoliticized and banks should not be rescued outright.

Most important, the government should move away from the implicit guarantee for depositors and owners to applying the existing limited explicit deposit insurance for depositors, while simultaneously relying more on market participants to monitor and discipline banks instead of micro-managing financial institutions.

Regarding capital markets, the following recommendations were made:

- The market needs more good scrips. The process would be easier if good issuers could be attracted by improving the market governance system and eliminating scope for manipulation. There are only limited instances, such as commercial banks/leasing companies, where regulators can impose guidelines relating to capital structure. Hence it may be difficult to force a corporate house to list its equity unless it agrees at the time of licensing or registration. Inadequate disclosure requirement and a culture of family-owned conglomerates deter the expansion of corporate governance into the local industry. Regulators need to play an active role in removing the bureaucratic bottlenecks and promote rules that provide incentives to companies to list their stocks.
- To expedite the market development process, it may be a good idea to decide on certain milestones regarding capital market development and link them to the disbursement of Development Credit Support of the World Bank. The government is making good progress in other sectors including monetary management, corporatization of public-sector banks and others through this linkage.
- The missing link among the Securities & Exchange Commission, Bangladesh Bank, Bangladesh Telecom Regulatory Commission and other regulatory bodies is now being established. Individually they were not serving each other's interest, and there was no effective coordination among them, hence the country was deprived of great initiatives. A dedicated financial market cell at the Ministry of Finance could be formed to coordinate with these regulators as well as other ministries.
- In terms of creating market depth, more profitable state-owned-enterprises (SOEs) should be listed on the stock exchanges. The supply of securities can be increased if the SOEs are

allowed to operate through stock exchanges. Floatation of SOE scrips is expected to expand the market. Corporatization of SOEs will bring in transparency as well as confidence on the government financial system.

- Incentive for private sector entrepreneurs to access the capital market should be more noticeable. The tax gap between listed and non-listed companies could be increased. Infrastructure projects should access capital markets to raise finances through bonds and corporations should raise short-term finance through commercial papers. Securitizations should be encouraged and initiatives taken to promote new products in the market.
- In a more developed market, institutional investors such as merchant banks, commercial banks, insurance companies, are major traders of securities. Enforceable and effective laws and rules would attract foreign institutional investors.
- Equity research is not very popular yet in Bangladesh. The quality of brokerages houses should be assessed by the quality of research produced by their independent research departments. The SEC is expected to play an educational role in the process by bringing in international resources and creating investors' awareness through television and other media. Local TV channels should focus on business but more on financial education for the young generation (for example, college and university students) irrespective of their discipline. Young people have every right to learn the mechanisms of saving, investing and the importance of personal financial management.
- Quality analysis needs to address valuation issues in a more pro-active manner. The independent analysts should raise red flags when a scrip is overvalued or undervalued, and the intrinsic value of a traded security should be covered in the research paper. Investors are perhaps depending much on speculative analysis resulting in volatility in the market as opposed to fundamental analysis, which could attract more stable long-term investors who are sure about their investment tenure and expectations. It is observed that whenever there is a downturn in the market, individual investors go on a rampage; these investors should understand that downturns, bearish trends and market corrections are an integral part of stock markets.

## ***Growth and Employment***

Regarding the RMG sector, it was suggested that the export base be diversified, with more items rather than the current focus on knitwear. Locating more factories in different regions of the country would allow better access for workers and multiplier effects to be spread out nationally. Better work conditions, day care, health and education would allow the economic benefits to be better distributed. Also, better labor conditions are needed for improving the national brand image. Control of industrial effluents in the dyeing sector is necessary for safeguarding the environment and the addition of water treatment plants is desirable for new factories.

It was also recognized that several potential areas such as shipbuilding, port development, food processing, and tourism were potential growth sectors and foreign exchange earners. The development of a hub in Dhaka that could be led by Bangladesh Biman so that it would attract foreign investors was also suggested. There was also mention of building up seaports for similar traffic that would generate further investment and revenues. Being located in the crossroads between China and India, Bangladesh has an advantage in potentially serving as a transshipment site.

Very little has been done by policymakers to provide incentives to these areas and in-depth studies of these sectors are necessary to consider the potential and devise appropriate policy to encourage technology transfer and expansion.

Finally the importance of education and literacy, in both Bengali and English, was underscored. This would encourage foreign investment and allow Bangladesh to be integrated better into the global economy.

Team Leaders:

Dr. Farida Khan is Professor of Economics  
Co-Director, Center for International Studies  
University of Wisconsin-Parkside

Dr. Munir Quddus is Dean,  
College of Business  
Prairie View University, Texas

### **Recommendations of the group charged with: Education and Human Resource Development**

Bangladesh, more than any other country, has to turn

its abundant population into productive human resources in order to fulfill its vision for the 21<sup>st</sup> century. How the education system can be re-directed to help fight poverty, promote human development, create the conditions for life with human dignity for all, and face the challenges of the 21<sup>st</sup> century is, therefore, a paramount concern. The breakaway discussion group agreed on the following recommendations:

### ***Establishing a Unified System of Primary and Secondary Education***

Inequality in access and opportunities is the defining feature of the present education system. To overcome the divisions and discrimination in educational provisions, reflected in separate streams of government, non-government, private, and English medium schools and madrasas, at both primary and secondary levels, a unified general education system should be introduced with a common core curriculum, learning objectives and minimum required standards regarding teachers, facilities and learning materials. The unified approach and standards should be applied to all institutions, government and non-government, including quomi and aliya madrasas and English medium schools, and to all students attending any type of educational institutions.

### ***Promoting a New and Effective Pedagogy***

To equip children with the necessary skills, capabilities, and creativity essential for the information society and the knowledge economy of the 21<sup>st</sup> century, the didactic and teacher-centred pedagogy must be replaced by a more learner-centred and active teaching learning process. Sound formative and summative assessment tools and techniques should be used to assess the performance of students, teachers, institutions and geographical units and to diagnose and remedy deficiencies in the system. Pedagogic techniques that recognize different abilities of learners and challenge the gifted learners must be promoted. Appropriate technologies should be used to improve quality of instruction, enrich the learning experience for all, and upgrade and support teachers. ICT tools such as TV, VCD, mobile phone, and computers may be leveraged for “anytime-anywhere” learning, thereby saving time and cost and allowing flexible learner-centered schedules. A dedicated educational Bangladesh Television (BTV) channel for interactive educational programs should become a reality without delay.

### ***Making Education Truly Inclusive to Serve Children with Special Needs***

Different needs and circumstances of learners defined by their economic status, geography, gender, ethnic and language background, parents' educational level, and similar social, economic and family background should be recognized and educational provisions, curricula, and the school program should be appropriately adapted. Educational institutions should ensure full access of children with disabilities and special needs.

### ***Enhancing Competence, Performance, Rewards and Recognition of Teachers***

Skills and performance of teachers hold the key to better outcome from the education system. Human resource policy and practices including the career ladder should facilitate professional development and promote performance standards of teaching personnel. 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 raises tied to clearly established and enforced performance criteria. 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.

### ***Making Education Governance and Management Accountable and Effective***

Weak accountability in governance and ineffective management are the main obstacles to many initiatives underway for educational reform and development. Four areas demand attention in this respect.

- 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 authorities, training institutions and schools to make decisions regarding activities, operations and personnel within a framework of principles and guidelines.

- 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.
- 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.
- A consensus has to be built regarding political parties restraining themselves from involving students and teachers and their 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 at the national level and each institution should be developed and enforced.

### ***Ensuring Adequate Resources for Quality Education***

A threshold level of resources must be ensured for achieving the quality and equity goals in education. 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 should be given incentives to generate local funds.

Team Leader: Manzoor Ahmed  
Institute of Educational Development  
BRAC University, Dhaka  
Bangladesh

**Recommendations of the group charged with:  
Infrastructure**

The key points made by the panel on Environment, Energy, Infrastructure and Water Resources are as follows:

***Environment***

- Industrial effluents must be discharged properly. Bangladesh already has strict regulations in place but it is the implementation that is lacking.
- Deforestation has become a major problem in Bangladesh. The forest area has been reduced to only 6 percent. Besides, deforestation has adversely affected the lives of indigenous people and further deforestation must be stopped immediately.
- General decay of the rivers of Bangladesh must be addressed. For smaller rivers, dredging should be considered.

***Energy***

- A Comprehensive Energy Strategy is essential for Bangladesh. Rural energy sector comprising of solar, wind and other alternative renewable sources should be emphasized. NRBs should be encouraged to invest in alternate energy sources.
- A Center for Energy Excellence should be established to allow for growth of local expertise as well as NRB participations.

***Infrastructure***

- Spatial distribution of major infrastructures such as roadways, electricity, water supply and sanitation should be encouraged.
- A cell under the Planning Commission should be established to implement and monitor the proper distribution of major infrastructures.

***Water Resources:***

The Padma Barrage and Bridge should be built together. ECNEC has approved the construction of the Padma Bridge at Mawa at a cost of \$1.5 billion. This vision should be extended to build the Padma Barrage and Bridge together to save at least \$500 million in construction cost as well as to achieve the following unparallel benefits:

- Provide surface irrigation to 1.5 million hectares (Mha) in the Ganges Basin and 1.0 Mha in the Jamuna Basin to increase the food production by

7.5 million tons.

- Resuscitate the major tributaries viz. the Gorai, the Old Brahmaputra and the Dhaleswari and reduce the flooding by diverting flood waters to the resuscitated rivers.
- Generate dependable 600 MW of hydropower.
- Arrest saline water intrusion and save the Sunderbans, a World Heritage Site.
- Provide drinking water to Dhaka and Khulna through the Dhaleswari and Gorai Rivers, respectively.

It is, therefore, imperative that the government of Bangladesh immediately take steps to incorporate the Padma Barrage into the Bridge Project.

Bangladesh suffers from catastrophic floods almost every five to seven years causing numerous deaths and extensive destruction. Long-term, expensive structural solutions are beyond the means of Bangladesh. Instead, Bangladesh should concentrate on non-structural solutions centered around flood forecasting and flood-proofing of the houses.

Team Leader: Sufian A. Khondker, PhD, PE  
Senior Associate and  
Director of Water Resources  
Dewberry

**Recommendations of the group charged with:  
Health, Population and Non-governmental  
Organizations**

The breakaway session on health, population and NGOs was lively and many sub-topics were covered, none to the extent the group would have liked. The session was but one hour; hence our results were limited.

Before addressing each of the three areas of concern, there was consensus among the group that certain general conditions would have to be met for the recommendations to be viable in Bangladesh.

The first and most pressing concern was the historical influence of corruption in Bangladesh. It was felt that much of the corruption would need to be alleviated for the recommendations to be viable in this most deserving nation. Although the caretaker government offers hope, it was recognized that already there are reports of corruption in the caretaker government. Therefore, the first recommendation is that corruption ought to be forcefully addressed and hopefully eliminated to the extent possible.

Our second recommendation is to establish three task forces, each to address one of the issues: health, population and NGOs. These should be ongoing task forces, each of which is staffed with appropriate professionals and non-professionals who are willing to commit the necessary time and talent to insure quality and effectiveness.

A third recommendation centers on persons with disabilities in Bangladesh. Rather than considering persons with disabilities as a burden to the nation and a possible impediment to development, it is recommended that the experience of Bangladesh Protibandhi Kallyan Somity (BPKS) be carefully studied as an example of how the talents and commitment of persons with disabilities can be exploited not only to contribute to the nation's development, but also to provide leadership in Bangladesh's development and its assuming its rightful position among the family of nations worldwide. The input of people with disabilities should be sought across the entire spectrum of development issues and certainly not limited to those dealing specifically with disability issues. With these recommendations, the discussion of the main subject matters ensued. Given the limitations of time, the health sector is elucidated the most.

## **Health**

Health and human productivity are intertwined. There is a bi-directional relationship between health and economic development. In this regard, the Commission on Macroeconomics and Health (2001) asserted that "Improving the health and longevity of the poor is an end in itself, a fundamental goal of economic development." The Commission also stressed that while it is generally assumed that good health is a direct outcome of strong economic development, there is also the opposite evidence: that strong economic development depends on a healthy population. The positive externalities of keeping a nation's human resources healthy are significant for both developed and developing countries.

The World Health Report (2000) also urges health care systems to deliver good health to the population, design responsive health services, and ensure fair payment systems. International agencies such as the World Health Organization (WHO) are also making serious demands today on health care services by stressing accountability, quality, cost effectiveness, access, and sustainability, all focusing on the need to design more effective and efficient health programs.

The group felt that there is much to be accomplished

in this sector. Our first recommendation is that, in order to bring greater access to health services and therefore improved health to all Bangladeshis, a much greater emphasis is absolutely necessary on primary health care services. Such a focus would ensure that many health problems are tackled before they grow, while others are prevented altogether. Primary health care must begin at the village level and can often be offered through the services of the villagers and community health workers trained at a basic level, patterned after the "promotoras" of Mexico. This Mexican model has been very successfully replicated in the USA under the community health aide program.

In line with our recommendation for an emphasis and concomitant financial commitment to primary health care services, the planning, oversight and responsibility for those services must be decentralized and placed with local officials in the areas served. Our belief is that greater responsibility is taken and more appropriate services are offered when there is local accountability.

We also contend that improving tertiary (curative) care in Bangladesh requires attention to the issues of quality, access and costs. Improvement of managerial practices is key here that can be bolstered by the establishment of health administration education so that a specially trained workforce instead of generalists would be geared to the management and administration of health systems (hospitals).

It also important to bring in the patients' voice to improve health services by having them rate various service features regularly. These features include doctors, nurses, tangibles, process features, reliability, responsiveness, physical environment, etc.

At the same time, to ensure proper delivery of health, additional organizational and extra-organizational issues must also be addressed to improve the healthcare system. For example, studies are needed to examine the influence of political elements, commitment of the higher authorities of the Health Ministry (especially those in the Directorate of Health), the cooperation and coordination achieved with affiliated ministries such as the Ministry of Establishment (for recruitment purposes) and the Ministry of Finance (that makes funds available), and the role and quality of involvement of the development partners (e.g., The World Bank, USAID, WHO, UNFPA, etc.).

Changes in attitudes and practices at these higher

tiers of the health design and delivery system, where human, financial, technical, and policy matters are negotiated, is essential for the healthcare system to respond optimally and provide the needed services to respond best to patient needs. More specifically, the influence of party politics (who gets hired, who approves purchases), corruption at the Health ministry and Directorate of Health (who gets foreign or local training, who gets posted where, who is recommended for promotion, etc.), conditions imposed by the Ministry of Establishment and Ministry of Finance (in matters of recruitment, purchase of expensive diagnostics equipment, and related budgetary matters), and the purported interfering, imposing and intrasigent nature of the development partners also need to be examined; failures at these levels have significant ramifications for any improvements at the service delivery level. An example is the imbroglio in Bangladesh between the development agencies and the Ministry of Health and Family Welfare in regard to the right approach to healthcare service delivery that has led to much bickering, conflict and stoppage of funds for staff salaries and purchases of essential drugs (Haq 2003; The Daily Star 2006). Many feel this has seriously undermined the health and family planning program in Bangladesh. Unless these intertwined and networked structures of power and influence see eye to eye and demonstrate a spirit of collaboration and goal orientation to fulfill their mission of alleviating Bangladesh's health challenges, changes at the service delivery level may remain seriously encumbered.

Concern was also expressed among the group over the availability of legal drugs over the counter, drugs that should be taken only with prescriptions issued by properly trained medical professionals. The fact that any person can walk into a pharmacy and buy prescription drugs without proper prescriptions and the fact that many of these drugs are not manufactured to recommended standards were causes of great concern. We recommend immediate government attention to the development of a proper system for the appropriate distribution of these drugs.

The role and importance of the pharmaceutical sector was also acknowledged. This sector faces many challenges. For example,

- Raw materials are imported because of insufficient local production.
- No accredited labs exist for bioavailability/bioequivalence (BABE) testing.
- Few clinical research organization are there to conduct clinical trials.

- Limited scientific resource are in place for reverse engineering for API production.
- Individual companies may have attained some level of success but overall limited collaboration and cooperation with each other and academic institutions.

To address these issues, the following recommendations were offered:

- Political stability and willingness to change.
- Evidence based practice is needed requiring collection of data through research.
- There is a need for better and focused education and training of healthcare providers.
- API park must be established; this stalled public/private initiative must be revived.
- Bangladesh can benefit from the opportunity provided by TRIPS to manufacture generics.
- Provide incentive and bring overseas expertise - engage NRB Diaspora.
- BABE study laboratories and clinical research organizations must be established.
- Scientific collaboration and joint ventures must be aggressively pursued.
- Contract manufacturing should also be explored with MNCs.

It was also observed that medical students who perform their required social service for the government are often exploited by existing physicians as “free labor” in their own practices. In essence they are placed in physicians’ offices without pay and the financial benefits of their services accrue to the physicians for whom they work. There was strong consensus among our group that these students should be placed in areas, usually rural areas, where health services are severely lacking and that they should be paid for their social service; certainly their service must not be of financial benefit to individual health care professionals.

As our final health recommendation, we feel there are great opportunities for the development of income generating possibilities for Bangladeshis with the introduction of health promoting crops of both herbal and non-herbal varieties. Bangladesh, with its great fertile lands, holds great promise for becoming a leader worldwide in the development, production, utilization and exportation of such crops.

### ***Non-Governmental Organizations (NGOs):***

There has been a proliferation of NGOs across Bangladesh. The myriad of such organizations makes it virtually impossible for funding organizations to

determine the relative merit of those seeking financial and/or technical support. It is recommended that there be a greater role of the government in ensuring that those NGOs that are recognized and certified are indeed worthy of support and are indeed having a relatively significant and positive impact on those they purport to serve. With the government's greater oversight and assurance of quality and validity of needs addressed, the job of determining which organizations and/or projects to fund becomes simpler for the funding bodies and ensures that priority services are provided where and to whom they are most needed.

Further, the group recommends that NGOs be monitored for their provision of critical services at the grassroots level. Often the rural population and marginalized sub-populations are least served by NGOs, thus they miss those in greatest need. Better government monitoring will ensure that NGOs are properly run, funds are properly utilized and services address the greatest needs and are of top quality.

### **Population**

Strong concern was expressed by one member of the group that often the family planning methods offered village women are simply not acceptable or appropriate and therefore not used. The group's recommendation is that local, grassroots women and men be involved in designing family planning strategies and methods for their areas.

Finally, the group drew a logical and natural relationship between family planning and health, resulting in the recommendation that all planning be done in a holistic manner, carefully recognizing this relationship.

Team Leader: William Winkley  
Consultant, One Family International,  
Thibodaux, Louisiana, USA.

### **Endnotes**

1. John Rawls, *A Theory of Justice*. Cambridge: Massachusetts, Harvard University Press, 6<sup>th</sup> Printing, 2003, pp. 3-102.
2. *Ibid.* 77.
3. The U.S. Consul General in East Pakistan, Archer Blood, used the term to define the nature of killings of Bengali civilians by Pakistani army and their local collaborators during March-December 1971. Based on interviews with

Consul General Blood on April 7, 1971, and May 18, 1974. See also, Archer K Blood, *The Cruel Birth of Bangladesh: Memoirs of an American Diplomat*, UPL, 2002.

4. Most Bangladesh Newspapers, December 27, 2003. See for a detailed coverage, *The Daily Star*, December 27 and 28, 2003.
5. *Ibid.*
6. *Human Rights Watch*, February 2008, Volume 20, No. 1 (C)
7. *The Wall Street Journal*, June 28-29, 2008; *The New York Times*, June 29, 2008.
8. Milton C. Cummings, Jr. and David Wise, *Democracy Under Pressure*, New York: Harcourt Brace Publishers, 2008, pp. 797-ff. There is no mention of local government in the US Constitution. Powers are distributed between the federal government and state governments with concurrent powers exercised by both. Powers not specifically designated as such are reserved for the states and the people of the United States (10<sup>th</sup> Amendment of US Constitution). The 10<sup>th</sup> Amendment provided the constitutional basis of Home Rule, whereby states could delegate a wide range of powers to local governments in order for them to make their own forms of local government with needed authority to enact rules, levy taxes and elect/select local officials to run the local administration.
9. Zillur R. Khan, "Ideology and Internal Dynamics of South Asian Regional Cooperation", in Zillur R. Khan (ed.). *SAARC and the Superpowers*, United Press Ltd., 1991.

### **References**

The Daily Star (2006), "Donors Interfere in Nat'l Policies," 5, 794 (August).

Commission on Macroeconomics and Health (2001). *Macroeconomics and health: Investing in health for economic development*, Geneva: World Health Organization (December).

Haq, Naimul (2003), "Unification of Health, Family Planning Wings Reversed," *The Daily Star*, 4, 117 (September 21)

*The World Health Report 2000, Health Systems: Improving Performance*, Geneva, World Health Organization, 2000.

## **Dedication**

The success of the conference was the culmination of the work of a core group of colleagues from Bangladesh Development Initiative ([www.bdiusa.org](http://www.bdiusa.org)) and Democracy and Development in Bangladesh Forum, working collaboratively towards a common goal: to help make a difference in the political, social, and economic lives of the people of Bangladesh. The support of the Ash Institution of Democratic Governance and Innovation, Kennedy School of Government at Harvard University was also invaluable as was the help of the Bangladesh Embassy in Washington DC that extended its help in a befitting manner. The US Embassy in Dhaka, Bangladesh provided moral support and assistance with visa applications. The sponsors of the conference were The American Institute of Bangladesh Studies in USA, and Citibank, Prime Bank Limited and MGH Group from Bangladesh.

Syed Saad Andaleeb is Professor and Program Chair, Sam and Irene Black School of Business, Penn State Erie; President of Bangladesh Development Initiative; and Editor of The Journal of Bangladesh Studies.  
E-mail: [ssa4@psu.edu](mailto:ssa4@psu.edu)

# **The Untapped Energy Mine: The Revolutionary Scope of Renewable Energy for Bangladesh**

Sajed Kamal

## **Abstract**

The world faces an unprecedented energy crisis. Dependence on oil, coal, natural gas and uranium has led to their rapid depletion and skyrocketing energy prices; environmental consequences like global warming, acid rain and nuclear contamination; and political consequences like threatened national security and energy wars. There is an urgent need to transition to energy options that are clean, affordable, secure, sustainable and peaceable. Bangladesh is one of the worst victims; it is also in one of the most advantageous positions to make the transition. The country is richly endowed with renewable energy sources: light, heat, wind, water movement, and photosynthesis. Renewable energy technologies including photovoltaics, wind turbines, hydroelectric generators, solar thermal systems, solar greenhouses, biogas plants and solar cookers for a wide range of domestic, commercial and industrial purposes can revolutionize the economy. The article surveys the renewable energy initiatives in Bangladesh since the 1980s pilot phase and suggests the revolutionary prospect of building upon the evolving infrastructure on a massive scale. By urgently tapping into its practically untapped “energy mine” of renewable energy sources, not only could Bangladesh solve its own energy crisis, it could also set an inspiring example to the world! The article outlines a *Policy-Program-Practice (PPP)* continuum towards achieving this goal.

## **Think Globally, Act Locally**

Thomas Alva Edison (1847-1931), “the father of the electrical age”, said: “We are like tenant farmers chopping down the fences around our house for fuel when we should be using nature’s inexhaustible sources of energy—sun, wind and tide. I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.”<sup>1</sup>

Apparently, we have paid little attention to Edison’s advice. Instead, we continued to rely more and more on the fossil-nuclear energy path of oil, coal, natural gas and uranium to fuel the economy. But these resources are limited. All the reserves of oil, natural gas and uranium are estimated to be depleted by 2050, and coal by 2250.<sup>2</sup> These resources took millions of years to accumulate. Of course, we can go on arguing about the exact number of years before the world runs out of oil, continue to dig for additional reserves with more efficient and innovative extracting tools, and entrench ourselves in the nonrenewable path even more by substituting one nonrenewable fuel for another. But, at best, all that amounts to is choosing one disaster over another and keeping the wolf away from the door for a bit longer. And the wolf is all-in-one-body: skyrocketing fuel prices, threatened national security, terrorism, pollution, global warming, acid rain, nuclear contamination and energy wars. The collapsing economies, the Iraq war, hurricanes Katrina, Gustav,

Hanna and Ike, more frequent and intense cyclones and tornadoes around the world, and drought conditions from California to Australia destroying food production and fueling uncontrollable fires are telling us something about what we have gotten into by following the nonrenewable energy path and, even worse, the direction in which we are headed. Al Gore’s *An Inconvenient Truth* speaks loudly as a California-sized area of ice melts in Antarctica, and in the Himalayas—the abode of the gods who have been sustaining the creation from time immemorial, according to Indian mythology—the glaciers are melting at an accelerated rate.

The solution to this catastrophic scenario, therefore, is *a worldwide moratorium on further entrenchment into the fossil-nuclear path while, through conservation and efficiency, utilizing these resources only as transitional fuels toward a sustainable renewable energy path.* The transition will face short-term challenges and risks, but these pale in comparison to a suicidal entrenchment into the dead-end nonrenewable energy path—and that path is inevitable if the risk is not taken.

Fortunately, the transition to a renewable energy path is possible, but only if we act—now!

## **The Renewable Transition**

“Nuclear power and fossil fuels are the choices of the past. Renewable energy is the choice of the future

that is here today,” says Hermann Scheer, Chairman of EUROSOLAR, General Chairman of the World Council of Renewable Energy (WCRE), President of the International Parliamentary Forum on Renewable Energies, Member of the German Bundestag, and author of *A Solar Manifesto and Energy Autonomy: The Economic, Social and Technological Case for Renewable Energy*.<sup>3</sup>

The Sun sends an immense amount of energy to the Earth—freely—and it will continue to do so for its entire life, estimated to be between five and ten billion years. The energy from the Sun, or solar energy, is received through the renewable subsystems of light, heat, wind, water movement and photosynthesis. Sunlight that falls on the Earth only in around one hour contains the amount of energy we use globally in an entire year.<sup>4</sup> In addition to direct or natural uses, we need to technologically convert only a fraction of the solar energy to meet the global energy need. The extraordinary variety of renewable energy technologies such as photovoltaics, wind turbines, hydroelectric generators, solar water heaters, solar greenhouses, biogas plants and solar cookers—ranging from microwatt to megawatt scales—are being applied for a wide range of domestic, industrial and consumer products and purposes. Large scale utilization of other options—solar hydrogen, biofuels, geothermal—are on the horizon as these mature through criteria such as cost advantages and equitable and ecological considerations. The promise of renewable energy lies in its diversity, in the amazingly diverse natural and technological means through which the energy sources can be utilized. And long term sustainability lies fundamentally in our ability to live harmoniously within both the limits and renewability of such energy resources.

The transition will not be easy, especially because of the extent to which we have become entrenched in the nonrenewable path and the powerful vested interests that guard and reinforce this entrenchment. Investment in renewable energy technologies at various public and private levels is growing around the world, but it doesn't come close to allowing us to avoid catastrophe. The Energy Information Administration (EIA) of the U.S. government projects world marketed energy consumption to nearly double between 2004 and 2030. In the face of a growing energy shortage from nonrenewables and escalating energy need, barely seven percent of the world's energy is generated from renewable energy technologies. Even with all the signs and excitement

about going “green,” projections and policies for such generation by 2030 do not exceed twenty percent. The transition faces other barriers, as well: economically and politically powerful vested interests which guard and reinforce our deep entrenchment in the nonrenewable path, often behind a deceptive “greenwash” of superficial corporate social and environmental responsibility. Their investments in renewables are a pittance compared to the amount they invest in nonrenewables. While people everywhere worry about how to pay for their electricity, heat their homes and water, and drive to work in the face of skyrocketing fuel prices, Big Oil and other energy corporations make record profits and run amuck—armed by taxpayers' money and lives—across the globe, under the ocean, and to Antarctica made accessible due to melting ice, to squeeze the Earth of its last drop of oil, the last cubic foot of natural gas, the last pound of coal and the last microgram of uranium. Imagine the risk of the human, economic, environmental and political consequences of such a scenario.

On the hopeful side, people around the world are becoming increasingly conscious of the problems—environmental, health, economic, social, philosophical, political, legal, moral, even spiritual—arising from dependence on nonrenewables. Al Gore and the UN's Intergovernmental Panel on Climate Change (IPCC) being awarded the 2008 Nobel Prize for Peace is a recognition of the consensus of the global scientific community *and* the global public concern over the climate change crisis—and an urgent call for action. At the same time, the costs of an increasing variety of renewable energy technologies are decreasing. A growing number of incentives such as subsidies, tax benefits and financing options are being offered. Individuals and communities around the world—from rural to urban settings, from a village home in Bangladesh to a skyscraper in New York City—are tapping into these opportunities and acting on solutions. Even countries as a whole, like Germany, Denmark, Iceland and Cuba, combining national policies and practical actions, are setting into motion an up to one hundred percent transition to the renewable energy path within the foreseeable future. In the U.S., Al Gore and T. Boone Pickens have announced bold proposals to combat climate change and free the U.S. from its dependency on foreign oil by making a major transition to renewable energy sources within ten years. To succeed, these will require major policy changes and massive public participation, addressing the proposals in ways which can turn them from

proposals into programs and action.

Thanks to the alliance of the Social Democratic Party and the Green Party, and the visionary leadership of Hermann Scheer, the German government is geared up for a transition to a 100% renewable energy economy. It is the world's most aggressive policy for transition into the renewable energy path, marking the period until about 2020 as the "make-or-break" years for the transition. Barely starting in 1990, fueled by a synergistic interplay of policy and action, the installed wind capacity has since grown by more than 2000%, biomass by more than 500%, and photovoltaic installations by more than 15,000% in Germany. Today, Germany is the largest producer of wind energy and—after Japan—the second largest producer of electricity from photovoltaics in the world.<sup>5</sup>

Cuba is another example. The collapse of the Soviet Union in the 1990s also led to Cuba's loss of access to Soviet oil, chemical fertilizers and pesticides, creating an unprecedented energy, food and agricultural crisis. But the crisis also opened a window to an opportunity: to quickly transition out of oil and chemical based agriculture and get into organic farming throughout the country. Cuba seized the opportunity and within the next few years practically all the arable lands in Cuba were transformed into organic farms and urban gardens. Today 50% of the vegetables eaten in the city of Havana are organically grown within the city limits and nationally 80% of the food is grown on organic farms. In addition, through CUBASOLAR, the Cuban society for the promotion of renewable forms of energy and respect for the environment, Cuba has installed photovoltaic systems in schools across the country. Combining policy and practice through joint efforts of private ownership, cooperatives and state programs, it's an inspiring story of Cuba's survival of peak oil and a hopeful example for the rest of the world.<sup>6</sup>

H. G. Wells put it well: "Human history becomes more and more a race between education and catastrophe." We all are in the race—and *every* runner, *every* step, *every* contribution, counts. The amazingly diverse nature and scope of renewable energy technologies—with an astounding variety of designs and scales—offer us unprecedented opportunities to enter and win the race.

## The Bangladesh Energy Scenario

*"We have for over a century been dragged by the preposterous West behind its chariot, choked by dust, deafened by noise, humbled by our own helplessness, and overwhelmed by the speed. If we ever ventured to ask 'progress towards what, and progress for whom', it was considered oriental to entertain such doubts about the absoluteness of progress."*<sup>7</sup>

*Rabindranath Tagore (1941)*

As with the world as a whole, the energy crisis has reached a critical point in Bangladesh—only with more direct manifestations. Energy being the lifeline of an economy, the crisis epitomizes the "development" and "progress" Bangladesh has been dragged into by relying on the nonrenewable energy path. Tagore speaks to us today with only more relevance and urgency than in 1941.

The fuel import bill of Bangladesh is over 70 per cent of the country's total export earnings. The only sizable fossil fuel reserve is natural gas. Estimates vary and there is no consensus. After closely examining various estimates, in the report, "Energy Strategy for Bangladesh: A Brief Survey with Recommendations," the Energy Panel of Bangladesh Environmental Network (BEN) determines 10.6 trillion cubic feet (TCF) to be the most reliable estimate of proven reserves.<sup>8</sup> How long the reserves will last is another matter of speculation. It could be anywhere between 7 to 20 years, depending on the accuracy of an estimate and rate of consumption. A speculated additional reserve may stretch the gas supply for a few more years.

Whatever amount of gas is found, the economic feasibility and net economic benefit remain serious questions. The cost of exploration and extraction increases as reserves get more difficult to reach. Explorations by multinationals have already caused critical environmental and economic damages. Promises of adequate compensation have been grossly violated. With the worldwide growing energy demand, the pressure to export gas has been mounting. There's been a growing opposition to export, but the power and pressure of dollars and "development" aid mean little that gas may be available for the country's own consumption. Currently only a small percent of the population has access to natural gas for cooking; and even that supply has become increasingly unreliable. But the

answer to that is not more natural gas. The use of natural gas will also contribute to global warming. Bangladesh is among the regions which are most vulnerable to this unnatural disaster. Cyclone Sidr—so consistent with the IPCC projections (at a massive human, environmental and economic cost) is yet only a sampling of what is to come—unless there is an urgent reversal of the energy path we are on. If economic development is the rationale for exploiting natural gas, enough is known about the potential catastrophic economic consequences of global warming, which far outweigh any economic benefit derived from natural gas. By entrenching itself more into natural gas, should Bangladesh pave the path for its own disaster? Or should it set an example by taking a stand to reverse the direction and demand for the world community to follow?

As of now, Bangladesh is one of the lowest contributors to global warming, while being one of its worst—and worsening—victims. The major emitters of greenhouse gases contributing to global warming are the industrially developed countries. The U.S., with six percent of world's population consuming thirty-three percent of all the energy produced in the world, is the world's leading contributor of greenhouse gases, as well. China and India are on a rapid rise as they aggressively follow the western conventional, suicidal and unsustainable path of unbridled industrial development, relying mainly on the nonrenewable energy path. Both the countries have launched impressive renewable energy programs, but this amounts to a mere pittance compared to their aggressive pursuit of nonrenewable options.

The rising sea level is drowning Bangladesh. The question is how much and how soon? Speculations range between one-third to entire Bangladesh, largely situated on river deltas and coastal lowlands, will disappear under water by the end of this century if the signs and predictions of global warming with rising sea levels are correct. And, of course, so will a significant portion of the U.S. Gulf Coast, New York, Boston harbor, London and Amsterdam, as well as significant portions of countries like Nepal, Bhutan and Malaysia. Many island nations around the world will nearly, if not completely, perish. Scientists are still working on determining exactly how much the Earth is warming due to human activity and how high the sea will rise, but there's no valid argument against these happenings. The catastrophic consequences are widely acknowledged.<sup>9</sup>

In Bangladesh, one of the world's most densely populated countries—an estimated 150 million people (2008) with 3% growth rate—living on a 144,000 sq km area (smaller than Iowa), the land areas not submerged will face an unthinkable explosion of environmental refugee crisis, civil unrest, diseases, and salinity and other contamination of water and cropland. This puts Bangladesh in an especially strong position, both morally and legally, to stand up against global warming. Bangladesh must be a leading voice demanding from the world community—if necessary, through the United Nations and International Criminal Court—to urgently address the causes and consequences of global warming in other countries, as well. Why the International Criminal Court? That's because—with all the information and evidence we have of the causes and catastrophic consequences of global warming—the general inaction against, and continued insistence, the nonrenewable energy path ought to be considered a crime against humanity—even more, a crime against the Earth and all its inhabitants. The G8 Summit, held in Japan in July 2008, is the most recent enactment of another self-congratulatory, elitist and foot-dragging drama, devoid of substance and avoider of action but full of loopholes and empty promises presented on the world stage by the leaders of the industrialized nations.

As a victim, Bangladesh—synergizing its political sovereignty and civil-environmental-legal activism—must demand justice. And the least of the justice for all the people victimized must include: financial compensation, full rehabilitation, and immigration rights to any country mainly responsible for global warming, i.e., the “developed” countries which are the main contributors to global warming. Every other just demand, through every appropriate avenue, must be explored and legally pursued to fight global warming. Survival of the entire global community, not just Bangladesh, rests on it. It's a call for legal action not against any people or any nation in the world, per se. Rather, it's on their behalf against the unimaginable consequences of global warming and its profiteers. It's a call, therefore, also for a globally united stand—and action. The catastrophic impact of global warming is universal and knows no national boundaries.

Hydroelectricity contributes 3% of the total energy supply in Bangladesh. However, mainly due to inappropriate topology and plant size, the only major hydroelectric power generating facility, the Kaptai

project on Karnaphuli River in the Chittagong Hill Tracts (CHT) area, has turned into an ecologically damaging and unreliable power source. Consequently, once touted as an energy and economic solution, it's turning into a long term economic liability, as well—outstripping its benefits. Its imposition and negative impact on indigenous communities, particularly on the Chakmas, which amounts to nothing less than cultural genocide, long rationalized as an inevitable price of “progress” and “development,” raises the question of the moral legitimacy of such projects. Constructed (1957-1963) under the Pakistani government, funded by USAID, the project uprooted some 100,000 tribal people, including 18,000 families, of which 70% were Chakma. Over 400 square miles of land was submerged under water, including 40% of all the fertile agricultural land in the CHT area. The tragic and unjust legacies of the project, including its failed rehabilitation and compensation promises, continue to linger in the political and social tension which so characterize the area even to this day. The Kaptai hydroelectric project is also a warning that even a renewable energy project will have to be planned and implemented holistically through proper human, ecological, social and moral considerations. Genuine progress and development do not have to be at the expense of equity and social justice. What cannot be undone can certainly serve as a guideline for future projects.

The negative impacts—a ruined indigenous and sustainable economy, environmental destruction, and cultural genocide—are so reminiscent of the impacts of energy projects such as coal, natural gas, uranium, large hydro on indigenous communities around the world: from the Native Americans in North, Central and South Americas to tribal communities across Africa. In Bangladesh, once again, such a scenario is unfolding at Phulbari in Dinajpur district, with multinational corporate, donor-driven proposals for coal mining in the region, in spite of growing opposition from environmentalists, scientists, activists, and local people—including indigenous communities—which have thrived there for ages and who have vowed to “die in order to protect our homeland.” Anu Muhammad, economist and General Secretary of the National Committee to Protect Oil, Gas, Mineral Resources and Ports leading the national opposition, said, “The proposed ‘development’ project is merely a scheme to loot natural resources from a poor country for the rich. We will not allow GCM Resources (the recent new name of Asia Energy) to turn a land of food for the

people into a black hole for corporate profit.”

There have already been extensive propaganda, intimidation, torture, and casualties.<sup>10</sup> In August 2006 paramilitary forces opened fired and killed seven people and injured at least 200 who were returning home from participating in a 70,000-people peaceful protest march against Asia Energy, a London-based multinational corporation, there to do the mining. The donor behind the project is Asian Development Bank (ADB). However, in the face of growing protests against the project, reportedly ADB did not consider the Phulbari project at its June 2008 board meeting, saying that it will not be funding it in the short term. This is indeed a great victory for the protesters. But we must be vigilant for what does “not in the short term” mean? What will ADB decide in the long term? Will other donors be sought or brought in?

The profit driven, export oriented, open-pit coal mining project with a 30-year life, will displace an estimated 130,000 people, disrupt 500,000 people, and destroy 650 square kilometers of highly fertile multi-crop land. It will deplete groundwater, expediting desertification, pollute soil, water and air, and ruinously alter the rich biodiversity evolved over time immemorial. The coal export facilities to be constructed will also cause extensive damage to the Sundarbans, the largest cluster of mangrove forests in the world, a UNESCO World Heritage Site, and a natural barrier against cyclones. The list of predictable and multifaceted negative impacts from the proposed Phulbari coal mining project grows longer, far outweighing its pittance of a dubious and short term benefit promised to Bangladesh. Good sense and credibility of just governance from the national administration is urgently being called upon.

Lately, there's also a renewed push for the construction of a nuclear power plant. It is promoted as the solution to global warming, carefully avoiding any mention of the devastating economic, environmental and political consequences associated with it, such as the intensive use of fossil fuels for the nuclear power generation process (which belies that the nuclear energy does not contribute to global warming), uranium depletion, radioactive contamination during uranium mining, tilling, processing, power production, high water consumption, waste storage, disposal, decommissioning, risks of accidents, terrorist attacks on nuclear power plants, nuclear weapons proliferation, and out-of-control costs.<sup>11</sup> Digging for

more oil or gas, or excavating another coal or uranium mine, or building a nuclear "breeder" reactor, which gets more and more costly and risky, are not solutions. Add to that Bangladesh's topography and dense population, increasing the risk many more times. Germany's official decision in 2000 to phase out its 19 nuclear power plants by 2020 is both a warning and an example for the world. Thereby, Germany joined the ranks of Austria, Belgium, Italy, The Netherlands, The Philippines and Sweden, who have a policy to phase out nuclear power plants as a dead-end technology.<sup>12</sup> However, having once chosen the path, the countries now will still have to worry about safeguarding the nonfunctioning power plants and storing their wastes for years to come at an enormous cost. Nuclear legacies last for millions of years and cost billions of dollars. Rejected by those countries, the nuclear industry—through donor agencies imposing self-serving donor-driven projects—is turning to unsuspecting or energy starved and desperate developing countries. Bangladesh does not need to fall victim to that.

In short, while the demand for energy is multiplying in Bangladesh, a growing scarcity of firewood and cooking gas, rising costs, inadequate and unreliable electric supply, environmental destruction and pollution have reached crisis proportions, which is impossible to solve by relying on nonrenewables or manipulating the power supply.

Fortunately, Bangladesh has an alternative: practically untapped!

### **“The Untapped Energy Mine”—The Renewable Energy Prospect for Bangladesh**

Bangladesh is richly endowed with renewable energy sources. Sunlight is abundant year-round in this semi-tropical region. Even during the monsoon season with long daylight hours, solar radiation is as good as the annual average. In addition to ample light and heat, the hundred-plus-mile long coastal areas, hilly sections and islands provide ample wind for wind turbines; waterways of varied forms and speed provide ample wave and gravity driven water flow for ecologically balanced hydroelectric generators; and the lush vegetation provides ample photosynthesis and biomass for fuel for a variety of purposes. Compared to Germany—which has become an inspiring example of a country set on a full transition to the renewable energy path—Bangladesh receives twice the amount of solar

radiation than Germany. Even during the monsoon season the solar radiation is as good as the annual average.<sup>13</sup> Bangladesh is truly an exceptional, naturally endowed and integrated, renewable “energy mine.” Judiciously planned and harnessed, this energy mine has an inexhaustible capacity far beyond meeting the country's annual 4000 megawatts of electricity need, while also generating other forms of usable energy such as heat and biogas. And however large the capital cost appears up front, that cost is minor compared to the alternative. That alternative is the vast amount of money which will need to be invested towards the, at best, short term solutions—but in the long run, dead-end *nonsolutions*—from nonrenewables, leaving the country only more economically impoverished and indebted, environmentally ruined, and politically vulnerable. None of these is inevitable if the current energy crisis is viewed as a warning, a critical turning point, a crossroads, and, indeed, both an unprecedented and one-time opportunity to act urgently on a revolutionary transition to the renewable energy path. It is in their support for the transition that the other countries and their donor agencies can play a vital role, if they're truly interested in helping Bangladesh solve its energy crisis. Currently some support is being given to renewable energy projects, but nowhere close to the rate needed to make a transition. And a much bigger push is for nonrenewables. So, the motive and extent of collaboration will need to be addressed. Genuine collaboration for a transition is necessary and welcome. It's good for Bangladesh and it's good for the world.

Bangladesh's renewable energy mine offers such a promise. Contrary to the publicized notion that it will take a miracle to solve Bangladesh's energy crisis, it is indeed a “development” blunder of a miraculous proportion that such a crisis could be contrived in Bangladesh.

Since the late 1980s, various renewable energy technology projects have been implemented at the NGO, private, commercial, academic and governmental levels. The early pioneers included the Red Crescent, Bangladesh Protibondhi Foundation, Nijera Kori, UBINIG, Centre for Mass Education in Science (CMES), the Fuel Research Institute of BCSIR, the Energy Park of the Renewable Energy Research Centre (of the Department of Applied Physics and Electronics at Dhaka University), the Atomic Energy Centre, the Rotary Club of Dhaka, Rahimafrooz Battery, Bangladesh Solar, Bangladesh Centre for Advanced Studies, Swanirvar, Solar

Energy System, Ananda, First Bangladesh Technologies, Prakaushali Sangsad and the Rural Electrification Board (REB). They played varied roles as users, educators and sellers. Through innovation and turnkey transfer some components, such as charge controllers, deep cycle batteries and 12V DC lights and fixtures, began to be manufactured locally. Some attained qualities among the best, while being the cheapest in the world. Forums, workshops, seminars and conferences began to take place at various levels. The number of active players continued to grow.

Especially since the late 1990s a much bigger combined thrust has come from more NGOs, governmental and semi-governmental agencies, universities and businesses to research, educate and disseminate PV systems around the country. Among these are Grameen Shakti, BRAC, Rahimafrooz Solar, Bangladesh Power Development Board (BPDB), Rural Electrification Board (REB), Local Government Engineering Department (LGED), Thengamara Mohila Shabuj Shangha (TMSS), Anando, Bangladesh Centre for Advanced Studies (BCAS), COAST Trust, Integrated Development Foundation, Centre for Mass Education in Science (CMES), Srizon Bangladesh, Shubashati, Bangladesh Rural Integrated Development for Grub-Street Economy (BRIDGE), Padakhep Manbik Unnayan Kendra, Development Organization of the Rural Poor, Palli Daridra Bimochan Foundation, Hilful Fuzul Samaj Kalyan Sangstha, Mukti Cox's Bazar, Rural Services Foundation, Associate Resource Management Company (ARMCO), Micro Electronics, BAPA (Bangladesh Poribesh Andolan), Pathshala—The South Asia Institute of Photography in Dhaka, Muktiyoddha Jadughar/Liberation War Museum, Singer Bangladesh Limited, Upokulio Bidyutayon O Mohila Unnayan Shamity of Char Montaz, Bangladesh Institute of Fuel Research and Development of BCSIR, Department of Applied Physics and Electronics at Dhaka University, Center for Energy Studies at the Bangladesh University Engineering and Technology (BUET), Sun's NRG Bangladesh, and Shidhulai Swarnivar Sangstha. Infrastructure Development Company Limited (IDCOL), under the Rural Electrification and Renewable Energy Development Project (REREDP), with funding from the Global Environmental Facility (GEF), IDA of the World Bank, KfW and GTZ, promotes Solar Home Systems (SHSs) through sixteen partner organizations (POs), which are included in the above list.<sup>14</sup>

The economic, technological and environmental advantages of photovoltaics, biogas and solar cookers have been well proven in Bangladesh. To date, there are over 200,000 installed stand-alone PV systems, generating over 7 megawatts of power. Grameen Shakti installed over 100,000 of these systems and BRAC, 40,000. A typical 50-watt solar home system comes with three 8-watt fluorescent lights, a deep cycle battery, and a charge controller. The cost, around Taka 20,000 (about \$300), includes installation and warranty. The solar module comes with a warranty of 20 years, and the battery, 5 years (with an expected life of 8-10 years and recycling options). Such a system can save around Taka 400 per month spent on kerosene. Still, the upfront payment can be high for many, so microcredit financing helps in making the systems affordable. There are also about 17,000 mostly home-scale, biogas plants in Bangladesh, installed by the Fuel Research Institute of BCSIR, BRAC, Grameen Shakti, and some other NGOs and private entrepreneurs. Although there are only a few installations, the experience with wind turbines, micro hydro, and grid-connected PV systems shows great promise.

It's a matter of immense pride that Grameen Shakti, Rahimafrooz Battery and Shidhulai Swarnivar Sangstha have been awarded the prestigious Ashden Awards for Sustainable Energy. Grameen Shakti and Rahimafrooz Battery received the award in 2006 for "the central roles which they have played in delivering the world's most successful solar power programme bringing light and power to rural people." Grameen Shakti also received the "Eurosolar Prize" in 2003 and the "Right Livelihood Award" (Alternative Nobel Prize) in 2007. Shidhulai received the Ashden Award in 2007 for its innovative solar powered school-library boats in the remote Chalanbeel region in Rajshahi. We should also take pride that two of the lead authors of the report by the Nobel Prize winning IPCC, which has done a historical service to thrust the climate change crisis to the world's attention, are from Bangladesh, Dr. Atiq Rahman, Executive Director of Bangladesh Centre for Advanced Studies, and Dr. Saleemul Haque, Head of Climate Change Group, International Institute of Environment and Development, London.

An infrastructure is evolving. It's time to build upon it on a massive scale. We have the knowledge and experience of the crisis, and we have the knowledge and experience of the solution. Stand-alone PV systems are already proven to be the most cost

effective way to generate electricity in areas outside the grid. 70 percent of the land area in Bangladesh lies outside the grid. These can be installed with a variety of designs and scales. There are many other options: Hybrid systems combining PV and wind turbines or ecologically balanced hydroelectric systems; distributed generation through grid-connected PV systems for urban and other gridded areas, installed on roofs and walls, which feed the grid with solar-generated electricity, “turn the meter backwards” and reduce stress on the power line; solar powered IPS systems; solar thermal systems for heating and cooling; solar greenhouses; various types of solar cookers; wind turbines ranging in sizes from 250 watts to over 3 megawatts each—with cut-in wind speed as low as 7 miles/hour and cut-out speed as high as 120 miles/hour; utility-scale, megawatts-size, wind farms and PV fields, some combining electricity generation and agricultural production; offshore wind farms; industrial and community scale biogas plants generating gas and electricity, with superb quality organic fertilizer and fish feed as the byproduct; PV, wind turbine and other renewable energy technology hardware manufacturing plants through turnkey transfer. All these options have successful examples around the world, for Bangladesh to judiciously emulate and innovate. These will also come with a revolutionary potential for job creation and employment, fueling a sustainable economy.

Some of these options have been tested as pilot projects in Bangladesh. In 1999, BRAC Solar Energy Program installed a PV-wind hybrid system at the BRAC Area Office in Cox’s Bazar. The program also installed two grid-connected systems, one at BRAC’s Training and Resource Centre in Mymensingh (1200 watt), and another at its Area Office at Madhabdi. These pilot systems have contributed much valuable data on their feasibility and constraints.<sup>15</sup> Also, a 1.1 kilowatt grid-connected rooftop PV system has been installed in 2007 at the Renewable Energy Research Centre, Dhaka University, by a team of faculty members and research associates of the University’s Department of Applied Physics, Electronics and Communications Engineering.<sup>16</sup> These systems take only a few days to install. They are simple, reliable and durable. With political will, policy, planning, investment, programs and action, hundreds of thousands of building roofs across the country could be urgently transformed into grid-connected electricity generating power plants, launching an instant pay-back period and a downward cost curve—

transforming into a revenue curve.

Energy is the lifeline of an economy, and a new dimension of renewable energy is being added to the energy mix of the country. However, to make a transition to a renewable energy path, which implies a fundamental reversal of the trend towards the nonrenewable energy path, it requires more. Based on the common-sense understanding and the perennial wisdom that long term sustainability lies fundamentally in our ability to live harmoniously within the limits and renewability of our natural resources, a national policy—with a *Policy-Programs-Practice* continuum (PPP)—must be conceived and implemented. Applicable to every country in the world, including Bangladesh, it will require the following:

- maximizing conservation and efficiency in the use of nonrenewables, while utilizing them only as transitional resources;
- transparent, accountable and equitable public-private partnerships to maximize efficiency and expediency;
- a moratorium on further entrenchment into the nonrenewable path, combined with disincentives such as a reduction of subsidies for nonrenewables and a progressive carbon tax and cap on carbon production;
- proactive and massive utilization, investment and development of appropriate renewable options;
- five, a combined offering of public education, technical support, a legal framework and financial incentives to renewable energy users and producers;
- six, collaboration between experts and stakeholders in both nonrenewable *and* renewable energy fields to devise an integrated and comprehensive public policy—holistically assessing both the nonrenewable and renewable options, from both global and local perspectives—to lead the transition through action (programs into practice).

The multifaceted energy crisis will have to be understood and addressed from multiple perspectives and skills. Bridges have to be built between policy makers and practitioners, economists and environmentalists, academics and field workers, specialists and generalists, educators and activists, idealists and realists, industrialists and ecologists, program planners and implementers, problem researchers and problem solvers. Some bridges exist, but more as exceptions. We must engage in dialogue

and collaborate—within the country and with the world—in a shared vision and action. It's good for Bangladesh, and it's good for the world.

It may seem like a daunting—even revolutionary—task. But insisting on a path which has led Bangladesh—and the world—to the crisis we are in is not a solution; it is suicidal. On the other hand, the revolutionary scope of renewable energy offers us another choice, a hope, a one-time opportunity to pave a path towards a solution. Bangladesh is capable of achieving the “impossible.” Against all odds and formidable opposition the Liberation War proved it. An essential meaning and realization of that blood-drenched liberation is now to be found in Bangladesh's claim, commitment and achievement of her energy independence and sustainability. The task amounts to nothing less than a national task with the utmost urgency—and a call to action—now!

### **Begum Rokeya—A Global Visionary of Renewable Energy**

The kitchen was situated in a beautiful vegetable garden. Every creeper, every tomato plant was itself an ornament. I found no smoke, nor any chimney either, in the kitchen—it was clean and bright; the windows were decorated with flower garlands. There was no sign of coal or fire.

“How do you cook?” I asked.

“With solar heat,” she said, at the same time showing me the pipe, through which passed the concentrated sunlight and heat. And she cooked something then and there to show me the process.<sup>17</sup>

This quotation is from “Sultana's Dream,” a short story by Begum Rokeya (1880-1932), a pioneer of women's education and gender equality, writer and social reformer, who was born in Pairabond in Rangpur (now in Bangladesh) and died in Calcutta (now Kolkata). The story, originally published in *The Indian Ladies Magazine*, Madras, India, 1905, in English, is one of the earliest, if not the earliest, documented expression of the scientific imagination behind solar cookers. The same story, a pungent satire on male dominated society, which antedated by a decade the much better known feminist utopian novel, *Herland*, by Charlotte Perkins Gilman, is also a masterpiece of ecological and renewable energy literature which envisioned natural conservation,

environmental protection and, even more astonishing, scientific advancements which included the use of solar electricity, solar heat collectors, rainwater harvesting and hydrogen-powered vehicles!

Rokeya Sadan, a shelter for girls and women operated by Bangladesh Mahila Parishad, is named after Begum Rokeya. It occupies an entire upper floor in a multistory building in Mahila Parishad's headquarters in Dhaka. It was a great honor and pleasure for me, with the support of my family and friends, to be able to contribute a stand-alone photovoltaic system which reliably provides lighting for the entire floor, even when it's dark in the rest of the building due to the frequent load shedding and the unreliability of the grid. The system was installed in 2004—one hundred years after Begum Rokeya wrote “Sultana's Dream.”

Together let us act to more fully realize Begum Rokeya's dream and vision, and Bangladesh's aspiration for an energy self-sufficient, prosperous, sustainable and peaceable future. Such a future is eminently possible by relying on a path lit by its very own renewable energy mine, and at the same time, by becoming a part of the global solution and setting an inspiring example for the rest of the world—which too is our shared home, under the same Sun!

### **Endnotes**

1. Edison, Thomas Alva, quoted in “Power for the 21st Century,” a booklet of SELCO (Solar Electric Light Company), Chevy Chase, MD. Also, <http://radio.weblogs.com/0109157/stories/2003/01/20/randomQuotes.html>
2. Editors of *The Ecologists. Blueprint for Survival*. New York: New American Library, 1972; Berger, John. *Nuclear Power: The Unviable Option*. New York: Dell, 1977; Commoner, Barry. *The Poverty of Power*. New York: Alfred Knopf, 1976; Campbell, Colin. *The Coming Oil Crisis*. USA: Multi-Science Publishing Company and Petroconsultants SA, 2004; Campbell, Colin J, and Laherrère, Jean H. “The End of Cheap Oil,” *Scientific American*. March 1998, pp. 78-79; Deffeyes, Kenneth. *Hubbert's Peak: The Impending World Oil Shortage*. Princeton, NJ: Princeton University Press, 2001; Deffeyes, Kenneth. *Beyond Oil: The View from Hubbert's Peak*. New York: Hill and Wang, 2005; Flavin, Christopher, and Lenssen, Nicholas. *Power Surge*. New York: W. W. Norton, 1994; Flavin,

- Christopher, and Lenssen, Nicholas. "Into the Solar Age," *Sun World*, March/April, 1991; Goodell, Jeff. *Big Coal: The Dirty Secret Behind America's Energy Future*. Boston: Houghton Mifflin, 2007; Goodstein, David. *Out of Gas: The End of the Age of Oil*. New York: W. W. Norton, 2004; Hanley, Wayne, and Mitchell, John, eds. *The Energy Book*. Brattleboro, VT: The Stephen Green Press, 1980; Hartman, Thom. *The Last Hour of Ancient Sunlight*. New York: Harmony Books, 1999; Heinberg, Richard. *The Party's Over: Oil, War and the Fate of Industrial Societies*. Gabriola Island, BC, Canada: New Society Publishers, 2003; Kunstler, James Howard. *The Long Emergency: Surviving the End of Oil, Climate Change, and Other Converging Catastrophes of the Twenty-First Century*. New York: Grove Press, 2006; Meadows, Donella H., Meadows, Dennis L., Randers, Jorgen, and Behrens III, William W. *The Limits to Growth*. New York: Universe Books, 1972; McKillop, Andrew, with Newman, Sheila, eds. *The Final Energy Crisis*. London: Pluto Press, 2005; Mesarovic, Mihajlo, and Pestel, Eduard. *Mankind at the Turning Point*. New York: E. P. Dutton & Co., and Reader's Digest Press, 1974; Roberts, Paul. *The End of Oil: On the Edge of a Perilous New World*. Boston: Houghton Mifflin, 2004; Scheer, Hermann. *A Solar Manifesto*. London: James & James, 1994, and *The Solar Economy*. UK, London, and Sterling, VA, USA: Earthscan, 2004; Simmons, Matthew R.. *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*. New York: Wiley, 2005; Stobaugh, Robert, and Yergin, Daniel. *Energy Future*. New York: Ballantine Books, 1980; Tertzakian, Peter. *A Thousand Barrels a Second: The Coming Oil Break Point and the Challenges Facing an Energy Dependent World*. McGraw-Hill, 2007; and Udall, Stewart, Conconi, Charles, and Osterhaut, David. *The Energy Balloon*. New York: Penguin Books, 1975.
3. Scheer, Hermann, [www.wind-orks.org/FeedLaws/HermannScheerLessonsfromGermany.html](http://www.wind-orks.org/FeedLaws/HermannScheerLessonsfromGermany.html)
  4. Nocera, Daniel, <http://web.mit.edu/newsoffice/2008/oxygen-0731.html>
  5. Aiken, Donald, "Germany Launches Its Transition to All Renewables". [www.sustainablebusiness.com/features/feature\\_printable.cfm?ID=1208](http://www.sustainablebusiness.com/features/feature_printable.cfm?ID=1208); Runci, Paul, "Renewable Energy Policy in Germany: An Overview and Assessment." A report by The Joint Global Change Research Institute, University of Maryland, College Park, Maryland, USA. January 2005; and Morris, Craig. *Energy Switch: Proven Solutions for a Renewable Energy Future*. Gabriola Island, BC, Canada: New Society Publishers, 2006.
  6. *The power of Community: How Cuba Survived Peak Oil*. DVD produced by The Community Service, Inc., P.O. Box 243, Yellow Springs, Ohio 45387. Available through [www.communitysolution.org/cuba](http://www.communitysolution.org/cuba).
  7. *Rabindranath Tagore on rural reconstruction*. Government of India, New Delhi (no date) Quoted in: Sillitoe, Paul, ed. *Indigenous Knowledge and Development in Bangladesh: Present and Future*. London: Intermediate Technology Publications, 2000.
  8. [http://www.ben-center.org/energy/BEN\\_Energy\\_Panel\\_Final\\_Final\\_Sep%201\\_2006.doc](http://www.ben-center.org/energy/BEN_Energy_Panel_Final_Final_Sep%201_2006.doc)
  9. The Report of the UN's Intergovernmental Panel on Climate Change, 2007, [www.ipcc.ch](http://www.ipcc.ch). Also, Global Tomorrow Coalition. *The Global Ecology Handbook*. Boston, MA: Beacon Press, 1990; Gelbspan, Ross. *The Heat Is On: The Climate Crisis, the Cover-Up, the Prescription*. Boston: Perseus, 1998, and *Boiling Point: How Politicians, Big Oil and Coal, Journalists and Activists Are Fueling the Climate Crisis—and What We Can Do to Avert Disaster*. New York: Basic Books, 2004; Gore, Al. *Earth in the Balance*. Boston: Houghton Mifflin Company, 1992, and *An Inconvenient Truth*. Emmaus, PA: Rodale Press, 2006; Legett, Jeremy. *Carbon War and the End of the Oil Era*. New York: Routledge, 2001; Lyman, Francesca, with Mintzer, Irving Courier, Kathleen, and Mackenzie, James. *The Greenhouse Trap*. Boston, MA: Beacon Press, 1990; McKibben, Bill. *The End of Nature*. New York: Random House, 1989; Monbiot, George. *Heat: How to Stop the Planet from Burning*. Cambridge, MA: South End Press, 2007; Oppenheimer, Michael, and Boyle, Robert H. *Dead Heat*. New York: Basic Books, 1990; Schneider, Stephen, and Londer, Randi. *The Coevolution of Climate and Life*. San Francisco: Sierra Books, 1984; Scientific American, *Managing Planet Earth: Readings from Scientific American*. New York: W. H. Freeman and Company, 1990; Speth, James Gustave. *Red Sky at Morning*. New Haven and London: Yale University Press, 2004; and Weart, Spencer R. *The*

- Discovery of Global Warming*. Cambridge, MA: Harvard University Press, 2003.
10. Gain, Philip, "Phulbari, Asia Energy and Grassroots Revolt," *Earth Touch*, an occasional magazine of the Society for Environment and Human Development (SEHD), Bangladesh, www.sehd.org, April 2007.
  11. Bartlett, Donald, and Steele, James. *Forevermore: Nuclear Waste in America*. New York: W. W. Norton Company, 1985; Berger. *op.cit.*; Caldicott, Helen. *Nuclear Madness*. Brookline, MA: Autumn Press, 1979, *The New Nuclear Danger*. New York: The New Press, 2002, and *Nuclear Power Is Not the Answer*. New York: The New Press, 2006; The Committee for the Compilation on Damage Caused by the Atomic Bombing in Hiroshima and Nagasaki. *Hiroshima and Nagasaki*. New York: Basic Books, 1981; Browne, Corinne, and Munroe, Robert. *Time Bomb*. New York: William Morrow & Co., 1981; Calder, Nigel. *Nuclear Nightmares*. Middlesex, England: Penguin Books, 1981; Davenport, Elaine, Eddy, Paul, and Gilman, Peter. *The Plumbat Affair*. London: Futura Publications, 1978; Durie, Sheila, and Edwards, Rob. *Fuelling the Nuclear Arms Race*. London: Pluto Press, 1982; Environmental Action Foundation. *Accidents Will Happen*. New York: Harper & Row, 1979; Falk, Jim. *Global Fission*. New York: Oxford University Press, 1982; Faulkner, Peter, ed. *The Silent Bomb*. New York: Vintage Books, 1977; Ford, Daniel. *Three Mile Island: Thirty Minutes to Meltdown*. New York: Penguin Books, 1982; Ford, Daniel. *Meltdown*. New York: Simon & Schuster, 1986; Ford, Daniel, Kendall, Henry, and Nadis, Steven. *Beyond the Freeze*. Boston: Beacon Press, 1982; Fuller, John. *We Almost Lost Detroit*. Readers Digest Press, 1975; Gale, Robert, and Hauser, Thomas. *Final Warning: The Legacy of Chernobyl*. New York: Warner Books, 1988; Gofman, John, and Tamplin, Arthur. *Poisoned Power*. Emmaus, PA: Rodale Press, 1979; Gray, Mike, and Rosen, Ira. *The Warning*. Chicago: Contemporary Books, 1982; Grossman, Karl. *Cover Up: What You Are Not Supposed to Know About Nuclear Power*. Segaponack, NY: The Permanent Press, 1980; Gyorgy, Anna, and Friends. *No Nukes*. Boston: South End Press, 1979; Hawkes, Nigel, et. al. *Chernobyl: the End of the Nuclear Dream*. New York: Vintage Books, 1987; Hilgartner, Stephen, Bell, Richard, and O'Connor, Rory. *Nukespeak*. Penguin Books, 1983; International Physicians for the Prevention of Nuclear War (IPPNW) and the Institute for Energy and Environmental Research (IEER). *Plutonium: Deadly Gold of the Nuclear Age*. Cambridge, MA: International Physicians Press, 1992; Kallet, Arthur, and Schlink, F. J.. *100,000,000 Guinea Pigs*. New York: Grosset & Dunlap, 1935; Jungk, Robert. *The New Tyranny*. New York: Warner Books, 1979; The League of Woman Voters Education Fund. *The Nuclear Waste Primer*. New York: Nick Lyons Books, 1985; Loeb, Paul. *Nuclear Culture*. New York: Coward, McCann & Geoghegan, 1982; Lovins, Amory, and Lovins, Hunter. *Energy/War: Breaking the Nuclear Link*. New York: Harper & Row, 1981; Munson, Richard, ed. *Countdown to a Nuclear Moratorium*. Washington, DC: Environmental Action Foundation, 1978; McKinley, Olson. *Unacceptable Risk*. Bantam, 1976; Medvedev, Zhores. *Nuclear Disaster in the Urals*. New York: Vintage Books, 1980; Nader, Ralph, and Abbotts, John. *The Menace of Atomic Energy*. New York: Norton, 1979; Nelkin, Dorothy, and Pollak, Michael. *The Atom Besieged: Antinuclear Movements in France and Germany*. Cambridge, MA: The MIT Press, 1982; Radical Science Collective. *No Clear Reason*. London: Free Association Books, 1984; Rapoport, Roger. *The Great American Bomb Machine*. New York: Dutton, 1971; Reader, Mark, ed. *Atom's Eve*. New York: McGraw-Hill, 1980; Roberts, Alan, and Medvedev, Zhores. *Hazards of Nuclear Power*. Nottingham, UK: Spokesman, 1977; Rosenberg, Howard L.. *Atomic Soldiers: American Victims of Nuclear Experiments*. Boston: Beacon Press, 1980; Safer, Thomas H., and Orville, Kelly E.. *GI Victims of U.S. Atomic Testing*. New York: Penguin, 1983; Schell, Jonathan. *The Fate of the Earth*. New York: Alfred Knopf, 1982; Sternglass, Ernest. *Secret Fallout*. New York: McGraw-Hill, 1981; and Shapiro, Fred. *Radwaste*. New York: Random House, 1981.
  12. "Nuclear power phase-out". www.en.wikipedia.org/wiki/Nuclear\_power\_phase-out.
  13. Hossain, M., Professor of Physics and Director of Renewable Energy Research Centre, Dhaka University, quoted in Kamal, Sajed. *Photovoltaics: A Global Revolution & Its Scope for Bangladesh*, p. 18. Dhaka, Bangladesh: IBINIG: Policy Research for Development Alternative, 1989.
  14. <http://www.idcol.org/files/projects.htm>

15. Saha, Sudip Kumar, "BRAC Solar Energy Program for Sustainable Development: Photovoltaic Hybrid Power," *Solar Photovoltaic Systems in Bangladesh: Experiences and Opportunities*, edited by M. Eusuf. Bangladesh Centre for Advanced Studies and The University Press Limited, Bangladesh, 2005.
16. Mazumdar, Rezaul Karim; Adittya, Subrata Kumar; Huque, Saiful; Rahman, Md. Habibur; Kawser, Shamim; Anwar, Asif; and Sarker, Md. Sajedul Hossain, "Rooftop Grid-Connected Solar Photovoltaic System," unpublished report, 2007.
17. Hossain, Rokeya Sakhawat. *Sultana's Dream and Selections from The Secluded Ones*. New York: The Feminist Press at The City University of New York, 1988; *Rokeya Rachanabali* (collected works of Begum Rokeya). Dhaka, Bangladesh: Bangla Academy, 1993; and, *Sultana's Dream*. Dhaka, Bangladesh: Narigrantha Prabartana, 1998.

## References

Bartlett, Donald, and Steele, James. *Forevermore: Nuclear Waste in America*. New York: W. W. Norton Company, 1985.

Berger, John. *Nuclear Power: The Unviable Option*. New York: Dell, 1977.

Browne, Corinne, and Munroe, Robert. *Time Bomb*. New York: William Morrow & Co., 1981.

Calder, Nigel. *Nuclear Nightmares*. Middlesex, England: Penguin Books, 1981.

Caldicott, Helen. *Nuclear Madness*. Brookline, MA: Autumn Press, 1979.

Caldicott, Helen. *Nuclear Power Is Not the Answer*. New York: The New Press, 2006.

Caldicott, Helen. *The New Nuclear Danger*. New York: The New Press, 2002.

Campbell, Colin. *The Coming Oil Crisis*. USA: Multi-Science Publishing Company and Petroconsultants SA, 2004.

Commoner, Barry. *The Poverty of Power*. New York: Alfred Knopf, 1976.

Deffeyes, Kenneth. *Beyond Oil: The View from*

*Hubbert's Peak*. New York: Hill and Wang, 2005.

Deffeyes, Kenneth. *Hubbert's Peak: The Impending World Oil Shortage*. Princeton, NJ: Princeton University Press, 2001.

Durie, Sheila, and Edwards, Rob. *Fuelling the Nuclear Arms Race*. London: Pluto Press, 1982.

Editors of *The Ecologists*. *Blueprint for Survival*. New York: New American Library, 1972.

Environmental Action Foundation. *Accidents Will Happen..* New York: Harper & Row, 1979.

Eusuf, M. *Solar Photovoltaic Systems in Bangladesh*. Dhaka, Bangladesh: Bangladesh Centre for Advanced Studies and The University Press Limited, 2005.

Falk, Jim, *Global Fission*. New York: Oxford University Press, 1982.

Faulkner, Peter, ed. *The Silent Bomb*. New York: Vintage Books, 1977.

Flavin, Christopher, and Lenssen, Nicholas. *Power Surge*. New York: W. W. Norton, 1994.

Ford, Daniel, Kendall, Henry, and Nadis, Steven. *Beyond the Freeze*. Boston: Beacon Press, 1982.

Ford, Daniel. *Meltdown*. New York: Simon & Schuster, 1986.

Ford, Daniel. *Three Mile Island: Thirty Minutes to Meltdown*. New York: Penguin Books, 1982.

Fuller, John. *We Almost Lost Detroit*. Readers Digest Press, 1975.

Gale, Robert, and Hauser, Thomas. *Final Warning: The Legacy of Chernobyl*. New York: Warner Books, 1988.

Gelbspan, Ross. *Boiling Point: How Politicians, Big Oil and Coal, Journalists and Activists Are Fueling the Climate Crisis—and What We Can Do to Avert Disaster*. New York: Basic Books, 2004.

Gelbspan, Ross. *The Heat Is On: The Climate Crisis, the Cover-Up, the Prescription*. Boston: Perseus, 1998.

Global Tomorrow Coalition. *The Global Ecology Handbook*. Boston, MA: Beacon Press, 1990.

- Gofman, John, and Tamplin, Arthur, *Poisoned Power*. Emmaus, PA: Rodale Press, 1979.
- Goodell, Jeff. *Big Coal: The Dirty Secret Behind America's Energy Future*. Boston: Houghton Mifflin, 2007.
- Goodstein, David. *Out of Gas: The End of the Age of Oil*. New York: W. W. Norton, 2004.
- Gore, Al. *An Inconvenient Truth*. Emmaus, PA: Rodale Press, 2006.
- Gore, Al. *Earth in the Balance*. Boston: Houghton Mifflin Company, 1992.
- Gray, Mike, and Rosen, Ira. *The Warning*. Chicago: Contemporary Books, 1982.
- Grossman, Karl. *Cover Up: What You Are Not Supposed to Know About Nuclear Power*. Segaponack, NY: The Permanent Press, 1980.
- Gyorgy, Anna, and Friends. *No Nukes*. Boston: South End Press, 1979.
- Hanley, Wayne, and Mitchell, John, eds. *The Energy Book*. Brattleboro, VT: The Stephen Green Press, 1980.
- Hartman, Thom. *The Last Hour of Ancient Sunlight*. New York: Harmony Books, 1999.
- Hawkes, Nigel, et. al. *Chernobyl: the End of the Nuclear Dream*. New York: Vintage Books, 1987.
- Heinberg, Richard. *The Party's Over: Oil, War and the Fate of Industrial Societies*. Gabriola Island, BC, Canada: New Society Publishers, 2003.
- Hilgartner, Stephen, Bell, Richard, and O'Connor, Rory. *Nukespeak*. New York: Penguin Books, 1983.
- Hiroshima and Nagasaki*. New York: Basic Books, 1981.
- Hossain, Rokeya Sakhawat. *Sultana's Dream*. Dhaka, Bangladesh: Narigrantha Prabartana, 1998.
- Hossain, Rokeya Sakhawat. *Sultana's Dream and Selections from The Secluded Ones*. New York: The Feminist Press at The City University of New York, 1988.
- International Physicians for the Prevention of Nuclear War (IPPNW) and the Institute for Energy and Environmental Research (IEER). *Plutonium: Deadly Gold of the Nuclear Age*. Cambridge, MA: International Physicians Press, 1992.
- Jungk, Robert. *The New Tyranny*. New York: Warner Books, 1979.
- Kallet, Arthur, and Schlink, F. J. *100,000,000 Guinea Pigs*. New York: Grosset & Dunlap, 1935.
- Kamal, Sajed. *Photovoltaics: A Global Revolution & Its Scope for Bangladesh*. Dhaka, Bangladesh: IBINIG: Policy Research for Development Alternative, 1989.
- Klare, Michel T. *Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency*. New York: Henry Holt and Company, 2004.
- Klare, Michel T. *Resource Wars*. New York: Henry Holt and Company, 2002.
- Kunstler, James Howard. *The Long Emergency: Surviving the End of Oil, Climate Change, and Other Converging Catastrophes of the Twenty-First Century*. New York: Grove Press, 2006.
- Legett, Jeremy. *Carbon War and the End of the Oil Era*. New York: Routledge, 2001.
- Loeb, Paul. *Nuclear Culture*. New York: Coward, McCann & Geoghegan, 1982.
- Lovins, Amory, and Lovins, Hunter. *Energy/War: Breaking the Nuclear Link*. New York: Harper & Row, 1981.
- Lyman, Francesca, with Mintzer, Irving, Courrier, Kathleen, and Mackenzie, James. *The Greenhouse Trap*. Boston, MA: Beacon Press, 1990.
- McKibben, Bill. *The End of Nature*. New York: Random House, 1989.
- McKibben, Bill. *Fight Global Warming Now: The Handbook for Taking Action in Your Community*. New York: Holt, 2007.
- McKillop, Andrew, with Newman, Sheila, eds. *The Final Energy Crisis*. London: Pluto Press, 2005.

- McKinley, Olson. *Unacceptable Risk*. Bantam, 1976.
- Meadows, Donella H., Meadows, Dennis L., Randers, Jorgen, and Behrens III, William W. *The Limits to Growth*. New York: Universe Books, 1972.
- Medvedev, Zhores. *Nuclear Disaster in the Urals*. New York: Vintage Books, 1980.
- Mesarovic, Mihajlo, and Pestel, Eduard, *Mankind at the Turning Point*. New York: E. P. Dutton & Co., and Reader's Digest Press, 1974.
- Monbiot, George. *Heat: How to Stop the Planet from Burning*. Cambridge, MA: South End Press, 2007.
- Morris, Craig. *Energy Switch: Proven Solutions for a Renewable Energy Future*. Gabriola Island, BC, Canada: New Society Publishers, 2006.
- Munson, Richard, ed. *Countdown to a Nuclear Moratorium*. Washington, DC: Environmental Action Foundation, 1978.
- Nader, Ralph, and Abbotts, John. *The Menace of Atomic Energy*. New York: Norton, 1979.
- Nelkin, Dorothy, and Pollak, Michael. *The Atom Besieged: Antinuclear Movements in France and Germany*. Cambridge, MA: The MIT Press, 1982.
- Oppenheimer, Michael, and Boyle, Robert H. *Dead Heat*. New York: Basic Books, 1990.
- Policy Research for Development Alternative, 1989.
- Radical Science Collective. *No Clear Reason*. London: Free Association Books, 1984.
- Rapoport, Roger. *The Great American Bomb Machine*. New York: Dutton, 1971.
- Reader, Mark, ed. *Atom's Eve*. New York: McGraw-Hill, 1980.
- Roberts, Alan, and Medvedev, Zhores. *Hazards of Nuclear Power*. Nottingham, UK: Spokesman, 1977.
- Roberts, Paul. *The End of Oil: On the Edge of a Perilous New World*. Boston: Houghton Mifflin, 2004.
- Rosenberg, Howard L. *Atomic Soldiers: American Victims of Nuclear Experiments*. Boston: Beacon Press, 1980.
- Safer, Thomas H., and Orville, Kelly E. *GI Victims of U.S. Atomic Testing*. New York: Penguin, 1983.
- Scheer, Hermann. *The Solar Economy*. London, UK, and Sterling, VA, USA: Earthscan, 2004.
- Scheer, Hermann. *A Solar Manifesto*. London: James & James, 1994.
- Schell, Jonathan. *The Fate of the Earth*. New York: Alfred Knopf, 1982.
- Schneider, Stephen, and Londer, Randi. *The Coevolution of Climate and Life*. San Francisco: Sierra Books, 1984.
- Shapiro, Fred. *Radwaste*. New York: Random House, 1981.
- Simmons, Matthew R. *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*. New York: Wiley, 2005.
- Speth, James Gustave. *Red Sky at Morning*. New Haven and London: Yale University Press, 2004.
- Sternglass, Ernest. *Secret Fallout*. New York: McGraw-Hill, 1981.
- Stobaugh, Robert, and Yergin, Daniel. *Energy Future*. New York: Ballantine Books, 1980.
- Tertzakian, Peter. *A Thousand Barrels a Second: The Coming Oil Break Point and the Challenges Facing an Energy Dependent World*. McGraw-Hill, 2007.
- The Committee for the Compilation on Damage Caused by the Atomic Bombing in Hiroshima and Nagasaki.
- The League of Woman Voters Education Fund. *The Nuclear Waste Primer*. New York: Nick Lyons Books, 1985.
- The Report of the UN's Intergovernmental Panel on Climate Change (IPCC), 2007.
- Udall, Stewart, Conconi, Charles, and Osterhaut, David. *The Energy Balloon*. New York: Penguin Books, 1975.
- Weart, Spencer R. *The Discovery of Global Warming*. Cambridge, MA: Harvard University Press, 2003.

**Sajed Kamal, EdD**, teaching “Renewable Energy and Sustainable Development” in the Sustainable International Development Program at Brandeis University in Massachusetts, USA, has been a lecturer and consultant on renewable energy internationally for more than thirty years, setting up projects in the United States, Bangladesh, Sri Lanka, Armenia, and El Salvador. He is the president of the International Consortium for Energy Development—a Boston-based nonprofit corporation, a member of the Board of Directors of the Boston Area Solar Energy Association, a member of the Union of Concerned Scientists, a Consultative Committee member of the Bangladesh Environment Network (BEN), and Founder-Coordinator of Solar Fenway—a committee of the Fenway Community Development Corporation in Boston. In Bangladesh, he conceived and implemented the pioneering “A Photovoltaic Pilot Program for Bangladesh” (1986-1989), was the consultant to the “BRAC Solar Energy Program for Sustainable Development” (1997-2000), and is currently active with numerous renewable energy projects in Bangladesh. In 2008 he was awarded a “Lifetime Achievement Award” by the U.S. Environmental Protection Agency, New England Region.

This article is a revised version of a paper presented at “Bangladesh in the 21<sup>st</sup> Century”, a scholarly conference organized jointly by Bangladesh Development Initiative ([www.bdiusa.org](http://www.bdiusa.org)), Democracy and Development in Bangladesh Forum (DDBF), Massachusetts, and The Ash Institute for Democratic Governance & Innovation, John F. Kennedy School of Government, Harvard University, on June 13-14, 2008, at Harvard University, Massachusetts, U.S.A. E-mail: [arskamal@verizon.net](mailto:arskamal@verizon.net)

# **Education Sector in Bangladesh: A Review of Developments Since Independence (Primary and Secondary Education)**

Muhammad Masum

## **Abstract**

Since independence, particularly after transition to democratic rule in 1991, significant progress has been made in human resource development in Bangladesh. Increased enrollment, particularly of girls at the primary and secondary levels, contributed to promoting gender balance besides increasing overall access to education. Failure to improve quality and content of education and low levels of internal and external efficiency of the education system, however, continue to remain as major concerns. A disturbing development in Bangladesh has been limited access of the poor to quality education. Education, instead of serving as a 'great equalizer,' has contributed to exacerbating existing inequalities and passing them on to future generations. Besides, expansion of the religious stream of education that caters primarily to the educational needs of the poor, with content that has little relevance to labor market needs, has possibly contributed to the growing unemployment and discontent amongst the educated youth and the emergence of fundamentalist forces in recent times. All of the above developments call for immediate reforms.

## **Introduction**

At the time of independence in 1971, Bangladesh was perceived by many as 'a test case of development', not only because of its extremely narrow physical and financial resource base, but also because of its underdeveloped human resources--the key to economic transformation. Since then significant progress has been made in human resource development in Bangladesh, particularly after her transition to democratic rule in 1991 that contributed to the elevation of Bangladesh from a low- to a medium-level country as suggested by the Human Development Index. Bangladesh's recent successes in quantitative expansion of the education system contributed to promoting gender balance, besides increasing overall access to education. However, the failure to significantly improve the quality of education in an increasingly competitive global environment in the face of rapidly integrating world economy, and the growing rate of unemployment amongst the educated youth, that reflects a mismatch between education and skills, is of major concern. Limited access of the poor to quality education and upper end of the job market exacerbates the existing inequalities that are passed on to future generations. (Masum 2006).

The objective of this paper is to trace the above developments in primary and secondary education sectors of Bangladesh since independence with a view to suggesting appropriate educational policy reforms. The following sections: introduce the

structure and quantitative dimensions of primary and secondary education in Bangladesh with a brief note on how they evolved over time; examine the content and quality of education at primary and secondary levels highlighting their significance for the labor market; and discuss the labor market outcomes reflecting external efficiency of the education sector. Summary of the findings and policy recommendations are presented in the final section.

## **Education Scenario of Bangladesh: The Quantitative Dimensions**

The education system in Bangladesh is characterized by the co-existence of three separate streams: the mainstream being a vernacular based secular education system carried over from the British colonial days; a madrasah based religious education stream which had been functioning in this country since an even earlier period, that gained momentum only after the mid-eighties; and the English medium stream, a more recent development, that uses English as a medium of instruction, modeled after the British education system using the same curriculum.

All of the above streams, however, have certain common elements, and there exists a scope for reintegration of graduates of one stream with another at different levels of education.

### ***Pre-primary Education***

One- or two-year, pre-primary education is

**Table 1: Early childhood care and education (ECCE)**

Gross Enrollment Ratio (**GER**) in Pre-primary Education (%) and New Entrants to the First Grade of Primary Education with ECCE experience (**NEFGPEE**) (%)

GER						NEFGPEEE						
1998/1999						2002/2003				2002/2003		
Country	Age Group 2002/ 2003	Total	Male	Female	GPI (F/M)	Total	Male	Female	GPI (F/M)	Total	Male	Female
Bangladesh	3-5	22.3	21.6	23.2	1.08	20.6	19.9	21.3	1.07	23.3	24.3	22.3
India	3-5	19.5	19.6	19.4	0.99	34.0	33.8	34.1	1.01			
Maldives	3-5	45.9	46.0	45.9	1.00	46.6	46.2	47.1	1.02	90.0	90.5	89.5
Nepal	3-4	12.1	13.9	10.2	0.73	17.6	18.8	16.2	0.86	9.6	8.7	10.6
Pakistan						47.3	50.1	44.3	0.88			
Developed Countries		76.1	75.7	76.5	1.01	81.1	81.2	80.9	1.00			
Developing Countries		32.9	33.7	32.0	0.95	34.3	34.1	34.5	1.01			

Source: UNESCO (2005) pp.300-302

imparted in private schools/kindergartens. At the time of independence in Bangladesh, the above component, recognized as a useful stage to smoothen the transition from home to an institutional environment, hardly existed and for a long time remained outside the purview of official education policy of Bangladesh. The Education Policy 2000 had recommended its gradual introduction to 5+ children with a view to universalizing one-year pre-primary education by the year 2005. But with the change in government in 2001, the policy was abandoned and no headway could be made in this regard. Rather, gross enrolment ratio in pre-primary education declined from 22.3% in 1998/1999 to 20.6% in 2002/2003 (UNESCO, 2005).

Table 1 presents a picture on early childhood care and education (ECCE) in Bangladesh and other South Asian countries.

In Bangladesh, the net enrollment ratio at pre-primary level is significantly less than the gross enrollment rate. It stood at 10.5 and 9.9 in 2003 and 2004 respectively. In 2004, the gender differential seemed marginal, with net enrollment ratio for girls at 9.9% compared to 9.8% for boys. (<http://uis.unesco.org>).

In Bangladesh, pre-primary education of uncertain quality is generally imparted in a number of commercially operated kindergartens and nurseries that belong to the private sector, located mostly in the urban areas. As the fees are generally high, only the

children from affluent families have access to such institutions. The Report of the National Education Commission 2003 recognized the importance of pre-primary education, and recommended a number of short and medium term measures such as the setting up of a separate section immediately for pre-primary education in the Directorate of Primary Education; preparation of a national curriculum; registration and monitoring of all kindergartens to ensure that the national curriculum is properly being implemented; and appropriate training of pre-primary teachers.

### **Primary Education**

Five-year compulsory primary education for the 6-10 year age group is imparted mainly in government and non-government primary schools and *ebtedayee madrasahs*. In metropolitan cities, however, government and non-government primary schools cater to the educational needs only of the poorer sections of the people, as the better-off families usually send their children to private English Medium schools/ secondary schools that run primary sections as well. There are a substantial number of NGO-run non-formal schools catering mainly to the dropouts of the government and non-government primary schools. Very few NGOs however impart education for the full 5-year primary education cycle. Because of this, on completion of their 2-3 year non-formal primary education in NGO run schools, students normally re-enter government/non-government primary schools at upper classes. NGO-run schools differ from other non-government private schools.

While the private schools operate like private enterprises often guided by commercial interests, NGO schools operate mainly in areas not served either by the government or private schools essentially to meet the educational needs of vulnerable groups in the society. They usually follow an informal approach to suit the special needs of the children from vulnerable groups.

Before independence, primary education in Bangladesh was imparted primarily in schools set up, funded, and managed by the local elites with support from local bodies. Immediately after independence, the government nationalized all existing primary schools and took full responsibility for running these schools. All primary school teachers became government employees. New schools were set up where needed, primarily by local elites, which on registration started receiving government funding in the form of salary subvention for teachers. NGOs also started setting up schools in un-served areas for underprivileged children and school drop-outs. A legislation providing for universal free compulsory primary education was enacted in 1990 that came into effect on January 1, 1992.

In 1970, just before Bangladesh gained independence, there existed 29,082 primary schools with a student enrollment of 5,283,787 (32% girls) and a pupil teacher ratio of 46 (UNESCO: Statistical Year Book, 1973). Independence gave a big boost to primary education in Bangladesh. The number of schools sharply increased to 36,537 in 1972; 39,914 in 1975; and 43,472 in 1983. Student enrollment also increased, to 8,349,834 (34% girls) in 1975 and

8,808,028 (37% girls) in 1983. As number of teachers did not increase proportionately, the pupil teacher ratio, however, increased from 46 in 1970 to 51 in 1983. (UNESCO: Statistical Year Books for different years). In 1972, gross enrollment ratio at the primary level stood at 73 (52 for girls). Since enforcement of Universal Free Primary Education Act in 1992, implementation of various innovative programs and projects such as Food for Education Program enabled children from poor households, till then child workers, to join schools and Satellite Schools Projects. Bangladesh thus made rapid progress in quantitative expansion of her primary education sector. In 1990/91, the net enrollment ratio in Bangladesh was 71. By 2004, it increased to 94.1 (95.8 for females and 92.6 for males) (<http://www.uis.unesco.org>). Enrollment in primary schools increased from 12.6 million in 1991 to 18.4 million in 2004. Over this period, while the number of government primary schools remained unchanged at 38 thousand, the number of non-government primary schools (including community schools) increased from 12 thousand to 49 thousand of which 19 thousand were government registered (GOB, 1996, and BANBEIS, 2004).

Table 2 presents a picture on access to primary education in Bangladesh and other South Asian countries, and the averages for developed and developing countries.

According to the Report of the Household Income and Expenditure Survey, 2000, of all children attending schools at the primary level, 70.70% were enrolled in the government primary schools, 13.43% in Govt. subsidized schools, 5.39% in private

**Table 2: Participation in primary education**

Country	2002/ 2003	Net enrollment ratio (NER) in primary education (%)								Out of primary school children (000)	
	Age Group	1998/1999				2002/2003				1998/1999	2002/2003
		Total	Male	Female	GPI (F/M)	T	M	F	GPI F/M		
Bangladesh	6-10	84.8	85.6	83.9	0.98	84.0	82.4	85.7	1.04	2632	2925
India	6-10					87.5	90.0	84.8	0.94		14586
Maldives	6-12	99.7	99.4	100.0	1.01	92.4	92.2	92.6	1.00	0.2	4
Nepal	5-9	68.5	76.1	60.3	0.79	70.5	74.6	66.0	0.88	940	918
Pakistan	5-9					59.1	67.5	50.0	0.74		8145
Sri Lanka	5-9										
Developed Countries		96.6	96.6	96.6	1.00	95.6	95.4	95.9	1.01	1991	2375
Developing Countries		82.0	85.2	78.6	0.92	83.2	85.3	80.9	0.95	102052	95459

Source: UNESCO (2005)

schools, while 4.43% attended NGO-run schools: all the above belonging to the mainstream of education. The madrasahs accounted for 4.04% of total primary enrolment while only 1.40% studied in the English Medium schools. (BBS, 2003).

According to a national survey conducted by Education Watch, in 2001, the government primary schools (GPS) accounted for 61% of total enrolment while the shares of registered non-government primary schools (RNGPS), non-government primary schools (NGPS), non-formal education (NFE), madrasahs, English medium schools, and satellite/community schools were 16.6%, 1.8%, 7.1%, 7.0%, 2.1% and 2.7% respectively (CAMPE-UPL, 2002).

In 10 selected upazilas spread throughout the country, according to child surveys conducted by the concerned Upazila Education Officers (UEO) in 2004, the corresponding figures were 57.4%, 24.4%, 1.7%, 1.1%, 9.2%, 2.5% and 3.1% respectively (CAMPE, 2005).

As the different sets of data are not strictly comparable, it is not possible to discern any trend. But, given the fact that there has been no increase in the number of government primary schools for a long time, the RNGPS whether registered or not, the madrasahs and English medium schools have been playing an increasingly greater role in catering to the educational needs at the primary level.

Education Watch, based on a School Catchment Area Household Survey, and a number of focus group discussions, conducted in 2004 in the 10 upazilas mentioned earlier, made the following observations:

- 1) The commercially operated kindergartens, or the English medium schools were generally perceived to be the 'best quality schools', and all those who could afford them, the well off and the local influential people, sent their children to kindergartens;
- 2) Compared to the kindergartens, the government primary schools were perceived to be of inferior quality;

The non-formal schools were appreciated by some as 'the teachers taught the students with due care, the supervisors supervised the schools regularly, and the classrooms were not so crowded.' The fact that these types of schools did not charge money for educational expenditures from the parents; but instead some schools provided learning materials and

other support, impressed most parents;

- 1) Religious considerations prompted some stakeholders to support the provision for *ebtedayeee madrasahs* or the religious stream of primary education, but a discernible majority of participants were critical of *ebtedayeee madrasahs* and the non-governmental primary schools, whether registered or not, because of their poor quality compared to kindergartens, GPS and non-formal schools.
- 2) In every upazila there existed a few quality institutions. These could be a GPS, kindergarten, community school or NFE school. These of course could serve only a small proportion of the children, usually not from the poorer families. The so called "good schools" were not promoting equality of opportunity for all children (CAMPE, 2005).

Those who got enrolled, however, could not complete their primary education.

In Bangladesh, the survival rate to last grade of primary education stood at 65% in 2004 (67.3% for females and 63.1% for males). Repeater rate was 7% (6.9% for females and 7.2% for males) in 2004 (<http://www.uis.unesco.org>).

Education Watch, 2001, based on a national survey, however estimated a much higher completion rate of 75.7% for Bangladesh: 76.2% for girls compared to 73.5% for boys. It also observed that the completion rate was higher for urban students (78.8%) compared to rural students (73.8%). Completion rate was higher for non-formal schools (82.6%), followed by government schools (76.1%), non-government schools (73%), and *madrasahs* (63.4%). In this respect, no area wise variation was observed in government schools, but urban non-government schools and *madrasahs* were ahead of their rural counterparts. On the other hand, the completion rate was slightly higher in rural non-formal schools than the urban ones.

On average the children took 6.6 years to complete the five-year cycle, 6.5 years for girls and 6.7 years for boys; 5.7 years in non-formal schools, 6.5 years in government schools, 6.8 years in non-government schools and 7.4 years in *madrasahs* (CAMPE-UPL, 2002).

Education Watch School Catchment Area Household Survey, 2004 found that amongst children coming from 'always in deficit' households, the incidence of

**Table 3: Internal Efficiency: Survival in Primary Education and Transition to Secondary Education in Bangladesh and other South Asian countries**

Country	Survival Rate to Last Grade (%)						Transition to Secondary Education (%)					
	1998/1999			2001/2002			1998/1999			2001/2002		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Bangladesh	54.7	50.1	60.0	53.9	49.3	59.0	75.5	69.9	81.7	89.3	83.0	95.7
Bhutan	76.4	74.4	78.9	81.3	78.0	85.1	87.6	87.8	87.4	82.5	82.4	82.6
India	62.0	63.3	60.4	61.4	59.7	63.5	88.8	90.7	86.1	86.7	84.9	89.0
Nepal				64.9	63.3	66.9				78.2	80.1	75.9
Sri Lanka				98.4	97.9	98.9				97.0	96.4	97.3
Developed Countries				97.7	97.2	98.3				98.9	98.5	99.4
Developing Countries				74.5	72.4	76.7	84.5	86.9	81.5	83.3	83.8	82.3

Source: UNESCO (2005) pp. 332-335

both ‘never enrolled’ and ‘drop outs’ were much higher compared to children coming from ‘sometimes in deficit’, ‘break-even’ and ‘surplus’ households (CAMPE, 2005). That means that the children from poorer households in Bangladesh not only have less access to primary education; given the higher drop-out rates amongst them, even fewer are likely to complete the full five year primary educational cycle and then move on to secondary level of education.

What were the reasons for non-enrollment and dropping out? Education Watch School Catchment Area Household Survey, 2004, listed poverty (24.5%), refusal of school authorities to admit (20.6%), and ‘the child does not like school’ (16.3%) as the leading factors accounting for non-enrollment, while poverty (41.3%) and ‘the child does not like school’ (37.5%) primarily accounted for the drop-out rate (CAMPE, 2005).

Although, no tuition fee was charged, and the text books were supposed to be provided, free of cost, many parents facing economic hardship found it difficult to meet different school expenses like examination fees, cost of school dress or notebooks. In addition to this, was the cost of private tuition that was widely practiced: 43.2% of all students were observed to have engaged private tutors and, on the average, a student had to pay Tk. 152 per month for private tuition. The average cost for private tuition directly varied with academic progress, from Tk. 120 per month in Class I to Tk. 201 per month in Class V. As the schools did not function well, those who could not afford private tuition lagged behind and were discriminated against by their teachers who themselves were often engaged in private tuition. Poverty thus emerged as a major cause of non-enrollment and high drop-out rate (CAMPE, 2005).

### *Secondary Education*

On completion of primary education, students (11+) enroll for junior secondary education that spans over 3 years. At the end, some branch out to join the vocational stream, offered at Vocational Training Institutes (VTI), currently called technical schools and colleges, and Technical Training Centers (TTC) run by the Ministry of Education, and the Ministry of Labor and Employment respectively, while students in the mainstream continue in government and non-government secondary schools for a 2-year secondary education in their respective areas of specialization i.e. humanities, science, commerce, etc. At the end of their secondary education, the students sit for their first public examination (S.S.C.) under the supervision of seven education boards.

The students of religious education and English medium streams also sit for their respective public examinations, Dakhil, and O-level, conducted by the Madrasah Education Board, and London/Cambridge University respectively, facilitated by the British Council in case of the latter.

After 10 years of schooling at primary and secondary level, students (16+) who succeed in passing the Secondary School Certificate (S.S.C.) examination have the option of joining a college for a two-year higher secondary education in their respective areas of specialization, or enroll in technical/ polytechnical institutes for technical education. After a 2-year higher secondary education, one has to sit for another public examination called Higher Secondary Certificate (H.S.C.) Examination conducted by the Education Boards to qualify for further education.

Students of religious and English Medium streams

also sit for their respective public examinations, Alim, and A-level, conducted by the Madrasah Education Board and London/Cambridge University respectively to qualify for further education.

In Bangladesh, in 1973, at the secondary level, gross enrollment rate (for the age group 10-14 years) stood at 25 (13 for females). In 1980, the above rate (for the age group 10-16 years) was 18 (26 for males and 9 for females). In 1983, gross enrollment rate at the secondary level (for the age group 11-17 years) was 18 (26 for males and 10 for females).

The marked increase in enrollment at the primary level, and introduction of stipends for all female students contributed not only to a significant increase in the enrollment rate but also in ensuring a greater participation of girls at the secondary level. Compared to only 19% in 1990/1991, net enrolment rate increased to 40.3% in 1998/99, and further to 44.5% in 2002/2003, with the Gender Parity Index (Female/ Male) moving up from 0.95 in 1998/1999 to 1.11 in 2002/2003 (Table 2.4) (World Bank, 2005, and UNESCO, 2005).

According to a nationwide survey conducted by Education Watch in 2005, the net enrollment rate for the age-group 11-15, in classes VI to X, stood at 45.1%-50.6 % for girls compared to 39.6% for boys, registering a marked increase over the last seven years; in 1998 the corresponding rates were, 32.6%, 35.3% and 30.0% respectively. The net enrollment rate for girls in secondary education thus increased at a faster pace compared to boys (CAMPE, 2005a).

Between urban and rural areas, there existed a substantial gap in participation, the net enrollment rate in urban areas being 54.0% compared to 43.6%

in rural areas. The participation rate in the metropolitan cities, however, lagged behind the national average, as children from large urban slums had a lower level of participation in secondary education (CAMPE, 2005a).

Disaggregating secondary enrollment rate by level, it may be observed that in Bangladesh in 2004, gross enrollment rate at the junior secondary level stood at 64.4 (67.5 for females and 61.4 for males); at secondary level at 47.3 (48.1 for females and 46.6 for males); and at higher secondary level at 33.6 (32.5 for females and 34.7 for males). It is interesting to note that the female gross enrollment rate which was substantially higher at the junior secondary level narrows down at the secondary level and lags behind that of their male counterparts at the higher secondary level (<http://www.uis.unesco.org>).

Access to secondary education has been most inequitably distributed. According to the national household income and expenditure survey of 2000, the bottom 40% of the households by income scale got only 11% of the places in secondary education whereas the top 40% accounted for 73% of the places, the 20% accounting for 46% of places.

A nationwide survey conducted by Education Watch in 2005 also found that there existed statistically significant relationship between net enrolment of children and annual food security status of their households, a proxy for household income. While the net enrolment rate for children from 'surplus' households was estimated at 59.2%, it dropped to 49.9% for children from 'break-even' households, to 40.8% for children from 'sometimes in deficit' households, and to 25.2% for children from 'always

**Table 4: Participation in Secondary Education**

Country	Age Group 2002/2003	Enrollment ratio in technical/vocational education (%) 2002/2003	Net Enrollment Ratio (NER)							
			1998/1999				2002/2003			
			Total	Male	Female	GPI (F/M)	Total	Male	Female	GPI (F/M)
Bangladesh	11-17	1.14	39.4	40.3	38.5	0.95	44.5	42.1	46.9	1.11
Developed Countries			89.2	89.0	89.4	1.00	91.0	90.3	91.6	1.01
Developing Countries			42.8	45.9	39.7	0.86	50.1	52.2	48.0	0.92

Source: UNESCO (2005) pp. 340-343

**Table 5: Reasons for Non-enrollment at Secondary Level**

(Percentage distribution of non-enrolled children by reasons of non-enrolment; residence; and gender)

Reasons	All Bangladesh			Rural Bangladesh			Urban Bangladesh		
	Girls	Boys	Both	Girls	Boys	Both	Girls	Boys	Both
School far away from home	3.1	1.5	2.2	3.6	1.6	2.4	0.7	0.2	0.4
Scarcity of money	50.0	46.6	48.1	46.8	45.8	46.2	66.8	52.2	59.5
Admission refused	1.4	0.5	0.9	1.4	0.4	0.9	1.3	0.9	1.1
No use of education	1.5	2.2	1.9	1.5	2.3	2.0	1.7	2.0	1.9
Unsuccessful in exam.	2.9	2.6	2.7	3.1	2.6	2.8	2.2	2.6	2.4
Child works at/outside home	7.2	11.1	9.4	7.7	11.9	10.1	4.6	5.1	4.8
Child's dislike for school	14.7	30.3	23.6	15.7	30.1	24.0	9.4	31.5	20.4
Security concerns	3.2	0.0	1.4	3.6	0.1	1.5	1.3	0.2	0.8
Marriage	8.3	0.2	3.7	8.8	0.2	3.8	5.7	0.0	2.9
Disability	2.0	2.3	2.2	2.4	2.2	2.3	0.4	2.6	1.5
Others	5.5	2.8	4.0	5.5	2.8	3.9	5.9	2.6	4.3
Total	100	100	100	100	100	100	100	100	100

Source: CAMPE (2005a)

in deficit' households (CAMPE, 2005a).

Also observed was a statistically significant positive relationship between children's enrolment in secondary schools and the educational status of their parents. Mothers with tertiary or secondary education were more likely to send their children to schools compared to those with lower level of education. The net enrollment rate was 31.1% for children whose mothers never went to school, compared to 53.6% for those with primary educated mothers, 74.6% for those with secondary educated mothers, and 85.7% for those with tertiary educated mothers. The net enrolment rates at secondary level were, 29%, 46.4%, 66.4%, and 81.2% respectively for similar levels of fathers' education (CAMPE, 2005a).

Most of the children who were never enrolled in secondary schools belonged to poor households, and their parents, 90% of the mothers and 82.6% of the fathers, had no formal education.

Poverty, dislike for schools and the need for children to work at/outside home thus emerge as the primary reasons for non-enrollment at secondary level of education. It may be pointed out that unlike primary education for which no fees are charged and the textbooks are provided free of cost, secondary education in Bangladesh involves substantial costs as not only tuition fees have to be paid but textbooks

have to be purchased also in addition to costs of school dress, transportation costs, and the cost of private tuition that has a high incidence at the secondary level.

The Education Watch survey mentioned above, found that, in 2005, of those enrolled in secondary education, only 6% went to government secondary schools, 2.3% went to combined school-and colleges, nearly three quarters went to non-government secondary schools, 1.5% went to junior secondary schools; the madrasahs accounted for 14.2%, and the rest 1% went to English medium, vocational and trade schools, categorized as others (Table 6)

As the government secondary schools, the combined school and colleges and English medium schools were primarily located in urban areas, their shares in total secondary enrollment in urban areas were relatively higher compared to their shares in rural areas whereas in rural areas, in secondary enrollment, the non-government secondary schools, the madrasahs and junior secondary schools dominated overwhelmingly.

It may be observed from Table 7 that the benefits of government secondary education were particularly unequally distributed. According to HIES 2000, 96% of students enrolled in government secondary schools belonged to the top 40% households by income scale.

**Table 6: Percentage Distribution of Students by Type of School, Residence and Sex**

School Type	All Bangladesh			Rural Bangladesh			Urban Bangladesh		
	Girls	Boys	Both	Girls	Boys	Both	Girls	Boys	Both
Dakhil Madrasah	10.7	11.5	11.0	12.0	13.3	12.5	3.9	2.4	3.2
Higher Madrasah	2.8	3.7	3.2	3.1	4.2	3.6	1.4	1.7	1.5
Junior Secondary	1.8	1.2	1.5	2.0	1.4	1.7	0.8	0.3	0.6
Non-govt. secondary	76.1	73.6	74.9	77.4	75.5	76.6	69.1	64.0	66.7
Government secondary	5.5	6.5	6.0	3.8	3.5	3.7	14.2	21.5	17.6
School & college	2.4	2.2	2.3	1.2	1.2	1.2	8.5	7.1	7.9
Others	0.7	1.3	1.0	0.4	1.0	0.7	2.2	2.9	2.5

Source: CAMPE (2005a): Education Watch Household Survey, 2005

**Table 7: Enrollment by socioeconomic status**

Socioeconomic status	National distribution: Household Income and Expenditure Survey				Distribution of SSPS sampled households			
	GSS	NGSS	DM	Total	GSS	NGSS	DM	Total
Bottom quintile	0	4	8	4	3	19	31	20
Lower middle quintile	1	6	12	7	8	20	23	20
Middle quintile	3	15	15	15	9	21	19	20
Upper middle quintile	13	29	31	28	22	20	19	20
Top quintile	83	46	34	46	58	20	8	20

Source: GOB-SSPS (2005) p.26

From the bottom 20% households, none studied in government secondary schools (GSS). Dakhil madrasahs (DM) tended to serve relatively poorer students. Even in madrasahs the majority of the students did not come from the lower income households. Of all madrasah students, only 20% came from the bottom 40% households, which accounted for only 10% of all students of the non-government secondary schools (NGSS). The SSPS, 2005 however showed that, of the sample households, the top 40% accounted for 80% of GSS, 40% of NGSS and 27% of DM enrollment while the bottom 40% accounted for 11% of GSS, 39% of NGSS and 54% of DM students that indicated to an improvement in the access of poorer children to secondary education. The majority of the poorer children, however, continued to get enrolled in

Dakhil madrasahs.

Education Watch 2005 estimated the dropout and repetition rates at 11.8% and 7.4% respectively. Dakhil madrasahs had the highest dropout rate of 17.6% while the government schools had the least, 2.4%. Repetition rate was the highest, 15.6%, in Class X.

Retention / survival rate of students from Class VI to Class X, however, varied by school type. It was the highest in government schools (73.7%) and the least in Dakhil madrasahs. Completion of secondary education (by passing SSC/Dakhil examinations) also varied considerably by school type-the lowest for non-government schools (18.5% of those enrolled in Class VI), and the highest for government schools (57.3%).

### ***Higher Secondary Education***

In Bangladesh, a two-year higher secondary education program is offered in School & Colleges, Intermediate Colleges, intermediate sections of Degree (Pass), Degree (honors) and Master's Colleges. In 2003, there were 219 non-government schools and colleges, 10 government and 1350 non-government intermediate colleges, 138 government degree (pass) and 931 non-government degree (pass) colleges, 43 government degree (honors) and 18 non-government degree (honors) colleges, 60 government master's and 25 non-government (master's) colleges—2794 institutions in total, offering higher secondary education compared to only 848 institutions in 1990, to cope with an expansion in enrollment, from 8, 24,112 in 1990 to 14,49,229 in 2003 due to a surge in female enrollment encouraged by the introduction of a Female Stipend Program. Females' share in total enrollment increased from 24.6% in 1990 to 39.2% in 2003. Over the 1990-2003 period, while the number of government colleges offering higher secondary education increased only marginally from 198 to 251, the number of non-government colleges increased manifold, from 650 to 2543 with many new colleges cropping up in rural areas as well, thus extending the scope for higher education to rural students including girls whose participation increased in secondary education. Of the 2794 colleges, 1908 colleges were located in rural areas where the female share in total enrollment was 37.6% compared 40.5% in urban areas. It is disconcerting however to note that the dropout rate at the higher secondary level seems to have been increasing in recent times, from 39.8% in 1999 to 46.7% in 2003 (BANBEIS, 2004)

### ***Qaumi Madrasahs***

In addition to the government approved madrasah system of education mentioned earlier, there exists, within the religious stream, another sub-system, which is implemented by Qaumi Madrasahs. Little however is known about this sub-system as the Qaumi Madrasahs operate independent of any government control/regulation, receiving no public resource support, and therefore are not easily accessible.

### **Content and Quality of Education and their Implication for Labor Market in Bangladesh**

No doubt, since independence, there has been significant quantitative expansion of education at primary and secondary levels in Bangladesh. In this section we explore what changes have taken place in

the content and quality of education at these levels, which also indicate their implication for the labor market.

### ***Primary Education***

#### ***Content***

Primary education (ISCED level I), also known as elementary education, is normally designed to provide pupils with a sound basic education in reading, writing and mathematics and an elementary understanding of subjects such as history, geography, natural sciences, social sciences, art and music. Religious instruction may also be featured. These subjects serve to develop pupils' ability to obtain and use information they need about their home, community, country etc. (UNESCO, 2005).

In Bangladesh, the curriculum for the general stream of primary education has been designed following basically the above approach. Spread over five years, Bangla, English, Mathematics, Introduction to Bangladesh, Introduction to Environment, Religious Studies, Physical Education, Music, Arts and Crafts are taught using textbooks produced by the National Curriculum and Textbook Board. In the religious stream, Arabic and a few other religious subjects are also taught. The English medium schools do not follow the national curriculum. Each school has its own curriculum and as most of these schools use primarily foreign textbooks, the students generally fail to acquire basic knowledge about their own country, people and culture.

#### ***Quality of Primary Education***

The significant quantitative expansion in primary education particularly during the nineties as indicated by increased primary enrollment rate was not however matched by improvement in 'quality'. The objective of primary education is the development of basic competencies in language, numeracy and life skills (including values and attitude) amongst children so as to enable them to effectively pursue further education and to be productive in society. To shed light on the quality of education received by these children, they were assessed for basic competencies by Education Watch 1999 through a national survey. It was observed that in 1998 only 29.6 percent of children could satisfy the minimum levels in all four competency areas, viz. reading, writing, numeracy, and life skills/knowledge. Compared to a score of 26.7% in 1993, over the period 1993-1998, there seems to have been some improvement in the quality of primary education, but

such improvement was confined to rural areas only as a declining trend was observed in the urban areas (CAMPE-UPL, 1999).

Education Watch 2000, in a follow-up study probed deeper into the quality issue. It examined the achievement of competencies by students at the end of the primary stage. Since 1992, a curriculum with 53 competencies was implemented at the primary level in Bangladesh. Of the cognitive competencies 27 lent themselves to a paper-pencil test which was administered on a nationally representative sample of students of Class V drawn from three sub-systems, viz. government, non-government and non-formal institutions just before the end of their five-year cycle of primary education. The major findings are presented below:

1. Only 1.6% of the students acquired all 27 competencies tested.
2. By type of institutions, only 1% students of the government schools, 0.9% students of non-government schools and 6% students of non-formal institutions achieved the above competencies.
3. Gender wise, 1.8% of girls and 1.5% of boys achieved all 27 competencies.
4. 1.2% of the rural and 3.2% of the urban students attained all the competencies.
5. None of the students of rural non-government schools mastered all the competencies.
6. Of the six groups of students, students of the rural non-formal schools secured the top position with 7.1% of them mastering all the competencies and the urban non-government schools got the second position, of whom, 4.3% achieved all the competencies.
7. On average the children achieved 16.1% i.e. 60% of all competencies.
8. The boys performed better than the girls, and the urban students performed better than the rural students.
9. Subject-wise achievement of terminal competencies (% of students achieving relevant competencies) were, in cases of Bangla, 36.5; Social Studies, 19.2; General Science, 17.3; Mathematics, 11.6; and English, 9.4.
10. On average, the students performed better in items that tested the knowledge level compared to those that tested the level of understanding. Performance was extremely poor in items that tested the level of comprehension, application, analysis and synthesis.
11. There existed a wide variation in the performance of schools, as on average the students of the sample schools achieved between 1.7 and 26.7 competencies. Such variation as

indicated by the coefficient of variation was the highest in rural non-formal schools followed by rural non-government, urban non-formal, rural government, urban non-government and urban government schools.

12. Based on an assessment of the 'best' students of the 'best' schools of Dhaka city, it was observed that 63.9% of the best students achieved all 27 cognitive competencies against national estimate of only 1.6%. Such wide variation was observed in all the subject areas.
13. Mean number of competencies achieved by 'always in deficit', 'occasional deficit', 'break-even' and 'surplus' households were, 15.4, 15.7, 16.4 and 17.7 respectively.

Achievement of students directly varied with the level of education of their parents, and access to private coaching. Students of those schools which had lower student-teacher ratios (<40:1), had better qualified and more trained teachers, and were more frequently visited by the local education authorities had higher learning achievements. Thus, the students' learning achievements were largely a function of their family background, the support they received from their families, the school environment, and the level of supervision of the local education authorities.

#### *Implications for the Labor Market*

Given the fact that a large number of children particularly from the poor households don't get access to primary education, a large proportion of those who do, cannot complete the full five year cycle of primary education. Many of those who, even after successfully completing their primary education, fail to acquire functional literacy, one may reasonably expect wide prevalence of lack of functional literacy in the labor force of Bangladesh. Definitely some incidence of child labor in the primary age group prevails, as many of those who don't get access to primary education and those who drop out before completing the primary education cycle join the labor market.

#### *Secondary Education*

##### *Content*

Secondary education in Bangladesh, mentioned earlier, is imparted in three different phases. In the general stream, in Phase I, known as the Junior Secondary level, spanning over Classes VI-VIII, the subjects taught are Bangla, English, Mathematics, Religious Studies, Social Science, General Science, Agriculture/Home Economics, Physical Education,

Arts & Crafts and Arabic/Sanskrit/Pali as an elective subject. In Phase II, known as the Secondary level, spanning over Classes IX-X, all the students study Bangla, English, Mathematics, Religious Studies and Social Science/General Science as compulsory subjects, and specialize in Science/Humanities/Commerce by choosing 3 subjects from a number of subjects offered under each group. In Phase III called the Higher Secondary level spanning over Classes XI-XII, the students besides studying Bangla and English as compulsory subjects, generally continue with their studies in their respective areas of specialization. At both secondary and higher secondary levels, the students, if they so desire, may study an additional subject of their choice.

In the religious stream, at the junior secondary level, although as in the general stream, subjects such as Bangla, English, Mathematics, Social Science, General Science, Agriculture/Home Economics are also taught, but as 400 marks (out of 1000) have been set aside for studying Arabic (200 marks) and two religious subjects (100 marks each) Bangla and English receive lesser emphases (100 marks each as opposed to 200 marks each in the general stream). Besides, Physical Education and Arts and Crafts, taught at the general stream get dropped. At the secondary level also the above pattern continues. Although between general and religious streams, a number of subjects remain common, but lesser emphases are put on the study of Bangla and English to make room for studying Arabic and three other religious subjects. Besides, the number of elective subjects also get reduced from three to two. At the higher secondary level also, the above pattern continues in case of compulsory subjects, but in case of elective subjects there seems to be no difference between religious and general streams under different areas of specialization.

At secondary and higher secondary levels, not all schools/colleges however offer all the above specializations. In many schools/colleges, located primarily in rural areas, for shortage of science teachers, and for lack of necessary infra-structural facilities such as laboratories, many rural students remain constrained to effectively exercise their right to make appropriate choices in respect of fields of their study.

Education Watch, 2005 reports that only about half of the schools had science laboratories of varying quality; only 30% of the non-government schools had adequate laboratory facilities; 87% of the madrasahs did not have any. 37% of the schools claimed to have

computer education facility, but a fifth of the schools had only one computer, and another fifth had 2-15 computers; the rest had none. Majority of the teachers were not properly qualified. Although, 84% of the secondary teachers had a bachelors or higher degrees, 57% of the teachers claiming bachelors degree were placed in the third division or even did not even take the degree examination. The same was the situation with 78% of those who claimed Masters' degree. Nearly half of the teachers studied humanities; 20% studied science and 23% were madrasah graduates. Of the graduate Dakhil madrasah teachers, only 8.9%, 3.2% and 2.3% studied science, social science and commerce respectively. More than half of the secondary teachers had no professional pedagogic training. Only 19.7% of the Madrasah teachers received some kind of training. All the above factors effectively constrain the scope of specialization for a student, and seriously affect the quality of education a student receives.

Under the vocational stream, the compulsory subjects for study include, Bangla (200), English (200), Mathematics (100), Religious Studies (100), Social Science (100), Trade Science (100), Drawing/Use of Computer, Self-employment & Enterprise Development (100); and an elective vocational trade (300) and relevant practical training (100). At the higher secondary level the above pattern continues.

The introduction of SSC and basic trades programs for students in TTCs/VTIs no doubt contributed to improving the completion rates compared to what it was in the early 1990s. Although the student-instructor ratio at 18.3:1 did not seem to be very high, most instructors having no relevant industrial experience lacked necessary skills to teach, with little promotion prospects, neither did they have any incentive for quality teaching. Funds were lacking for in-service training of teachers or industrial attachments. Most VTIs, polytechnics, and specialized degree programs suffered from outdated, obsolete and worn out equipment. No budgets were provided for maintenance of equipment, and little for consumable supplies. The students received group rather than individual training. Lesson plans and job sheets were rarely used in the training. Intended practical training could therefore not be implemented. At the diploma level, internship for students could not always be arranged. As a result, polytechnic graduates often failed to acquire practical shop floor skills. The outcome was that most of the graduates of vocational and technical programs were not skilled, and few got into appropriate occupations (UPL, 2000).

### *Quality of Secondary Education*

The quality of secondary education, defined as learning achievements during the secondary level under different streams, may be ascertained at the exit points on the basis of the results of the SSC and HSC examinations despite certain criticisms of the examinations themselves as they rarely tested the analytical capability of the students, and were prone to widespread copying. In controlling copying, however, remarkable success has been achieved in recent years. Tables 8 and 9 present the results of SSC and HSC examinations under different streams, starting with the general stream followed by religious and vocational streams.

The high rates of failures under all the streams reflect poor quality of secondary education in general. In the general stream as most of the students in rural areas, for reasons mentioned earlier, are compelled to join Humanities group, the lowest pass percentage observed in this particular group, to a great extent, also reflects the quality of education imparted in rural schools.

How did quality of education differ by school type?

Government secondary schools achieved a substantially higher pass rate than other types of school. Urban schools have a considerably higher pass rate compared to rural schools. Differences between the results for boys and

**Table 8: Results of Secondary School Certificate (SSC) Examination**

Year	% of pass		% of pass in Science Group		% of pass in Humanities Group		% pass in Business Studies Group	
	Total	Female	Total	Female	Total	Female	Total	Female
2001	35.22	33.71	47.79	49.08	23.90	25.35	43.87	49.89
2002	40.66	37.72	53.59	52.30	30.87	30.31	42.78	45.68
2003	35.91	33.60	46.53	45.18	26.10	26.03	40.06	43.45
2004	48.03	45.98	57.66	56.79	38.37	38.27	50.59	52.28

Source: BANBEIS (2004), pp. 30-31

**Table 9: Results of Higher Secondary Certificate (HSC) Examination**

Year	% of pass		% of pass in Science Group		% of pass in Humanities Group		% pass in Business Studies Group	
	Total	Female	Total	Female	Total	Female	Total	Female
2001	28.41	29.72	32.69	37.44	23.73	24.66	37.82	48.62
2002	27.10	27.77	29.62	33.21	22.55	23.87	36.41	45.58
2003	38.43	38.14	38.67	41.76	33.00	33.59	49.60	56.04
2004	47.74	46.78	51.38	54.13	40.63	40.94	58.02	63.32

Source: BANBEIS (2004) pp. 30, 32.

**Table 10: SSC Examination Results by School Type, Location and Gender in a Sample of Schools**

Year	School Type			Location		Gender		Total
	GSS	NGSS	DM	Urban	Rural	Male	Female	
2002	75	39	48	81	41	63	57	60
2003	68	32	35	77	30	57	52	54
2004	74	46	54	80	46	67	63	65

Source: GOB-SSPS (2005), p.34

**Table 11: Level of Participation in SSC/DM Examination, 2004 (%)**

Proportion of Class X students sitting in the SSC examination (%)	School Type			Total
	GSS	NGSS	DM	
<33	0	4	11	6
33-66	0	35	30	33
66-100	5	33	46	36
>1000	95	28	13	25

Source: GOB-SSPS (2005), p. 35

girls were less stark; nonetheless they displayed a consistent pattern; boys' pass rates exceeded girls' pass rates (Table 10).

Not all the students enrolled in Class 10 of the sample schools participated in the SSC examination. Had they done so, the difference in performance of the different types of school would have come out much more glaringly (Table 11).

A look at the performance of different types of schools at the junior scholarship examination, another indicator of quality of education at the secondary level, also indicated that success was monopolized primarily by the participants from government secondary schools while none from the sample Dakhil madrasahs succeeded in winning a single scholarship in any year.

Although the quality of education imparted at the secondary level in general is not very satisfactory, there are a number of educational institutions in Bangladesh, both government and non-government, which have already established themselves as centers par excellence offering high quality education as reflected by brilliant performance of their students at both SSC and HSC examinations.

#### *Implications for the Labor Market*

As net enrollment rate sharply drops from primary to secondary level, one may expect high incidence of child labor particularly in the age group 11-14 in the labor market of Bangladesh. Those who fail to get enrolled at the secondary level virtually have little option but to join the labor market.

Dropouts from the junior secondary level in the above age group are also likely to join the labor market and thereby increase the child labor population.

Given the content and quality of education at the

secondary level particularly of the religious stream, even those who succeed in passing SC/HSC hardly acquire necessary language and numerical skills; and knowledge in relevant fields that are valued in the job market/considered useful for self-employment.

#### **Education and Labor Market in Bangladesh**

Having outlined the supply side picture of the labor market focusing on educational profiles of the potential labor force in Bangladesh we intend to discuss here the labor market outcomes, given the demand conditions arising from the pattern of growth experienced by her economy.

The Labor Force Surveys conducted by the Bureau of Statistics serve as our principal data sources. Fragmentary evidences have also been drawn from available other sources.

In Bangladesh, a look at the distribution of employed persons by major industry and educational level indicates that in 2002-2003, only 4.1% of the employed persons for the country as a whole had an educational level, such persons were employed in agriculture, forestry and related works.

The major sectors employing manpower were, electricity, gas and water; bank insurance and finance; education services; real estate, rent and business activities; public administration, and health and social workers. The shares of manpower with degree and higher level of education in the above sectors were 43.9%, 51.6%, 46.0%, 25.3%, 22.0%, and 23.2% respectively. These were also the sectors having amongst their work force a sizeable proportion of SSC/HSC graduates, whose shares were, 21.4%, 28.3%, 34.3%, 26.3%, 35.3%, and 36.1% of the above sectors respectively (BBS 2004). Unfortunately however, these sectors did not account for large proportions of the employed force, their respective shares being, 0.2%, 0.5%, 2.7%, 0.4%, 2.2%, 1.1% only (BBS 2004).

**Table 12: Average annual growth rate of employment by industry and gender, 1999-2000 to 2002-2003**

Major industry	Average growth rate		
	Both sexes	Male	Female
Total	<b>4.4</b>	<b>3.5</b>	<b>7.7</b>
Agriculture, forestry and related works	<b>4.1</b>	<b>0.9</b>	<b>15.9</b>
Fishing	<b>19.1</b>	<b>23.2</b>	<b>-37.3</b>
Mining and quarrying	<b>-7.7</b>	<b>26.2</b>	<b>-72.9</b>
Manufacturing	<b>5.2</b>	<b>4.4</b>	<b>6.5</b>
Electricity, gas and water	<b>-10.4</b>	<b>-8.6</b>	<b>-24.5</b>
Construction	<b>10.7</b>	<b>11.4</b>	<b>2.0</b>
Wholesale and retail trade	<b>2.7</b>	<b>4.4</b>	<b>-22.2</b>
Hotel and restaurant	<b>3.0</b>	<b>3.9</b>	<b>-7.9</b>
Transport, storage and communication service	<b>7.7</b>	<b>8.2</b>	<b>-20.7</b>
Bank, insurance and finance	<b>-0.7</b>	<b>-0.8</b>	<b>0.6</b>
Real estate, rent and business activities	<b>14.5</b>	<b>19.2</b>	<b>-26.9</b>
Public administration	<b>8.8</b>	<b>9.1</b>	<b>5.5</b>
Education services	<b>4.1</b>	<b>3.1</b>	<b>7.0</b>
Health and social workers	<b>18.9</b>	<b>15.5</b>	<b>29.1</b>
Community, personal service, household sector and others	<b>-3.5</b>	<b>-4.0</b>	<b>-3.1</b>

Source: BBS (2004) p. 48

**Table 13: Distribution of Unemployed Population Aged 15 Years and Over by Level of Education and Sex**

Level of education	Bangladesh			Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	4.3	4.2	4.9	5.0	4.6	6.2	4.1	4.0	4.4
No education	3.4	3.4	3.6	3.2	3.1	3.5	3.5	3.4	3.6
Class I-V	3.3	3.1	4.3	3.3	2.9	4.5	3.4	3.1	4.2
Class VI-VIII	3.9	3.8	4.3	4.3	3.9	5.6	3.8	3.8	3.7
Class IX-X	5.6	5.7	5.2	6.2	6.3	6.0	5.3	5.4	4.8
SSC,HSC and equivalent	7.8	7.0	11.7	8.7	7.7	12.9	7.2	6.6	10.7
Degree and above	9.5	8.1	17.4	7.7	6.2	14.7	12.0	10.6	22.8
Others	9.6	8.9	15.7	9.0	5.7	31.2	10.0	11.0	0.0

Source: BBS (2004) p. 65

Moreover, in the recent past, not all the above sectors experienced high rates of growth in employment.

Employment in several of these sectors did in fact decline. Over 1999-2000 to 2002-2003 period, the

annual average rate of growth in employment in the above sectors were, -10.4%, -0.7%, 4.1%, 14.5%, 8.8%, and 18.9% respectively (BBS, 2004). With quantitative expansion of educational facilities in Bangladesh, while increasingly more and more

graduates of different levels of education were joining the labor market for employment matching their expectations, growth in such employment opportunities could hardly keep pace. As a result, open unemployment amongst the educated labor force, particularly, in the youth, reached relatively high levels. In 2002-2003, while, the national open unemployment statistics was, 4.3%, the rate of unemployment for SSC/HSC/equivalent; degree & above, and others were 7.8%, 9.5%, and 9.6% respectively (Table 13). In 1999-2000, the open unemployment rate for the nation as a whole was 4.3%. That means that the open unemployment situation for the country as whole remained unchanged over 1999-2000 to 2002-2003 period. Unfortunately however, for degree & above category, there seems to have been some deterioration, as open unemployment rate for this category of the labor force had been estimated at 7.8% in 1999-2000. For the SSC/HSC/equivalent category, the above rate was 11.5% (BBS, 2002) which indicated to some improvement in the employment situation for the above category of educated labor force.

Looking at Tables 13 and 14, one may notice that, in 2002-2003, amongst the youth aged 15-29, although holders of degree and above constituted only 3.6 % of the labor force, they accounted for 12.8% of the unemployed. The corresponding figures for SSC/HSC/equivalent graduates were 9.8% and 20.9% respectively. Those with schooling up to Class IX- X, constituted 10.8% of the labor force but accounted for 15.3% of the unemployed. Those with no schooling constituted 41.7% of the labor force, but their share in the unemployed was 26.4%. Thus, as the level of education increased, so did the rate of unemployment amongst the more educated segments of the labor force.

In 1999-2000, those with degree and above constituted 8.1% of the unemployed youth that rose

to 12.8% in 2002-2003. Unemployment situation thus further deteriorated amongst the more educated youth. The share of those with SSC/HSC/equivalent amongst the unemployed youth also remained high, although, declining over the same period, from 23.5% to 20.9%.

Given the content and quality of education of the religious stream, and students of humanities group of the general stream, it is quite likely that unemployment will be relatively more heavily concentrated amongst them in the category of labor force with SSC/HSC/equivalent.

### Summary of Findings and Policy Recommendations

Education that contributes to unlocking the potential of an individual is generally believed to be a powerful instrument for building not only a prosperous economy but also a just society. Rapid improvement in access to primary enrollment, ensuring gender balance over the past decade and a half, no doubt opened up new possibilities, but failure to ensure improvement in the quality of education, did not let us fully benefit as the drop-out rate continued to remain high and the learning achievements of the graduates hardly improved. As secondary education was imparted primarily by the private sector that charged fees, and the students particularly from the poorer households faced high opportunity costs, many failed to pursue their education and were compelled to join the labor market that already included the dropouts of the primary education.

No wonder that in 2002-2003, Bangladesh had a child labor population of nearly five million of which 360,000 were in the age group 5-9, despite provision of free and compulsory education and a nationwide stipend for education program administered by the

**Table 14: Youth Unemployment by Level of Education and Sex, 1999-00, 2002-2003**

Level of education	Unemployed 1999-2000			Unemployed 2002-2003		
	Both sexes	Male	Female	Both sexes	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
No schooling	13.1	11.3	16.0	26.4	25.8	28.0
Class I-V	22.9	22.8	23.2	13.6	13.2	14.6
Class VI-VIII	14.9	14.2	16.0	11.6	12.2	9.9
Class IX-X	17.5	19.1	14.9	14.0	15.3	10.6
SSC/HSC/equivalent	23.5	23.2	23.9	20.9	20.7	21.4
Degree & above	8.1	9.4	6.0	12.8	12.1	14.8
Others				0.8	0.8	0.7

Source: BBS (2002) p.75 BBS (2004) p.75

government; and 4,631,000 in the age group 10-14 (BBS, 2003a). Most of them were children of uneducated and unskilled workers, who because of their extremely low wages/productivity lived in absolute poverty, and were not in a position to bear the cost of educating their children. They depended, rather, on these children to supplement their family income. The above child labor population, with no access to education, will grow up like their parents, as uneducated and unskilled workers, and in their turn, like their parents, failing to educate their children, will drive them to join the labor market as they themselves were driven to do so by their parents. Unless tackled right now with all seriousness, the phenomenon of child labor will perpetuate in Bangladesh from generation to generation, remaining as a major cause of poverty. There is thus a need for extending the duration of free and compulsory primary education to 8 years instead of 5 years as it is at present, and ensuring that all children aged 5-14 are enrolled in schools and that they remain in their schools for the entire duration of basic education. This would help them acquire useful quality education so that even if they do not continue their education further and join the labor market, they would do so equipped with relevant knowledge and skills and contribute significantly to raising the productivity of the enterprise they will be working for on in their self-employment ventures.

At the secondary level, the current content of both religious and general streams of education that receive public resources seem to have been seriously deficient in meeting the education and skills needed in a highly competitive world. The religious stream does not equip its students with necessary language and numerical skills. The students of humanities and business studies groups of the general stream, and of religious stream of education, do not receive adequate exposure to science education. The students of science group of both general and religious streams of education, on the other hand, get little exposure to social sciences and no exposure to business education. The students of humanities group of both general and religious streams receive no exposure to business education. The objective of secondary education is to equip the students with necessary knowledge and skills for pursuing higher education or for joining the labor market. Thus, there is a need for ensuring appropriate balance between the two objectives. The way the current curriculum of secondary education has been designed, it seems, it is geared primarily to achieve the first objective.

The best way to achieve both objectives

simultaneously is to introduce a common curriculum for core disciplines such as languages, both Bangla and English, Mathematics, basic sciences, social sciences and business studies; and computer science, to be studied by all students, essentially to adequately prepare them for the labor market; and allowing advanced students to choose a limited number of courses in their fields of interest, be it science, humanities, business or religious studies. The above core curriculum will, no doubt, contribute to better equipping the secondary graduates not only for wage employment in productive sectors of the economy, but also for self-employment. The fact that deserves to be highlighted at this point is that self-employment is the major type of employment in Bangladesh, accounting for 45% of total employment (BBS, 2004). Definitely, compulsory exposure to a basic course on business studies, particularly accounting, will surely contribute to improved productivity of all self-employed persons.

Quality is a function of investment and management. In 1973, Bangladesh spent 2% of her GNP, and 13% of all her public expenditure on education. But as the size of Bangladesh's GNP at that time was very small, per pupil public expenditure on education amounted to US\$4.2 only, compared to US\$ 13.6 in India and US\$ 1090.8 in USA (1974). Since then, although Bangladesh's GDP has increased considerably, thanks to achievement of a high average annual growth rate of around 5% over 1990-2005 period, allocation of public expenditure to education increased only marginally to 2.36% of her GDP, and 14.24% of her total public expenditure in 2005. (<http://www.uis.unesco.org>).

The developing countries' average public expenditure on education amounted to 4.5% of their GNP (UNESCO, 2005). For improving quality of education at all levels, Bangladesh needs to significantly increase her allocation of public resources to education to reach the developing countries' average in the shortest possible time.

The increased flow of resources to the education sector needs to be utilized in a way that contributes to the enhancement of quality of education imparted by the academic institutions, i.e. on the training of teachers, betterment of library and laboratory facilities, improved provisioning of learning materials, improving the institutional mechanism for academic supervision, and for developing an institutional mechanism for rewarding excellence both for teaching and learning. Bright students must be provided with adequate resource support in the form of generous scholarships so that they face no

hindrance in pursuing further education.

For efficient utilization of scarce resources that flow into the education sector, management of all components of this sector needs to be significantly improved. Before independence, despite poor pay, those who took up teaching as a profession did so out of their interest in teaching and most were devoted teachers. Classroom teaching was effective and the incidence of private coaching was virtually non-existent. Quality of education imparted did not significantly differ between schools whether they were located in metropolitan cities or urban rural areas. There were many instances of excellent results achieved by students from remote rural schools. After independence, as the educational infrastructure expanded and the government took over responsibility of paying teachers' basic salary, many unemployed youth took up teaching as a profession whether they liked it or not. They considered teaching just as any other job, and in the absence of an effective inspection/monitoring mechanism, quite often neglected their duties. As class room teaching suffered private coaching flourished, with many teachers setting up their own coaching centers. Performance of a student in school examination often depended on whether he/she attended the coaching centers run by their teachers. As students from poor families could not afford private coaching they lagged behind, and often dropped out.

Higher levels of education thus increasingly became a monopoly of the affluent and, rather than playing the role of a 'great equalizer,' turned into an instrument that promoted inequality in the society. The poor were marginalized. At the secondary level, they generally enrolled in the less expensive madrasah stream, received poor quality education, and very few managed to move to the next level of education. Most of those who did, however, could not get into a public or private university, and had to remain satisfied with a place in a poor quality private college. For them, landing with a job in the upper end of the labor market thus remained more as a dream than a reality.

Politicization of educational institutions since independence, particularly after the military takeover in 1982 and the transition to democratic rule in 1991 caused great harm to the education system. In the eighties, the country's military dictator, in order to mobilize political support for his regime, particularly from the religious groups, actively promoted the spread of madrasah education with public resources, which subsequent democratically elected regimes continued so as not to antagonize the religious

groups. In order to establish control over the educational institutions, all political parties opened their student fronts.

As members of the parliament were made chairpersons of governing bodies of all educational institutions in their respective constituencies, at the time of recruitment of teachers, political background of the candidates rather than their academic credentials, often received greater consideration. Allegation of corruption was also rampant. All these developments compromised the quality of education at different levels. The proposed move by the present care taker government to dissociate educational institutions from party politics is definitely in the right direction.

Even under the present circumstances, how can we ensure greater access of students from poor socio-economic background to high quality education?

Although the quality of education is generally poor in Bangladesh, there exist a few pockets of excellence such as the cadet colleges that admit students purely on merit through a nationwide competitive admission test, and the fees to be paid by the students are determined on the basis of their parents' income level. These are resourceful residential institutions with the highest per-student public resource allocation, operating in an environment free from all sorts of disturbances including political ones. Once admitted into a cadet college, a child from a poor household can pursue his/her education free of cost for six years, from Class VII to Class XII. The cadet colleges thus provide excellent opportunities to the children from poor households to acquire high quality secondary education that paves the way for accessing higher-quality education. The specialized nature of the admission test, requiring specialized and expensive pre-test coaching for success- conducted at a limited number of centers- however makes entry into cadet colleges extremely difficult for talented children from the poor households particularly from rural areas (Masum, 2005). If the cadet colleges can be persuaded to pursue a proactive policy in respect of admitting talented students from poor households on the basis of primary scholarship examination results, access of such students to the upper end of the labor market can be fairly ensured.

### References

BANBEIS (2004): Pocket Book on Educational Statistics 2004, Bangladesh Bureau of Educational Information and Statistics, Dec. 2004

BBS (2002): Report of the Labour Force Survey,

Bangladesh, 1999-2000, Bangladesh Bureau of Statistics, August, 2002

BBS (2003): Report of the Household Income & Expenditure Survey, 2000, Bangladesh Bureau of Statistics, March 2003

BBS (2003a): Report on National Child Labour Survey 2002-03 Bangladesh Bureau of Statistics, Dec. 2003

BBS (2004): Report on Labour Force Survey 2002-2003, Bangladesh Bureau of Statistics, Dec. 2004  
CAMPE-UPL (1999): Hope not Complacency: State of Primary Education in Bangladesh, 1999

CAMPE-UPL (2001): A Question of Quality: State of Primary Education in Bangladesh Vol. I

CAMPE-UPL (2002): Renewed Hope Daunting Challenges: State of Primary Education in Bangladesh

CAMPE (2005): Quality with Equity: The Primary Education Agenda

CAMPE (2005a): The State of Secondary Education: Progress and Challenges (draft)

GOB (1996): Bangladesh Economic Review, Ministry of Finance, Government of Bangladesh

GOB (2005): Bangladesh Economic Review, Ministry of Finance

GOB-SSPS(2005): Secondary Education: Interim Report

Masum (2005): Muhammad Masum, "Excellence in Education: Investing in Human Talent" in Independent University, Education in a Rapidly Changing World: Focus on Bangladesh

Masum (2006): "Education and Labor Market in Bangladesh," Independent Review of Bangladesh Development 2005, CPD (forthcoming)

UPL-World Bank (2000): Bangladesh Education Sector Review, Vol. II

UPL-World Bank (2000): Bangladesh Education Sector Review, Vol. III

UNESCO (1973): Statistical Year Book, 1973

UNESCO (2005): EFA Global Monitoring Report 2006: Literacy for Life

Note: This paper draws heavily from a work by the author, M. Masum: "Education and Labour Market in Bangladesh" in Independent Review of Bangladesh Development 2005, Centre for Policy Dialogue (CPD) Dhaka, Bangladesh (forthcoming)

Muhammad Masum  
Professor of Economics,  
Jahangirnagar University,  
Savar,  
Dhaka, Bangladesh (on leave)

Currently, Adjunct Professor  
Departments of Economics  
Towson University  
Towson, MD 21252  
U.S.A. and  
Morgan State University  
Baltimore, MD 21251  
E-mail: mmasum@towson.edu

# Socio-cultural Environment for Entrepreneurship Development in Bangladesh

Tahlil Azim

## Abstract

It is widely believed that some society/culture is more conducive to entrepreneurship than others. In line with this belief this paper explores and assesses the potential of Bangladesh as a springboard for entrepreneurship in terms of its socio-cultural setting. It offers a sketch of the socio-cultural environment of Bangladesh in terms of labor supply and labor quality, cultural milieu, religion, prevalence of security, social marginality and entrepreneurship education and training. It is observed that Bangladesh seems to be placed at the juxtaposition of both positive and negative socio-cultural forces for the development of entrepreneurship.

## Introduction

Entrepreneurs are recognized as central to the process of mobilizing capital, adding value to natural resources, producing necessary goods and services, creating employment and developing the means by which trade is carried on. Thus entrepreneurs are viewed as the most critical factors for economic development of a country (Schumpeter 1934) and the supply of entrepreneurs in an economy is believed to be the prerequisite for development. However, the growth of entrepreneurship results from certain environmental conditions and some socio-economic factor inputs.

Entrepreneurs are creations of the environment. If favorable environment prevails entrepreneurship will emerge and vice versa. The non emergence of entrepreneurship in Bangladesh at a desired level might be attributed to the adverse environmental factors. However, the study of environment for entrepreneurship faces the perennial question of what constitutes the environment. In fact, there is no consensus among the researchers in this regard. A number of authors and researchers have approached this topic by identifying a set of elements to be the constituents of the business environment of entrepreneurship development.

Naumes (1978) states that factors like external support for financing, technology, management and productive capacity are largely responsible for the success of many new ventures. Vesper and Albaum (1979) emphasize that the presence of local market conditions, existence of incubator industries, technical manpower, universities with doctoral programs and affiliated laboratories, research laboratories of major companies and governments, sources of venture capital and favorable government policies largely govern the decision of entrepreneurs in setting up a project. Cooper (1970) lists a number of environmental factors as important in entrepreneurial decisions: example of entrepreneurial

action, knowledge about entrepreneurship, attitude of the society toward entrepreneurship, salary and taxation, availability of venture capital, availability of personnel and support services, access to customers, access to universities, opportunities for interim consulting and general economic conditions. Shapero (1972) approaches this topic a bit differently and distinguishes the initial company formation from later startups and states that the former is dependent upon the ability of the founder to get financial support, to obtain technically skilled workers and to provide services not available in the area while the later startups are the result of spin-offs from existing companies and, therefore, mostly technology driven.

Bruno and Tyebjee (1982) identified availability of venture capital, skilled labor force, land facilities, access to transport, presence of experienced entrepreneurs, favorable tax and licensing policies, encouraging loan and financial policies, availability of support services, cultural and living conditions, government financial assistance and contracts, etc., as important environmental forces affecting the development of entrepreneurship. Ali and Alam (1997) identified easy loan, availability of skilled manpower, bureaucratic redtapism, political stability, smooth supply of infrastructural facilities, superior law and order situation, government support, liberal industrial policy, and education and training facilities as the influential factors in order of importance for the development of entrepreneurship in Bangladesh.

Roni (2003), in his study on "Environmental issues of Entrepreneurship Development: Bangladesh Scenario," included political, legal, and socio-cultural aspects as well as the role of state as the major elements of entrepreneurial environment. He also considered capital, labor, raw materials, technology, and market size and composition as the opportunity conditions for the entrepreneurs. He postulated that the economic opportunity condition in Bangladesh is reasonably favorable. But entrepreneurship has not stepped forward to take advantage of such favorable

conditions. In this regard he identified the unfavorable non-economic factors, like political, legal and socio-cultural factors that impede the growth of entrepreneurship in the country.

Considering the aspects important for entrepreneurship development in a country traced by the researchers as well as the peculiarities of Bangladesh, a host of factors like political system, political philosophy, governance, government incentives, corruption, rule of law, infrastructure, finance, market size, unemployment, raw materials, technology, labor supply and labor quality, cultural environment, prevalence of security, social marginality, entrepreneurship education and training, etc., may be pointed out as part of the business environment. However, the present paper has been dedicated to focus on the socio-cultural aspects of the environment only. The study is solely based on data and information collected from secondary sources. Relevant books, documents, government policies, web sites, articles and news items are the major sources of information and data used in the study.

### **Socio-cultural Environment for Entrepreneurship Development**

Socio-cultural factors are deeply rooted elements of a particular society and encompass the values, attitudes, norms, practices, institutions, stratifications, and related ways of a society. Socio-cultural events either force a person or make it desirable to choose entrepreneurship as a career option. From a sociological perspective, a factor such as societal upheaval is considered to have extensive impact on the making of new entrepreneurs. Societal disruptions which affect family life may influence the choice of non-traditional career paths (Hagen 1962). If the family of the entrepreneur does not seem to 'fit in' society or is seen to be different, then their children may feel the need to create a new niche for themselves (Kets de Vries 1996). Some studies indicate that entrepreneurs are more likely to come from ethnic, religious or minority groups (Weber 1958; Hirschmeyer 1964). It is widely believed that some society/culture is more conducive to entrepreneurship than others.

A recent exploratory study by Mueller and Thomas (2001) found support for the proposition that some cultures are more conducive to entrepreneurship than others. Individualistic cultures, for example, seem to foster an internal locus of control. These authors have concluded tentatively, that a 'supportive national culture will, *ceteris paribus*, increase the entrepreneurial potential of a country'. The corollary

is presented by Lee and Tsang (2001) who describe how a government report on Entrepreneurship Development in Singapore (published in 1985), revealed that there was a low tolerance of failure in that society. Indeed, the report outlined a prevalent view that failure in the job or in business would mean castigation and ruin – a mindset not conducive to risk-taking. Since then, of course, the government of Singapore has tried hard to promote a spirit of entrepreneurship in the city-state. Lee and Tsang (2001) also make an important point in relation to this discussion. They assert that other studies of entrepreneurial characteristics associated with venture performance have been based on Western countries, in particular the United States. Lee and Tsang assert that entrepreneurship is a culturally embedded phenomenon and that cross-cultural or cross-national generalization, unaccompanied by empirical support, lack substance.

Religion and its impact on entrepreneurial culture were also studied. Max Weber believed that "Protestant ethic" is conducive to the development of "spirit of capitalism" which is instrumental for entrepreneurship. On the same notion, he believes that "spirit of capitalism" is absent in religious belief system of Hinduism. However, many Indian scholars (Pandey 1970; Tripathi 1971) refuted the proposition and showed that Hindu belief system is very much related to individuals rather than the society as a whole.

Morrison (2000), seeks to answer the key question "what triggers the release of the invaluable enterprising spirit in a country?" by focusing on the relationship of certain cultural and societal factors and entrepreneurship. The study involved a cross-country study in Australia, Slovenia, Mexico, North America, Finland, Scotland, South Africa and Kenya. From this investigation, it appears that there is a significant relationship between entrepreneurship and cultural specificity, combined with an intuitive response by individual members of society, albeit part innate and part cultural conditioning. Certainly, the cultural context in which persons are rooted and socially developed plays an influencing role in shaping and making entrepreneurs, and the degree to which they consider entrepreneurial behavior to be desirable.

Hagen (1962), while describing the process of change in any society, suggests that growth in a society has been led not by individuals randomly distributed throughout a society but disproportionately by individuals from some distinctive group. He identifies "creative innovation" or "change" as the

fundamental characteristic of economic growth and believes that such innovation or change requires creative individuals. Hagen's principal theme is that such creative personalities or groups emerge when the members of some social group experience, what he calls, "The withdrawal of status respect". This "withdrawal" may occur when a traditionally alike group is displaced by force from its previous status by another traditional group, or when a superior group changes its attitude toward a subordinate group or on migration to a new society. However, Hagen's analysis fails to give policy measures for backward countries which are striving for economic development as he is identifying "Status withdrawal" as the causal factor in emergence of creative personality and status withdrawal by force cannot be contemplated in a democratic setup.

In consonance with Hagen's concern, some researchers have found that entrepreneurs often come from ethnic, religious or other type of minority group (Kets de Vries 1970; Roberts and Wainer 1996). Exposure to discrimination may restrict minority groups in their choice of employment and social status, and thus they are sometimes forced into self-employment when no employment option is open to them. Furthermore, according to Kets de Vries (1997), the process of social deterioration and the experience of religious oppression, can give rise to creative, innovative entrepreneurial activity.

Kets de Vries (1977) stresses that closer analysis of the entrepreneur often reveals an individual who has suffered hardship, has had an unhappy family upbringing and who feels displaced or even a 'misfit' in his own environment. His concept of the social misfit, the reject or marginal human being, is presented in his 1977 paper, aptly entitled 'The Entrepreneurial Personality: Person at the 'crossroads'. Thus, as already stated, the entrepreneur is for Kets de Vries a loner, a reject or a marginal individual (p. 35). He/she is inconsistent and confused about what they want, often acting irrationally, and is frequently impulsive. The entrepreneur is a 'reactive' individual who uses his/her rebellious nature to facilitate adaptation to changing situations. Tension and anxiety exists within such an individual as any potential success is viewed only as a prelude to failure.

"Rejection, dissatisfaction and a sense of failure follow the entrepreneur like an inseparable shadow (Kets de Vries 1977, p. 51)."

Thus the socio-cultural approach postulates that desirability of entrepreneurship as a career choice is,

to some extent, culture bound. Some cultures, particularly individualist cultures encourage entrepreneurship while the collectivist cultures work as a negative force for such option. Religious belief system also has its bearing on entrepreneurial desirability. However, there are individuals who are prone to overthrow cultural mask and emerge as "deviants". These deviant people are more likely to opt for entrepreneurship. Tayeb (1988) and Van der Horst (1996) emphasize that not all individual members of a society need necessarily be assumed to follow all the dimensions of their cultures in every aspect of their lives. None of us is a slave to the culture in which we live. There will be those who deviate from the cultural norm. Thus, Hofstede (1994) proposes that a person's behavior be only partially predetermined by their mental programmes. He/she has a basic ability to deviate from them, and to react in ways that are new, creative, destructive, or unexpected, e.g. entrepreneurially. Moreover, due to various social, political or economic reasons many people feel deprived and put up with the sense of dissatisfaction. These people, also may appear as entrepreneurs in an attempt to get rid of their depression.

The above discussion points to the fact that economic opportunities are not sufficient conditions for entrepreneurship to flourish development; it also requires some favorable socio-cultural factors for entrepreneurship to flourish in a country. Keeping this reality in mind the following sections offer a sketch of the socio-cultural environment of Bangladesh in terms of labor supply and labor quality, cultural milieu, religion, prevalence of security, social marginality and entrepreneurship education and training.

### ***Labor Supply and Labor Quality***

Bangladesh is well known for its large pool of cheap labor. The degree to which population size can be directly translated into labor supply is determined by the size of the adult population of a society and by the degree of labor mobility within a society (Gould 1982). If there are restrictions which hinder labor from entering industrial employment or prevent geographical movement within a society, labor will be more costly. These restrictions are absent in Bangladesh. Thus, Bangladesh has a large labor force which is increasing at a fast pace without having any major deterrent in the way of labor mobility; thus cost of labor is certainly low and cheap (Roni 2003). Foreign managers report that Bangladeshi workers generally respond well to training (Government of United States 2006).

However, the shortage of skilled workers in Bangladesh is a matter of concern. Business executives asked to rate the availability of scientists and engineers in their country in the survey for Global competitiveness report 2001-02, ranked Bangladesh 58 among the 75 countries in the survey. The relatively low ranking might reflect in part the relatively low tertiary enrolment ratio (about 5 percent) in Bangladesh (World Economic Forum 2002). It might also reflect a “Brain Drain” of skilled workers, a typical problem of most low-income countries.

### Cultural Milieu

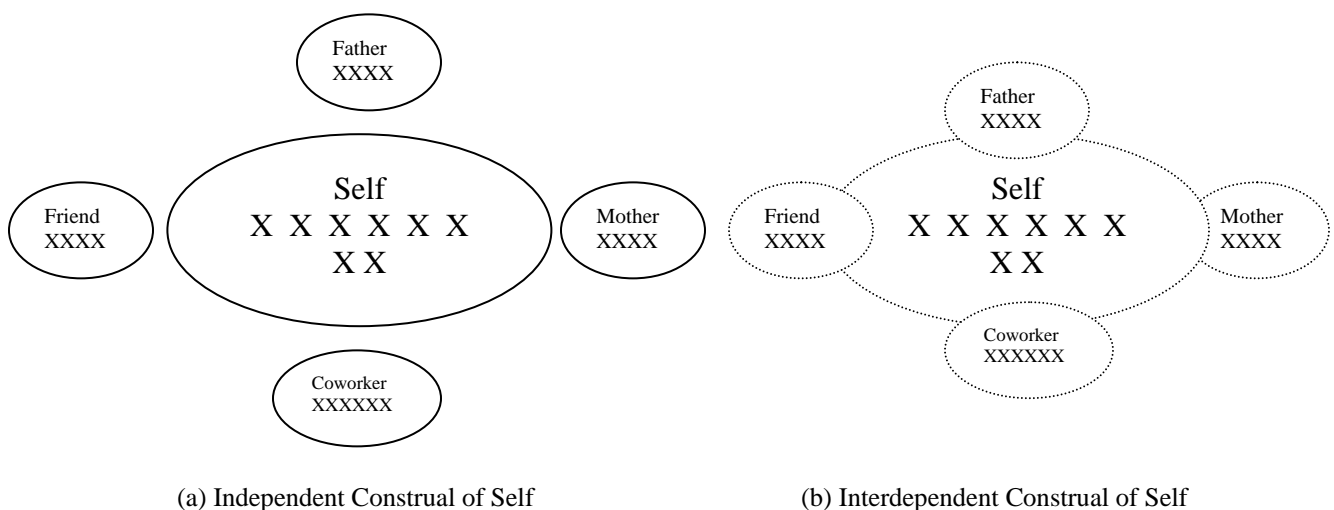
Cultural environment has a far-reaching effect upon the entrepreneurs. Tayeb (1998) defined culture and its scope as, “A set of historically evolved learned values, attitudes, and meanings shared by the members of a given community that influence the material and non-material way of life. Members of the community learn these shared characteristics through different stages of the socialization process of their lives in institutions, such as family, religion, formal education and society as a whole.”

Dutch Researcher Geert Hofstede (1994) attributes culture as “the collective programming of the mind,

which distinguishes the members of one human group from another.” A society’s culture determines the rules of how a person should behave in society. Hofstede (1980) conducted a very influential study on 1,16,000 respondents working in different IBM subsidiaries in 70 different countries and developed the typology consisting of four national and cultural dimensions: Individualism vs. collectivism, Uncertainty avoidance vs. Uncertainty acceptance, Power distance vs. Power respect and Masculinity vs. Femininity. In terms of Hofstede’s dimensions of culture, Bangladesh may be perceived to have the following characteristics:

- i. Collectivism: Bangladesh can be considered as a more traditional collectivist society. Here the interest of family and society is given preference over individual interest. In terms of typology of *self*, identified by Markus and Kitayama (1991), most of the Bangladeshi individuals maintain *interdependent construal of selves* as opposed to *independent construal of selves* where the self is unbounded, flexible and inseparable from social context. An individual in this society is not free to choose his career on his own. Rather the choice of his family is found to be more important of a determinant in this respect.

**Figure 1: Constructs of self**



Consequently, the good students are found to pursue the traditional subjects like medicine, engineering, law and recently business administration in their studies, and in their career, they choose either government or private job rather than independent entrepreneurial career. This collectivist characteristic also affects the saving and spending behavior of the people. Usually, people in such a culture accept more family responsibilities. The earners in the family spend their income for the maintenance of a large extended family which sometimes, even includes cousins, nephews etc. As a result, creating a handsome saving for investment purposes does not take place in such a culture. Moreover, there are mutual expectations in this culture that encourage people to borrow and lend to relatives if any need arises, which on the other hand, hampers the development of capital market/formal money market in the country. This can be evidenced from the findings of most studies on entrepreneurship that showed that entrepreneurs collected their initial seed capital either from their own source or from their friends and relatives (Begum 2002; Abdullah 1996; Ahmed and Sikder 1997).

- ii. **Uncertainty avoidance:** Because of uncertainty avoidance culture, most of the people in the country are more concerned about security and a constant source of income. This characteristic is against the very nature of risk taking which is the cornerstone of entrepreneurship. As a result, the people, in general, prefer salaried employment over initiating entrepreneurial ventures as their career option. Moreover, the inclination of people in the country to invest in land, smuggling and trading rather than in manufacturing may be attributed to this very cultural characteristic. This is also evidenced from the gradual development of entrepreneurship in the country. Most of the indigenous entrepreneurs are found to step into industrial ventures through accumulating capital either from trading or real estate business (Farouk 1983) or receiving unusual favor from the government in terms of financing (Kochanek 1993).
- iii. **Power respect:** In the power respect society, people give preference to the views of the elders and maintain difference among the

social classes. This feature is contrary to the spirit of entrepreneurship as it restricts individual choice and innovation. Rather it encourages duplication and preservation of tradition. This concept of culture justifies the attribution of status within the society. As mentioned by Roni (2003), the social setting of Bangladesh is still semi feudalistic in nature. Consequently a role that is consistent with such a setting will naturally seek high status. Thus government jobs which match such types of role are given high status value and it is found that the most brilliant students vie for government jobs rather than pursue entrepreneurial roles in the county. However, there are other contradictory views about status and prestige in the society. As Rahman (1981) argued; in Bangladesh higher prestige is attached to industrial profession as compared to other profession which has motivated farmers to adopt this profession. There was widespread antagonism among the people in general and in intellectuals, in particular, about the industrialists during the Pakistan period and in the early years of Bangladesh, as they were believed to be a handful of fortunate families created by the Pakistan government with huge public support. However, over the years this view has changed as the government continually started encouraging the private sector and reducing the participation of government in business. Thus status value has started shifting from government jobs to private entrepreneurship. In the face of acute unemployment in the country, the entrepreneurs are now viewed as the rescuer and consequently receive high status in the society. Even though Roni (2003) argued for higher status of government jobs, he also maintained that this perception is changing fast.

- iv. **Masculine:** In the masculine culture, people segregate the sex role and attach importance to money and other material gains over comfort and quality of life. This notion of culture may justify the low level of women entrepreneurship in the country.

In analyzing the cultural aspects related to entrepreneurship, Rahman (1989) has listed a number of features of an underdeveloped country, which are also true for Bangladesh. These are:

- (a) **People are fatalists:** They believe that fate is

determined and so nobody has anything else to do with it. (b) People are superstitious: They waste time in determining the auspicious days in order to commence their activities with the help of a clergyman. (c) They believe that the success of any venture or enterprise depends on the will of God. (d) Ownership of land is valued more than ownership of an enterprise. (e) There is no dignity of labor and manual labor is thought to be the least dignified of jobs. (f) Government job is considered as the most dignified and stable job. (g) To help in the building of mosque or temple is considered more of a socially responsible job than investment.

Khandkar (1992) viewed Bangladeshi society as an ascriptive society where economic roles are distributed according to the social status of individuals—not according to their competences. Consequently, it offers a hostile climate for entrepreneurship. Rahman (1989) argued that these features would have a negative effect upon entrepreneurship.

However, some research findings relating to entrepreneurial features of Bangladeshi entrepreneurs offer favorable indications. Hanna Papanek (1969) reported that Bangladeshis did not lack psychological traits of risk-taking for doing business. A.F.A. Hussain, (1963), based on a study, arrived at the conclusion that the businessmen of Bangladesh are sufficiently intelligent and smart in taking advantage of the business opportunities. Similar findings are also reported by Abdullah Farouk (1983). These are indicative of the potentialities of entrepreneurship that can be developed through proper policy framework.

### ***Religion***

One very influential force that shapes the cognitive setup of people is *religion*. As most of the people of Bangladesh adhere to Islam, their cognition is mostly constructed by the values and beliefs of Islam. The external locus of control of the people in Bangladesh is widely believed to be an outcome of Islamic belief of fate. But it is rather a misconstrued concept. Islam has never encouraged people not to work, and just to rely on fate or wait for fortune. Rather, the values and spirit of Islam can be of much help in inculcating the qualities of dynamism in its followers. It is to be pointed out that Islam is itself a motivating force (Solaiman and Hillaly 1997). The verses of the Holy Quran and the sayings of the Prophet (pbuh) are illustrative in this regard:

“Do not forget your share of the world” (Al-Quran).

“A person gets whatever he strives for” (Al-Quran).

“A faithful and trustworthy trader or businessman will be with the Prophet, Truthful, and Martyrs on the Day of Judgment” (Al-Hadith).

“The best of the earnings is the earning of those businessmen who do not lie when they speak, do not break the trust when trusted.” (Al-Hadith).

“Nine-tenth of the livelihood lies in business activities and one-tenth in cattle raising (agriculture)” (Al-Hadith).

Thus Islam approvingly speaks in favor of free enterprise and entrepreneurship, which, if properly taught may be instrumental for entrepreneurship development in the country. However, two particular issues pertaining to Islam have a significant bearing on the development of entrepreneurship in Bangladesh. One is the segregation of males and females. Islam disapproves of the free mixing of male and female which supports the tenets of masculine culture. And it may be believed to be instrumental for low level of women entrepreneurship in the country. Another aspect is exclusion of interest in Islam. Islam strongly prohibits interest (usury) as being exploitative. But, in reality, interest forms the backbone of the modern capital market and money market. Thus, the true followers of Islam find it contradictory to finance their ventures by raising fund from interest based banking system. Thus, even though Islam encourages its followers to be involved in business, a large segment of the practicing Muslims were excluded from this pursuit due to the absence of Islamic banking in the country. However, the introduction of Shariah (Islamic) Banking in the country has eliminated this problem. The recent adoption of shariah banking by hard core interest-based banks like, Standard Chartered Bank, HSBC bank, etc. (due to increased demand) in the country can be an evidence of people's concern for interest-free banking.

### ***Prevalence of Security***

Several writers have described entrepreneurial security as an important facilitator of entrepreneurial behavior. Security essentially involves protection from uncertainties, want, social disapproval and political interference. Brozen (1954) regards security as especially significant claiming that it may be the most important factor promoting entrepreneurship. His emphasis is upon protection from unnecessary

risks. Katzin (1964) stresses freedom from government control whereas Brandenburg (1962) simply cites security for person and property as being significant. No matter what the amount of security is (minimum, moderate etc.) it certainly is important. Roni (2003) maintains that perhaps this is the most important factor inhibiting entrepreneurial emergence in Bangladesh. Political disturbance in Bangladesh is high in comparison to neighboring countries. People often turn into unruly mob during observance of political programs, causing destruction of properties. More importantly loss of production increases risk and reduces profit significantly. In addition, a state of uncertainty looms large if frequent hartals are called. This phenomenon makes people cautious about security.

Government action has been another blow to security. After liberation, the government expropriated almost all private enterprises although some of these were given back later on; the government organizations have created insecurity on the part of the entrepreneurs.

Security is best protected if the rule of law prevails. In Bangladesh, there is little evidence to support the condition that rule of law could ever be established. Law and order situation has still remained far from satisfactory. People do not find any place to get remedy. Courts have been very ineffective, even devious, in discharging cases. In civil matters also, the court's directives remain unimplemented.

Taking all these factors together, Bangladesh has not been a place for undertaking entrepreneurial activities. Sometimes it is argued that people can do a job better if illegal ways are chosen over legal ways. Those ways certainly cannot be the ways for entrepreneurs who are not rogues.

### ***Social Marginality***

Entrepreneurs can emerge from socially marginal groups, like religious, cultural, ethnic or migrant minority. Their marginal social position is generally believed to have psychological effects, which make entrepreneurship a particularly attractive alternative for them. Marginality, as a factor of influencing entrepreneurship, is contingent upon legitimacy and mobility. If there is high degree of legitimacy and access to mobility channel, mainstreams will play more entrepreneurial roles than marginal. Under opposite conditions, the reverse will be true (Hoselitz 1975, Kriesberg 1963, Lipset, 1967).

Roni (2003) argued that because of inadequacy of

social legitimacy and mobility, the mainstream population in Bangladesh did not come forward with significant entrepreneurial roles. This gap could have been bridged, had there been sufficient number of entrepreneurs from marginal classes in the society. Ironically, for some reasons, the marginal segment of society, such as Hindus, Buddhists, Christians and tribal people did not show much entrepreneurial enthusiasm in the country. The religious minority may feel a perceived sense of insecurity for large investment and the tribal people may be too backward to assume any role pertaining to entrepreneurship in the country.

Thus as the entrepreneurially active minority like Ismailiyas, Bohra, or Memons, are too few in number in Bangladesh, they are too scant to fill the gap required for the attainment of required degree of industrialization.

### ***Entrepreneurship Education and Training***

It has been well documented in the literature that entrepreneurship can be taught i.e. the required qualities of an entrepreneur can be developed in a person through education and training. On this ground the education and training on entrepreneurship has received wide recognition as a field of study at the School, College and University level. It is also believed that entrepreneurship can be developed by imparting short-term training programs to different target groups to equip them with the required skills and traits. In line with this proposition, entrepreneurship education and training is imparted at a variety of levels in Bangladesh with multiplicity of content and duration. A course on entrepreneurship has been introduced as an optional paper for SSC and HSC level students of business studies group. A similar course is also offered for the students of polytechnics. Under the National University, a course on entrepreneurship has been introduced for the honors and masters students of management. At the university level, under the BBA program, almost all the universities, both public and private, offer at least one course on entrepreneurship either as a compulsory or optional course.

As far as training is concerned, the number of organizations offering a training program on entrepreneurship has increased tremendously in recent years. Small and Cottage Industries Training Institute (SCITI), a special institute of BSCIC is dedicated to impart short (11-day) training programs on entrepreneurship development and small business management in the country. SCITI conducts training both at its Office in Dhaka and at the field level in

different thanas of the country. Other than SCITI, Women Entrepreneurship Development Program (WEDP), a special program initiated by BSCIC, Bangladesh Institute of Management, Ministry of Women and Social Affairs, Directorate of Youth Development etc also offer short training program from time to time on entrepreneurship development in different relevant areas. Apart from government agencies, some private organizations and NGOs like, MIDAS, JOBS, KATALYST, BRAC, Grameen Bank, etc. also offer training programs for their target groups both in urban and rural areas.

Thus, as regard the education and training of entrepreneurship is concerned, Bangladesh has a variety of courses and programs for different levels of students and target groups. However, the curriculum, quality of faculties, methods of delivery, accessibility and overall effectiveness of these programs are yet to be assessed properly.

### Conclusion

The above notions of socio-cultural environment of Bangladesh indicate that it presents both positive and negative forces for the development of entrepreneurship in the country. Bangladesh offers a large pool of easily trainable employees at relatively cheaper price. The occupational and geographic mobility of labor is also observed to be one of the favorable conditions for labor market. However, in line with the cultural dimensions of Hofstede, Bangladesh can be regarded as a country upholding *collectivism, uncertainty avoidance, power respect and masculinity*, which are commonly believed to be less friendly for entrepreneurship development. However, since culture is always in a state of flux, many scholars believe that things are changing, in many cases, favorably for development of entrepreneurship in the country. Besides, many scholars identified the risk bearing attitude of the Bangladeshi people as an indication of presence of the entrepreneurial zeal among the people. Moreover, Islam, being the main religion of the people in the country approvingly speaks in favor of entrepreneurship which adds to the stimulation for the entrepreneurship development. However, Islamic taboos related to interest based banking and role of women may be viewed, to some extent, as a barrier to the entrepreneurship development in the country. Lack of social security due to political turmoil in the country, shaky government policy and poor enforcement of law have a serious bearing on the level of investment in the country, which is directly or indirectly related to the entrepreneurship development. Regarding social marginality in

Bangladesh, it is felt that even though socially marginal groups are expected to emerge as entrepreneurs in a country, it did not take much root in Bangladesh due to the meager size of the group or their extreme backwardness. One positive aspect of the socio-cultural environment is that entrepreneurship education and training has been gaining importance in Bangladesh gradually and remarkable quantitative and qualitative changes have been brought in this field which portends optimism for entrepreneurship development in the country.

### Reference

- Abdullah, Mohammad (1996), Entrepreneurship Development in Light Engineering Industries in Bangladesh: Problems and Policies. *Management Development* 25 (3) July-September.
- Ahmed, Salahuddin. and Zahid H. Sikder (1997), Women in Small Business of Bangladesh: A study of some selected Business Firms in Greater Chittagong. *Chittagong University Studies, Commerce* 13:41-54.
- Ali, Asharaf and Mohammad S. Alam (1997), The influence of business environment on the process of entrepreneurship development: A study of two selected Thanas of Chittagong City. *Chittagong University Studies, Commerce* 13: 19-40.
- Begum, Razia (2002), Entrepreneurial performance of Women Entrepreneurs in Bangladesh. *Journal of Business Studies* xxiii (2) December.
- Brozen, Y. (1954), Business Leadership and Technological Change. *The American Journal of Economics and Sociology* 14.
- Bruno, A. V. and T.T. Tyebjee (1982), The Environment to Entrepreneurship. In *The Encyclopedia of Entrepreneurship*, C.A. Kent et al. eds. New Jersey: Prentice Hall.
- Cooper, A.C. (1970), *The founding of technologically based firms*. Milwaukee: The Center for Venture management.
- Farouk, Abdullah (1983), Lessons from a Biographical Survey of Bangladeshi Entrepreneurs. *The Dhaka University Studies, Part C, 4* (4):77-81.
- Gould, L.C. (1982), Juvenile Entrepreneurs. *American Journal of Sociology*, 74 (6): 710-719.
- Government of United States of America (2006), *Doing Business in Bangladesh: A Country*

*Commercial Guide For U.S. Companies*, U.S. Foreign Commercial Service and U.S. Department of State.

Hagen, Evart (1962), *On the Theory of Social Change*. Homewood, IL: The Dorsey Press.

Hirschmeyer, J. (1964), *The Origin of Entrepreneurship in Meiji, Japan*. Cambridge, MA: Harvard University Press.

Hofstede, Geert (1980), *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.

Hofstede, Geert (1994), Defining culture and its four dimensions. *European Forum for Management Development: Focus: Cross-cultural Management*, 94 (1): 4.

Hoselitz, B. F. (1975), *Sociological aspects of economic growth*. Bombay: Vakil Feffer and Simons Pvt. Ltd.

Hussain, A.F.A. (1963), Pakistan. In *The role of savings and wealth in southern Asia and the west*. R.D. Lambert & B.F. Hoselitz, eds. Paris: UNESCO.

Kets de Vries, M.F. (1970), *The Entrepreneur as a Catalyst of Economic and Cultural Change*. Unpublished Doctoral Dissertation, Harvard University, Graduate School of Business Administration.

Kets de Vries, M.F. (1977), The Entrepreneurial Personality – A personal at the Crossroads. *Journal of Management Studies*, 14 (1): 34-57.

Kets de Vries, M.F. (1997), The Anatomy of the Entrepreneur: clinical observations. *Journal of Human Relations*, 49 (7): 853-884.

Khondker, Mubina (1992), Entrepreneurship Development and Economic growth: The Bangladesh Case. *Dhaka University Journal of Business Studies*, 13 (2): 199-208.

Kochanek, Stanley A. (1993), *Patron-Client Politics and Business in Bangladesh*. Dhaka: University Press Ltd.

Lee, D. Y. and Tsang, E. W. K. (2001), The Effects of Entrepreneurial Personality, Background and Network Activities on Venture Growth. *Journal of Management Studies*, 38 (4): 583-602.

Lipset, S.M. (1967), *Social Mobility in Industrial*

*Society*. London: Heinemann.

Markus, H. and Kitayama (1991), Culture and the self: Implications for cognition, emotion and Motivation. *Psychological Review*, 98: 224-253.

Morrison, A. (2000), Entrepreneurship: what triggers it? *International Journal of Entrepreneurial Behaviour & Research*, 6 (2): 59 - 71

Mueller, S.L. and Thomas, A. S. (2001), Culture and Entrepreneurial Potential: a nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16 (1): 51-75.

Naumes, W. (1978), *The entrepreneurial manager in the small business*. Reading, Mass: Addison-Wesley.

Pandey, A.N. (1970), Role of Religion. In *Seminar April 1970*.

Papnek, Hanna. (1969), *Entrepreneurs in East Pakistan*. South Asia Series, occasional paper no. 18, Asian Studies Center, Michigan State University.

Rahman, Habibur A.H.M. (1989), *Profile of Bangladeshi Entrepreneurs*. Bangladesh Business Research Report, University Grants Commission, Vol. 1: 67-80.

Roberts, E.B. and Wainer, H.A. (1996), *Some Characteristics of technical Entrepreneurs*. Research Program on the Management of Science and Technology, MIT, pp. 145-166.

Roni, N. N. (2003), Environmental issues of Entrepreneurship Development: Bangladesh Scenario. *Dhaka University Journal of Marketing*, 6.

Schumpeter, Joseph (1934), *The Theory of Economic Development*, Cambridge MA: Harvard University Press.

Shapero, A. (1972), The process of technical company formation in a local area. In *Technical entrepreneurship: A symposium*, ed. A.C. Cooper et al.. Milwaukee: Center for Venture Management.

Soliaman, Mohammad. and S. R. Hilaly (1997), Problems and Prospects of Entrepreneurship Development of Muslim Ummahs: The Case of Bangladesh. *The Cost and Management*, November-December.

Tayeb, M. (1998), *Organizations and National Culture*. London: Sage.

Tripathi, D. (1971), Indian Entrepreneurship in Historical perspective – A reinterpretation. *Economic and Political weekly*, IV (22).

Van der Horst, H. (1996), *The Low Sky: Understanding the Dutch*. Den Haag: Scriptum.

Vesper, K.H. and Albaum, G. (1979), *The role of*

*small business in research, development, technological change and innovation in region 10*. Working paper. University of Washington.

Weber, M. (1958), *The Protestant Work Ethic and the Sprit of Capitalism*. (T. Parsons, Trans.). New York: C. Scribners and Sons.

World Economic Forum (2002), *Global Competitiveness Report 2001/02*. Geneva.

Dr. Tahlil Azim, Assistant Professor  
School of Business  
Independent University, Bangladesh  
Chittagong Campus  
12 Jamal Khan Road  
Chittagong, Bangladesh  
Mobile: 01711-300366  
Tel: 0880-31-611262 (ext.136)  
Fax: 0880-31-611263  
E-mail: tahlilazim@yahoo.com

# **Significance of Employability Factors: Bangladesh Perspectives**

Rubina I. Ahmed  
and  
Joanna Crossman

## **Abstract**

The aim of the article is to explore the employability literature and examine its relevance to the context of private university business graduates in Bangladesh, a developing country in South Asia. Given the rapid rise of private universities in Bangladesh and the consequent number of graduating business students, this is an opportune time to explore graduate attributes from these institutions. Such an investigation would serve to guide discussions between employers and business education curriculum developers in Bangladesh and should ultimately have a positive impact upon graduate employability.

## **Introduction**

Graduate employability has recently attracted some interest within business literature (Cranmer, 2006; Duoc & Metzger, 2007) though most research in the area has been undertaken within a Western rather than Asian context. Expanding economies, universities, industrial and social development in Asia however would suggest a need to consider employability factors and give rise to further research within the Asian context. This paper therefore responds to the circumstances described by highlighting current work in the literature and considering the implications for the Bangladeshi context in South Asia. More specifically, the aim is to discuss the benefits of identifying employability factors for employers, tertiary education providers and business graduates in Bangladesh. Since no research in this context appears to exist, a position paper of this nature would appear to be timely and add value to the existing employability literature by identifying issues that arise from within non-western contexts. It is hoped that the paper will give rise to discussions amongst key stakeholders including employers and universities that will be of interest not only to a Bangladeshi audience but to other countries within Asia experiencing similar developments.

The article is organized in three sections. The first section will identify relevant literature on employability; explore some of the theoretical understandings of the concept and the implications amongst Bangladeshi stakeholders (tertiary education providers, employers and graduates). Secondly, the paper situates the discussion about employability against a backdrop of the rapidly rising business education programs in Bangladeshi private universities. Finally, some conclusions and

recommendations for future research directions in this area are discussed.

## **Employability and Cultural Context**

Employability can be defined from employers' and graduates' perspectives (Cranmer, 2006). From an employers' perspective, employability relates to a new graduate's possession of the skills, knowledge, attitudes, and commercial understanding to be effective in achieving organizational objectives (Mason, Williams & Cranmer, 2006). Employees view employability as the skills which they need to manage and continue learning throughout their careers (Harvey & Morey, 2003).

Students learn two sets of skills throughout their academic life. Firstly there are those skills that are subject specific or technical that are related to a specific career (Cassidy, 2006; Cox & King, 2006; Pool & Sewell, 2007;) in accounting, statistics or banking, for example. Secondly, non technical skills or employability skills are also relevant across various jobs or professions and are used throughout graduates' working life. Communication, willingness to learn, networking, team-working and ability to work under pressure (Cassidy, 2006; Duoc and Metzger, 2007; Raybould & Sheedy, 2005) serve as examples. Thus, some employability skills are not specific to a particular career but cut horizontally across all industries and vertically through hierarchies of positions within organizations (Sherer & Eadie 1987, p. 16). Employability skills have also been termed as, 'graduate attributes', 'graduate qualities', 'transferable skills', 'core skills', 'generic skills' and 'key competencies' (Cassidy, 2006; Pensiero & Mellveen, 2006;) and all basically refer to those skills required for graduates to be employed

within the community.

Employability factors are found to be contextually different. A cross-cultural study on employability factors by Harvey and Bowers-Brown (2004) revealed that the US, Canada, Finland, Denmark, South Africa, Australia, and New Zealand have accepted rather different graduate attributes necessary for employability. To illustrate, within the USA and Canada, universities use critical skills deemed to be required for their workforce. In South Africa, Denmark, and New Zealand, graduate employability factors are measured by a National Qualifications Framework (NQF). In Australia, graduates fulfill a 'generally accepted' set of attributes (Cranmer, 2006). Duoc and Metzger (2007) have classified professional competencies, business skills, and personal attributes as important employability factors in Taiwan.

Until very recently, limited research had been undertaken to find out about generic competencies in Asian countries, particularly amongst business graduates. However, Quek (2005) empirically identified generic competencies for successful work performance among Malaysian graduate employees in the field of banking, communication, production, engineering, and computer science. Duoc and Metzger (2007) have also identified 19 variables as important indicators of quality amongst business graduates in Vietnam. The Kember and Leung (2005) study concerned with graduate qualities in Hong Kong was able to isolate 'critical thinking, adaptability, communication skills, problem-solving ability and the capability of working productively in teams'. More specifically, Chisty, Uddin and Ghosh's (2007) paper emphasized improving business graduates' presentation, communication, and analytical and problem solving skills in order to increase employability opportunities in Bangladesh. However, the authors did not make clear the basis upon which these employability criteria were selected. They did nevertheless suggest that universities need to restructure curricula and teaching material, develop linkages between industry and tertiary education to enhance student employability in order to address unemployment within Bangladesh. Similarly, Gupta and Gollakota (2005) observed that within neighboring India there was some evidence to suggest that amongst Indian business graduates further development in communication, critical thinking, information technology and teamwork was needed.

Asian nations are rapidly developing in a climate of increased industrialization, multinational investment

and mass education. Globalizing forces have also contributed to the rising mobility of both career expatriates and students giving rise to new international perspectives in the literature on graduate qualities suggesting that a shift in focus from the merely national is required (Harvey & Bowers-Brown 2004). Existing literature has also illuminated specific lines of interest running through employability research. These include, the transition of graduates to the workplace (Fallows & Steven, 2000; Holden & Hamblett, 2007; Pensiero & Mellveen, 2006), employer expectations of business graduates (Rothwell, Herbert & Rothwell, 2008) and models of employability (Pool & Sewell, 2006). To date, there would appear to be plenty of scope in terms of exploring these lines of enquiry within the Bangladesh setting. However, it is first necessary to identify what employability means to the business graduates, employers, and tertiary education providers in Bangladesh.

### **The Stakeholders of Employability**

As stakeholders, universities, employers and students benefit from knowing about employability skills (Cox & King, 2006). The assessment of employability skills is important for the universities' ongoing commitment towards enhancing graduate employability skills. The identification of graduate attributes assists university management in introducing new courses, modifying existing ones and enhancing strategic relationships with the employers. Individual academics do perceive graduate attributes differently however and as a result, varied perspectives will impact on the curricula development as well as the teaching and learning of the respective programs and these differences have given rise to calls for dialogue between universities and employers to identify mutually agreed core graduate attributes (Barrie, 2004; Barrie, 2006). Much less research has been conducted on student perspectives on employability attributes as opposed to other stakeholders involved (Shah, Pell & Brooke, 2004).

Western researchers have identified varied attributes believed to be associated with graduate employability (Hodges & Burchell, 2003). Graduates able to embrace change are highly regarded by employers, for example (Duoc & Metzger, 2007). Context in terms of nations, cultures and particular industries will however influence perspectives on desirable employability skills. The challenge for universities lies in the fact that learning for graduate attributes cannot be entirely undertaken in classrooms

(Cranmer 2006) and the consequent perceived limitations of current curriculum is a matter of some concern (Cox & King, 2006; Wanken & DeFillippi, 2006, p. xi). Essentially, universities need to develop graduates able to make connections “between theory and practice, between knowing and doing, and between rigor and relevance” (Wanken & DeFillippi, 2006, p. xi). In other words, there is a perception that only experiential learning in Business education can adequately prepare graduates for working life. Despite these reservations, evidence suggests that students opt for a business degree expecting varied career options, advancements, and greater earning potential (Cox & King, 2006; Inderrieden, Holtom & Bies, 2006, pp. 3–5) and indeed there are good reasons for them to hold these perceptions given that the Inderrieden et al. study (2006) undertaken in the US found that graduates with an MBA degree did indeed command higher salaries and a greater chance of promotions than non-MBAs. In other words, it appears that a Masters in Business Administration (MBA) is positively associated with graduate skills, employability, compensation, and career advancement in the Western context (Mihail & Elefterie, 2006).

### **Business Education through Private Universities in Bangladesh**

Amongst the great changes that have occurred within university education landscape of Bangladesh over the last two decades (Commonwealth of Learning and UNESCO, 2004), the rapid growth of private universities is perhaps the most salient. A number of factors have contributed to their emergence. Firstly, heightened demographic pressure has affected the number of people who aspire to higher education (Ahmad, 2004, p. 137; IUB, 1997). Secondly, private universities have been viewed as an alternative to ‘session jams’ (Ahmad ed, 2000; IUB, 1997; Lamagna, Sharif & Islam, 2004) and a perception of deteriorating quality (Ahmad ed, 2000, pp. 19-26; IUB, 1997; Mahmud, 2002) within public universities. The term “Session jams” refers to a situation where the students cannot complete their degree on time (Alam et al., 2003; Ahmad ed, 2000, p. 33; IUB, 1997) in public universities because of student and teacher strikes (Ahmad ed, 2000, p. 35), political unrest (Ahmad ed, 2000, p. 34; IUB, 1997), and failure to conduct classes, examinations and publish exam results on schedule (Ahmad ed, 2000, p. 35). Alam et al., (2003) for example, have noted attractiveness of private universities as a result of better student-teacher ratios (1:10), effective physical resources, computer (internet) access, close academic supervision, well organized approaches to orientation

for both new students and staff and most importantly these institutions are free of session jams.

Thirdly, the delivery of business programs in private universities has been implemented as a strategy to reduce the ‘brain drain’ from Bangladesh to largely western education systems (Ahmad, 2004, p. 46; IUB, 1997; Lamagna et al., 2004). Certainly, private universities in Bangladesh follow the North American model of university education in that they are based upon a semester and credit system (Ahmad, 2004, p.140; Alam, Haque & Siddique, 2003; Huq, 2002; Islam, 2007).

Of interest to employers in Bangladesh is the widespread delivery of business programs within these universities (Alam et al., 2003) that are able to cater to the rising number of prospective students in this field (Ahmad, 2004; p. 138; Islam, 2007; Rahman, 2004). Some satisfaction with the quality of graduates amongst employers may be assumed from reports of the relative ease business graduates have in finding employment (Ahmad, 2004, p.138; Karim, 2006; Kim, Markham & Cangelosi, 2002). Shahjahan (2002) too has indicated that multinational banks and other business organizations are increasingly recruiting private university business graduates. The relationship between the quality of private university business programs and employability has not yet been thoroughly established however and signals of the level of quality in business programs of private universities appears to be a matter of ongoing discussion.

A handful of studies have been undertaken on the operations of private universities of Bangladesh (ADB, 2000; Alam & Haque, 2002; Commonwealth of Learning and UNESCO, 2004; Hopper, 1998; World Bank, 1999). One of the major issues that have been identified in these studies relates to the quality of education provided by the private universities. In recent years, the University Grants Commission (UGC), the regulatory authority of the universities in Bangladesh initiated the process of assessing the quality of education provided by the private universities in response to constant criticism of the operations of the private universities.

Whilst private universities are perceived as bringing an international standard to tertiary education at a reasonable tuition fee for the masses (Lamagna et al., 2004), it in fact comes with a high price tag (Hopper, 1998; Rahman, 2004) and is reputedly dogged by a shortage of qualified faculty members (Islam, 2007; Rahman, 2004), insufficient resources (Islam, 2007), and an ambiguous attitude of the government towards

these universities (ADBI, 2000). In addition, concerns about poor governance of private universities in terms of recruitment, management and the development of departments (Shahjahan, 2002) may not be adequately monitored within the remit of the existing 1992 Private University Act (Islam, 2007).

Employment opportunities are no doubt also related to the economic development of the business sector in Bangladesh over the last two decades with increased operations of multinational companies, growing investment in private sector enterprises, and expansion in the service sectors. A perception also exists that business-educated students from private universities demonstrate highly developed communication skills compared with non-business graduates (Commonwealth of Learning and UNESCO, 2004; Karim, 2006; Rahman, 2004). Unsurprisingly, intensive economic development has also led to a higher demand for market driven subjects such as business administration, computer science and engineering (Alam et al., 2003) given what appears to be a positive employment environment for graduates of these programs.

### Conclusion

Whilst the current buoyant economy in Bangladesh has encouraged high levels of employment for business graduates, it cannot be assumed that this happy state of affairs necessarily reflects an alignment between graduate qualities and employer needs. Establishing the relationship between the two would require an in depth research. The perspectives of graduates, employers, and tertiary education providers as stakeholders would need to be sought in order to provide a holistic view of complex employability factors. Pursuing an enquiry along these lines may also throw some light on perceptions of quality in the business programs of private universities and prove timely given the rapid rise of private universities in Bangladesh and increased numbers of graduates who require guidance when making decisions about the programs and universities that would best serve their learning and long term career plans.

Whilst the call for the development of international graduate attributes has much to commend it in an age of globalization, no nation can adequately assess the applicability or relevance of any model developed on these lines unless there is sufficient information about what local employers currently expect from graduates and the extent to which they perceive local universities are able to provide it. Understanding the

requirements of local employers is of course not only a matter of concern for private universities but also for all institutions charged with the higher education of a nation. In other words, the outcomes and implications will be directed to the interests of a broader educational community beyond that of private higher education providers.

### References

- ADBI, 2000, *Public-Private Partnerships in the Social Sector: Issues and Country Experiences in Asia and the Pacific*, (edited by Y Wang.), ADBI Publishing, 2000, Tokyo, Japan.
- Ahmad, Q.K. (2000), *Quality of Education and Campus Violence*, eds, Dhaka: UPL.
- Ahmad, M. (2004), *The Tale of the First Private University of Bangladesh –North South University*, Dhaka: APPL.
- Alam, M. and Haque, M. S. (2002), “Development of Private Universities in Bangladesh,” Dhaka: BIDS.
- Alam, M., Haque, M.S. and Siddique, F.S. (2003), “Private higher education in Bangladesh” in *Research Papers IIEP*, N.V. Varghese, eds, Paris: International Institute for Educational Planning.
- Barrie, S.C. (2004), “A Research-based Approach to Generic Graduate Attributes Policy,” *Higher Education Research & Development*, Vol. 23, No. 3, August: 261 – 275.
- Barrie, S. C. (2006), “Understanding What We Mean by the Generic Attributes Of Graduates,” *Higher Education*, Vol. 51: 215 – 241.
- Cassidy, S. (2006), “Developing Employability Skills: Peer Assessment in Higher Education,” *Education + Training*, Vol. 48, No. 7: 509 – 517.
- Chisty, K.K.S., Uddin, G.M. and Ghosh, S.K. (2007), “The Business Graduate Employability in Bangladesh: Dilemma and Expected Skills by Corporate World,” *BRAC University Journal*, Vol. IV, No. 1: 1 – 8.
- Commonwealth of Learning and UNESCO, 2004, “The Role of Transnational, Private, and For-Profit Provision in Meeting Global Demand for Tertiary Education: Mapping, Regulation and Impact, Summary Report, Case Study Bangladesh,” (R Middlehurst and S Woodfield), *Commonwealth of*

*Learning and UNESCO*, Canada.

Cox, S. and King, D. (2006), "Skill Sets: an Approach to Embed Employability in Course Design," *Education + Training*, Vol. 48, No. 4: 262 – 274.

Cranmer, S. (2006), "Enhancing Graduate Employability: Best Intentions and Mixed Outcomes," *Studies in Higher Education*, Vol. 31, No. 2: 161 – 184.

Duoc, T.Q. and Metzger, C 2007, *Quality of business graduates in Vietnamese institutions: multiple perspectives*, Journal of Management Development, vol 26(7): 629 – 643.

Fallows, S. and Steven, C. (2000), "Building Employability Skills into the Higher Education Curriculum: A University-wide Initiative," *Education + Training*, Vol. 42, No.2:75 – 82.

Gupta, V. and Gollakota, K. (2005), "Critical Challenges for Indian Business Schools as Partners in Development," *Decision*, Vol. 32, No. 2, July – December: 35 – 56.

Harvey, L. and Bowers-Brown, T. (2004), "Employability Cross-Country Comparisons," *Graduate Market Trends*, Winter 2004/5 viewed on August 25, 2008 <[http://www.prospects.ac.uk/cms/ShowPage/Home\\_page/Members\\_\\_\\_Log\\_in/Labour\\_market\\_information/Graduate\\_Market\\_Trends/Employability\\_cross\\_country\\_comparisons\\_\\_\\_Winter\\_04\\_05\\_/p!epmjld](http://www.prospects.ac.uk/cms/ShowPage/Home_page/Members___Log_in/Labour_market_information/Graduate_Market_Trends/Employability_cross_country_comparisons___Winter_04_05_/p!epmjld)>

Hodges, D. and Burchell, N. (2003), "Business Graduate Competencies: Employers' Views on Importance and Performance," *Asia Pacific Journal of Cooperative Education*, Vol. 4, No.2: 16-22.

Holden, R. and Hamblett, J. (2007), "The Transition from Higher Education into Work: Tales of Cohesion and Fragmentation," *Education + Training*, Vol. 49, No. 7: 516 – 585.

Hopper, R. (1998), "Emerging Private Universities in Bangladesh: Public Enemy or Ally?," *International Higher Education (The Boston College Center for Higher Education)*, Boston College, USA.

Huq, A.T.M.Z. (2002), "Quality Assurance in Higher Education: Some Reflections on Higher Education in the Affiliated Colleges Under the National University of Bangladesh," in Proceedings of the *International Seminar on Quality Assurance in Higher Education in Bangladesh*, University Grants Commission,

Bangladesh and The Commonwealth of Learning, Canada, Dhaka, pp. 111-128.

Inderrieden, E. J., Holtom, B. C. and Bies, R. J. (2006), "Do MBA Programs Deliver?," in *New Visions of Graduate Management Education*, Charles Wanken and Robert DeFillippi, eds. USA: Information Age Publishing, pp. 3 – 22.

Islam, F. (2007), "Private Universities: An Analytical Assessment," *The Bangladesh Today*, July 09, 2007.

(IUB) Independent University Bangladesh, (1997), "*Shaping the Future: The Story of the Independent University of Bangladesh*," Dhaka: Independent University Bangladesh.

Kember, D. and Leung, D.Y.P. (2005), "The Influence of the Teaching and Learning Environment on the Development of Generic Capabilities Needed for a Knowledge-Based Society," *Learning Environments Research*, Vol. 8,: 248 – 266.

Karim, E. (2006), 'Doorway to a Brighter Future', *Star Weekend Magazine*, vol. 5 (88), March 31, 2006.

Kim, D., Markham, F.S. and Cangelosi, J.D. (2002), "Why Students Pursue the Business Degree: A Comparison of Business Majors Across Universities," *Journal of Education for Business*, September – October: 28 – 32.

Mahmud, M.M. (2002), "Quality Assurance in Public Universities of Bangladesh: Status, Problems and Prospects," in Proceedings of the *International Seminar on Quality Assurance in Higher Education in Bangladesh*, University Grants Commission, Bangladesh and The Commonwealth of Learning, Canada, Dhaka: 129-156.

Mason, G., Williams, G. and Cranmer, S. (2006), "Employability Skills Initiatives in Higher Education: What Effects Do They Have on Graduate Labour Market Outcomes?," *National Institute of Economic and Social Research*, Institute of Education, University of London.

Mihail, D. M. and Elefterie, A. (2006), "Perceived Effects of an MBA Degree on Employability and Career Advancement: The Case of Greece," *Career Development International*, Vol. 11, No. 4: 352-361.

Pensiero, D. and Mellveen, P. (2006), "Developing an integrated approach to graduates' transition into the workforce", in the proceedings of *Marketing and Management Development conference*, July 2006, Paris.

Pool, L.D. and Sewell, P. (2007), "The Key to Employability: Developing a Practical Model of Graduate Employability," *Education + Training*, Vol. 49, No. 4: 277 – 289.

Rahman, M. O. (2004), "Private Universities: Viability and Credibility," *The Daily Star*, January 21, 2004.

Raybould, J. and Sheedy, V. (2005), "Are Graduates Equipped with The Right Skills in the Employability Stakes?," *Industrial and Commercial Training*, Vol. 37, No. 5: 259 – 263.

Rothwell, A., Herbert, I. and Rothwell, F. (2008), "Self-Perceived Employability: Construction and Initial Validation of a Scale for University Students," *Journal of Vocational Behaviour*, Vol. 73: 1-12.

Quek, A.H. (2005), "Learning for the Workplace: A Case Study in Graduate Employees' Generic Competencies," *Journal of Workplace Learning*, Vol. 17, No. 4: 231 – 242.

Shah, A., Pell, K. and Brooke, P. (2004), "Beyond

First Destinations: Graduate Employability Survey," *Active Learning in Higher Education*, Vol. 5, No. 1: 9 – 26.

Shahjahan, ASM 2002, "Quality Assurance In Private Universities Of Bangladesh: Its Status, Problems And Strategic Plans," in Proceedings of the *International Seminar on Quality Assurance in Higher Education in Bangladesh*, University Grants Commission, Bangladesh and The Commonwealth of Learning, Canada, Dhaka: 187 - 196.

Sherer, M. and Eadie, R. (1987), "Employability Skills: Key to Success," *Thrust*, Vol. 17, No. 2: 16 – 17.

Wanken, C. and DeFillippi, R. (2006), *New visions of graduate management education*, eds, USA: Information Age Publishing.

World Bank, (1999), "Education in Bangladesh: A Country Sector Review (Report No. 19548)," *Operations Evaluation Department*, Washington, D.C.: World Bank.

Rubina I. Ahmed  
School of Management  
University of South Australia  
Elton Mayo Building  
North Terrace, Adelaide, SA 5000  
Australia  
rubina.ahmed@postgrads.unisa.edu.au

Dr. Joanna Crossman  
School of Management  
University of South Australia  
Elton Mayo Building  
North Terrace, Adelaide, SA 5000  
Australia  
joanna.crossman@unisa.edu.au