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JOURNAL OF BANGLADESH STUDIES (ISSN 1529-0905)

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Articles are solicited from authors engaged in a variety of fields including agriculture, anthropology, basic sciences, business, economics, education, engineering, management, political science, psychology, sociology, and related fields. This diversity of perspective is sought by JBS because comprehensive development requires a broad foundation of knowledge. The articles should, therefore, address Bangladesh's development problems and prospects from a theoretical or analytical perspective prevalent in academic disciplines. Authors are also encouraged to prescribe measures that are meaningful, practicable, and amenable to the sector(s) or issues they address. Articles must also be comprehensible to the wide target audience. Thus, while the articles must be grounded in theory, analysis, and referenced

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Both short communications and full-length articles may be submitted. Analysis of recent developments, short reviews of newly published books, and expert comments on specific issues are treated as short communications, which should be limited to about 2,000 words. A full-length article should be about 5000 words and include a review of the literature. JBS also invites critiques or commentaries on articles published in the journal to foster debate and discussion. These may be published on the basis of space availability (which is often constrained by budgets) and the advice of the editorial board. Critiques must be about two JBS pages and must be written in a positive demeanor to ensure healthy discussion. JBS will attempt to obtain responses from the authors whose articles are critiqued. Opinions expressed in the selected articles or commentaries are solely the responsibility of the author(s).

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FROM THE EDITOR

With this issue of the Journal of Bangladesh Studies (JBS), we bring another set of relevant articles to our readers. While we acknowledge the slight delay in publishing this issue, we continue to toil with a very clear objective: to bring quality research articles to our readers on issues pertinent to Bangladesh. This is a challenge that is likely to persist, given that a research culture has not flourished in Bangladesh; not many international scholars seem to have found research on Bangladesh as engaging and worthwhile; and because of the growth of a plethora of competing research outlets, some of which seem to demand less from their contributors on substance, relevance, quality, etc. Some contributors, in their quest to publish or perish, may also opt for less rigorous outlets for their research. We, however, remain resolute in our quest to publish the very best research available on Bangladesh.

We begin this issue with an article addressing a crucial sector that has been Bangladesh's export mainstay: the garments industry. Günseli Berik and Yana van der Meulen Rodgers follow Bangladesh's growth in garment exports in recent years, despite the global economic slowdown. This has been achieved by focusing on the volume-driven low-price niche in the global market, especially USA and the European Union (EU). Even with China's entry into the market after expiration of the Multi Fiber Agreement and Agreement on Textiles and Clothing, Bangladesh has carved out a bigger market both in terms of share and value in USA and the EU.

This is a laudatory achievement. But it has also come at a price; the wage pressure that such a depressed economic environment has generated has affected employment and working conditions in the industry in various ways. These include violation of workers' rights including long working hours (often 60 to 86 working hours per week), forced or excessive overtime, illegal pay deductions, lack of safe and sanitary working conditions, prevention of the formulation of workers' organizations, harassment and abuse, and similar violations that loom large in the industry. On wage rates, the authors show that Bangladesh's garment industry workers are the lowest paid in the world at around \$.22 per hour—much less than the next rung which is \$.33 per hour in Cambodia. In China, that has recently increased its market share from 15 to 33 percent in the US and from 15 to 37 percent in the EU, the prevailing wage rates range between \$.55 and \$1.08 per hour.

That Bangladesh has maintained its competitiveness and gained in share and value of garment exports, despite China's freer access to global markets, misses the point. The deeper question is at what human cost? The violations listed earlier are serious, where the workers seem to have a "disposable" status. While this may be the norm for countries that have a burgeoning population and low employment opportunities, the stark contrast in wages and working conditions compared to other countries needs to be addressed. This calls for a major overhaul of the garment industry on such parameters as efficiency and dignity of labor. This becomes even more important at a time when, according to the authors, nations such as India, Pakistan, Cambodia, etc., have devalued their currency to become more competitive. As a consequence further pressures on the workers can lead to labor instability and disruptions on a massive scale if the workers – the main asset of the garment manufacturers – are unable to feed themselves or maintain their basic health and sanity.

Under the circumstances, the effects can be catastrophic for Bangladesh that, over the years, has been unable to diversify its export base significantly enough to reduce its dependence on the garment industry. The authors recommend policy reforms, from moving to a higher productivity export structure, improvements in working conditions, and diversification of the structure of production to investments in infrastructure and education that demand immediate attention of the nation's policy makers. Needless to elaborate, the working conditions of the multitude in Bangladesh are often deplorable. While there is no quick fix, that a process has been initiated to care for those who help sustain the economy must become clearer.

Mohammad Abdul Malek and Koichi Usami address another vital policy prerogative: improving non-farm employment (NFE) in rural Bangladesh. With rising population, limited land resources, and massive migration to the urban centers, NFE in the rural areas deserves a strategic thrust to bring social, political, and economic stability to the nation. Using econometric analyses, the authors show that gender and education are important determinants of NFE. Here they highlight women's considerably lower participation in NFE as they continue to be relegated to domestic chores that depress household incomes. Among the other variables of interest are access to credit, access to organizations, out-of-country

remittance, and education. Interestingly, the study finds that of the household income sources, non-farm self employment has the highest share (28%), followed by non-farm wage employment (20.3%), out-of-country remittance (20.1%) and in-country remittance (6%). Unfortunately, low-return NFE (68%) opportunities dominate the rural economy, requiring no particular education and little or no start-up capital. This reflects the neglect and inattention given to improving human potential in the country over the years. And this undeveloped human resource base continues to be the bane of the country, depressing economic growth and wealth distribution across income segments. The need to build relevant institutions (microfinance, commercial banks, and cooperatives), sound infrastructure, and a quality education system requires little additional emphasis to raise the income earning potential of the rural population and to stem the massive rural-urban migration today that has strained the services in the cities beyond what was ever envisaged. NFE must begin to play a much bigger role in policy planning for the sake of social and political stability and economic progress.

M. Aminul Karim revisits a contentious and often smoldering issue: the relationship between Bangladesh and India that has resulted in growing and serious misunderstanding and mistrust between the two nations. Being the heaviest “weight” in the South Asian neighborhood, India’s signals to its neighbors – often of indifference, ambivalence, uncertainty, or even a seeming lack of self-confidence in dealing with them – seems to be at the root of the problem that requires deeper understanding. Its vacillating positions from being the benevolent “big brother” now and a mean-spirited neighbor the next or a partner who wants to resolve conflict to being a party that is unreciprocating or even scheming for advantage are unreliable signals that do not build trust and confidence.

It is true that different regimes in Bangladesh have also played their part to widen the chasm of misunderstanding between the two nations. They too have failed to understand the power of cooperative endeavors, neighborly conduct, and the need to downplay differences while projecting common interests. But if one looks at the balance of power, to India these should be seen at best as misdemeanors rather than threatening or harmful and, thus, easily managed with the right blend of carrots and sticks. The question, therefore, is whether India is giving Bangladesh far more credit for being mischievous and being able to do harm than it possibly can, or whether it (India) is playing a game of keeping the

relationship on edge so that it does not have to give in, as a benevolent and resourceful big brother, to the equities that Bangladesh seeks (lifting of trade barriers, equitable water sharing, resolution of Teen Bigha, curtailing the ease and equanimity with which the BSF continues to fire upon (and kill) Bangladeshi civilians, or alleviating the insurgency issue). By keeping the relationship on edge and by controlling the levers, India can extract much and give little. And every time it tweaks this lever it seems to derive great satisfaction as it incites Bangladesh to react or even over-react, but do little else to moderate India’s apparent mischief-mongering and lack of serious intent to resolve any issues between the two countries.

Whether such behaviors can be attributed to the highest offices in India may be contested: they have too many agendas and much too much on their plates to be absorbed by the issues concerning Bangladesh. But it behooves the same offices to look into the behaviors and intentions of subordinates, assigned to deal with Bangladesh, who simply see this as a game to be prolonged: the proverbial cat and mouse game! It is at these levels where power and influence continue to be misused for some arcane, self-serving interests that need to be understood better. Such a state of affairs is not unlikely where the little people, lower down in the hierarchy, play niggardly games to enjoy some hidden satisfaction of their own, knowing full well that the onus of any failures will rest on the highest offices and not on them. In this web of deception and intrigue, the bigger prospects and initiatives get horribly entangled and ensnared, extending the state of low confidence in the negotiating parties and making the possibility of resolving existing problems more remote.

One finds this “multiple-personality” syndrome that India exudes from different tiers of the hierarchy in the writings of Krishnan Srinivasan in his book *The Jamdani Revolution* where the author pointedly shows how even his good intentions to resolve matters (Teen Bigha; the insurgency issue, etc) were often ignored at various tiers, with letters and phone calls repeatedly unanswered. Sane people understand that relationship stability and peaceful coexistence go together to improve the “balance of relationship” instead of the “balance of power” where the latter is usually the source of conflict and little good neighborly relations. It must also be realized that while there is substantial past baggage that dates back to 1947, India’s policy towards Bangladesh probably reflects the schizophrenic, warm and cold, nature of its population towards Bengali Muslims. Bangladesh’s minority but trenchant voice that

rebukes India at every turn, where a religious zeal is not hard to notice, must also scale back its anti-India rhetoric that is unrealistic and represents a bigger bark than a bite. Bangladesh and India can easily hush these voices by simply ignoring them and making some dramatic gestures to each other on a couple of substantive projects as starters: water sharing and trade access to Bangladesh and transit to India. Is that likely to happen? One wonders whether politicians in the subcontinent can overcome their power-hungry motives that usually bring out the worst in them.

Syed S. Andaleeb seeks to compare the quality of services provided by public and private hospitals in Bangladesh (Dhaka) with the services of foreign hospitals. The author's contention is that by improving quality of services, it would be possible to better serve the health needs of the people of Bangladesh, stem the huge outflow of foreign exchange to neighboring countries, and even reverse the flows to some extent. Lack of service quality in the nation's hospitals is something that is reinforced almost daily in media reports. Even the most egregious of service misfortunes (misdiagnosis, malpractice, supply of tainted blood, amputating the wrong limb, etc.) seem to find no redress. The consequence is devastating: the patient's sense of justice is shattered on a daily basis and their expectations of decent service are constantly negated. In addition, when their costs of obtaining health service continue to skyrocket, what faith can they place on the healthcare system? And, aptly, as the ratings in the study suggest, foreign health service

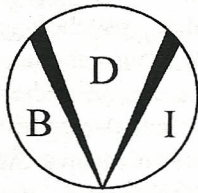
providers are preferred, not to mention that most of them happen to be Asian if not South Asians. If other Asians can serve us so well, why can't our very own? Can a champion emerge who can fix health care, working with modern concepts such as competition, incentives, continuous quality improvement (CQI) or six sigma? It really depends on who is at the helm: some inconsequential political appointee who receives a favor for services rendered to the party in power or a true champion whose head and heart are well-honed and aligned with the need to serve the suffering multitude!

Rahman et al. review the evolution of the education system, especially secondary education, since the British period and chronicle the twists and turns that the system has experienced over the years, responding to different policy prerogatives aimed at creating a certain type of society at different junctures. For those who want to understand how the education system evolved to where it is today, the article is invaluable. It provides a long-term perspective that lends itself to the analysis of what is needed today to meet the needs of a 21st Century environment in which Bangladesh and its people must fit.

I wish to record my sincere thanks to the contributors for their patience during the review process, the reviewers for their incisive but helpful stance, and Penn State Erie's Black School of Business for providing the support that has been bringing the journal to its readers for the past eleven years.

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Journal of Bangladesh Studies

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Articles are encouraged from fields including anthropology, agriculture, basic sciences, economics, education, engineering, international relations, management, political science, psychology, sociology, and related areas. We seek this diversity of perspective because comprehensive development depends on a broad foundation of knowledge. Broadly, the articles should address Bangladesh's development problems and prospects from a theoretical or analytical perspective prevalent in academic disciplines. Authors are encouraged to prescribe actions and measures that are meaningful, practicable, and amenable to the sector(s) or issues they address. Articles must also be comprehensible to a wide audience. Thus, while technical merit of an article is important, it is even more important that authors are able to communicate lucidly with a variety of readers who may not have the technical sophistication to understand the esoteric methodology of a particular field. In addition, while the articles must be grounded in theory, analysis, and referenced work, they must also communicate outside the specific disciplines of the authors without being perceived as popular, journalistic writing.

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Bangladesh's Ready-Made Garments Sector: Exports, Employment, and Working Conditions

Günseli Berik
and
Yana van der Meulen Rodgers

Abstract

This paper examines the recent evidence on Bangladesh's ready-made garment exports and working conditions in the context of trade liberalization since the end of 2004 and the global economic crisis of 2008-2009. Analysis of detailed export data shows that through early 2009, Bangladesh has managed to expand its garment exports and international market shares largely through the country's volume-driven, low-price export niche in the global market. While this export performance, second to only China, appears to have maintained employment levels, the increasing pressure on unit prices is likely to strengthen supplier resistance to improving wages and working conditions. Evaluation of the recent record of working conditions indicates persistent problems that are associated with Bangladesh's export niche and underscores the urgent need to move to a higher productivity export structure that would enable higher wages, improvements in working conditions, and overall gains in well-being. Implementation of a complementary set of domestic policies to diversify the structure of production (such as productivity-enhancing industrial policy, and investment in infrastructure and education) would enhance Bangladesh's export competitiveness and move the economy away from overdependence on exports. These domestic policies must be enabled and strengthened by reforms to the international governance of trade and investment so as to promote exports, employment, and decent working conditions in low-income countries. Chief among these reforms are a revitalized GSP scheme that rewards improvements in working conditions with market access, and rules that prevent investor or buyer mobility in the face of higher labor costs.

Introduction

An extremely competitive world market in textiles and garments has put strong pressures on Bangladesh to improve the price competitiveness of the country's exports, especially since the expiration of the Multi-Fibre Agreement (MFA) trade regime in 1994 and the Agreement on Textiles and Clothing (ATC) at the end of 2004. The MFA, in place from 1974, helped a number of low-cost producing countries, including Bangladesh, to launch export-oriented textile and apparel industries that generated substantial export earnings and employment growth, primarily for women workers. In the post-ATC world of declining unit prices and pressure on profits, textile- and garment-producing economies have strengthened their competition with each other and with China, the dominant producer. Garment production is the main source of wage employment for women in Bangladesh, where over two-thirds of the workforce in the garment sector is female. Hence female workers in Bangladesh are particularly vulnerable to job losses and downward pressure on wages and working conditions as potential consequences of the new international trade regime.

Bangladesh has a history of weak adherence to labor standards in industrial production and some of the

lowest labor costs in the world. Textile and garment workers have experienced numerous violations of worker rights supposedly guaranteed in the national labor codes, ranging from long working hours, forced and excessive overtime, illegal pay deductions, lack of safe and sanitary working conditions, and denial of the freedom to associate and bargain collectively. These conditions, as well as the effects of wage work in garments on women workers, have received intense scholarly attention (Kibria 1995; Kabeer 2000, 2004; Paul-Majumder and Begum 2000; Zohir 2001; and Kabeer and Mahmud 2004). While most of these studies emphasize the positive outcomes for women workers and their families, recent research indicates that extremely low wages and poor working conditions have persisted in Bangladesh well into the early 2000s, despite a shift in policy and scholarly discourse toward corporate self-regulation and the desirability of "sweat-free" working conditions (Berik and Rodgers 2009).

This paper examines recent surveys of working conditions and factory inspection reports to assess the status of employment and working conditions in Bangladesh in response to increased trade competition. Of particular interest, given the global economic downturn in 2008 and 2009, is whether the data point to employment declines and a worsening

in working conditions in Bangladesh. In order to infer changes in employment and labor standards not yet captured in the surveys and reports on working conditions, the study uses international trade data to examine changes in textile and garment exports and international market shares. Bangladesh did not see a decline in exports or experience employment losses in textiles and garments when the ATC expired, largely because temporary import restrictions imposed on China in 2005 by the European Union and the United States limited competition in several major categories of apparel. These trade rules shielded Bangladesh from the full effects of the ATC expiration.

Given that the safeguard measures on Chinese imports expired at the end of 2008 and industrialized country markets have contracted with the global economic crisis, Bangladesh has faced intensified global competition in garments and greater risk of export decline. While downward pressure on unit export prices makes it more difficult to seek improvements in wages and working conditions, an expansion in sales as consumers substitute lower-priced apparel would shield employment from declines and possibly even allow employment expansion. Because garment exports comprise close to 80 percent of Bangladesh's total exports, generating employment, raising wages, and improving working conditions matter not only for garment sector workers, but also for the broader goals of achieving employment-led growth, reducing poverty, and improving overall well-being in Bangladesh. Hence policy reforms cannot be limited to simply improving conditions in the garment sector; we argue instead for a broad-based policy strategy built on labor standards enforcement, export diversification, proactive industrial policy, and domestic-demand growth as the means toward alleviating some of the challenges facing Bangladesh's workforce.

Background

Bangladesh's garment industry took off in the early 1980s after a major structural adjustment program that emphasized export-orientation. Garment exports made up just one percent of Bangladesh's total manufactured exports in 1981 (UNIDO 2005). At the time, textiles accounted for 93 percent of exports, over half of which were destined for developing country markets. Over the next two decades, Bangladesh's dependence on garment exports increased substantially, while at the same time the destination shifted dramatically toward industrial country markets. More than 90 percent of

Bangladesh's apparel exports have flowed into the EU and US markets during the past decade (Haider 2007; Rahman *et al.* 2008).

Garment manufacturers in Bangladesh have relied on a large supply of low-wage female labor, a key component of labor-intensive production for the high-volume, low-margin segment of the world market. Garments became the source of more than 90 percent of manufacturing sector jobs for women by the late 1990s, up from 0.1 percent in 1981 (UNIDO 2005). In 2006, an estimated 2 million workers, about 60 percent women, held formal jobs in the garment sector (Bangladesh Bureau of Statistics 2007a). Low wages and generally poor adherence to the country's own labor regulations and international labor conventions provided the basis for competitive labor costs. As shown in Table 1, Bangladesh had the lowest labor costs from a sample of 38 apparel manufacturers in 2008. With workers earning an average of US\$ 0.22 per hour, Bangladesh ranked considerably lower than the next country (Cambodia, at US\$ 0.33 per hour). Note that these labor cost data include wages, social charges, and bonuses, but they are not adjusted for worker productivity (Emerging Textiles 2008). With rising wages in recent years, China is no longer the lowest cost producer in Asia, with workers in the inland parts of China earning US\$ 0.55 to 0.80 per hour, and workers in coastal regions earning up to US\$ 1.08 per hour. Asian countries as a group still provide a cost advantage compared to other regional apparel producers.

Despite widely-held expectations that most small Asian exporters would record export declines following the expiration of the ATC in December 2004, Bangladesh succeeded in increasing ready-made garment exports to the United States and, to a lesser extent, the European Union. Many attribute the absence of an adverse effect partly to temporary import restrictions that the United States and the European Union placed on garment imports from China following the end of the ATC. A number of scholarly and media articles have pointed to the appeal of Bangladesh as an opportunity for buyers from the United States and the European Union to diversify their sources of garments in the global market (Abernathy, Volpe, and Weil 2006).

Since the mid-1990s, US imports of textiles and garments from Bangladesh have more than tripled, rising from \$1.1 billion in 1996 to \$3.5 billion in 2008 (Figure 1). Even after the ATC expired at the end of 2004, Bangladesh still saw a steady increase in export values to the United States in every year up through the end of 2008. Textiles have made up a

Table 1. International comparison of labor costs in apparel manufacturing, 2008

<i>Country</i>	<i>Labor Cost (US\$/Hour)</i>	<i>Country</i>	<i>Labor Cost (US\$/Hour)</i>
Bangladesh	0.22	Guatemala	1.65
Cambodia	0.33	Tunisia	1.68
Pakistan	0.37	Dominican Republic	1.55-1.95
Vietnam	0.38	South Africa	1.75
Sri Lanka	0.43	Honduras	1.72-1.82
Indonesia	0.44	Peru	1.78
India	0.51	El Salvador	1.79
Haiti	0.49-0.55	Lithuania	1.97
China (Inland)	0.55-0.80	Morocco	1.97
Egypt	0.83	Turkey	2.44
China (Coastal)	0.86-1.08	Mexico	2.54
Nicaragua	0.97-1.03	Poland	2.55
Jordan	1.01	Brazil	2.57
Russia	1.01	Costa Rica	3.35
Philippines	1.07	Slovakia	3.44
Malaysia	1.18	Slovenia	3.55
Thailand	1.29-1.36	Romania	4.03
Colombia	1.42	Latvia	4.23
Bulgaria	1.53	Hungary	4.45

Source: Emerging Textiles (2008).

very small share while ready-made garments, both knitted and woven, have made up the lion's share. Exports to the European Union also rose in the post-ATC environment, albeit with less consistency from year to year. While exports to the EU doubled in value between 1999 and 2004, the post-ATC years saw a slowdown in growth and actual declines in 2005 and again in 2007. Following a recovery in 2008, export values to the EU reached a new high of 5 billion euro (which, at about \$7 billion, is roughly double the export value to the US). In terms of composition, knitwear (rather than woven garments) has comprised the bulk of Bangladeshi exports to the European Union. Because knitwear inputs are predominantly locally-produced while woven garments rely more on imported fabrics, it has been easier for knitwear producers to satisfy the 51 percent domestic and regional value addition requirement for gaining eligibility for preferential duty-free access to the European Union (Bangladesh Bank 2008).

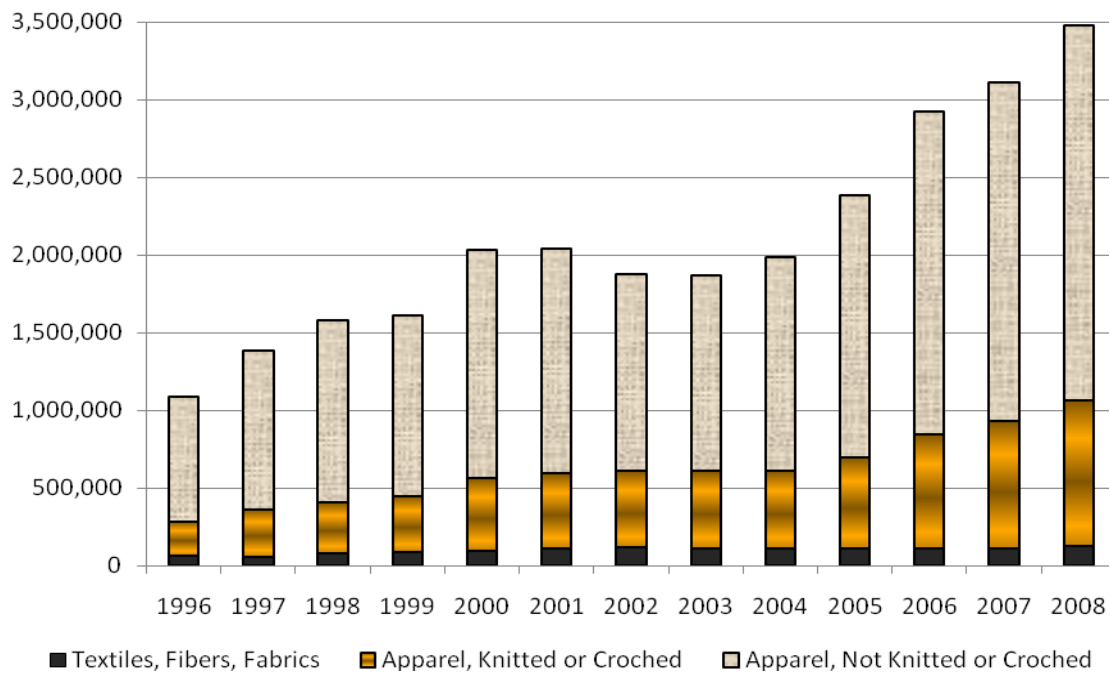
In terms of market share, Bangladesh has seen a small but steady increase in its share of the United States market—from 2.3 percent in 2003 to 3.6 percent by 2008—rather than the expected decrease (Figure 2).

A similar story applies to India, a close competitor that remains a relatively larger source country than Bangladesh in the US market. However, during this same period China has more than doubled its US market share of textile and garment imports, from 15 percent to 33 percent. Bangladesh has established a relatively stronger foothold in the EU market than in the US market, with a 6.0 percent share in 2008. Although Bangladesh has gradually become a bigger player in the EU since the late 1990s and has started to catch up to India, China has recorded an enormous increase in its EU market share, from 15 percent in 1999 to 37 percent in 2008. Most of this increase occurred in the direct aftermath of the expiration of the ATC, with some levelling off in 2006 due to the temporary import restrictions imposed by the EU.

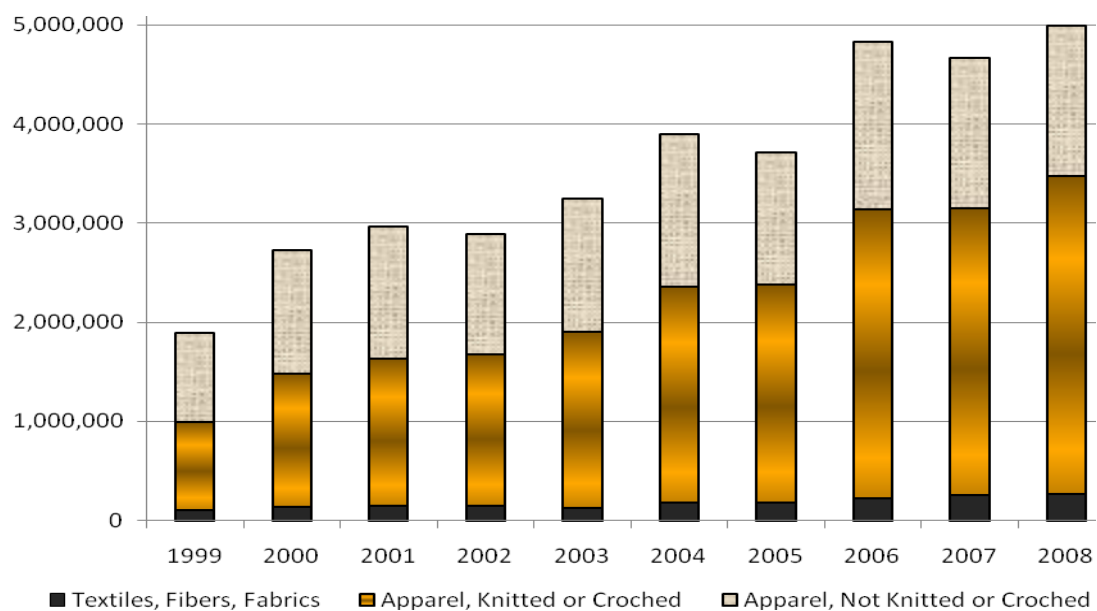
Export competitiveness considerations create a major obstacle in improving wages and working conditions in Bangladesh's garment sector. A recent analysis of surveys of working conditions in the garment sector from the early 1980s to 2008 indicates the persistence of the same set of problems (Berik and Rodgers 2009). These problems have stemmed more from poor enforcement of labor laws than the

Figure 1. United States and European Union textile and garments imports from Bangladesh

Panel A. United States Imports (in 1000s US\$)



Panel B. European Union Imports (in 1000s of Euro)

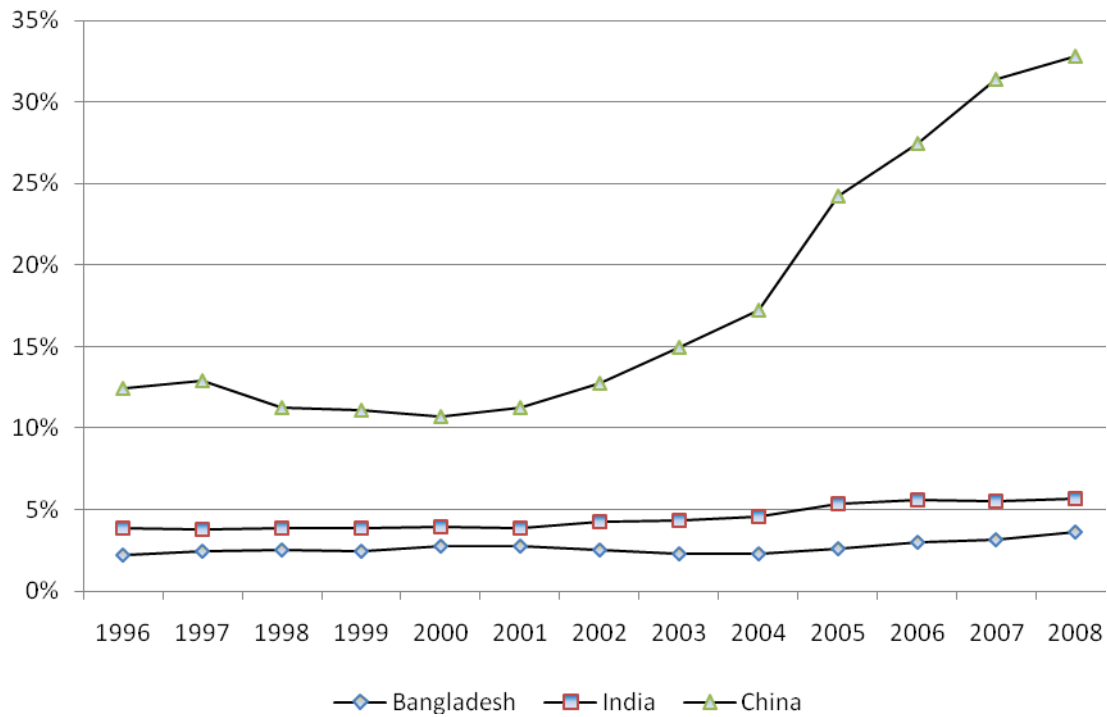


Note: EU is the EU-25 as specified in the source data. Trade categories include HTC codes 50 (silk yarns and fabrics) through 63 (other made-up textile articles).

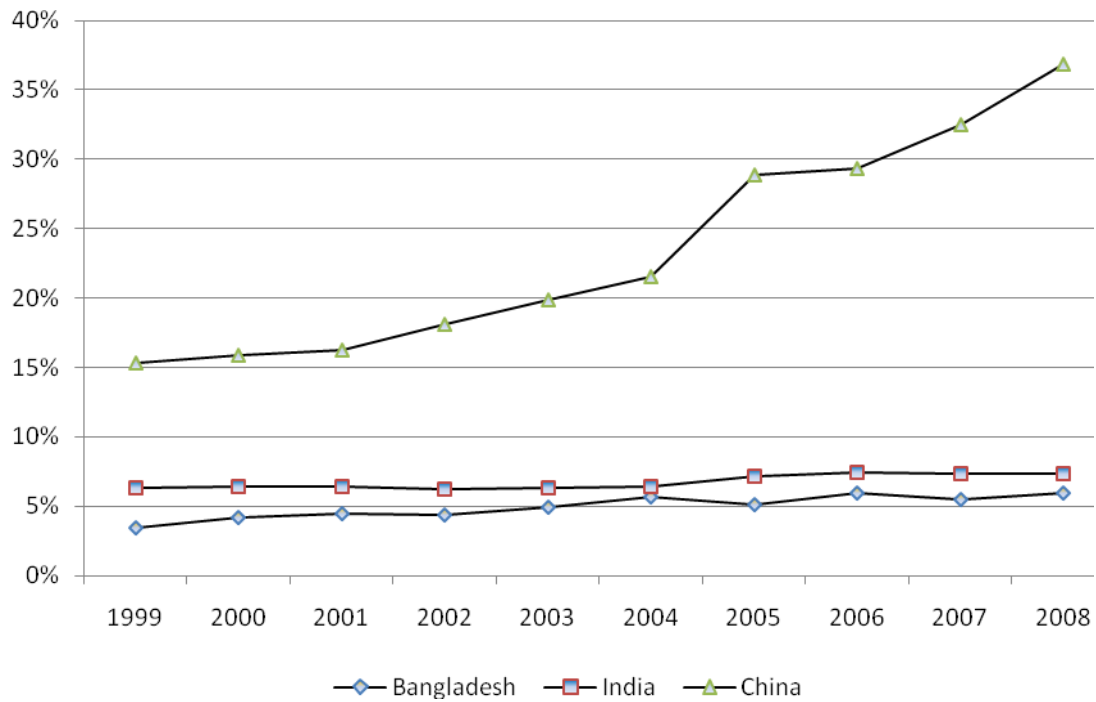
Source: Authors' calculations using USITC (2009) and the European Commission (2009).

Figure 2. United States and European Union market shares, textile and garments imports

Panel A: United States Market Shares



Panel B: European Union Market Shares



Source: Authors' calculations using USITC (2009) and the European Commission (2009).

shortcomings in the legal framework. Bangladesh is signatory to the major conventions of the International Labor Organization (ILO), including seven of the eight core conventions that strive to create decent workplace conditions, and these conventions are largely reflected in the labor laws of the country (the exception is the child labor convention). Yet government enforcement of labor laws is weak in absolute terms and is also weak relative to competitors. For example, in 2005, government inspectors made an average of 8 visits per garment factory, well below 16 in Cambodia and 14 in China (Rahman *et al.* 2008). ILO involvement in the 1990s did help to nearly eliminate the child labor problem in the garment sector through the ILO's collaborative efforts with the Bangladesh Garment Manufacturers and Exporters Association and with UNICEF. However, ILO pressures to bring union rights up to par with its conventions on freedom of association and collective bargaining, and pressures to enforce the rights of workers to address grievances about workplace conditions, are ongoing but ineffective (Elliott and Freeman 2003; ITUC 2009).

Notwithstanding these efforts, labor standards enforcement in Bangladesh takes place largely through the market mechanism. This mechanism is increasingly shaped by the corporate codes of conduct of major buyers and multi-stakeholder initiatives, including the Fair Labor Association (FLA), that seek to improve working conditions. Yet leaving enforcement to the voluntary initiatives of companies creates a piecemeal system that allows a large number of factories and subcontractors to remain outside the scope of monitoring efforts. Even the reach of the Fair Labor Association is limited. For example, the FLA conducted just 147 independent factory audits in 2006 while 39 FLA-affiliated companies sourced production from more than 5,000 factories globally (FLA 2007). Given this ad hoc approach to monitoring and enforcement, the poor status of Bangladesh's working conditions since the 1990s may be attributed to the workings of the market mechanism in a context of no effective rights to organize unions and bargain collectively.

Primary among these working-condition outcomes are the low wages that prevail in the country's main export sector. The garment sector does offer better earnings for women compared to their few alternatives within and outside the manufacturing sector (Kabeer 2004; Kabeer and Mahmud 2004). Yet real earnings in the sector have eroded considerably between 1994 and 2006, the years when the government raised the minimum monthly base

pay structure. Even with the 2006 adjustment to the minimum wage, in US dollar terms the lowest grade workers still experienced a decline in minimum earnings compared to the 1994 level (Khatun 2008). Moreover, this minimum does not even meet the international poverty threshold of a dollar a day.

A recent analysis of FLA independent factory audits gives an indication of compliance with labor laws in garment suppliers that source production for FLA-affiliated companies (Berik and Rodgers 2009). In 2005, the major source of non-compliance with the FLA's "Workplace Codes of Conduct" was in the combined category of hours of work, wages, benefits, and overtime compensation, which constituted 35 percent of the non-compliance incidents that were observed in the audited Bangladeshi factories. Noncompliance with the wage and hour codes also accounted for most of the code problems in other countries and in Bangladesh in earlier years. Bangladesh's violations for excessive hours of work were considerably worse than China and other regions. This record is consistent with Bangladesh's particular niche in the world market for garments, where its export performance depends on increasing the export volume rather than the unit price.

Global Financial Crisis and Garment Exports

Because Bangladesh is highly integrated with the global economy, the country is highly susceptible to business cycles and economic crises in the developed economies that constitute its major markets. In the United States, the demand for garments declined in 2008 and 2009 as the economic recession deepened and consumption demand declined. As shown in Table 2, the volume of US imports showed double-digit drops in most categories of cotton, wool, and man-made fiber garments in the first half of 2009 relative to 2008. High volume categories, including cotton underwear, women's and girls' cotton slacks and blouses, men's and boys' cotton shirts and trousers, and cotton nightwear all fell steeply during the first half of 2009, despite the lifting of quotas on Chinese imports on December 31, 2008. These sharp declines came on top of import reductions in most garment categories in 2008 relative to 2007. US imports of wool and man-made fiber apparel saw some of the highest percentage losses, although in absolute volume terms the drops were relatively smaller than for cotton apparel.

The US market slump has had an uneven impact across countries. As shown in Table 3, the volume of US imports from China surged in a number of high-volume categories, particularly those in which

safeguard measures were eliminated after December 31, 2008, while other leading source countries saw drastic declines. For example, China's exports to the US in two of its highest volume cotton categories—knit shirts and trousers—almost doubled in the first half of 2009. Bangladesh is the only other leading source country that experienced rising exports to the US in both these categories. A similar story holds for men's and boys' woven shirts: US imports in this category rose for China and Bangladesh during the first half of 2009 and dropped for the other leading source countries. The decline in US sales of garments was accompanied by downward pressure on retail prices, increasing the attractiveness of Bangladesh as a low-priced supplier. Prices for Bangladeshi garments actually fell in the US market in the first quarter of 2009 for numerous important categories of cotton apparel, including shirts and trousers (Emerging Textiles 2009a). However, Bangladesh did not fare well across categories, as it experienced declining export volumes to the US in underwear, women's and girls' woven shirts, and man-made fiber trousers (Table 3). In value terms, total US apparel imports dropped 11 percent in January - April 2009 relative to January - April 2008, while US apparel imports from Bangladesh actually rose by 13 percent in value during this period. Other large garment producers, including Indonesia, India, Mexico, and Honduras, all experienced declining sales values in the US market in early 2009 (Emerging Textiles 2009a).

A similar story about Bangladesh's price competitiveness holds in the EU market. In the first quarter of 2009, total EU apparel imports rose about 1 percent in volume while dropping more than 9 percent in US\$ value terms, reflecting the strong downward pressure on world prices in dollar terms. In contrast, EU apparel imports from Bangladesh grew 4 percent in volume terms and 7 percent in US\$ value terms, with the unit values for most of Bangladesh's product categories not moving very much (Emerging Textiles 2009a). Similarly, while the European economic downturn and a weaker euro caused the EU's total apparel imports to start declining in volume and value during the second quarter of 2009, EU imports from Bangladesh remained strong and resisted strong competition from China (Emerging Textiles 2009e, 2009f). A closer look at these overall trends reveals interesting differentials across import categories and countries. Table 4, which reports total apparel imports for the EU by value (in €), volume, and unit value (in € and US\$) for the first quarter of 2009, shows that unlike the United States, import values and volumes still rose in several of the EU's highest value categories.

For example, knit pullovers rose by 13 percent in value and 14 percent in volume, and women's and girls' woven suits increased by 3 percent in value and 29 percent in volume. Yet other categories recorded declines, particularly in volume terms. While import values in many categories rose in euro terms, import values in dollar terms dropped. The weaker value of the euro against the dollar was responsible for a jump in apparel prices in euro terms in most categories, while apparel prices in dollar terms dropped in numerous categories. Note that high value import categories generally do not have the highest unit values and are generating revenues from high volume trades. For example, knit t-shirts and woven suits for women and men, three of the highest value categories, each have below-average unit values, while brassieres and women's blouses have some of the highest prices and relatively low volumes.

As demonstrated in Table 5, which shows the EU's apparel imports from eight leading source countries, imports from China of items like knit pullovers and women's and girls' blouses surged with the lifting of temporary import restrictions in the EU. Despite these gains for China, Bangladesh continued to grow in terms of export values and volumes in major garment categories, and Bangladesh was one of the only countries that managed to offer lower prices than China. While Chinese garment prices on average were about 6 percent below the market average, prices of Bangladeshi garments stood at 35 percent below the market average (Emerging Textiles 2009d). Table 5 also shows that Bangladesh was one of the only leading source countries in the EU market whose garment prices either held even or rose slightly in dollar terms for most products. Although unit values rose for Vietnam and Indonesia, both these other countries experienced declining sales volumes and market shares in the EU market.

Monthly export data from the Bangladesh Bank indicates that Bangladesh's total exports have increased in value by 15 percent between July 2008-March 2009 and the same period in the previous year (Bangladesh Bank 2009). This increase owes almost entirely to the growth of woven and knitted garments, both of which expanded in volume and value over this period. Woven and knitted garments' combined share of exports has risen from 76 percent in July 2007-February 2008, to 79 percent of exports in July 2008-February 2009. In addition to the lower prices Bangladesh offers retailers, the increased attractiveness of Bangladesh as a source of garments likely owes to the rise in the value of the Chinese yuan against the US dollar (by 5 percent over 2008), while the value of the Bangladeshi currency has held steady (Rahman *et al.* 2009; Bangladesh Bank 2009).

Table 2. United States total apparel imports by volume, 2007-2009

	2008 Volume	2008-07 Change	Jan-Jun 09 Volume	Jan-Jun 09-08 Change	2008 Volume	2008-07 Change	Jan-Jun 09 Volume	Jan-Jun 09-08 Change
Cotton:								
352 Cotton Underwear*	2123.6	6%	841.7	-15%				
348 Slacks, WG*	1595.7	-2%	804.9	-8%				
339 Knit Blouse, WG*	1400.0	-1%	645.0	-12%				
338 Knit Shirts, MB*	1123.8	-2%	477.7	-14%				
347 Cot.Trousers, MB*	1089.4	-1%	526.4	-8%				
351 Cot. Nightwear	922.2	-7%	325.9	-17%				
332 Cotton Hosiery	659.3	1%	330.0	2%				
335 Cot. Coats, WG	621.3	0%	179.3	-19%				
340 N-Knt Shirts, MB*	600.0	-11%	247.1	-8%				
336 Cotton Dresses	580.6	16%	411.6	4%				
334 Other Coats, MB	367.3	2%	83.4	-10%				
350 Dresses, Gowns	363.9	-10%	158.9	-12%				
359 Other Cot. App.	356.6	-9%	159.5	3%				
341 N-Knt Blouse, WG	300.2	-10%	170.6	-8%				
345 Cotton Sweater	288.1	-9%	45.6	-1%				
342 Cotton Skirts	153.4	-23%	105.8	-4%				
349 Bras & Other*	35.9	-1%	15.8	-19%				
Wool:								
435 Wool Coats, WG	82.3	5%	12.3	-8%				
446 Wool Sweater, WG	30.7	-14%	2.4	-9%				
438 K Shirts, Blouses	23.6	-1%	3.2	-12%				
433 Suit-Typ Ct, MB	20.7	-11%	7.1	-27%				
443 Wool Suits, MB*	20.1	-19%	8.4	-22%				
447 Trousers, MB*	17.5	-14%	6.6	-27%				
436 Wool Dresses	14.5	13%	3.0	2%				
Wool Continued:								
448 Wool Slacks, WG								
445 Wool Sweater, MB								
442 Wool Skirts								
444 Wool Suits, WG								
Man-Made Fiber:								
659 Other App.								
638 Knit Shirts, MB*								
636 Dresses								
651 Nightwear								
652 Underwear*								
639 Knit Blouses, WG*								
635 Coats, WG								
647 Trousers MB*								
648 Slacks WG*								
632 Hosiery								
634 Other Coats, MB								
650 Dress Gown, Robe								
641 N-K Blouses, WG								
649 Bras/Ot Bod Sup								
640 N-K Shirts, MB*								
646 Sweaters, WG								
642 Skirts								
644 Suits, WG								
643 Suits, MB								
645 Sweaters, MB								

Note: In millions of meters². The notation * indicates quotas on imports from China until December 31, 2008.

Source: Emerging Textiles (2009b).

Table 3. United States apparel imports by volume from eight leading source countries, first half, 2008-2009

	<i>Jan-Jun 09 Dozens</i>	<i>Jan-Jun 09 Change</i>	<i>Jan-Jun 08 Share</i>	<i>Jan-Jun 09 Share</i>	<i>Jan-Jun 09 Dozens</i>	<i>Jan-Jun 09 Change</i>	<i>Jan-Jun 08 Share</i>	<i>Jan-Jun 09 Share</i>
338/339 US Cotton Knit Shirts*								
World	187,103,134	-13%	100%	100%	89,345,737	-8%	100%	100%
China	23,381,664	90%	6%	13%	21,579,545	96%	11%	24%
Vietnam	18,014,083	-4%	9%	10%	15,166,986	9%	14%	17%
Honduras	17,161,578	-32%	12%	9%	7,864,548	-8%	9%	9%
Indonesia	15,032,055	7%	7%	8%	7,534,928	-16%	9%	8%
Mexico	10,994,902	-23%	7%	6%	5,183,687	-14%	6%	6%
India	10,521,782	-5%	5%	6%	4,265,524	-35%	7%	5%
Cambodia	9,368,499	-20%	5%	5%	3,663,455	-26%	5%	4%
Bangladesh	8,722,875	9%	4%	5%	1,819,364	-31%	3%	2%
340/640 US Men's and Boys' Woven Shirts*								
World	15,411,216	-12%	100%	100%	109,966,789	-14%	100%	100%
China	3,839,091	11%	20%	25%	15,563,377	-26%	17%	14%
Bangladesh	3,543,027	2%	20%	23%	15,322,714	65%	7%	14%
Indonesia	1,420,174	-13%	9%	9%	9,150,181	24%	6%	8%
Vietnam	1,240,033	-9%	8%	8%	9,120,398	-8%	8%	8%
India	1,011,402	-27%	8%	7%	6,270,735	242%	1%	6%
Honduras	577,847	-28%	5%	4%	2,505,307	-28%	3%	2%
Mexico	465,425	-12%	3%	3%				
341/641 US Women's and Girls' Woven Shirts								
World	21,083,316	-8%	100%	100%	24,733,269	-10%	100%	100%
China	10,340,950	-5%	47%	49%	4,977,040	36%	13%	20%
India	3,168,649	-8%	15%	15%	2,703,428	3%	10%	11%
Indonesia	2,469,890	-23%	14%	12%	2,207,680	-29%	11%	9%
Bangladesh	1,316,091	-11%	6%	6%	2,035,275	-12%	8%	8%
Vietnam	1,049,384	21%	4%	5%	1,622,825	-30%	8%	7%
Cambodia	378,348	26%	1%	2%	1,047,135	-24%	5%	4%
Mexico	325,553	-25%	2%	2%	746,773	-40%	5%	3%
Honduras	143,758	-29%	1%	1%				
647/648 US Man-Made Fiber Trousers*								
World	21,083,316	-8%	100%	100%	24,733,269	-10%	100%	100%
China	10,340,950	-5%	47%	49%	4,977,040	36%	13%	20%
India	3,168,649	-8%	15%	15%	2,703,428	3%	10%	11%
Indonesia	2,469,890	-23%	14%	12%	2,207,680	-29%	11%	9%
Bangladesh	1,316,091	-11%	6%	6%	2,035,275	-12%	8%	8%
Vietnam	1,049,384	21%	4%	5%	1,622,825	-30%	8%	7%
Cambodia	378,348	26%	1%	2%	1,047,135	-24%	5%	4%
Mexico	325,553	-25%	2%	2%	746,773	-40%	5%	3%
Honduras	143,758	-29%	1%	1%				

The notation * indicates quotas on imports from China until December 31, 2008. Source: Emerging Textiles (2009c).

Table 4. European Union total apparel imports by value, volume, and unit value, first quarter 2009

	€Value	€Value Change	Volume	Volume change	€/kilo UV	€ UV change	US\$ UV change
Knitted Apparel							
6109 T-shirts	2,036,925,867	-4%	1,670,329	-3%	12.19	0%	-13%
6110 Pullovers	1,566,364,785	13%	974,240	14%	16.08	-1%	-13%
6104 Suits/Trousers, WG	614,676,651	13%	473,749	-5%	12.97	19%	4%
6108 Pajamas/Slips, WG	431,471,943	-3%	316,379	-25%	13.64	30%	14%
6105 Shirts, MB	420,220,891	6%	306,927	-5%	13.69	12%	-3%
6106 Blouses, WG	349,819,051	6%	204,568	0%	17.10	6%	-7%
6115 Pantyhose/tights	348,082,325	-1%	726,694	33%	4.79	-25%	-35%
6111 Babies Garments	323,284,794	6%	209,860	-12%	15.40	21%	6%
6112 Tracksuits/Skisuits	281,866,016	3%	146,523	-14%	19.24	20%	5%
6107 Underpants, MB	218,853,113	3%	212,490	-11%	10.30	16%	2%
6103 Suits/Trousers, MB	123,006,071	-10%	125,907	-29%	9.77	27%	11%
6114 Special Garments	112,725,837	-10%	62,571	-23%	18.02	18%	3%
6102 Overcoats, WG	94,980,390	31%	74,726	26%	12.71	4%	-9%
6116 Gloves/Mittens	91,383,628	-9%	122,768	-15%	7.44	8%	-6%
6101 Overcoats, MB	46,195,249	28%	37,624	25%	12.28	3%	-10%
6117 Made-up Accessories	35,853,315	13%	29,095	8%	12.32	5%	-8%
Woven Apparel							
6204 Suits/Trousers, WG	2,781,758,622	3%	2,065,112	29%	13.47	-20%	-30%
6203 Suits/Trousers, MB	1,967,428,636	2%	1,321,694	-6%	14.89	8%	-6%
6206 Blouses, WG	706,030,474	8%	271,522	8%	26.00	1%	-12%
6205 Shirts, MB	657,903,305	-4%	389,480	-15%	16.89	12%	-2%
6202 Overcoats, WG	521,301,076	12%	300,690	-11%	17.34	25%	10%
6212 Brassieres	389,832,369	-2%	116,725	-6%	33.40	4%	-9%
6201 Overcoats, MB	382,198,341	10%	226,634	-13%	16.86	26%	10%
6211 Tracksuits/Skisuits	361,937,494	1%	258,578	-13%	14.00	16%	1%
6210 Non-woven, Felt	294,699,057	13%	222,411	-7%	13.25	22%	6%
6209 Babies Garments	171,418,188	10%	90,958	-10%	18.85	22%	7%
6214 Shawls, Scarves	112,730,901	48%	67,606	27%	16.67	17%	2%
6208 Underwear/Pajamas, WG	82,785,164	-6%	74,392	-29%	11.13	33%	16%
6207 Underwear/Pajamas, MB	45,934,133	-13%	54,935	-27%	8.36	20%	5%

Note: Volume in 100's of kilos. Source: Emerging Textiles (2009d).

However, currency depreciations vis-à-vis the US dollar in a number of competitors (India and Pakistan, and to a lesser extent, Viet Nam, Cambodia, and Sri Lanka) have simultaneously undermined the export competitiveness of Bangladesh relative to these countries (Rahman *et al.* 2009).

Hence the 2008-09 financial crisis has led to large reductions in consumer demand for apparel in the US and EU markets, which have in turn translated into volume declines in their overall apparel imports. Two source countries stand out from the others for having weathered the storm thus far in terms of maintaining or even increasing their sales volumes and market shares during the first half of 2009: China and Bangladesh. While the lifting of US and EU import restrictions at the end of 2008 explains the surge in Chinese exports in numerous categories, Bangladesh's extremely low prices have served to maintain its competitiveness even in the difficult market environment. Although Bangladesh has seen increases in garment exports, monthly growth rates have slowed down, from 16 percent growth in January 2009 relative to January 2008, to 9 percent in April 2009 from the same month in 2008 (Emerging Textiles 2009a). The tremendous downward pressure on apparel prices and labor costs, plus the deceleration in export growth, both have negative implications for employment and working conditions in Bangladesh's garment industry.

Looking to the future, the effect of the economic crisis on garment exports in Bangladesh also depends on the stimulus packages, and more generally, industrial policies being pursued in competitor economies. Of particular concern is China's recent reversal of measures that encouraged its own producers of lower-end products to move up the ladder (Rahman *et al.* 2009). These measures had benefited the lower-end suppliers in Bangladesh by thinning the global competition in lower-end markets, and China's new policy will intensify the competition once again. Another threat to Bangladeshi apparel producers comes from India's industrial policy to support its own cotton yarn manufacturing. This policy has recently made imported Indian yarn more competitive in Bangladesh compared to the domestically-manufactured yarn, resulting not only in Bangladeshi yarn factory closures, but also in an increased lead time in Bangladesh's knitwear sector. In addition, China and India have implemented stimulus packages to support their own exporters of labor-intensive industries (including apparel and textiles) through various exporter subsidies such as export tax rebates, which would put Bangladeshi

suppliers at a relative disadvantage.

Financial Crisis, Employment, and Working Conditions

The effect of the crisis on employment, wages and working conditions in the garment sector is not yet discernible in statistics. As argued by Rahman *et al.* (2009) and supported by our analysis of detailed export data, the volume-driven nature of garment exports has likely kept employment high and shielded the industry from job losses, at least until early 2009. However, lower consumer prices in 2009 will likely translate into downward pressure on supplier prices, on wages and working conditions in the sector, and on the volume of orders. In response to buyer pressure to reduce production costs in cutting and making, apparel manufacturers reportedly have doubled their efforts to increase productivity and reduce wastage of fabric/apparel without reducing wages (Rahman *et al.* 2009). If garment export growth decelerates or declines, in their quest to maintain low unit prices, factories might be tempted to outsource more of the production to subcontractors, away from the sight of factory inspection programs.

Furthermore, if Bangladesh experiences further deceleration in the growth of garment export volumes, then employment decline and lower employee turnover may ensue. Lower employee turnover weakens the incentive for employers to improve wages and working conditions in order to keep experienced sewing operators. In any case, suppliers will resist any improvements that raise costs for buyers, such as raising the minimum or factory wage. Yet higher productivity and quality control also continue to be concerns of suppliers in order to maintain orders in an increasingly competitive environment. The overall effect of the crisis on basic supplier compliance with buyer corporate-social-responsibility programs or FLA-type initiatives depends on the extent to which corporate buyers maintain their commitment to these programs. Since the crisis in importing countries is likely to weaken consumer and union support for improvements in workers' rights and working conditions in developing countries, and, hence, attention to corporate-social-responsibility programs, pressure on suppliers is likely to diminish as well (Maquila Solidarity Network 2009).

The state of trade union rights in Bangladesh was unchanged in 2007 and 2008 relative to the early 2000s. Time series data based on US State Department Reports indicate that over the 1981-2007 period, worker rights in Bangladesh changed from

Table 5. European Union apparel imports by volume and unit value from eight leading source countries, first quarter, 2008-2009

	EU Total	China	Bangladesh	Turkey	India	Vietnam	Morocco	Indonesia	Tunisia
Volume									
6105 Shirts, MB	306,927	71,040	103,085	20,561	35,555	10,939	2,545	7,191	2,249
6106 Blouses, WG	204,568	49,191	37,009	47,749	21,170	5,698	6,160	1,773	2,216
6109 T-shirts	1,670,329	404,291	572,655	232,061	150,232	19,394	44,495	15,384	18,390
6110 Pullovers	974,240	490,108	165,100	74,571	28,330	16,918	20,328	14,584	15,616
6203 Suits/Trousers, MB	1,321,694	595,776	207,301	86,941	41,135	36,175	40,243	22,351	57,104
6205 Shirts, MB	389,480	149,931	83,411	19,003	56,489	15,378	5,744	13,055	6,341
Volume Change									
6105 Shirts, MB	-5%	-1%	6%	-17%	-3%	-36%	-9%	-15%	-30%
6106 Blouses, WG	0%	74%	14%	-5%	1%	-54%	-8%	-34%	-43%
6109 T-shirts	-3%	25%	4%	-16%	-9%	-66%	-1%	-13%	-17%
6110 Pullovers	14%	111%	2%	-19%	-9%	-38%	10%	-46%	-10%
6203 Suits/Trousers, MB	-6%	5%	-1%	-16%	-10%	-41%	-24%	4%	-27%
6205 Shirts, MB	-15%	-27%	4%	-29%	17%	3%	-33%	-18%	-17%
Volume Share									
6105 Shirts, MB	100%	23%	34%	7%	12%	4%	1%	2%	1%
6106 Blouses, WG	100%	24%	18%	23%	10%	3%	3%	1%	1%
6109 T-shirts	100%	24%	34%	14%	9%	1%	3%	1%	1%
6110 Pullovers	100%	50%	17%	8%	3%	2%	2%	2%	2%
6203 Suits/Trousers, MB	100%	45%	16%	7%	3%	3%	3%	2%	4%
6205 Shirts, MB	100%	39%	21%	5%	15%	4%	1%	3%	2%
US\$ - U.V. Change									
6105 Shirts, MB	-3%	3%	4%	-8%	-12%	9%	7%	8%	1%
6106 Blouses, WG	-7%	-18%	1%	-10%	-10%	79%	-11%	6%	9%
6109 T-shirts	-13%	-26%	0%	-16%	-9%	98%	-28%	12%	-13%
6110 Pullovers	-13%	-24%	3%	-11%	-6%	13%	-19%	3%	-9%
6203 Suits/Trousers, MB	-6%	-5%	9%	-7%	-5%	47%	-11%	7%	-8%
6205 Shirts, MB	-2%	16%	6%	6%	-28%	5%	-13%	0%	-17%

Note: Volume in 100's of kilos. Source: Emerging Textiles (2009d).

being “fully protected” during part of the 1980s to “somewhat restricted” during the 1990s to “severely restricted” after 2001 (CIRI 2009). According to the Decent Work Indicators Pilot Survey of 2005, 8.9 percent of workers in Bangladesh are members of trade unions or workers’ welfare associations, with a higher rate in urban areas at 13.7 percent and a higher rate among urban men (15.4 percent) than urban women (9.1 percent) (Bangladesh Bureau of Statistics 2009).

In legal terms, the Bangladesh Labor Act of 2006 has consolidated various labor laws into one comprehensive act. By the same token, it has carried over provisions restrictive of union rights into this new act, although it has also expanded the category of workers that are permitted to form unions (ITUC 2009). The Export Processing Zone (EPZ) Workers Association and Industrial Relations Act of 2004, through which union rights in EPZs were to be phased in over a four-year period, is a restrictive law that does not comply with the ILO’s conventions on freedom of association and collective bargaining rights. Moreover, since the passage of the Act, EPZ employers have vigorously sought to prevent the formation of worker organizations, and the implementation of each phase has lagged behind schedule. The resistance to implementing union rights is likely due to public warnings reportedly made by Asian investors against the formation of trade unions (ITUC 2009). At the end of 2008, the EPZ labor tribunals that were supposed to provide workers access to a judicial system for grievances had yet to be established. While the ban on strikes and lockouts was to expire by October 31, 2008, the Bangladesh Export Promotion Authority extended the ban for another two years. Despite the phase-in of union rights, as of September 2009 the Bangladesh Export Promotion Authority continued to advertise the “production oriented labor laws” that forbid the “formation of any labor union in EPZs” as a way to attract FDI. This promotional language signals the Bangladesh Export Promotion Authority’s nearly unlimited authority to administer labor matters in EPZs (Export Promotion Bureau 2009).

The two-year state of emergency in Bangladesh ended in December 2008. During this period the lack of a legal framework to resolve labor-related grievances resulted in ongoing labor unrest in the garments sector, which was met by employer and police intimidation (New Age 2009; ITUC 2009). Workers had no other recourse but to engage in spontaneous protests to address a whole range of workplace grievances. They participated in spontaneous strikes and they blocked roads to protest

long working hours, non-payment of wages and overtime, and maltreatment by management. In response, employers dismissed workers trying to organize unions and, emboldened by the emergency powers ordinance, security forces also arrested and detained workers and union officials with impunity. There is also reported government harassment of organizations or unions that support EPZ workers or insist on the implementation of labor laws (ITUC 2009). Any slowdown in garment exports is expected to allow no room for change in this situation. If anything, employer resistance to the expansion of union rights and union activity is likely to increase at a time when union activity is essential.

In late 2008, the Fair Labor Association initiated independent external monitoring in three factories in Bangladesh to evaluate compliance with ten workplace codes of conduct that the FLA sought to uphold in factories that supplied FLA-affiliated companies (FLA 2008). These audit reports provide a glimpse of the kinds of workplace problems that prevail in large factories that source major brand-name companies committed to making improvements in working conditions. The audited factories were large establishments that employed between 963 and 1958 workers and sourced six brand companies. The monitoring results reveal that 17 of the 27 violations of the FLA codes were related to health and safety. These problems entailed relatively low-cost adjustments and they were rectified by a follow-up visit to two of the factories by the company’s local representative. As of early July 2009, the third factory had yet to receive a follow-up visit.

Other recorded violations occurred in the categories of FLA-code awareness; freedom of association; harassment and abuse; and hours of work, wages, benefits and overtime. Code awareness violations involved the lack of an independent mechanism for workers to contact the buyer, as well as workers not being given a copy of their employment contract. Inactive worker welfare committees and the lack of a secure suggestion box served as evidence for non-compliance of the freedom of association code. These types of infringements appear relatively minor against Bangladesh’s background of widespread worker intimidation and harassment by both factory owners and government forces (ITUC 2009; New Age 2009).

Violations with respect to worker harassment, worker abuse, and hours of work suggest that these violations are probably endemic to Bangladesh’s market niche and are more difficult to fix. Management efforts that force workers to work longer hours and to work more

intensively stem from the desire to achieve lower unit labor costs. For example, one FLA external monitoring audit in 2008 reported supervisors chastising and verbally abusing workers for failure to meet production targets or for mistakes. Moreover, two of the factories had problems with hours of work. In one factory, workers were working on weekly rest days and not receiving a subsequent compensatory day off. In the other factory they were working continuously up to 20 days. Excessive hours of work—on the order of 60 to 86 hours per week—were also documented on several occasions in 2008. The FLA audit reports indicated the need to reduce excessive working hours and cut continuous schedules as a plan of action. However, there was no outline of how the supplier should implement this plan. Indeed, the factory in question was not compliant on the follow-up visit by the company representative because the visit coincided with an upcoming shipment date when hours of work were longer. Also, it is difficult to remedy the working-hours problems without raising the regular hourly wage. Survey results indicate that after the ATC phase-out in the garments sector, effective working hours (overtime and normal hours) have increased (Rahman *et al.* 2008). That said, as recorded in the FLA audit report and two Centre for Development Dialogue surveys (Rahman *et al.* 2008, Khatun 2008), the workers were happy with overtime hours since they could earn a higher overtime rate or even earn additional income at the same regular hourly rate.

Excessive hours were prevalent outside of the ready-made garment sector as well, most likely indicating the widespread nature of low regular-wage rates. According to the 2007 Wage Survey, workers in formal establishments tended to work long hours, with 57 percent working 50 or more hours per week (Bangladesh Bureau of Statistics 2007b).¹ Average monthly income of wage earners was lower among the group that worked 60 or more hours (compared to workers who worked 40 or more and 50 or more hours per week), suggesting that workers who work longer hours are doing so to compensate for relatively low wage rates (Bangladesh Bureau of Statistics 2007b). Worker eagerness to generate sufficient earnings, the absence of better job alternatives, and the widespread nature of excessive hours in formal establishments all make it difficult to tackle hours of work. Effective freedom of association and collective bargaining rights would break this pattern of low wages and long hours.

If Bangladesh starts to experience falling orders due to the 2009 economic crisis, then there will be fewer problems with excessive hours of work and

continuous work schedules. However, a decline in the volume of production is unlikely to help rectify the problem of low earnings rates. Hence workers are likely to experience declining monthly earnings due to fewer hours of work as well as downward pressure on wage rates.

While the 2008 FLA audit results do not indicate the use of child labor, forced labor, or discrimination against women, it is difficult to conclude that factories avoided these practices. The problem of lack of a contract or an appointment letter, which is considered a mild form of forced labor and is recorded in previous reports, is not noted in the more recent reports. This problem of hiring workers informally is improving, although it is still widespread in Bangladesh. In the garment sector only 20 to 30 percent of all employers and half the large employers provided workers with a contract in 2006 (Rahman *et al.* 2008). According to the Decent Work Indicators Pilot Survey of 2005, only 28 percent of employees had a written contract or appointment card (Bangladesh Bureau of Statistics 2009).

Other evidence indicates that wage discrimination against women is prevalent in garment factories, over and above the earnings differentials associated with occupational segregation by sex. The Wage Survey of 2007, for example, reveals that the job categories that women predominate—sewing operator and helper—generate lower monthly earnings than a job mostly staffed by men—knitting operator (Bangladesh Bureau of Statistics 2007b). Specifically, in 2007, sewing operators and helpers earned 3,505 Tk. and 2,609 Tk., while knitting operators earned 4,760 Tk. These earnings differentials between women and men capture differences in skill and in overtime work. But as the analysis of the two CPD surveys indicates, even when skill and other productivity-related differences are taken into consideration, there is still a gender earnings ratio on the order of 72 to 80 percent. This ratio has declined from 95 percent in the early 1990s (Rahman *et al.* 2008; Khatun 2008). Furthermore, a 2006 focus group with garment workers also indicated gender differentials in base monthly earnings between women and men sewing operators (Berik and Rodgers 2009).² The crisis context is likely to make it difficult to address the earnings differential between men and women, when the problem does not even register in compliance monitoring programs.

On the whole, analysis of FLA's monitoring results indicate that those problems that can be addressed relatively easily are fixed by suppliers (for example, most of the health and safety related shortfalls), but

problems that arise from the export market niche of Bangladesh (that is, wages and hours-related violations to keep unit labor costs low) are difficult to address. To be effective in achieving improvements in these persistent problems, monitoring programs and voluntary codes of conduct have to constitute pressure points for promoting freedom of association, collective bargaining rights, and the principle of non-discrimination.

Policy Reforms

Bangladesh so far has been shielded from the adverse effects of global downturn by its export market niche in garments. Since the early 1980s and in the recent global downturn, Bangladeshi export performance in garments has remained dependent on increasing export volume and keeping unit prices low. This niche is also associated with the persistence of working condition problems and constitutes the source of manufacturer and government resistance in Bangladesh to full implementation of laws that would improve wages and working conditions in the garment sector. Continued presence in this niche amounts to a highly risky strategy, since heavy reliance on volume-driven exports has rendered Bangladesh vulnerable to slumps in destination markets and relentless downward pressure on labor costs (and living standards). In addition, industrial policy of competitor economies is likely to undermine Bangladesh's export competitiveness, as in the case of weak backward-linked industries like yarn. To reduce this export vulnerability and create space for improvements in working conditions and wage levels, Bangladesh needs to embark on policies to upgrade technology and products and to reduce the lead time in garment production and distribution. Pursuit of an active industrial policy to move the country from the low-end niche in the export market would create room for higher profit margins and higher wage rates. Industrial policy that diversifies export products, moves toward higher quality exports, and builds backward linkages would serve as a central component in a new strategy for better labor standards. Such improvements in working conditions can be achieved without undermining employment and exports by identifying a complementary package of domestic policies, including industrial policy, backed up by efforts at the level of international governance.

Although the 2008-09 financial crisis and the resulting resource constraints have made it difficult to initiate or pursue industrial policy, export diversification that targets promotion of price inelastic goods with high income elasticity is necessary. In addition, promoting vertical integration

by building knitting mills and dye facilities nearby can improve competitiveness in the garment industry. The government also needs to consider combining an export strategy with a strategy that orients the production structures toward greater reliance on domestic demand. This approach is compatible with higher wages, stronger labor standards, and a higher quality of growth. It also helps to diversify the structure of production in a way that reduces the overdependence on a few markets and few products.³

Although the Bangladeshi government has been relatively slow to pursue such productivity-enhancing industrial policy, new policies for export promotion, domestic demand stimulation, and sectoral and regional development are considered critical areas for reform and are backed by the Centre for Policy Dialogue (CPD 2009). Policies to support the garment sector have been limited to granting export manufacturers access to duty-free machinery imports, which garment manufacturers have used to upgrade their capital stock in the post-ATC period. Allowing the private sector to establish bonded warehouses with special incentives, including the duty-free import of raw materials for garment export production, will not only reduce lead times but will also promote long-term industry development (Haider 2007). Bangladesh has also seen some firm-level restructuring and a scaling of production through manufacturers' own efforts. However, in-house research and development, which is highly correlated with labor productivity, has remained inadequate, contributing to the sector's limited export diversification (Rahman *et al.* 2008). Additional policy initiatives to promote technology and product upgrades include the establishment of a Technology Upgradation Fund and a Skill Upgradation Fund to support the garment sector and strengthen vocational training (Rahman *et al.* 2008, 2009). The Global Competitiveness Report 2009-2010 underscores the need to address the lack of adequate skilled workforce to undertake new industrial activities (World Economic Forum 2009). Bangladesh scores very low on the quality and quantity of higher education and on-the-job training. In addition, greater emphasis on gender equality in education and training programs could facilitate women's movement into higher-skilled jobs by boosting their productivity and skills acquisition. Once women workers can qualify for these jobs, enforcing laws on gender-equitable pay, health and safety in the workplace, and union rights is crucial for improving livelihoods and countering the gender income inequalities still so prevalent in Bangladesh.

Any strategy to improve labor standards requires

additional domestic policies that strengthen various dimensions of Bangladesh's export competitiveness. Non-labor components of costs and supply bottlenecks have hampered competitiveness and created non-negotiable costs, making labor costs the only true variable cost. Investment climate data show fairly clearly the need to fight corruption, which would serve not only macroeconomic objectives but also help to improve the enforcement of labor standards. In addition, Bangladesh has experienced persistent problems with infrastructure (especially electricity supply), insufficient financing, and high reliance on imported inputs in the context of cumbersome trade and customs regulations. These problems have raised costs, reduced productivity, and weakened export competitiveness. The World Economic Forum (2009) highlights the ongoing bottlenecks in quality of port and air transport infrastructure, and quality of electricity supply. Investments in infrastructure as well as organizational improvements in firms can cut non-labor costs and reduce lead-times in ready-made garment exports.

These domestic policies raise questions about reforms of international governance. Developing country governments should be able to undertake industrial policy and increase government spending on education without facing constraints on their macroeconomic policies. In addition, domestic policies could be complemented, and indeed strengthened, by reforms of global governance of trade and investment that enable Bangladesh and other textile and garment-exporting countries to protect jobs and resist a decline in labor standards in an increasingly competitive environment.

It is difficult for a single country that is heavily dependent on exports to implement labor laws or any other policies that are perceived to raise the costs for buyers or investors. At the global level, a revitalized GSP scheme that emphasizes incentives for labor standards compliance with a new local role for the ILO as an independent monitor could be implemented. Such a trade-incentives approach that provides low or no-duty access to markets in exchange for verified advances in working conditions could overcome the potential trade-off between jobs and working conditions, and offer a viable alternative to the trade-sanctions approach. Ultimately, stronger adherence to international labor standards will reduce the sector's vulnerability and improve its competitive position. There is a strong economic rationale for increasing compliance with labor-market regulations that are consistent with fundamental worker rights, job security, and fair terms of employment. A

growing body of empirical evidence indicates that regulations consistent with the ILO's core labor standards have a positive impact on exports and FDI, with improvements in the quality of human capital and political stability serving as the key channels that outweigh any short-term pecuniary costs. While labor laws that provide greater job security and better terms of employment can entail costs to employers, empirical evidence suggests that these trade-offs are offset by dynamic efficiency gains and benefits to society at large (Elson 1999, Palley 2004). Garment sector research in Bangladesh also shows that higher wage rates and good compliance standards at the firm level have a strong positive effect on labor productivity (Rahman *et al.* 2008). Hence greater compliance with labor standards is a viable and desirable option for Bangladeshi textile and garment producers that are adjusting to the post-ATC trade rules.

Moreover, investment liberalization must be revisited at the global level to allow low-income countries to protect themselves against capital flight and buyer mobility. Investor threats to move to other low labor-cost sites, and buyer incentives to source from sites with the lowest cutting and making costs, present the major hurdle in enforcing union rights and other labor laws. When simultaneously implemented in several competitor countries, and supported by complementary domestic policies, a trade-incentives approach could provide an effective strategy for raising the global floor under working conditions and worker pay.

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Endnotes

1. Large, hence formal, establishments predominate as a source of wage employment in Bangladesh. In 2007 almost three quarters of wage earners (72 percent) worked in establishments that employed 100 or more workers while almost half the establishments surveyed were small (employing less than 5 workers). Women constituted 12.4 percent of formal establishments and a slightly higher 13.2 percent of informal establishments (Bangladesh Bureau of Statistics 2007b).

2. In the labor market as a whole the gender wage differential is prevalent. In formal establishments, median earnings of women were 68.6 percent of men's earnings in 2007 (Bangladesh Bureau of Statistics 2007b). Women's monthly earnings were less than men in all percentile earnings categories, ranging from a low of 55 percent of men's earnings in the 10th percentile to 77 percent for the 90th percentile. Mean daily gender income ratios were lower for workers with fewer years of schooling where garment workers are likely to be located—ranging from 64 percent of male earnings for women with no schooling to 62 percent for women with 6 to 10 years of education.
3. See Palley (2004) for arguments in favor of a strategy based more on domestic demand, and Felipe and Lim (2005) for evidence on the contribution of both exports and domestic demand to macroeconomic performance across Asia.

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Determinants of Non-farm Employment in Rural Bangladesh: A Case of Advanced Villages

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Abstract

Given the critical importance of non-farm sector (NFS) on rural stability, we followed the broader definition of the sector and aimed at understanding the participation behaviors of household members/workers in non-farm employment (NFE). We conducted a field survey of 214 randomly selected households' members/workers from four villages in a relatively advanced rural location- Comilla Sadar *Upazila* (Sub-district) for the year 2005-06. In the context of the rural/farm household economic model, we used a version of double hurdle econometric methods (Probit and Censored Tobit regressions) to analyze determinants of participation and intensity of participation (e.g. hours worked) respectively. The empirical analyses were done for overall NFE first, and sector-wise NFE later. Overall, the empirical analyses confirm the importance of gender and education as individual characteristics, and remittance earners as a household characteristic, for remittance employment. Results also suggest that access to credit, access to organizations, and remittance earners as household characteristics, with growth centers and institutions as community characteristics are important for local employment. However, their effects are qualitatively and quantitatively different in terms of participation and intensity of participation in both overall and sector-wise NFE. Based on our findings, the higher dependency on out-country remittance and local low-return NFE could be a threat for sustainability of local livelihoods in advanced rural areas. In addition, the lower participation of females, especially educated females, in NFE could represent a loss of human capital. Thus, promotion of local high-return and remittance employment targeted at the poor households and the increase of female participation in NFE deserve special attention.

Introduction

Diversifying one's sources of income has become a major challenge in Bangladesh in recent years. Compared to the agricultural sector (hereinafter, farm sector), employment opportunities in the non-farm sector (NFS) have been increasing rapidly since the early nineties. The Government of Bangladesh (GOB) in its national poverty reduction strategy paper identified the NFS as a "leading sector" in the rural economy (GOB, 2005). However, in practice the NFS is not getting as much attention as the farm sector despite the fact that such neglect may be socially costly in the long run (Hazell and Haggblade, 1993; Arif, et al., 2000; IFPRI, 2007). Non-farm employment (NFE) for a rural household represents supplementary sources of income, especially for the poor. To date, several studies in Bangladesh reviewed the NFS sector (Bhattacharya, 1996; World Bank, 2004) and several of them substantiated the participation and the household income determinants (Hossain, et al., 1994, 2000; Khandker, 1996; Hossain, 2004, 2005). However, their definitions did not explicitly consider the income gained from remittance employment as separate components of non-farm income (NFI), whereas, such income, nowadays, contributes a considerable share of household income. Such underestimation of the NFS

was not supported by a number of similar studies (Naude and Taylor, 2001; Haggblade, et al., 2009). Their analyses also did not follow the rural/farm household economic model (developed by Singh, et al., 1986; Benjamin and Guyomard, 1994; De Janvry and Sadoulet, 1995), which is now being followed in the international literature. Moreover, the studies in the context of Bangladesh used nationally representative sample surveys (Hossain, et al., 2000; Hossain, 2004, 2005). These studies, to our knowledge, could not fully explain the real picture of the NFS in less poverty-prone areas (hereinafter, relatively advanced areas) where the non-farm activities (NFAs) are relatively developed and diversified. In this backdrop, the Government might not have been able to intervene to shore up the NFS in the advanced rural areas due to a lack of understanding of household behaviors for this sector.

In this context, based on the broader definition of the NFS, this paper is a case study of a relatively advanced rural location of Bangladesh, namely Comilla Sadar *Upazila* (Sub-district). We addressed questions such as: what are the key determinants of household members' participation (and the extent) in overall NFE? What are the key factors determining household workers participation (and the extent of participation) in sector-wise NFE? We assume that

the portfolio of NFAs for a rural household is decided based on its access to public/private, physical, financial, human and social assets. Within the context of a rural/farm household economic model, we implemented a version of double hurdle econometric method (Probit and Censored Tobit regressions). Thus, we attempted to provide a detailed and comprehensive picture on the influences on household members'/workers' decisions in diverse NFE for individual characteristics (such as education), household characteristics (such as landholding) and community/village factors (such as a nearby growth center).

Because the NFS has been receiving priority in many developing countries, as a way of employment/income diversification, the conclusions drawn from this study could be applicable to similar advanced rural areas of Bangladesh and other developing economies. Given the problems of low farm productivity, poverty and food insecurity of Bangladesh, besides identifying the NFS as a "leading sector" this study is aimed at specifying some policy recommendations which are directed not just at farm sector development, but in promoting the rural economy as a whole.

Literature Review

The popular rural/farm household economic model provides the theoretical foundation for exploring labor supply decisions in non-farm research. Huffman (1980, 1991, and 2001) used a similar approach to examine non-farm labor supply, production, and consumption decisions by US farmers. It was adopted in many developing countries such as South Africa, Zimbabwe and Bolivia (Serumaga-Zake and Naude, 2003; Matshe and Young, 2004; Sanchez, 2005, respectively). The advantage of this model is estimating determinants of participation (and level of participation) in NFE within the same theoretical framework. Almost every study conducted so far has analyzed participation in the NFE either as a whole or sector-wise, but to the best of our knowledge, none has contributed to the overall and sector-wise participation in NFE. We found that very few studies used the broader context of NFE. Another advantage of this approach is in adapting existing econometric methods. Most studies used the double hurdle method developed by Cragg (1971), which allowed a distinction between the determinants of participation and level of participation in NFE through two separate stages. We found that the similar studies conducted in the South Asian Context did not follow this well-known approach of rural/farm household economic

modeling. However, Micevska and Rahut (2007) developed an analytical framework that yielded different activity choices as optimal solutions to a simple utility maximization problem in the context of the Eastern Himalayas region.

Methodology

Defining the non-farm sector

Like another similar work by the same authors, this study used a broader definition of the NFS (Malek and Usami, 2009). The rural household workers engaged in a set of earning activities that are not own farm based or off-farm based (except household enterprises in primary farm production of crop, livestock, poultry and fisheries) are included in the NFS (Lanjouw and Lanjouw, 2001). Especially, the local NFS is defined as any earning activity that the workers are participating in within the village, other neighboring villages, growth centers or rural town (excluding the Municipality at district headquarters and *Pouroshova* at *Upazia* headquarters), while retaining the households in the village. In our view, the farm wage employment should be included in the local NFS rather than the farm sector, because the relatively disadvantaged household (landless/land poor) workers cannot work as self-employed in the farm sector; they work mainly either as farm or non-farm day laborers. In addition, a good number of absentee household workers are engaged in remittance employment in another place like non-local areas of the country for domestic migration (hereinafter in-country) and abroad for international migration (hereinafter out-country); and these remittance jobs are considered as separate components under non-local NFS. Naude and Taylor (2001) argued that using sub samples that took part in a given local NFS excluding remittance incomes and other transfers would have produced biased results. Thus, in our paper, we included farm wage employment, non-farm self-employment, non-farm wage employment under local NFS and in-country remittance employment and out-country remittance employment under non-local NFS. Hereinafter, sometimes the NFAs, NFE and NFI are interchangeably used.

The concept of income is comprehensive, including income received in kind and in cash. Household income is defined as the sum of net incomes resulting from the engagements of household workers in local and non-local NFS and other income. Farm income is defined as net income from primary production of household farm enterprises (HFEs). Non-farm self-employment income is defined as net income from

the household non-farm enterprises (HNFEs) in which the workers participate in the local secondary and tertiary industries. Farm wage income and non-farm wage income are gross incomes derived from wage employment participated in within the locality. Remittance income (in-country and out-country) are net receipts from the household workers employed in-country and out-country. Other income includes transfers including rental income, pensions, interests, gifts, disadvantaged allowance, etc.

Empirical model

According to the two-person household model², the household members/workers take part in NFE when the marginal rate of substitution of non-farm work for income is equal to the market wage rate. For an individual household member/worker, the decision on participating in NFE would depend on a contrast of market wage rate and individual reservation wage³: variables that increase the reservation wage reduce the probability of participation in NFE, while variables that increase the market wage rate increase the probability of participation in NFE. The reservation wage is an endogenous variable that depends on exogenous variables in the model such as, output and input prices, fixed farm factors, individual household members'/workers' and household characteristics. It is found that an individual employment decision depends on perceptions of the households in the village and community (De Janvry and Sadoulet, 2001; Matshe and Young, 2004; Sanchez, 2005; Micevska and Rahut, 2007). Based on the premises, we define the rural labor supply function⁴ for an individual household member (and worker). Considering the difficulty in getting reliable information on output and input prices, for implementing the theoretical function similar studies chose a set of exogenous variables such as individual and household characteristics, which might affect the individual shadow price of time and the reservation wage rate. The empirical model should rule out other household members' attributes due to difficulty in representing them (Matshe and Young, 2004). Thus, the individual participation in NFE depends on the vectors of individual, household and community characteristics.

The unique feature of this model is its joint modeling of two decisions, namely estimating the determinants of (i) whether an individual participates or not; and (ii) the level of participation (e.g. number of hours worked). The double hurdle econometric method is applicable to the joint modeling of participation and hours allocated to NFE as two separate decisions

(Matshe and Young, 2004). The first hurdle for participation decisions corresponded to a Probit regression, while the second hurdle for hours of work equation took the form of a Censored Tobit regression conditional upon clearing the first hurdle. Sanchez (2005) in his study used truncated regression for the second hurdle. Given that all observations were available with some true values unknown, we used Probit and Censored Tobit regressions to analyze the determinants of participation and level of participation respectively in NFE.

The variables for the empirical model are shown in Appendix 1. The choice of exogenous variables in such a study is problematic as Ghadim, et al. (1999) noted. In order to satisfactorily distinguish the parameter estimates, some exclusion restrictions across the vectors of exogenous variables were usually required (Matshe and Young, 2004). Theory seldom allowed one to be precise as to which variables should come into consideration in which vector and thus the selection was inevitably arbitrary to some extent. However, the exogenous variables are explained in terms of household incentives and capacities (Corral and Reardon, 2001). The incentives are expressed as return and risk in the forms of prices of farm inputs and outputs, wages, and production risks under which the farmers accomplish the farm activities. The capacities are stated as vectors of capitals/assets at individual, household and community level, which put households in reasonably better positions to act in response to the incentives. The incentives can be explained by either pull or push factors working into the labor market (Lanjouw and Lanjouw, 2001). In other words, the pull and push factors can be explained in the context of diversification (Davis and Pearce, 2001). Within any specific rural location, distress-push diversification attracts households that are either less resource-endowed or have lower income in low-return NFE. On the other hand, demand-pull diversification attracts households in relatively high-return NFE typically requiring higher investment that only the richer households can afford. Based on these understandings, the exogenous variables for our empirical model have been articulated.

Study area and data collection

Though Comilla Sadar *Upazila* has been purposely selected for the study, it represents well the relatively advanced rural locality of Bangladesh (Table 1-2). Comilla Sadar is an *Upazila* (sub-district) of Comilla District in one of the advanced regions of Bangladesh.

Table 1. Summary statistics of some socio-economic characteristics at various levels

Variables	National level		Lagging regions		Advanced regions		Comilla District	
	Mean	S.D. ⁶	Mean	S.D.	Mean	S.D.	Mean	S.D.
Per capita income (BDT)	12,520.78	26,017.56	11,884.71	33,407.16	13,133.44	15,918.55	13,429.56	9,464.15
Share of NFI (%)	76.71	33.14	73.04	35.71	80.24	30.05	80.08	28.34
Household head age (years)	46.05	13.88	45.10	13.75	46.97	13.95	48.36	13.10
Household size (persons)	4.90	2.11	4.66	1.94	5.13	2.23	5.65	2.18
Landholdings (acres)	1.68	1.06	1.78	1.12	1.60	.99	1.51	.83
Education of household head (schooling years)	2.85	3.93	2.94	3.97	2.77	3.90	3.47	4.21
Electricity connection (%)	31.33	46.39	27.07	44.43	35.43	47.84	67.00	47.00
Cell phone owned (%)	6.09	23.93	3.66	18.79	8.44	27.80	16.00	36.00
Value-house (BDT)	67,201.44	121,016.5	46,983.25	93,018.55	86,675.4	140,171.9	140,360.00	220,677.90

Source: Estimated from Household Income and Expenditure Survey (2005).

Table 2. Basic characteristics of Comilla Sadar *Upazila*, 2005-06

Item	Characteristics
1) Location	Comilla in the Division of Chittagong. About 100 km southwest of the capital city Dhaka.
2) Literacy level	75%
3) Level of dependency on farming	Full-time farm households (10%), part-time farm households (70%), full-time non-farm households (20%)
4) Modes of transport	Connected by national highway and national railway with Dhaka and Chittagong.
5) Rural markets/ Growth centers	About 30 rural markets and 7 growth centers
6) Major trade and commerce	Farm input business, farm products trade and agro-processing, transport and construction business, restaurants, handicrafts and cottage industries, grocery, etc
7) Others	Being assigned "Export Processing Zone (EPZ)" at Comilla.

Source: Focus group discussion with Key informants (2006)

It is located 100 km southwest of the capital city Dhaka and adjacent to Tripura of Eastern India and connected by the national highway and the national railway with Dhaka, and the second most important industrial city, Chittagong. Based on the focus group discussion with the key informants, two groups of villages⁵, excluding the urban location *Pouroshova* at *Upazila* headquarters, were made. Then, four villages (two from each group) of Comilla Sadar *Upazila* were selected randomly so that the case study villages could be well represented. The villages are within the 15 km reach from Comilla district headquarters. We find that their literacy rate (case study villages' average) is 75% while the national average is 53%. Farming is relatively mechanized in the case study villages. Farmers produce plenty of rice and many types of vegetables. Household workers are engaged in local NFAs and remittance employment. Major formal employment sources are the "Export Processing Zone (EPZ)" at Comilla, government organizations (GOs), non-government organizations (NGOs), commercial banks and private

companies in the locality and non-local areas of the country mainly in Dhaka. A good number of households have at least one out-country remittance earner. Many household workers are engaged in HNFEs. Thus, we find relatively developed farming and moderate NFS (both local and non-local) in the case study villages. We feel we can justify the examination of the determinants of NFE of advanced villages in such a rural locality.

Since we were investigating determinants of NFE, we took the sample of non-farm households (part time farm and full-time non-farm households) excluding full time farm households for this study. As the extent of full-time farm households is not very high (about 9%), to our thinking, our sample selection could be justified. Accordingly, we randomly selected a sample of 214 non-farm households (about 19% of the population) proportionate to all strata according to landholding (large, medium, small and marginal, and landless). Then, a survey was conducted among the sample households during

August and September 2006. The survey was designed to collect detailed data on participation, time allocation and income earned by all their members/workers participating in certain economic activities such as HFEs and all NFAs for the reference year 2005-06. Participation is measured by whether individual member/worker is taking part in certain economic activities, while time allocation yearly given to those activities indicates the level of participation. We interviewed the best informed household members for all relevant data based on a structured questionnaire. The focus of the survey was on the household members/workers and on how each decided, firstly, whether to participate in any of the economic activities (either HFEs or NFAs). Secondly, if the individual response for NFAs was yes, they were next asked in which sectors of the NFAs, he/she participated full-time or part-time. Thirdly, we inquired as to the total hours per year allocated to work in all sectors of NFAs aggregating (or disaggregating) the number of hours, days, weeks and months of work declared by an individual. For getting the yearly time given to formal sector employment and remittance employment (for both out-country and in-country), in addition to their regular office hours, we inquired as to their over-time periods and then decided their full working time. Next to get information on household income as defined earlier, after asking household annual expenditure, information on income from different sectors was gathered. All the pertinent information was collected following the recall method. In addition to the questionnaire survey, observational methods and four separate focus group discussions with the key informants in the four villages respectively were conducted, for gathering qualitative and community level information.

Results and Discussion

Nature of NFE

Participation, time allocation and income shares

The household workers participate in and earn more income from NFAs than from their HFEs (Table 3), being consistent with the findings from other similar studies conducted in South Asia (Lanjouw and Shariff, 1999; Hossain, et al., 2000; Lanjouw and Lanjouw, 2001; Premaratne and Senanayake, 2004; Hossain, 2004, 2005; Mishra, 2007). One of the main reasons is that the landless households constitute a sizeable population (about 20% for our sample) where the importance of NFAs is inevitable.

Compared to the participation (66%), more labor time (about 93%) is allocated to the NFAs and more income shares (87%) are gained as well. That means that the relative returns from NFAs are higher compared to their HFEs. Compared to males, female participation is considerably lower (17%) in economic activities, as well as NFAs. Of the household income sources, non-farm self-employment shows the highest share (about 28%) of total income, followed by non-farm wage employment (20.3%), out-country remittance (20.1%), and in-country remittance employment (6%). Apart from local NFAs, about 16% of the household workers participate in remittance employment. The household workers (4%) participate in in-country remittance employment with GOs, NGOs, commercial banks and private companies mainly in the capital city (Dhaka). As for the out-country remittance employment (12%), they mainly participate in the Middle East (for example, Saudi Arabia) and Southeast Asia (for example, Malaysia and Singapore) under the category of unskilled and semi-skilled workers.

Low vs high-return local NFAs

We have sharp differences in the household net income from high-return (Mean: BDT⁷ 89,324 and SD: BDT 57,347) and low-return (Mean: BDT 55,254 and SD: BDT 31,451) NFAs. Among the local NFAs, about 68% of the participation is observed in low-return NFAs which typically require no particular education and little or no start-up capital. This is due to the households' landlessness, poor education, and credit/cash constraints, on the one hand; and significant entry barriers to high return NFAs and market segmentation, on the other hand. In our study villages, such low-return NFAs are roadside and weekly market vendors, grocery shops/retailers with temporary sheds, mechanics and artisans, rickshaw pullers, etc. in the informal self-employed category, and construction/mill workers and other unskilled poorly-paid non-farm and farm day-laborers, etc. under the wage-employed category. On the contrary, only 32% of the participation is observed in relatively high-return NFAs which usually require certain skills, education and capital. For instance, salaried jobs with GOs, NGOs, EPZ and other private companies working in the locality under the wage employed category, and wooden and steel furniture manufacturing, farm input and equipment manufacturing, food processing, egg/poultry feed/fish trade, grocery shops/retailers with permanent sheds,

Table 3. Participation, time allocation and income share by economic activities in Comilla Sadar Upazila 2005-06 (N=442)

Activities/sectors	Participation (%)	Time allocation (%)	Income share (%)
Farm enterprises	34.4	6.5	12.8
NFAs as a whole	65.7	93.4	87.4
Farm wage employment	8.6	12.8	5.1
Non-farm self-employment	20.8	18.8	27.7
Non-farm wage employment	20.2	18.1	20.3
In-country remittance employment	4.2	20.0	5.7
Out-country remittance employment	11.9	23.7	20.1
Others (rental income, pensions, interest, gifts, etc.)	8.5
Total	100.0	100.0	100.0

Source: Field survey (2006)

pharmacy, hotel and restaurant, information communication services, etc. which are creating demand in the locality under the self-employed category belong to the high-return local NFAs.

Determinants of participation and level of participation in overall NFE

Table 4 presents the results from estimation of Probit and Censored Tobit regressions for individual participation explaining the probability (in dichotomous nature) of participation and intensity of participation. Individual participation is measured by whether an individual member is taking part in any certain NFE, while the intensity of participation measures how much time an individual member is allocating to all NFE, respectively. Results show that both Probit and Censored Tobit regressions are statistically significant⁸ as a whole, and a good number of variable coefficients are also statistically significant. The variable coefficients can be used to establish the magnitudes of the effects of a change in Probit index increases by a certain amount. For example, for each unit increase in the individual gender (1 if male), Probit index (participation) increases by 2.624. Similarly, in the level of participation equation, for example, for each unit increase in the individual gender (1 if male), the level of participation increases by 3184. According to the estimated results presented in Table 4, the following observations can be highlighted.

Among individual characteristics, the results suggest that male adults (positive coefficient for gender) are more likely to participate in NFE as a whole, which indirectly reveals the lower participation of females (17% in our sample) in NFE. Results also suggest a significant gender (male) bias in time allocation in NFE. This may show that females in economically productive (mostly married) ages with children are

dedicating themselves to domestic and child rearing activities and limiting their participation in economic activities and NFE, as well. Despite having a certain level of schooling for young female adults, the social and religious norms might also lower their participation. As stated in Matshe and Young (2004), variables such as individual age and education are incorporated to articulate the effect of age, experience, formal training, etc., which may be associated with the shadow wage rate. Results show that the quadratic life-cycle consequences on both participation and level of participation in NFE are as expected: for the young, individual participation and their allocated time increase with age, but at older ages the opposite results appear. This result is consistent with related literature (Benjamin and Guyomard, 1994; Abdulai and Delgado, 1999). We could make a twofold interpretation for a statistically insignificant coefficient for the education variable in the case of overall NFE. Firstly, the individual level of education might not be the prerequisite for the overall NFE that the household workers participate in, since these are basically informal and low-return NFE (68% among local NFE) in nature requiring little or no skill and/or capital. And secondly, many youths attend primary school, but few continue on to secondary school due to the opportunity cost of obtaining an education versus the necessity of employment.

Among household characteristics, we find a significant U-shaped effect of work experiences of the household head on participation and the extent of participation in overall NFE. The coefficient of household composition variable is positive and statistically significant suggesting that the members of larger households have a higher probability to participate in NFE. The coefficient for household dependents is negative and statistically significant, which may be due to the fact that the sample

Table 4. Determinants of individual participation and level of participation in overall NFE in Comilla Sadar Upazila (2005-06): Probit and Censored Tobit estimates (N=491)

Exogenous Variables	Participation	Level of participation
I_gen	2.62 (.25)***	3184.03 (224.58)***
I_age	1.33 (.38)***	1700.17 (318.89)***
I_age2	-1.64 (.38)***	-1995.26 (324.73)***
I_edu	-.11 (.13)	29.95 (103.26)
Hhh_wexp	-1.35 (.36)***	-905.41 (259.15)***
Hhh_wexp2	1.43 (.35)***	904.22 (255.69)***
Hhh_edu	.19 (.13)	107.23 (109.89)
Size	1.59 (.61)***	1594.65 (435.29)***
M_wkr	-.68 (.28)***	-582.06 (203.25)***
Dependents	-1.31 (.46)***	-1332.68 (329.95)***
Hhh_incs	.19 (.12)*	80.34 (96.03)
Landholding	-.20 (.09)**	-152.17 (87.41)*
Mgn_cap1	-.05 (.08)	17.05 (62.60)
Mgn_cap2	-.18 (.11)	36.36 (90.12)
Farm_TOT	-.60 (.19)***	-347.69 (156.80)**
Acc_credit	.24 (.24)	272.28 (191.42)
Acc_org	.11 (.23)	-29.14 (185.00)
Acc_rela	.37 (.18)**	35.94 (148.17)
Growth_c	.74 (1.06)	-387.23 (837.17)
Institutions	.09 (.21)	334.78 (168.48)**
Nvill	1.84 (1.92)	26.66 (1505.04)
Constant	-2.45 (1.08)	-1125.03 (859.16)
Log likelihood (21)	-163.79	-3299.07
LR Chi ²	216.23	280.86
Prob > chi ²	0.00	0.00
Left censored obs at <=0	..	118

Source: Field survey (2006)

Notes: 1) Numbers in parenthesis are standard errors

2) Statistical significance: *** at 1%, **at 5%, * at 10% levels, respectively

3) Variables are standardized

households have a higher dependency ratio. These results are consistent with similar studies (Premaratne and Senanayake, 2004 in Srilanka; Hossain, et al., 1994 in Bangladesh). Household multiple sources of income, an indicator of income diversification, influence members more to participate in NFE. A negative and statistically significant coefficient for household landholdings on both participation and time given to overall NFE suggests that landless households push their members to diversify their NFE. Favorable farm's terms of trade⁹ (TOT) also has a negative and statistically significant influence on both participation and level of participation in NFE. While household access to friends, relatives, neighbors, etc. has a positive and statistically significant influence on participation in NFE, all other household characteristics such as remittance earners, access to formal credit, access to organizations, etc., have no statistically significant

influence on either participation or level of participation in overall NFE. Among the community variables, the NFE institutions worked for have a positive and statistically significant influence on the time given to NFE.

Determinants of participation and level of participation in sector-wise NFE

The results elaborated above do not provide a detailed picture of the participation and time allocation of household workers because of the aggregation of the sectors of NFE in the endogenous variable. In this section, our focus is to understand the participation and level of participation in sector-wise NFE. Data presented in Appendix 2 and 3 provide the results from the estimation of Probit and Censored Tobit regressions for individual participation and level of participation in sector-wise

NFE, respectively. For both participation and level of participation, seven separate regressions were estimated¹⁰. Taking insights from Micevska and Rahut (2007), apart from estimating equations for the three main sectors of local NFE (namely, non-farm self-employment, farm wage employment, and non-farm wage employment) we also estimated equations for high-return and low-return NFE. For remittance employment, our estimated equations are for in-country and out-country remittance employment. Results show that while all equations are statistically significant as a whole, only several variable coefficients are statistically significant for each sector of NFE. The variable coefficients can be used to establish the magnitudes of the effects of a change in the exogenous variables for the particular equation, as depicted earlier. According to the estimated results presented in Appendix 2 and 3, the following observations can be made and are summarized below.

Among individual characteristics, the results for sector-wise NFE suggest that the out-country remittance employment, non-farm wage employment and non-farm self-employment seem to be more accessible to males (alternatively, accessibility to females is extremely low) compared to other sectors of employment in both participation and extent of participation. While age and quadratic term in age have statistically significant influence on participation and level of participation for overall NFE, these variables have no statistically significant influence on participation for sector-wise NFE, but still have statistically significant influence on time given to non-farm self-employment and low-return NFE. For overall NFE, individual education has no statistically significant influence, but it has an inverse U-shaped effect on participation for remittance employment (more usual to out-country remittance employment) suggesting the fact that people who participate in remittance employment are mostly unskilled or semi-skilled in nature requiring a low level of education. The statistically insignificant dummy coefficient of education for sector-wise NFE supports a similar fact. Individual education reduces time given to farm wage employment, but increases time given to out-country remittance employment and local high-return NFE. Since many related studies found education as the key determinant of participation in NFE, to check the robustness of this result, we included here two additional related variables (the highest level of schooling completed by a male worker and a female worker of the household) instead of the level of education of the household head. Results for the highest level of schooling completed by a male worker prove the systematic fact (positive and statistically significant

effect for high-return NFE, but negative and statistically significant effect for low-return NFE). Results for the highest level of schooling completed by a female worker (positive and statistically significant effect for the non-farm wage employment, but negative and statistically significant effect for the non-farm self-employment) might prove the fact that due to social and religious norms and domestic responsibilities female education is not playing any significant positive role in creating non-farm self-employment among educated female workers. Individual multiple sources of income have a negative and statistically significant influence on time given to high-return NFE, but a positive and statistically significant influence on participation and time given to both non-farm self-employment and farm wage employment. This result indirectly supports the fact that household workers diversify themselves mostly in low-return non-farm self-employment and farm wage employment. Household multiple sources of income influence workers more to participate in non-farm wage employment, compared to other types of employment.

Among other household characteristics, to probe the intergenerational effects for sector-wise NFE, instead of total work experiences, the non-farm work experiences of the household head (1 if yes) as a dummy variable was considered. But, unfortunately, this variable is not statistically significant for any sector of NFE except time given to high-return NFE. This result suggests that non-farm experienced household head encourages household workers to allocate less time to high-return NFE. This finding is, to some extent, contradictory to the usual fact. Household size encourages its workers positively to participate in non-farm self-employment, but negatively in non-farm wage employment. It also influences workers to allocate more time to out-country remittance employment and non-farm self-employment, but discourages non-farm wage employment. A higher dependency ratio is again evident for participation in local NFE by the statistically significant coefficient of household dependents. Landholding is another statistically significant determinant for local NFE (negative for non-farm wage employment, but positive for non-farm self-employment). Favorable farm's TOT has a negative and statistically significant influence on farm wage and in-country remittance employment, but a positive and statistically significant influence on high-return NFE. Though the household remittance earners and the set of dummy variables are not statistically significant for overall NFE, these variables are particularly important for sector-wise NFE. Remittance earners (in-country and out-

country) encourage remaining household workers to remittance employment (in-country and out-country, respectively), but discourage local employment in general; because the remittance employment reduces the workers' need to undertake local NFE. However, the out-country remittance earners influence them to undertake local high-return NFE. This might have been possible due to their better household resource endowments and access to these jobs. Access to formal credit has a positive influence on low-return NFE but a negative influence on high-return non-farm and out-country remittance employment. This result supports the fact that rural formal credit (basically micro credit), due to its limited credit ceiling, is confined to financing local low-return income generating activities only. Access to organizations lowers the individuals' need to participate in the local wage employment, but pull the individuals to participate in non-farm self-employment. A negative coefficient of access to relatives, friends, neighbors, etc. for farm wage employment (where the poor household workers mainly participate) and out-country remittance employment (where the relatively rich household workers usually participate) might suggest the poor cognitive social capital¹¹ is working among the poor and rich households. However, its positive coefficient for non-farm wage employment (where the middle income households usually participate) might suggest that the relatively better cognitive social capital is available among the middle-income households.

The community variables are particularly important for local NFE. As for the growth center¹², which is considered to be a suitable place for NFE in rural areas, our results suggest that it positively influences high-return NFE, while negatively influencing low-return NFE. A similar result is evident for the nature of the village. Unfortunately, the institutions working in the locality encourage low-return NFE, but discourage high-return NFE.

Conclusion and Recommendations

This study reveals that the NFAs cannot be deemed "marginal" in the advanced villages of Bangladesh. Compared to the participation (66%), more labor time (about 93%) is allocated to the NFAs and more income shares (87%) are gained as well. That means that the relative returns from NFAs are higher compared to their HFEs. Compared to males, female participation is considerably lower (17%) in economic activities, as well as NFAs. Of the household income sources, non-farm self-employment show the highest share (about 28%) of total income, followed by non-farm wage

employment (20.3%), out-country remittance (20.1%), and in-country remittance employment (6%). The low-return NFAs (68%), typically requiring no particular education and little or no start-up capital and where the relatively poor households participate, dominate the local employment market. Overall, for remittance employment, the empirical analyses confirm the importance of gender and education as individual characteristics remittance earners as household characteristic. Results also suggest that access to credit, access to organizations, and remittance earners as household characteristics, with growth centers and institutions as community characteristics are important for local employment. However, their effects are qualitatively and quantitatively different in terms of participation and intensity of participation in both overall and sector-wise NFE. Particularly, the sector-wise important factors are: 1) *non-farm self-employment*: individual gender, household access to formal credit, access to organizations, out-country remittance earners, and female education; 2) *non-farm wage employment*: individual gender, household size, landholdings, and access to friends, relatives, neighbors, etc.; 3) *local high-return/low-return NFE*: household access to credit, remittance earners, male education, growth center, and institutions; and 4) *remittance (in-country/out-country) employment*: individual gender, education, household remittance earners (in-country/out-country), and access to formal credit.

Based on the findings, a high dependency on out-country remittance and local low-return NFE could be a threat for sustainability of livelihoods in advanced rural areas. In addition, the lower participation of females, especially educated females, in NFE, could represent a loss of human capital. Thus, promotion of local high-return and remittance employment targeted at the poor households and the increase of female participation in NFE should deserve special attention. The following recommendations are offered:

- (i) For local high-return NFE, the role of growth centers, institutions, access to formal credit, and access to organizations are particularly important. Business environment in growth centers could be improved in terms of physical infrastructure (road connectivity, power supply, etc.) and network building. In addition to supporting low-return income generating activities, the relevant institutions (GOs, microfinance institution-NGOs, Commercial Banks, Cooperatives, etc.) have to extend their credit ceiling and technical support to relatively high-return non-farm ventures. In

this context, a micro enterprise development program targeted at the poor households should be designed.

- (ii) For remittance employment (both in-country and out-country), providing education for the young of the poor households at least up to the secondary level should be encouraged. Special government efforts (such as reservation of quota) and credit support targeted at the poor households should be considered.
- (iii) Since female participation is so much lower than male participation in earning activities and female education is not playing any significant positive role in creating non-farm self-employment, massive social mobilization programs for increasing the participation of educated female individuals in earning activities, especially at non-farm self-initiatives should be introduced.

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Endnotes

1. Household members are economically active members in the age bracket of 15 years and over capable of participating in NFAs as a whole (a few are not working due to lack of opportunity or a few are working with household farm enterprises only). However, household workers are the household members in the age bracket of 15 years and over who are practically participating in NFAs on a part-time or full-time basis.
2. A version of Matshe and Young (2004) suggested by Benjamin and Guyomard (1994) as the theoretical basis.
3. In labor economics, the reservation wage is the lowest wage rate at which a worker would be willing to accept a particular type of job.
4. $L_s = f(p, x, y, z)$. Where, L_s = Labor supply, p =

vector of input and output prices, x = vector of individual and other members' characteristics, y = vector of capital available to the household and household characteristics, z = vector of village/community characteristics.

5. First group: where the farm sector is relatively more developed in terms of crop yield, technological adoption, cropping intensity, diversity in cultivation, etc.; second group: farm sector relatively less developed, but NFS relatively more developed.
6. Standard deviation.
7. Bangladesh Currency/Taka (BDT): US\$ 1.00 = BDT 67.08 as of 2005-06 (GOB, 2006)
8. Log likelihood chi squares with 21 df are 216.23 and 280.86, respectively with a p-value of 0.0000.
9. If terms of trade (ratio of farm products prices to that of non-farm products) is greater than 1, it is said to be favorable.
10. The first five equations are for local employment, while the last two are for remittance employment.
11. One form of social capital that is based on social norms, values, fellow feelings, etc.
12. Growth center is the place in rural areas where relatively better physical infrastructures and business environments have been developed.

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Appendix 1. Variable Definitions

Endogenous variables

Overall NFE

Participation for overall NFE (1 if yes)

Level of participation for overall NFE: Total yearly (2005-06) hours allocated to overall NFE

Sector-wise NFE: Participation

Participation in non-farm self-employment (1 if yes)

Sector-wise NFE: Level of participation

Total yearly (2005-06) hours allocated to non-farm self-employment

Participation in farm wage employment (1 if yes)

Total yearly (2005-06) hours allocated to farm wage employment

Participation in non-farm wage employment (1 if yes)

Total yearly (2005-06) hours allocated to non-farm wage employment

Participation in in-country remittance employment (1 if yes)

Total yearly (2005-06) hours allocated to in-country remittance employment

Participation in out-country remittance employment (1 if yes)

Total yearly (2005-06) hrs allocated to out-country remittance employment

Participation in high-return NFE (1 if yes)

Total yearly (2005-06) hours allocated to high-return NFE

Participation in low-return NFE (1 if yes)

Total yearly (2005-06) hours allocated to low-return NFE

Exogenous variables: individual level

<i>I_gen</i>	Individual gender (1 if male)
<i>I_age</i>	Individual age (years)
<i>I_age2</i>	Individual age squared (years squared)
<i>I_edu</i>	Individual level of education (schooling years)
<i>I_edu2</i>	Individual level of education squared (schooling years squared)
<i>I_edud</i>	Individual education dummy (1 if schooling years is above 8 years)
<i>I_incs</i>	Income sources (numbers) as indicator of individual income diversification

Exogenous variables: household level

<i>Hhh_wexp</i>	Household head (Hhh) work experiences (years)
<i>Hhh_wexp2</i>	Hhh work experiences squared (years squared)
<i>Hhh_nfwexp</i>	Hhh non-farm work experiences (1 if yes)
<i>Hhh_edu</i>	Hhh level of education (schooling years)
<i>Medu_mwkr</i>	Highest level of schooling years of male household workers
<i>Medu_fwkr</i>	Highest level of schooling years of female household workers
<i>Size</i>	Family member size (numbers)
<i>M_wkr</i>	Male working members (numbers)
<i>F_wkr</i>	Female working members (numbers)
<i>Dependents</i>	Economically inactive/dependent members (numbers)
<i>Hhh_incs</i>	Income sources (numbers) as an indicator of household income diversification
<i>Landholding</i>	Landholding owned (acres) as indicator of physical capital
<i>Mgn_cap1</i>	In-country remittance earners (numbers) as an indicator of migration human capital
<i>Mgn_cap2</i>	Out-country remittance earners (numbers) as an indicator of migration human capital
<i>Farm_TOT</i>	Ratio of farm products prices to that of non-farm products (1 if ratio is greater than 1) to show farm TOT
<i>Acc_credit</i>	Access to formal credit (1 if yes) as a proxy of financial capital
<i>Acc_org</i>	Access to GOs, microfinance institution-NGOs, and rural cooperatives (1 if yes) as an indicator of structural social capital
<i>Acc_rela</i>	Access to friends, relatives, neighbors etc. (1 if yes) as an indicator of cognitive social capital

Exogenous variables: community level

<i>Growth_c</i>	Rural towns/growth centers within ½ hr distance by usual transport (numbers)
<i>Institutions</i>	GOs, NGOs, rural cooperatives working in the village/locality (numbers)
<i>Nvill</i>	A village with relatively less developed farm sector (1 if yes)

Appendix 2. Determinants of individual participation in sector-wise NFE in Comilla Sadar Upazila (2005-06): Probit estimates

Exogenous variables	Local employment					Remittance employment	
	Non-farm self-employment	Farm wage employment	Non-farm wage employment	High-return NFE	Low-return NFE	In-country	Out-country
I_gen	.71(.34)**	-.35(.52)	1.30(.37)***	.64(.60)	-.70(.62)	.55(1.13)	2.16(.76)***
I_age	.45(.32)	.02(.55)	-.35(.34)	.03(.04)	-.02(.04)	-1.95(1.70)	.09(.66)
I_age2	-.35(.31)	-.10(.55)	.14(.35)	-.00(.00)	.00(.00)	1.67(1.60)	-.33(.71)
I_edu	-.35(.32)	.27(.92)	.03(.34)	.13(.09)	-.12(.10)	6.72(3.02)**	5.36(1.47)***
I_edu2	.21(.24)	-1.25(1.21)	-.18(.26)	.00(.01)	-.01(.01)	-1.57(1.23)	-2.10(.70)***
I_edud	-.02(.30)	.20(1.10)	.35(.33)	.19(.42)	-.18(.43)	-1.47(1.10)	-.50(.43)
I_incs	.28(.08)***	.76(.17)***	.03(.09)	-.36(.26)	.42(.27)	-.49(.45)	-.84(.24)***
Hhh_nfwex	-.20(.23)	.18(.57)	.31(.25)	-.18(.32)	.17(.33)	-.37(1.18)	.52(.34)
Medu_mwkr	-.00(.03)	-.10(.06)	.05(.04)	.10(.05)**	-.11(.05)**	-.22(.17)	-.09(.06)
Medu_fwkr	-.08(.04)**	-.15(.11)	.09(.04)**	.06(.06)	-.06(.06)	-.04(.26)	-.05(.06)
Size	1.37(.62)**	1.64(1.13)	-1.14(.71)*	-.22(.28)	.18(.29)	-4.28(7.17)	1.34(1.09)
Dependents	-1.09(.48)**	-1.77(.85)**	1.04(.55)**	.22(.28)	-.20(.29)	4.50(5.72)	-.99(.84)
M_wkr	-1.08(.64)*	-.08(1.25)	.90(.71)	-.06(.28)	.126(.29)	1.83(6.75)	-1.55(1.11)
Hhh_incs	-.01(.11)	.16(.22)	.20(.11)*	.23(.20)	-.29(.21)	.98(.88)	.06(.18)
Landholding	.13(.09)	-5.82(2.22)***	-1.00(.33)***	-.16(.06)***	.17(.06)***	.41(.73)	-.14(.11)
Mgn_cap1	-.10(.08)	.02(.26)	-.34(.11)***	.47(.29)	-.54(.29)*	1.74(.59)***	-.25(.17)
Mgn_cap2	-.24(.11)**	-.26(.22)	-.40(.13)***	.59(.25)**	-.63(.25)***	-2.08(1.10)**	1.11(.18)***
Farm_TOT	-.13(.18)	-1.15(.39)***	-.17(.20)	.06(.27)	-.07(.27)	-2.71(1.33)**	.20(.31)
Acc_credit	.87(.24)***	.26(.45)	-.46(.24)**	-.72(.32)**	.81(.33)***	3.46(2.55)	-.36(.40)
Acc_org	.53(.22)***	-.96(.45)**	-.51(.24)**	-.20(.31)	.28(.32)	-5.18(2.93)*	.25(.41)
Acc_rela	.21(.19)	-1.41(.29)***	1.43(.23)***	-.02(.25)	.23(.26)	-1.02(1.43)	-1.09(.35)***
Growth_c	.12(.27)	-.85(.31)***	1.33(1.16)	2.35(.72)***	-2.40(.74)***	.03(4.94)	-.36(.65)
Institutions	-.02(.11)	.06(.16)	-.192(.22)	-.52(.20)**	.51(.21)**	.31(.86)	-.02(.21)
Nvill	.53(.54)	-1.27(.71)*	2.23(1.99)	9.43(2.96)**	-9.81(3.08)***	.96(8.53)	-.49(1.29)
Constant	-3.88	-1.72	-3.42	-16.80	17.46	-1.86	-5.65
Obs	442	442	442	278	278	442	442
Log likelihood (24)	-194.17	-68.48	-164.26	-103.26	-97.71	-21.34	-68.90
LR Chi ²	124.57	179.18	176.13	121.55	128.75	149.50	231.34
Prob> chi ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Field survey (2006)

Notes: 1) Numbers in parenthesis are standard errors; 2) Statistical significance: *** at 1%, ** at 5%, * at 10% levels, respectively; 3) Variables are standardized

Appendix 3. Determinants of individual level of participation in sector wise NFE in Comilla Sadar Upazila (2005-06): Censored Tobit estimates

Exogenous Variables	Local employment			Remittance employment			
	Non-farm self-employment	Farm wage employment	Non-farm wage employment	High-return NFE	Low-return NFE	In-country Out-Country	
I_gen	1495.33(812.53)*	-789.20(620.10)	3211.02(813.88)***	1812.03(1758.01)	200.33(453.94)	2316.73(2270.40)	4394.76(1359.26)***
I_age	1572.98(746.87)**	282.91(748.58)	-307.88(739.36)	149.90(114.01)	50.00(25.51)**	-3856.95(1870.64)**	539.55(1182.10)
I_age2	-1388.51(742.28)*	-520.69(749.26)	-169.56(766.89)	-1.74(1.44)	-70(32)**	3533.78(1841.28)**	-920.49(1262.26)
I_edu	-917.39(752.08)	-1471.48(842.12)*	151.11(729.43)	602.45(249.14)***	154.20(89.14)*	9497.08(4116.85)**	10000.55(2144.68)***
I_edu2	620.66(586.55)	574.77(835.29)	-416.33(540.96)	-14.18(15.26)	-29.20(9.68)***	-3083.86(1794.20)**	-3685.38(997.54)***
I_edud	-40.30(723.27)	335.13(947.67)	439.26(688.84)	-98.00(111.1)	667.64(496.52)	-683.70(1741.49)	-1333.86(754.10)*
I_incs	578.48(201.11)***	711.01(203.82)***	-37.30(191.31)	-1878.31(783.93)***	-21.26(224.62)	-675.11(662.97)	-2090.31(521.61)***
Hhh_nfwex	-694.93(539.65)	70.03(586.22)	600.32(528.97)	-1589.86(902.14)*	-30.12(326.57)	-921.90(1611.18)	477.97(587.39)
Medu_mwkr	-23.74(71.36)	-68.04(71.33)	138.86(76.12)*	225.66(146.12)	-81.28(42.87)**	-228.24(248.69)	-182.00(97.67)*
Medu_fwkr	-230.47(109.01)**	-77.34(97.48)	166.04(83.45)**	228.94(143.76)	-29.20(55.88)	248.52(450.65)	-132.62(105.06)
Size	2737.13(1465.98)*	1864.99(1287.34)	-2473.76(1520.32)*	-1037.47(831.73)	119.53(241.69)	-10048.98(11405.81)	3939.17(1927.31)***
Dependents	-2273.50(1152.48)**	-1758.17(956.77)**	2035.91(1173.81)*	773.92(835.19)	-112.90(245.00)	9280.06(8881.00)	-3035.24(1482.58)**
M_wkr	-1607.3(1484.92)	-288.20(1444.49)	1792.03(1515.75)	384.51(826.57)	219.36(251.04)	6176.59(11169.03)	-4706.44(1962.51)***
Hhh_incs	-159.26(265.26)	229.27(256.18)	618.10(246.67)***	201.35(559.71)	-206.03(173.15)	1394.15(860.33)*	257.47(301.42)
Landholding	346.89(198.40)*	-4019.63(1474.93)***	-2154.98(693.08)***	-71.13(150.12)	-2.74(89.58)	301.22(1118.95)	-42.53(191.06)
Mgn_cap1	-206.53(192.20)	-171.79(301.76)	-679.03(222.18)***	722.67(780.93)	-154.78(287.44)	2343.12(519.91)***	-350.64(269.12)
Mgn_cap2	-670.97(269.29)***	-319.67(255.82)	-850.26(275.39)***	1367.90(717.65)**	-37.89(245.58)	-2485.18(1149.28)**	1881.39(269.24)***
Farm_TOT	-180.53(426.47)	-1273.73(482.46)***	-316.35(409.70)	1227.51(726.92)*	-74.81(237.79)	-3178.47(1556.55)**	395.16(537.90)
Acc_credit	2040.95(582.32)***	471.11(590.30)	-917.76(496.14)*	-2122.60(906.91)**	794.31(280.77)***	4321.11(2641.56)*	-134.98(697.22)
Acc_org	1546.47(550.45)***	-817.21(565.45)	-907.69(473.79)**	-17.17(858.06)	-147.58(269.46)	-6670.29(2421.39)***	226.93(709.14)
Acc_rela	547.93(461.50)	-1960.96(402.95)***	2942.70(521.96)***	-257.14(705.22)	17.32(223.65)	-796.24(1602.65)	-1701.96(567.83)***
Growth_c	-170.53(608.30)	-967.48(444.41)**	2382.95(1719.16)	6979.30(1985.80)***	-1654.47(566.06)***	-481.63(5439.34)	-672.95(1370.78)
Institutions	190.86(251.14)	49.49(214.38)	-230.05	-1366.8(560.27)***	452.72(166.54)***	376.00(1062.62)	-533.22(382.78)
Nvill	761.25(1224.31)	-1591.87(995.07)	433.75	27879.84(8208.22)***	-6307.08(2340.74)***	690.42(9399.17)	-1581.7(2607.704)
Constant	-7441.43	-613.46	-7693.98	-51504.45	10259.79	-541.59	-12837.54
Obs	442	442	442	278	278	442	442
Loglikelihood (24)	-1231.90	-517.56	-1166.98	-784.46	-1809.53	-227.63	-668.57
LR Chi2	128.55	145.06	174.18	112.34	104.63	129.49	253.18
Prob> chi2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Left censored obs at <=0	322	390	326	202	76	419	374

Source: Field survey (2006)

Notes: 1) Numbers in parenthesis are standard errors; 2) Statistical significance: *** at 1%, ** at 5%, * at 10% levels, respectively; and 3) Variables are standardized.

Bangladesh-India Relations: Some Recent Trends

M. Aminul Karim

Abstract

India's contribution towards Bangladesh's War of Liberation in 1971 was critical to the latter's birth. But the events that followed the liberation of Bangladesh did not result in the continuance of cordial relations, as hoped, between these two countries. There are a few fundamental issues between India and Bangladesh, such as land and maritime boundary demarcations, the sharing of waters from 54 common rivers, informal trade, transnational crime, and interference in internal affairs that have adversely affected their relationship. On an optimistic note, however, interpersonal relations and civil society contact groups between the two countries have increased. There is a need for greater understanding, dialogue, diplomacy, regional cooperation and less interference in each other's internal affairs. While it may be easy to simply list these issues, addressing them would be difficult, mainly due to the overall geopolitical compulsions, the historical legacy, and the mutual mistrust in the region. India-Bangladesh relations would improve greatly if both parties recognize the need for greater political will to overcome the geopolitical compulsions, to appreciate the essence of regional (mainly economic) cooperation and to realize the benefits of peaceful coexistence. In assessing the challenges between the two countries and the need to overcome them, this paper will examine some recent trends, as well as explore a possible framework for the future direction of India-Bangladesh relations.

Introduction and Thesis

India extended critical support to Bangladesh during its War of Liberation in 1971, thus paving the way for cordial relations between the two countries. However, the relations sufficed, primarily due to several unresolved issues that distanced the two neighbors and the overall geopolitical game involving India and China. It is also important to note that both powers are close neighbors with most of the South Asian states.

India is a big neighbor and it is capable of assuming a central position in the region. Rajen Harshe's evaluation may be pertinent here: "It is, thus, as a result of India's (whether perceived or not) economic and military might, that India's smaller neighboring countries regard the South Asian region as an Indo-centric region, with India being the core and other South Asian states as the periphery" (quoted in Chaturvedi 2008, p.24). On the other hand, borrowing the idea from Zbigniew Brzezinski (1997), former United States National Security Advisor, India may be called a geostrategic player while Bangladesh may be called a geostrategic pivot where "A geostrategic player has the capacity and national will to exercise influence beyond its borders in order to alter the existing geopolitical state of affairs, while the significance of a geopolitical pivot is derived from how strategically it is located, and the potential consequences it may bring about as a result of the behavior of the geostrategic players."

Nonetheless, it is necessary for India, as a formidable

power in the region, to take along its neighbors, especially the smaller nations, irrespective of whichever party may be in power, and settle any outstanding issues amicably. A relatively smaller country such as Bangladesh has to depend on, and share resources like water, energy, maritime, trade and technology with its neighbors. However, when there is contention among these states, especially over the sharing of resources, the situation gives rise to misunderstandings which then lead to a state of mistrust. Such a state of mistrust is also a historical legacy which makes the situation extremely complicated.

Bangladesh is a small country, in terms of area, resources and gross domestic product (GDP), when compared to most other South Asian countries. Some even label it as a 'soft state'. For human security it has to depend on the two giants, India and China; and turns to the Middle East, America, European Union, Malaysia and Japan among others mostly for remittances, development aid, energy, and trade and commerce. Apart from facing challenges in human security issues, Bangladesh is also plagued by problems pertaining to transnational crime, international water disputes, inter-state land and maritime border demarcations and informal trade – all of which have cross-border ramifications, especially with India and to some extent with Myanmar. While the population in Bangladesh is the third most homogenous in the world after North and South Korea, internal political squabbles resulting from low political culture, natural calamities that continually devastate its land, overpopulation

problems and scarce resources make it difficult for this country to attain its developmental goals. However it has excelled in areas like achieving gender disparity in primary and secondary education, decreasing child mortality rate, in its microfinance policy and in supporting the United Nations peace-keeping operations around the world.

India on the other hand, is rapidly developing in such sectors/aspects as the economy, science and technology, human resources development and the military. It has a population of close to 1.2 billion while that of Bangladesh is 150 million with GDP purchasing power parity per capita of US\$ 2,900 and US\$1,500 respectively, based on 2008 figures (<https://www.cia.gov/library/pulications/the-world-factbook/goes/in.html>). Nearly 450 million people in India and about 56 million in Bangladesh live below the poverty line (Chen and Ravallion 2007). Endemic poverty is therefore a critical problem for both countries. India's Human Development Index (HDI), which measures a country's level of "human development" based on factors such as life expectancy, standard of living, and education, was ranked 132nd and that of Bangladesh was ranked 147th out of 179 countries in 2008. (<http://hdr.undp.org/en/statistics>)

India has one of the largest and state-of-the-art military forces in the world, while Bangladesh's military is small in comparison. India and Bangladesh spend 2.5 percent and 1.5-1.7 percent of their GDP (http://indiatoday.intoday.in/content_mail.php?option=com_content&name=print&id=28618 accessed on 13 July 2009) on defense respectively. Former American Secretary of State Madeleine Albright once commented that no diplomacy can be effective without a befitting military prowess (one of the components of national power) backing it. India is aspiring to become an Asian power or even assuming a global leadership role, to go beyond the orbit of South Asia and compete with China.

India is the largest democracy in the world with its democratic values and ethos emulated by other nations. Similar values could be the forerunners for better relations between the two countries. India definitely enjoys more political stability than Bangladesh; however, there remains much room for improvement in the area of constitutional liberalism in both countries. There is, therefore, a need to understand the varied dynamics of inter-state relations, particularly in light of certain recent issues that are straining the relations between the two countries. The issues are cross-cutting and may be difficult to prioritize. However, the transit issue from

the Indian perspective and water sharing from the Bangladesh perspective demand greater attention and deliberation. In addition, there is already an existing history of mistrust between India and Bangladesh, which has been exacerbated by these current issues. The overall scenario thus calls for a change in the South Asian mindset.

In this context, the paper will explore the critical facets of contemporary Bangladesh-India relations and deal with the broad issues that directly impinge on this relationship. All the issues raised are critical and involve vital national interests (core values) of the states. The questions that arise, therefore, are whether the issues make a big impact on the relationship and whether they contribute to exacerbating the mistrust that already exists. Furthermore, there is also the question of whether it is necessary for a change in mindsets to resolve the issues and if the geopolitics in the region affects these relations. This paper, while answering these questions, will eventually try to develop an outline which predicts the direction in which the relationship will likely go. It will attempt to show the complexities of the centre-periphery syndrome and offer a framework for improving the big-country versus small-neighbor relationship. The paper will also highlight some indicators showing that a change in mindsets is already taking place. However, an in-depth analysis of the said indicators and needed change is beyond the scope of this paper.

Issues Affecting Relations

As indicated, India's military and economic support to Bangladesh during the 1971 War of Liberation and its aftermath were quite critical and substantial. Bangladesh should remain grateful to India, notwithstanding other objectives India might have had for supporting the War. However, there have been many twists and turns in the relationship ever since Bangladesh's liberation due mainly to the unique geostrategic location of Bangladesh. The country suffers from the "tyranny of geography", since it is surrounded by India on three sides and its South is joined to the Bay of Bengal and restricted by the sea.

An Indian researcher identified the main features of India's relations with its neighbors as "geographical contiguity, socio-cultural affinity, common security concerns, economic development and harnessing common rivers", since these waters are shared among the countries. The researcher acknowledged the divergence in perceptions of these neighbors on many issues; he, however, now sees some positivity in a

mutuality of understanding. India has paid more attention to security concerns and the constraints of its neighbors in the last decade than in the preceding decades. (Pattanaik, 2003, p.187)

However, a former Bangladeshi diplomat, Harun Ur Rashid, sees a divergence of interests between India and Bangladesh. Thus, as he explains, the following are the reasons for this divergence: 'Firstly, Bangladesh is one of the Least Developed Countries (LDCs) in the world. Secondly, it is a member of the Organization of the Islamic Conference (OIC). Thirdly, the country does not want to dominate the world. Fourthly, India is seen as a regional power, unlike Bangladesh, which is embroiled in the power game with China and to some extent with Pakistan. Furthermore, India overtly forged a military pact with the United States on nuclear cooperation recently. Lastly, India does not like any external powers intervene in the affairs of South Asia' (Harun Ur Rashid 2003, p.251). Such divergence could be true for any two neighboring countries, but with political will and the spirit of good neighborliness, it could be narrowed down.

Water Sharing

The factors are manifested in the layout of the 54 common rivers where Bangladesh is the lower riparian country. The fair sharing of the waters of these common rivers, especially as their overall flow is likely to decrease, is critical for Bangladesh's sustenance and ecological balance. India also needs more water for its ever increasing population in different states through which these rivers flow. Latest in the series of river water issues is the dispute over the waters of a major river, Meghna, which flared up when the Bangladeshi Foreign Minister expressed her concerns to the visiting Indian Foreign Secretary about the "controversial project" called Tipaimukh dam on the north-eastern border between Bangladesh and India. The concerns were that the project might "eat up Bangladesh's due share of the international River Meghna which supplies water to hundreds of water bodies in the region" (The Daily Star, Dhaka, 14 April 2009). The concern is also substantiated by Dr R. K. Ranjan, an Indian expert and representative of the citizens' concern for Dams and Development in Manipur (the Indian State where the Dam is being constructed). He has noted, "We will get only 30-40MW of electricity from the hydroelectric project that would be built by constructing the dam. So why should we put our fish resources and environment at stake for such a small amount of electricity?(Ibid, 20 June 2009)." According to an Australian environmental scientist,

"The dam would cause the Surma and Kushiara (rivers in Bangladesh) to run dry from November to May...A detailed study by the World Dam Commission published in 2000 states that the adverse impacts of any large dam are irreversible for the lower riparian region"(Banu 2009). The Indian High Commissioner in Dhaka has, however, refuted the allegations raised by the Bangladeshi side. He said, "Recently, there has been a lot of agitation on the question of Tipaimukh Dam. I would like to reiterate that it is a hydro-electric multipurpose project to produce electricity." He emphasized that the project was recognized as a storage dam in the Bangladesh-India Joint Rivers Commission in its 1972 and 1978 meetings (The Bangladesh Today, 22nd June 2009). However, there are certain controversies as to the exact type of project being planned by India, as also highlighted by the Bangladesh Prime Minister after her recent visit to India in January 2010. A Bangladeshi regional water expert, Mr. Tauhidul Anwar Khan, posits that, along with the dam, the barrage component will be added to the project; in that case, the impact on the environment will be more disastrous than that of the Farakka barrage built in the 1970s on the river Ganges entering the northwestern part of Bangladesh. He further adds that they are bound to have adverse impacts—sociological, hydrological, and morpho-logical—on the downstream country.

The Indian Foreign Secretary also assured that the proposed project would not harm Bangladesh. The Prime Minister of Bangladesh told the National Parliament on 29 June 2009 that her government was hopeful of solving the controversial Tipaimukh Dam problem through bilateral talks. This has been reciprocated by the Indian Prime Minister when he assured the Bangladesh Prime Minister "that New Delhi would not take any step regarding their planned Tipaimukh Dam that might affect the bilateral relations between Bangladesh and India." This was once again reiterated by the Indian Prime Minister during the two Prime Ministers' summit meeting in Dehli in January 2010. This is, indeed, a positive development which would greatly dispel the apprehensions raised by the Bangladeshi side. This is also likely to have a cooling effect on the recent heated political relations between the two countries.

In 1997, the United Nations General Assembly adopted the Convention on the Law of Non-Navigational Uses of International Water Courses, which inter alia created a legal framework for the equitable utilization of the waters of Transboundary Rivers and envisaged co-riparian countries taking appropriate measures to prevent harm to other co-

riparian states. The Indian High Commissioner in Dhaka, however, questions the legality of such a Convention since it has not been made into a law. From a legal point of view, his questioning is valid. However, Articles 4 and 5 of Helsinki principles, adopted by the UN in 1996, specifically stipulated that in utilizing water resources from an international river, every riparian will see the economic and social needs of other riparians are not impaired. A Bangladeshi expert views Bangladesh's looming malady vis-à-vis that of South Asia in the following words:

Being a lower riparian, Bangladesh is most vulnerable to unilateral withdrawal of waters of transboundary rivers by upper riparian countries. Bangladesh is also one of the top ten countries that would be seriously affected by climate change. It is feared that water shortages in much of South Asia will constitute a grave threat to economic development. (Harun Ur Rashid, the Daily Star, Dhaka, 6 May 2009)

Appreciation of such vulnerability by all parties can greatly address the water sharing issue as was done in case of insurgency problems in Bangladesh and water sharing in respect of the Ganges River. The Ganges Water Sharing Treaty, however, lacks the guarantee clause, which is a cause of concern for Bangladesh. Water sharing of other common rivers would also continue to strain the relations.

Insurgency

India's north-eastern states, as reported in the press, are plagued by insurgency. It is believed there are about 175 insurgent groups operating in the states surrounding Bangladesh. Bangladesh itself has been fighting an insurgency for the last few decades in its south-eastern part called Chittagong Hill Tracts (CHT), although it has been greatly contained ever since the signing of the peace accord with the insurgents in 1997. It is likely that there could be a spill-over effect of insurgents taking shelter in each other's country or using cross-border routes for the transportation of smuggled arms. One Indian source alleges that "a new arms bazaar in the no-man's land near the Bangladesh-Myanmar border town of Naikhangchari, which has become home to Indian insurgent outfits like the United Liberation Front of Assam and the National Democratic Front of Bodoland. The Harkat-ul-Jihad-al-Islami, a terrorist outfit in Bangladesh, is known to be imparting training to these outfits" (Khan 2009). In a recent meeting, chiefs of the border security forces

exchanged lists of the "criminals" (Bangladesh and India showing 1,227 and 77 "criminals" respectively) hiding in their respective countries. As a matter of fact, cross border terrorism, in different forms and manifestations, is a reality in the whole of South Asia. Insurgency in Northeast India had turned out to be an Achilles' heel for even the British Raj, which had failed to establish its suzerainty over these insurgency prone areas. Cross-border terrorism or insurgencies carry potential for conflagration.

Transit Issue

In order to tackle the insurgency more effectively and comprehensively, India, for obvious geopolitical reasons, wants a direct route through Bangladesh that would ease the transportation of its resources. This entails the economic development of the region. The transit route through Bangladesh would reduce the distance between Kolkata (in the West Bengal State of India) and Agartala (in the Tripura State of India), from 1880 kilometers to 740 kilometers¹. Bangladesh, so far, has spurned such requests as it is concerned that this might affect its internal security. However, there is another school of thought that opines Bangladesh would reap great financial benefits from transit and thereby reduce the trade gap that exists between the two countries. There is a probability that India, in return, would be more forthcoming in resolving other issues like water sharing, land and maritime border demarcations, and lifting the non-tariff barriers that India imposes on the goods imported from Bangladesh. This is inferred because so far there has not been any substantial progress in resolving most of the major outstanding issues. This author feels that such developments would help create a quid pro quo scenario. But given the sensitivities and suspicions involved, it may be difficult to reach this desired state in the foreseeable future. As mentioned in the joint communiqué issued after the recent summit-level meeting between Bangladesh and India, Bangladesh has agreed, in principle, to allow India to use Bangladesh's two maritime ports; i.e., Chittagong and Mongla. This may apparently satisfy India's long-sought-after strategy of having transit through Bangladesh. However, it may result in political backlash in Bangladesh and its internal political dynamics may flare up.

Maritime Boundary Demarcation

Another contentious issue between India and Bangladesh that has recently come to the limelight is the maritime border demarcation, an issue that also involves Myanmar. The Bay of Bengal, located south of Bangladesh, could be the country's new frontier

for resources. Bangladesh claims a huge continental shelf, since the sea is not considerably deep as seen from its base line. Bangladesh claims 29,000 and 22,000 nautical miles from India and Myanmar, respectively, as extended continental shelf, which conflicts with the claims of those countries. Bangladesh is worried that it might get sea- or zone-locked by both India and Myanmar if both powers insist on resolving the issue based on the principle of equidistance instead of equity. There are tricky issues like the acceptance of a Bangladesh base line and the fixation of control points with its neighboring nations from where either of these neighbors would draw the maritime boundary. Linked to it is the dispute over the ownership of an island in the River Hariabhanga, in the south-western part of Bangladesh bordering India and adjoining the Bay of Bengal. Resolving the issue of South Talpatty/New Moore (the names, respectively, that the island is given by Bangladesh and India) has “more to do with the extent of the maritime zone to be potentially acquired in the oil rich delta of the Bay of Bengal than the island itself. As such the island holds the potential to become the core contentious issue between the two nations”(Alam, the Daily Star, Dhaka, 12 May 2006). The Hindu of India reports that India-Bangladesh maritime boundary talks remain inconclusive. The disputes were mainly over the Talpatty/New Moore Island and the claim on exclusive economic zones in the Bay of Bengal (The Hindu, India, 19 September 2008).

Bangladesh is likely to ask for an application of equity principle which would ensure it a much larger exclusive economic zone, territorial water, and continental shelf. While all parties could have been more forthcoming in resolving the issue, there was reportedly some tension between the navies last year. However, diplomatic negotiations are ongoing, although it is unlikely that they would lead to any negotiated settlement because vital national interests of the states concerned are involved. Hence the matter may have to be referred to the International Court or the United Nations for its resolution. As a matter of fact Bangladesh has recently taken up the issue with the United Nations for arbitration. Keeping the problem unresolved would continue to vitiate the relations with spiraling mistrust. It is unlikely that the countries would budge considerably from their stated position. There is, however, an example of the International Court giving an exemplary verdict in favor of equity principle, considering the location of the two neighboring countries and contour of the shoreline.

Land Boundary Demarcation and Fencing

Bangladesh shares a 4,156-kilometre border with India, of which 6.5 kilometers remain un-demarcated. This issue, along with the exchange of 62 enclaves and adversely possessed lands by the two countries has not been resolved due to the lack of ratification of the Land and Border Agreement 1974 by India. Bangladesh ratified and implemented the agreement soon after its signing. On border demarcation, Bangladesh has opposed the idea of India erecting a fence along the border, which it considers to be a defensive structure. “In contrast, from an Indian perspective, the main purpose of the fence is to prevent smuggling, illegal immigration and the use of the open border by insurgents and criminal elements” (Pattanaik, 2007). On the issue of border management, there is a system of institutionalized interaction for discussions between the Home Secretaries of both the countries, the Director Generals of the Indian Border Security Force and the Bangladesh Rifles on a regular basis. Such institutionalized arrangements tend to keep the border-related tensions between the two countries under control. Border-related tensions, which have become routine, have often soured the relations in the past and may continue to do so in the future. It is reportedly alleged in Bangladeshi press that the Indian Border Security Forces continues to shoot at the unarmed trespassers coming from the Bangladesh side.

Alleged Illegal Migration of Bangladeshis to India

India constantly accuses Bangladesh of huge illegal migration from its borders to the adjoining states of India to the extent that it changes their demographic pattern; Bangladesh, however, denies it. Former Chief of India’s top spy agency (Research and Analysis Wing) even dubs it “demographic aggression” (Verma, 2009). The Indian High Commissioner’s (in Bangladesh) concern about illegal migration deserves attention, “We have to be circumspect in issuing visas particularly when we know that around 25,000 Bangladeshis do not return after entering India every year. Those who enter unrecorded are many more. Our concern about illegal migrants cannot be brushed aside” (The Daily Star, Dhaka, 21 July.2009). One Indian source claims that the annual illegal immigrants from Bangladesh are approximately 3,000,000 and the total number of Bangladeshi nationals living in India is approximately 15 to 17 million (Singh 2005, p.64). This is, in fact, quite a staggering figure: only a little more

than two-thirds of the Australian population. Such allegations, even if they are not fully substantiated empirically, carry potential for conflict. It can be surmised that non-traditional security issues today may become traditional security issues tomorrow. Some of these issues also contribute to the internal political dynamics of both the countries.

Geo-economics

Again, the geo-economic spectrum does not spell a win-win outcome. India's economy is too big for Bangladesh to compete with, which is also true in the case of China. Hence, it is always a lose-win situation for Bangladesh when being compared with India. In 2007-08, the Indian Ministry of Commerce stated that Bangladesh's imports from India amounted to US\$2.918 billion and exports to India were worth US\$257.12 million. There are, however, definitely convincing reasons for such an imbalance – like the appreciation of the Bangladeshi Taka against the Indian Rupee, the development of better land trade routes, the surge in import of cereals from India and India's higher stage of development. More importantly, Bangladesh's export-base is so narrow and shallow that it constrains greater penetration in the Indian market. What seemingly aggravates the mistrust is that Bangladeshi products trying to access the Indian market confront a number of non-tariff barriers. A senior economist of the United Nations Conference on Trade and Development (UNCTAD) opines that standardization, certification and custom rules create obstruction to regional trade and investment in South Asia (Banga, *The Daily Star*, Dhaka, 9th July 2009). On the non-tariff barriers, the Indian High Commissioner in Dhaka has offered that New Delhi would provide both equipment and training for improving the capacity of the Bangladesh Standards and Testing Institute so that its certification could win international recognition (*The New Age*, 7th May, 2009). However, Bangladeshi businessmen are ever apprehensive of India's blockage of Bangladeshi goods entering Indian markets, on one pretext or another.

Illegal imports which are generally 1.2-1.5 times higher than legal imports may even be more of a cause for worry for Bangladesh. Rehman Sobhan observes, "Persistent and growing deficit with India demands attention because of its political as distinct from economic implications" (quoted in Sreedhara, 2002, p.427). Now this trade imbalance is also heating up political relations. There is a huge trade deficit with China as well, but it does not carry any political undertones. The developments could be attributed to the unresolved bilateral issues with

India, relative absence of both India-funded projects and joint commercial and industrial ventures as compared to China. Obviously, the two closer neighbors would have more issues, or irritants to confront than the ones further afield.

Future Directions

The future direction of this interstate relationship should be contemplated on the continuance of globalization, the geopolitical realities in the region, and the greater political will to offset the effects of mistrust that has developed over the decades, the appreciation of the necessity of regional cooperation, peaceful coexistence and non-interference in each other's internal affairs.

The mad race of globalization gives rise to a hunt for resources like different raw materials especially energy, markets and cheap labor. Globalization may have many positive impacts but it cannot affect the national interests of the countries concerned. It may not bode well for the relationship when natural resources are getting scarce, transnational crime continues to rise, and when there is a tendency by the bigger powers trying to establish their stronger grip in the domestic affairs of the smaller nations. It may be pertinent to link a statement made by the then Indian Prime Minister in the Indian Parliament on 16 May 1995, as part of India's Defense Policy, where two of its components directly impinge on the interstate relations:

- (3) To be able to exercise a degree of influence over the nations in our immediate neighborhood to promote harmonious relationship in tune with our national interests;
- (4) To be able to effectively contribute towards regional and international stability and to possess an effective out-of-the-country contingency capability to prevent destabilization of the small nations in our immediate neighborhood that could have adverse security implications for us (Singh 1996, p. 59-60).

This may send out a wrong signal to the smaller neighbors. It is believed there is a realization by the Indian political elite now that such a statement, if translated into reality, may prove to be counterproductive as it happened in the case of Sri Lanka in the 1980s. The suggestion here would be that the South Asians come out of this Monroe Doctrine type of mentality. C. Raja Mohan, an Indian strategist, succinctly observes, "New Delhi does not have the luxury of pursuing a kind of Monroe

Doctrine for the region. Instead of trying to keep other powers out of the region, India must work with them to promote economic modernization, social harmony, and political moderation” (Mohan 2004). On the other hand the Gujral Doctrine, propounded by India’s Prime Minister I. K. Gujral in the mid-1990s, stipulated that India would extend its assistance to sort out the outstanding problems and issues with its smaller neighbors. India would not ask for anything in return but would give and accommodate what it is able to, in good faith. It worked well and hence Bangladesh could resolve the insurgency and water sharing problems by signing a Peace Accord in 1997 and the Ganges River Water Sharing Treaty in 1996.

As envisaged in the Ganges River Water Sharing Treaty, such water sharing agreements may be extended to other common rivers as well. The principles of ‘equity, fairness, and no harm to either side’ as enshrined and proposed for sharing the waters of other common rivers in the Ganges River Water Sharing Treaty may also be applied for other common rivers. However, so far there has not been any substantial progress in resolving the sharing of water of other common rivers. Such a state of affairs adds up to the state of mistrust that already exists.

What is of prime importance in these interstate relations entanglement is the existence of political goodwill, mostly coming from the big neighbor. Bangladesh, for all practical intents and purposes, is suffering from a dependency syndrome for resolving all of its outstanding issues and for life sustenance resources. There is a complex working between India and Bangladesh. Such a complex is thus viewed by the former Chief of India’s top spy agency (R&AW) as, “Bangladesh’s asymmetry with India and its extreme sense of inferiority vis-à-vis India contribute in a big way to the problems of illegal infiltration into India and promotion of cross border terrorism” (Verma, 2009). This complex may be taken care of in the greater interests of regional cooperation.

However, the overall geopolitical game in the region may also work as an impediment. Such a game would continue to be played out by the actors concerned but within the game plan certain adjustments, compromise or dovetailing may have to be agreed upon for better regional harmony. This, in an implied way, may even help the geopolitics of the actors.

South Asians may have to think of a multilateral approach instead of a bilateral one to tackle common problems in South Asia. On this note, the idea of ‘cooperative security’ as opposed to ‘collective

security’ for South Asia, as suggested by Raja Mohan, may be given due recognition. He suggests for a “policy of dealing peacefully with conflicts... (like) active engagement in negotiation and a search for a practical solution with a commitment to preventive measures”. He argues that the outlines of cooperative security have already begun in South Asia. In addition, he feels that “the challenge now is to lend political energy to the process of problem-solving and accelerate wide ranging regional cooperation” (Mohan, 2004). The author elucidates that the idea of cooperative security recognizes interdependence that ranges from avoiding a nuclear war to the actualization of a free trade area in the subcontinent.

There could be an understanding or even plans of signing a treaty prohibiting interference in the internal affairs of other countries, as was signed between China and India called the Panchasheela Agreement in 1954. As a matter of fact, one of the principles of the Gujral Doctrine is that, ‘no country should interfere in the internal affairs of another’. This would greatly help in fostering better neighborliness and friendship among the South Asian states.

The South Asian countries may even follow a ‘prosper thy neighbor’ policy. Such a policy would ensure better security for all and guarantee more interaction at the civil society, media, cultural, parliamentarians, and non-governmental organization level, following the concept of Track II diplomacy. The media in both countries may be encouraged to engage in more objective and responsible reporting, and better cultural integration can go a long way in mindset change, although that would be a long drawn-out process. As a case in point, the concept of a South Asian University, proposed by the Indian Prime Minister in the last Dhaka SAARC Summit, is a commendable start towards that direction. All these processes, including the idea of SAARC “Food Bank” may also help dilute the situation of mistrust in South Asia.

Both India and Bangladesh could further reinforce their border control and management mechanism specifically to reduce alleged informal trade, illegal immigration and cross border terrorism.

The South Asian Free Trade Agreement (SAFTA), an outcome of the SAARC process, which was supposed to be in operation by this time, was unable to take off. As a matter of fact, SAARC, as a process, has not made any considerable progress like some other regional organizations. However, the experts of both

countries may also study the feasibility of a Free Trade Area (FTA) as the Sri Lanka–India free trade arrangement, producing a win-win outcome: Sri Lanka's exports to India and Indian investments in Sri Lanka have surged. A World Bank study revealed that an FTA would benefit Bangladesh more than India. Bangladesh, however, insists on a multilateral framework under the SAFTA. More intraregional trade, which only comprises five percent of the total trade in the region, may be encouraged.

Conclusion

Greater regional cooperation, especially in the field of economic development, to eradicate the poverty trap may be the ultimate goal of all South Asians. But unless some corrective and ingenious measures are devised at this point in time, the situation might move in the opposite direction. That would be extremely disconcerting for the millions of poverty-stricken South Asians. Poverty also gives rise to many other newfangled crimes like women, child and drug trafficking, gun running, and cross border terrorism; there is, therefore, a need to generate greater political will through understanding and dialogue to resolve the outstanding issues, some of which may even seem intractable. They may have to go beyond the geopolitical compulsions and move towards more concrete regional cooperation like what the Europeans and Southeast Asians are doing. Otherwise, development per se will only delude the South Asians. A change of mindset is a dire necessity, at this time, for the South Asians. Prosperity for all is the way forward. Both Bangladesh and India have much to contribute to and gain from this process.

Endnotes

1. Under the 1974 India-Bangladesh Land Boundary Agreement, Bangladesh was supposed to get a lease in perpetuity for a 178 meters X 85 meters of India's territory in Bangladesh to connect *Dahagram* (a Bangladeshi enclave inside India) with the mainland of Bangladesh. Bangladesh did not get the Corridor nor did it get the Corridor connecting north western Bangladesh with Nepal for Nepalese merchandise to use Bangladeshi seaport *Mongla* in South western Bangladesh. However, India has been provided waterway-transit inside Bangladesh since 1972.

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A Comparison of Health Service Quality in Public, Private, and Foreign Hospitals: Perceptions of Bangladeshi Patients

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Abstract

This study compares the quality of healthcare services in public, private and foreign hospitals as perceived by hospital patients from Bangladesh. With poor funding and lack of improvements in the public health services, private health care has seen rapid growth. However, their quality of services remains in question. With the growing number of patients going out of the country for healthcare needs, it is important to compare the perceived service quality in the three types of hospitals to gain insights and establish benchmarks so that patients do not have to go overseas for health services and so that both public and private hospitals are able to upgrade their services to better meet the needs of patients. To ensure comparability, similarly “reputed” hospitals were selected from the three groups. A survey was conducted through exit polls of a random sample of 400 patients released from selected hospitals in Dhaka City. Users of foreign hospitals were selected using snowball sampling for lack of lists. Using multivariate and univariate ANOVA, significant differences were found between the three groups on service quality measures. The findings suggest that service delivery by hospitals in Bangladesh has much room for improvement. In particular, to stop the outflow of foreign exchange, the improvements, at a minimum, must match the services provided by foreign hospitals. To accomplish this, policy measures and improved managerial practices must be introduced into the country’s health care system.

Introduction

The health sector in Bangladesh occupies an enormously important position in ensuring sustainable overall socioeconomic advancement of the country. In addition to promoting general well-being, its ability to serve the healthcare needs of the population has significant economic implications derived from productivity increases. Following the principles of universal health coverage, giving priority to the poor and most vulnerable as prompted by the Millennium Development Goals, and pursuing better quality of life for its citizens, the Government of Bangladesh (GOB) has embarked on a multi-pronged strategy including greater orientation to client needs, higher quality of services, provision of an essential services package, expanded private sector role, and a cost recovery program that is coupled with establishing a decentralized health management system (WHO, HNPS 2003-06).

While the efforts of the government and the NGOs in the health sector have met with some success, as reflected in child and maternal mortality figures, there are also serious problems in the country’s public healthcare system. Media stories regularly feature unsavory practices and service failures that can shake the confidence of the users of health services in this sector. The Bangladesh Government and its development partners have also acknowledged their concerns about the quality of healthcare services

(HNPS, 2003-2006). According to them:

“Absenteeism of health care providers is a major concern; consultation time is very short (2-3 minutes), with almost no privacy. Health facilities hardly open in time except at rural facilities (UHFWC, CC). A good number of posts are lying vacant at Upazila and below levels. Rural facilities need more budget to meet local needs. Most of the time, providers are busy with other activities, including private business. Unavailability of drugs is the single most important reason for people’s dissatisfaction about public health facilities.”

These instances reflect weaknesses in health service delivery, especially in the public hospitals, that must be quickly and responsibly addressed.

Failing the customer, however, is not uncommon even in the Western countries and may be difficult or impossible to eliminate (DeWitt and Brady 2003). Keaveney (1995) suggests that service failures and poor recovery strategies are leading causes of customer defection in service organizations. Failures arise from unavailable and unreasonably slow services, inattention to customer needs, and a host of other reasons (Bitner, Booms and Tetreault 1990). Dube and Maute (1996) review the literature to suggest that over half of customer switching behavior may be attributed to service failure and poor

management of service recovery in the developed countries.

With population increases and a burgeoning need for health services, there is also a growing private healthcare system that has begun to emerge with the government's encouragement. Despite higher direct costs, it is not unusual to see long waiting lines for private care. This suggests that patients may be deriving certain benefits from this sector not available to them from the public sector. We believe this may be so because of better service quality.

Significantly, also, there is growing defection of a large number of Bangladeshi patients to foreign hospitals in search of quality care despite the financial costs and the cumbersome processes involved in getting visas, obtaining foreign exchange, arranging for transportation, accommodation and food, and finding the right service providers. Here too, the perceived benefits seem to exceed the costs. The resulting huge losses of foreign exchange for Bangladesh, estimated by one study (IHE, 2002) at Tk. 500 million (US \$1 = Tk.60 at present) a year and by Bayes (1999) at Tk.10 billion (US \$1 = Tk.50 at the time) represents huge costs that the nation endures for lack of quality healthcare services in the country.

Objectives and Propositions

The objective of this paper is to provide a comparative assessment of the quality of services received by patients in Bangladesh from three different health sectors: public, private and foreign. The assessment may be used as a basis or benchmark for future studies to track changes in the quality of services received. Comparisons across sectors are particularly useful for developing standards and for devising delivery mechanisms to ensure that the service standards are attained. It should also sensitize hospital and healthcare planners to those areas of service that might be significantly improved.

Three propositions guided the study. First, given the size, scope, complexity, and lack of well-conceived and integrated improvements in the public health sector, oft-reflected in various unpleasant media reports and government documents, it was felt that hospitals in the public sector would be rated as average or lower on service. Long delays in obtaining services, the need for patients to furnish various supplies and medical tools, and the commonly

experienced rude behaviors of healthcare staff are some of the reasons for which public hospitals were expected to earn low service quality ratings. Second, it was felt that with a rapidly growing private health sector, with its particular system of incentives and substantial profit-making opportunities, hospitals in the private sector would obtain better service ratings than hospitals in the public sector to be able to draw more patients, serve them well, and be rewarded commensurately. Better incentives in this sector are purported to affect the level of service that is subsequently expected to be reflected in the patient ratings. Third, significant outflows of foreign exchange have been noted for availing health care in foreign countries. This outflow may have increased substantially in recent years according to expert estimates, the reason for which is better, more integrated, and comprehensive services offered by the foreign hospitals and doctors. Moreover, driven by their own incentive structures and processes while serving the more affluent and being paid in hard currency, it was expected that foreign hospitals would provide a memorable service experience to patients from abroad as a way of promoting their services to additional clients via word-of-mouth while retaining the customers served. Hence, service quality ratings were expected to be the highest for foreign hospitals.

Metrics Important to Patients

This paper uses patient-centered metrics to assess the quality of services received by patients. In this regard, past research in the advanced countries has shown that the patient's perspective is very important in shaping service delivery (Rahmqvist 2001, Stewart 1984, Makoul, Arnston and Schofield 1995). It is also well-recognized that while patients may be unable to judge the technical quality of service, they certainly can judge how they were treated.

It is important that certain criteria be used to assess patients' perceptions of hospital service quality. Earlier studies (Andaleeb 2000, 2001) suggest that the SERVQUAL framework (Parasuraman, et al. 1985, 1988, 1991) with some refinements as suggested by Carman (1990) may be used in the context of Bangladesh. The SERVQUAL framework was thus embellished on the basis of focus group discussions to include additional elements pertinent to the local culture. The following metrics are reflective of the service dimensions that patients

desire and expect in their interactions with hospitals. Addressing them systematically is likely to bring about needed changes in the healthcare system.

Service Factors

Assurance: Knowledge, skill and courtesy of the doctors and nurses are key elements that can provide a sense of assurance to patients that they will be well looked after. For a service that is largely credence based (Zeithaml and Bitner 2000), where customers may find it impossible to evaluate the quality of the services received even after purchase and consumption, a sense of assurance engendered by the service providers can greatly influence patient evaluations. When patients feel assured that the healthcare system would correctly interpret laboratory reports, diagnose the disease competently, provide appropriate explanations to queries, and generate a sense of safety, they are likely to feel more assured.

Reliability: Reliability refers to providers' ability to perform the promised service dependably and accurately. In Bangladesh reliability of the provider is often attenuated by prescription of unnecessary medical tests, haphazard supply of drugs at the hospital premises, irregular supervision of patients by care providers, inability to provide correct treatment the first time, etc.

Responsiveness: A general expectation among patients is that the hospital staff would respond promptly when needed. Patients also expect that required equipment would be available when needed, found to be functional all the time, and be able to provide quick diagnoses of one's health condition. In addition patients also expect prescribed medicines to be available when needed and effectively administered as other indicators of responsiveness.

Communication: Communication is vital in the hospital setting whereby service providers understand patients' concerns and convey to them the needed health regimen. If a patient feels alienated, uninformed, or uncertain about her health status and outcomes, it may affect the healing process. When patient concerns are readily discussed, it can alleviate their feelings of uncertainty. Also, when the nature of the treatment is clearly explained, patients' awareness is heightened and they are better sensitized about expected outcomes. In general, patients expect doctors and nurses to communicate clearly and in a friendly manner any information regarding laboratory tests, X-Ray results, diagnoses, prescriptions, health

regimen, etc.

Empathy: Empathy is defined as the caring and individualized attention that patients receive. Healthcare providers' empathy and understanding of patients' problems and needs can greatly influence patients' service quality evaluations and overall satisfaction. Patients desire service providers to be attentive and understanding towards them. Thus, doctors and nurses ought to give each and every person in their care a patient hearing and share their their empathy.

Tangibles: Physical evidence that the hospital will provide satisfactory services can be very important to patient satisfaction judgments. Generally, good appearance of the physical facilities, equipment, personnel, and communication materials create positive impressions. A clean and organized appearance of any hospital, its staff, its premises, restrooms, equipment, wards and beds can influence patients' impressions about the hospital and its likely use.

Procedures: This factor refers to an orderly management of the overall healthcare service process. It constitutes patients' expectation that doctors would maintain proper visiting schedule, and that there would be structured visiting hours for relatives, friends etc. Maintaining updated patient records and adopting proper patient release procedures are also pertinent to ensuring consistent quality of services.

Availability/Access: Availability of doctors, nurses and hospital beds round the clock are of general concern among the patients that reflects the level of access they have to healthcare. Scarcity of clinical staff, beds and cabins in the government hospitals sometimes forces patients to choose private hospitals—in certain cases non-reputed ones. When the hospital provides easy physical access and where doctors, nurses, beds and/or cabins are easily available, patient evaluations of service quality are likely to be better.

Methods

Secondary research

Some research on Bangladesh's healthcare system, albeit limited, is now available in journal publications, government documents, and reports of international organizations. However, the issue of

healthcare “service quality” has barely been examined. Thus, additional secondary sources were consulted from the developed world for guidance and adaptation. The SERVQUAL framework was prominent in this literature that helped conceptualize service quality.

Qualitative research

To confirm the dimensions of services derived from the SERVQUAL literature, the research team initially conducted in-depth discussions with 10 patients (covering the three types of hospitals) about their service experiences. The elements uncovered as a result were grouped under the major factors discussed in the patient metrics, leading to the selection of eight service constructs (i.e. Assurance, Reliability, Responsiveness, Empathy, Tangibles, Communication, Procedures, and Access). The first five factors represent the original SERVQUAL dimensions, while the remaining three factors emerged from the in-depth interviews. Other aspects such as food quality and ambulance services were dropped from our initial list because they were not relevant for all hospitals.

Questionnaire Design

A preliminary questionnaire was developed in English based on secondary and qualitative research. The questionnaire was translated into Bengali and retranslated several times until it was user-friendly and captured the desired constructs. Reasons for the study, complete confidentiality guarantees, the right of refusal to answer specific questions, and contact information were provided to the respondents according to internationally accepted research protocol. The questionnaire was pre-tested several times to arrive at appropriate wording, format, length, and sequencing of the questions.

Data Collection Method

A ten-member team of final year students of two private universities in Bangladesh were recruited for data collection. They were properly briefed about the objective of the study and the questionnaire. They were also trained rigorously to collect unbiased and meaningful data.

A permission letter from the Ministry of Health and Family Welfare (MOHFW), Government of Bangladesh (GOB), was forwarded to the respective hospital administrators to provide necessary help and

to cooperate with the data collectors. The researchers also supervised the data collecting teams at different hospitals and assisted with obtaining the list of patients to be released. Upon receipt of this list, the data collectors used random sampling procedures to select respondents and administer the questionnaire.

Sampling

The population of the research was defined as those who have been in-patients in the selected public and private hospitals in Dhaka City or in reputed hospitals in a foreign country within the past twelve months. Hospital reputation was controlled for to ensure comparability. Simply put, it did not make sense to compare “any” local hospital with foreign hospitals which are often carefully selected by patients availing their services. Our comparisons, therefore, included the set of hospitals that are deemed reputable in the three sector categories: public, private, and foreign. Dhaka City hospitals were chosen because it hosts many more hospitals than elsewhere, attending to a diverse set of patient afflictions and needs. Resource and time constraints also necessitated that the study be confined to hospitals in one city.

Two separate lists of public and private hospitals in Dhaka, along with their bed capacity, were obtained from the MOHFW. From the public hospital list, Dhaka Medical College and Mitford hospital were chosen purposively as reputed hospitals that handle patients with various health problems. From the list of private hospitals, again three reputed hospitals were chosen purposively. These include Central Hospital, Holy Family Hospital, and Monowara Hospital. That these hospitals were “reputable” was affirmed by officials of the MOHFW, GOB.

To ensure representation, sample sizes of 150 were planned to be collected from the public and private hospitals. The list of patients, ready to be released on a particular date, was obtained from the respective ward-in-charge of the public hospitals and the patient relations in-charge of the private hospitals. From these lists, using simple random sampling, patients were selected keeping the targeted sample size in mind.

Data for the patients availing foreign hospital care were difficult to collect using probability sampling as no lists were available for this category of patients. As a result, the snowball sampling method was used. Since people using foreign hospitals are looking for

quality services, it was assumed that they would gravitate toward the better known hospitals found in Thailand, Singapore, and India. This was the main reason for comparing “reputed” hospitals. Data were collected only from those respondents who had been admitted as in-patients within the past twelve months. Overcoming a variety of challenges, a total of 413 surveys were completed of which 13 were discarded because of excessive missing data and other errors and inconsistencies.

Analysis

Frequency distributions were obtained to check for data entry errors (i.e. unrecognized or missing codes) and to obtain descriptive statistics (means and standard deviations) for each constructs and for all three categories of hospitals.

To affirm the dimensions of service quality that were deemed important, factor analysis was performed with varimax rotation. Items loading together on a common factor (with Eigenvalues equal or greater than 1.00) were checked to see if they were meaningfully clustered. When this was not the case, items were deleted one at a time until the factor structure made the most sense.

Results

Measures and Dimensions

It is interesting to note that the dimensions that emerged from the analysis were somewhat different from the ones posited. For example, the measures of “Tangibles” split into two components: staff and facilities (i.e., human and non-human components) that made clear sense. Also, instead of loading on the posited service factors, doctors and nurses were seen as the defining and central elements of service provision. Consequently, the derived factors epitomized doctors’ service orientation and nurses’ service orientation as composites of the chosen items across different constructs such as reliability, responsiveness, assurance, and communication. Thus, most of the key items purported to measure the proposed service dimensions were retained; they merely loaded differently as constructs, but in a manner that was easy to interpret. Varimax rotation and the final rotated solution resulted in six factors comprised of thirty-two items (see Table 1) that explained 66.68% of the cumulative variation. Items for each factor were separately factor analyzed. In all

cases a single factor was recovered, indicating convergent validity.

The derived factors, representing a composite of items, were re-labeled as “doctors’ service orientation (DSO)”, “nurses’ service orientation (NSO)”, “tangibles (hospital)”, “tangibles (staff)”, “availability”, and “access.” The constructs also demonstrated robust correlations. These strong and significant associations with the correct signs provided evidence of predictive validity.

Reliability values using Cronbach’s Alpha were very satisfactory and in accordance with the recommendations of Nunnally (1978), that alpha values should be .70 or greater. The obtained values are shown below:

Doctor Service Orientation (composite of 13 indicators)	.95
Nurse Service Orientation (composite of 6 indicators)	.90
Tangibles (Hospital) (composite of 6 indicators)	.91
Tangibles (Staff) (composite of 2 indicators)	.87
Access (composite of 3 indicators)	.73
Procedures (composite of 2 indicators)	.69

Findings

It was posited that foreign hospital would be rated higher than private hospitals and that private hospitals would be rated higher than public hospitals on the selected dimensions. To test this proposition, multivariate and univariate ANOVA were used. Multivariate ANOVA (or MANOVA) is used as a generalization of ANOVA given that we use several dependent variables.

The multivariate tests (Pillai’s Trace, Wilks’ Lambda, Hotelling’s Trace, and Roy’s Largest Root) indicated that the null hypothesis of equal group centroids can be rejected. In other words the combination of dependent variables shows significant differences in patient ratings across the treatment conditions. Only when the multivariate main effect is

TABLE 1
Factor Analysis with Varimax Rotation

	Component					
*	DSO	TANGBL (Hospital)	NSO	TANGBL (Staff)	ACCESS	PROCESS
x45	.750	.262	.119	-.028	.002	.116
x50	.750	.210	.246	.192	.086	.038
x46	.741	.257	.201	-.030	.064	.222
x44	.729	.212	.089	.083	.000	.124
x51	.705	.157	.309	.251	.151	.100
x53	.681	.215	.250	.130	.300	.008
x39	.670	.142	.262	.189	.214	.285
x52	.623	.170	.174	.269	.157	.147
x40	.592	.077	.163	.375	.191	.334
x31	.570	.218	.361	.216	.366	.107
x38	.567	.067	.155	.277	.293	.398
x23	.491	.179	.278	.230	.328	.214
x25	.473	.028	.155	.165	.263	.442
x6	.181	.728	.142	.197	.147	.116
x10	.173	.720	.331	.151	.090	.093
x19	.208	.715	.274	-.118	.185	.076
x7	.250	.697	.175	.259	.073	.206
x9	.280	.624	.234	.181	.172	.141
x18	.165	.559	.045	.315	.104	.240
x30	.320	.226	.746	.167	.223	.026
x54	.316	.335	.729	.044	.098	-.026
x29	.140	.146	.718	.325	.144	.228
x55	.269	.393	.618	-.183	.199	.076
x24	.225	.141	.607	.339	.188	.279
x48	.274	.224	.607	.110	-.091	.338
x16	.347	.261	.135	.740	.175	.080
x17	.225	.325	.266	.728	.104	.094
x4	.077	.239	.133	-.005	.736	.245
x2	.350	.152	.128	.254	.656	.015
x3	.294	.253	.311	.347	.456	-.009
x70	.276	.257	.166	.089	.184	.700
x69	.209	.350	.144	.019	.015	.617

* see items in Appendix 1

Factors are: DSO (Doctors' Service Orientation), Tangibles (Hospital), NSO (Nurses' Service Orientation), Tangibles (Staff), Access, and Procedures.

significant, is it appropriate to examine the dependent variables using ANOVA to test for significant differences.

Univariate F-tests ($F = 38.74$; $p < .001$) showed that the null hypothesis of no difference between the three groups for doctors' service orientation was rejected. Table 2 indicates that there is no difference in means on for doctors' service orientation (DSO) between the public and private sectors in Bangladesh, but they both were rated significantly lower than foreign hospitals. This finding suggests that users of the public healthcare system are not being underserved by doctors. This may be due the fact that many doctors employed in the reputed public sector hospitals also work in the private sector. However, private sector users who pay a premium to obtain better healthcare service may not be receiving value for their money. Also the finding that DSO obtained a significantly higher rating for foreign hospitals may explain why many patients are seeking services in foreign countries.

On nurses' service orientation (NSO), F-tests resulted in rejecting the null hypothesis ($F = 39.22$; $p < .001$). A comparison of the means indicated the existence of significantly different levels of service as perceived by patients. As posited, the foreign hospitals were rated highest on NSO, followed by private hospitals and then the public hospitals. While these differences may be attributed to a variety of factors including nurses' social standing, resources, training, incentives, etc., the quality of nursing in the country clearly has much room for improvement.

The strongest effect of the three types of hospital services was found on tangibles ($F = 183.82$; $p < .001$) as reflected in the hospital premises. We again see three distinct levels of perceived service on this dimension: the foreign hospitals scored significantly higher than the private hospitals while the private hospital were rated significantly higher than the public hospitals, the spread in the differences being the greatest on this construct.

TABLE 2
Significance Tests of Difference Between the Hospital Types

Variables	Mean Score (Public Hospitals)-a n = 152	Mean Score (Private Hospitals)-b n = 152	Mean Score (Foreign Hospitals)-c n = 94	ANOVA F-Value p < .001
Doctor Service Orientation	3.89 ^c (.68)	3.99 ^c (.56)	4.58 ^{ab} (.49)	38.74
Nurse Service Orientation	3.70 ^{bc} (.82)	3.94 ^{ac} (.60)	4.48 ^{ab} (.48)	39.22
Tangible (hospital)	3.06 ^{bc} (.78)	3.92 ^{ac} (.62)	4.67 ^{ab} (.44)	183.18
Tangible (staff)	4.34 ^c (.59)	4.35 ^c (.57)	4.76 ^{ab} (.44)	19.89
Access	3.86 ^c (.77)	3.95 ^c (.60)	4.63 ^{ab} (.50)	43.71
Procedures	3.70 ^{bc} (.73)	3.93 ^{ac} (.55)	4.47 ^{ab} (.58)	41.25

Note: Subscript a = significantly different from public hospitals
Subscript b = significantly different from private hospitals
Subscript c = significantly different from foreign hospitals

Receiving significantly lower ratings, public hospitals need to be more conscious of their physical surroundings and the level of cleanliness they maintain as an important component of service delivery. While maintaining a clean hospital environment requires resources, more importantly it needs a mind-set of its administrators who are apparently oblivious of the need to manage the upkeep and looks of the premises, including rest rooms (toilets), hallways, equipment and other tangibles. If this aspect of service delivery can be upgraded, patients could benefit from the potential healing effects of the surroundings (flower beds, a paint lift, clean facilities, etc.). Research is also needed to determine whether appearances of the public hospitals are consciously not upgraded to discourage the affluent and better paying patients from using them, the reason being they would avail service from the more expensive private hospitals.

Regarding the appearance of the staff (only doctors and nurses were considered in the measures), the null hypothesis was again rejected ($F = 19.92$; $p < .001$). The mean scores suggest that there is no perceived difference in the appearances of the doctors and nurses between public and private sectors. However, doctors and nurses in foreign hospitals obtained a significantly higher rating, a factor that may be playing a role, however minor, in attracting patients to these hospitals where they might perceive receiving better quality of service by “cleaner” looking staff.

On access, it was felt that private hospitals would be more accessible than public hospitals. The difference, however, was not significant. Upon reflection, this result may be a manifestation of the fact that the private hospitals are usually smaller in capacity and therefore have limited absorptive capacities or because all respondents were those who were discharged from the hospitals; clearly, they all had access. As for foreign hospitals, since they need to be contacted in advance they were seen as significantly more accessible.

Hospital procedures involve maintaining patient records and adopting proper patient release procedures to better serve the patients. In this regard, the means clearly indicate that the procedures in the three categories of hospitals are different: foreign hospitals are seen as much better, followed by private hospitals, and then public hospitals. In Bangladesh, generally, patients themselves are responsible for maintaining their own records. Consequently, if

patients misplace the records, the service providers often lack information on their history that can lower the quality of service delivered. Often physicians may have to work with little or no information as patients are not trained to organize and maintain their medical records. This shortcoming may also prolong the time needed to treat patients as their history, likely to be flawed for memory distortions, is rebuilt painstakingly before the doctor can re-diagnose the condition and treat it. This is an important area in which regulations may have to be instituted, especially in the public hospitals, to preserve patient information in the service facility to serve patients better. Another option is to train patients to better maintain their records.

Conclusions

This study generally supports the contention that differences would be observed on perceived service quality between the three categories of “reputed” hospitals. Significant differences apparently exist on three out of six dimensions between public and private hospitals, while services provided by foreign hospitals are “always” perceived as better. We note, however, that despite the adversities faced by the public hospitals on funding, infrastructure, equipment, personnel, training, support services, drug availability, reward systems, etc., the selected hospitals scored better than expected on certain dimensions, matching the better reputed private hospitals on three out of six dimensions. One reason the two reputed public hospitals—Dhaka Medical College Hospital and Mitford Hospital—seemed to hold their own when compared to reputed private hospitals may be attributed to their long-standing image built over decades, dating to an era before the birth of Bangladesh in 1971.

In particular, we note no significant difference between doctors in the public and private hospitals. This may be because many doctors work in both places while nurses do not. There may also be an overall positive bias in the ratings of doctors because patients are evaluating the “exalted” doctor who provides specialized services on a salient issue (health) and generally belongs to a higher-status societal group. A final reason for the higher ratings may be attributed to the fact that the doctors rated were from the best hospitals in the country, suggesting that the best hospitals in the public and private sectors are really comparable.

As for the higher than expected ratings on other dimensions of service obtained by public hospitals, it may be argued that most service recipients in the country are not entitlement-conscious; they do not know their rights or how to demand or expect more from the health services and are generally content with whatever services they can get. By sensitizing them to the metrics identified in this study, the citizenry could be made more conscious of their rights to expect better. However, it remains to be seen in future studies whether patient perceptions “in general” about the public hospitals elsewhere in the country are as good as we found for the selected public hospitals.

Of particular note is that on “all” measures of service quality, foreign (mostly Indian) hospitals earned significantly higher ratings. These ratings may also reflect the evaluations of those who have experienced unsatisfactory services at the local hospitals. This, we believe, reflects why many are choosing to obtain health services abroad. If the attendant and growing outflow of foreign exchange for health care is to be stopped and possibly reversed, concerted efforts are needed at the policy level as well as at the service delivery level in the nation’s hospitals. While we briefly touch upon several policy issues, the findings of the study are more amenable to service delivery at the hospital level. It suffices, however, to note that the two are interlinked.

At the policy level, thoughts must be devoted to two major factors: prevention and cure. Prevention involves multi-pronged strategies that involve intersectoral collaboration. For example, health issues must be more aggressively incorporated into the school curriculum from an early (primary education) stage, links must be established with information and communication sectors to bring about needed behavior changes in the general population, and the healthcare sector must be geared up to provide expanded preventive care (annual check-ups, immunization, etc.). On another level, life care must be addressed by policy makers to ensure a healthy physical environment free from air pollution, poor water quality, congested housing, population growth, and related factors. Social policies that ensure greater participation in the workplace, freedom from violence and abuse, etc. can also go a long way in promoting better overall health as the burdens and vicissitudes of life are ameliorated.

At the service delivery level, which is what this paper is about, we address service quality issues in

hospitals and the needed standards for service delivery staff that would better ensure patient care. In fact, the service factors and their measures identified in this study reflect what is important to patients. Addressing them in judicious ways can help bring about important behavioral changes among the nation’s hospitals to deliver better quality of services. In this regard, Myers (1993) and Bagozzi and Lee (2002) summarize earlier work on social influence theory and suggest that people conform to influence for two reasons: *Normative influence* gains conformity based on a person’s desire to fulfill others’ expectations, represented in norms or standards, often to gain acceptance. In other words, people tend “to avoid rejection, to stay in people’s [those who set and evaluate standards] good graces, or to gain their approval” (Myers 1993, p. 246). By selecting standards and devising appropriate evaluation mechanisms, healthcare service providers can be shown whether and the extent to which they fulfill expectations and are in people’s good graces.

Informational influence on the other hand suggests that people conform by accepting evidence about reality provided by other people, especially when that reality is ambiguous. In other words, if the evidence gathered from patients can show a different reality to healthcare providers (e.g., non-conformance to standards), it may again be possible to influence them to deliver better and more appropriate health services. According to Myers (1993), “concern for social image produces normative influence. The desire to be correct produces informational influence.”

To best use the service quality metrics identified in this study, it is imperative for a lead agency to formulate a set of basic standards that incorporate the metrics to reflect the patient’s voice. In the developed countries, such standards are tied to performance evaluations and are regularly used to rank or rate individuals, groups, and even organizations such as banks, mutual funds, insurance companies, etc. Similar procedures could also be used in Bangladesh and other developing countries to rank or rate hospital services. Based on the metrics identified, all hospitals (public and private) could be periodically evaluated and a system of ranking could be devised to place the evaluated hospitals in one of the following categories: platinum, gold, silver or bronze. This is easy for patients to comprehend and should be a valuable basis for them to make informed choices. Only an aware public can make the sector conform to established standards by avoiding poorly ranked hospital service providers. The evaluations

and rankings should be widely disseminated among the general public through information centers, public awareness campaigns, media participation, and a variety of accessible and well-illustrated literature. Conducted effectively and over time, such dissemination can help shape the behaviors of the healthcare providers, thereby serving as an important basis for the social control of healthcare delivery.

When patients have access to reliable information based on the shared evaluations, they will choose those healthcare providers that are better rated. Consequently, hospitals that earn poor ratings or rankings are likely to be stimulated to improve quality. The social consequences of being rated low should serve to foster a competitive environment for better ratings among the providers, especially when they are held up to public scrutiny. Also, when the evaluations are widely disseminated, their impact on the healthcare system should be reflected not only on patient satisfaction ratings but, eventually, also, on stemming or even reversing the level of foreign exchange outflows that are tied to patients seeking quality health care services abroad.

When the ratings are low and do not meet standards, hospital administrators must envisage and offer a variety of programs including training, supervision, incentives, and resource transfers so that skills are matched appropriately with needs. Hospitals that earn consistently low ratings should be targeted by regulatory agencies and penalized on certain privileges. For public hospitals this could include reduction in allocations for capital projects, bonuses, training budgets, etc. For private providers, cancellation of privileges and licenses, closure of their practices and barring them from practice should not be ruled out. If a national capability for standard-setting, continuous evaluation and wide dissemination of information can be firmly established, the overall quality of hospital services in the country should improve rapidly.

In conclusion, it must be said that even though the ratings obtained in this study for public and private hospitals are not quite stellar, given the tremendous adversities under which they function in Bangladesh, especially in the public sector, the ratings are commendable. Consequently, where low ratings are obtained, the numbers may be used initially for development instead of punitive purposes. In fact the external evaluations must be matched with proper resource allocation and managerial practices to ensure that the hospitals are fully functional and that

the service providers are properly hired, trained, empowered, supported, evaluated, and rewarded to motivate them to provide the best service possible. Unless the right internal systems are in place, external evaluations and pressures thus generated will bring about few needed changes. To this end, two additional components are essential: a systematic approach to service research in this sector and the introduction of healthcare administration as a separate field of study. Incorporating these elements and ideas in the total scheme of healthcare service delivery can be instrumental in devising a health care system that is competitive, innovative, futuristic, and able to deliver what the best hospitals in neighboring countries are able to deliver. The long term gains are likely to be substantial: improved services, higher patient satisfaction, reversal of the outflow of foreign exchange and, perhaps even, the establishment of a healthcare system that can attract patients from abroad that can serve as a foreign exchange earner to contribute to economic growth and development.

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APPENDIX 1

Constructs and Items measured on five-point Likert scales

DSO:

- X50: Doctor was willing to answer any question.
- X45: Doctors explained the purpose of the diagnostic tests.
- X46: Doctors explained the test results.
- X44: Doctor gave clear advice to patients about the prescriptions.
- X51: Doctor listened to you attentively.
- X53: Doctor was caring.
- X39: Doctors provided logical answers to questions about my condition.
- X52: Doctor appropriately discussed your previous condition.
- X40: You felt safe in the hands of the doctors.
- X31: Doctors attended to you sincerely whenever needed.
- X38: Doctors were competent in diagnosing the problem.
- X23: Doctors regularly followed up on the treatment regularly.
- X25: Doctors provided correct treatment the first time.

NSO:

- X54: Nurses were caring.
- X30: Nurses attended to you sincerely when needed.
- X29: Nurses were quite willing to respond when needed.
- X48: Nurses communicated patients' needs to doctors.
- X55: Nurses gave individual attention to patients.
- X24: Nurses administered treatment in a timely manner.

TANGIBLES (Hospitals):

- X6: Hospital was visually appealing.
- X10: Cabin/Ward, bedding and floors were clean.
- X19: Toilets and bathrooms were clean.
- X7: Hospital premises were neat and clean.
- X9: Healthcare centers had modern equipment.
- X18: Operation theatre and instruments were clean.

TANGIBLES (staff):

- X16: Doctors were clean in appearance.
- X17: Nurses were clean in appearance.

ACCESS:

- X4: It was easy to get a bed/cabin.
- X2: Hospitals had adequate number of doctors.
- X3: Hospitals had adequate number of nurses.

PROCESS:

- X70: Documentation and recording system was organized.
- X69: Patient release procedure was carried out properly.

Secondary Education in Bangladesh: History and Contextual Perspectives

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Abstract

Secondary schools are vested with the responsibility of imparting knowledge, skills and attitudes essential for individuals to fit into society for development. This article analyses the development of secondary education in Bangladesh in different periods of time and socio-political contexts, especially in the context of British and Pakistani rule over Bangladesh. A number of commissions and committees were formed at different times to introduce changes in the education system. Accordingly, secondary education was revised with emphasis on the development of an all-round individual, female education, the acquisition of quality education, curriculum and assessment, and the inculcation of technical and science education. The system of educational administration was decentralized to promote school-based management, financial transparency and teacher empowerment. The non-government schools and madrasas have always been encouraged to play an active role in providing secondary level education in Bangladesh. A new education policy for Bangladesh was proposed in September, 2009 after the restoration of democratic process in the country. At the secondary education level broad-based change is needed to increase access, equity and relevance. Furthermore, in conjunction with globalization and national demands, educational objectives, structure and system, curriculum, education-budget, public-private partnership, government-NGO cooperation, corruption-free governance are all vital issues to address, aiming to make secondary education worthwhile.

Introduction

Formal education is fundamental to sustainable development. It allows individuals to develop within their community and country, and enables nations to compete and survive in the global economy. Education plays a critical role in fostering basic intellectual abilities and expanding further educational opportunities that are vital to success in a world where power is closely linked with knowledge. Access to knowledge is key to skill formation and improving productivity. Therefore, education, which stimulates and empowers people to participate in their own development, is the most important instrument for poverty reduction in Bangladesh. Education is also heralded to reduce population growth, decrease maternal mortality, increase agricultural productivity, raise labor force participation and lead to democratization (Case 2006; McGrath 1999). Investment in education results in a citizenry that is more committed to good governance, fiscal accountability and transparency.

Bangladesh is one of the least developed countries of the world today. It is plagued with multifarious problems in its social, political, and economic structures. Recurring political upheavals, natural

disasters, dramatic social changes and economic convulsions contributed to the poor quality of life of the common man. The bulk of the people live in abject poverty either in the run-down rural areas or in destitute urban slums. Only a fortunate few in the cities and towns have access to basic goods and services provided by the government. Therefore, poverty eradication is currently at the top of the government's agenda. The Constitution of Bangladesh enjoins upon the Government of Bangladesh the obligation to ensure literacy of all citizens (GoB 1972). The Government of Bangladesh has made commitments in the World Education Forum (Dakar 2000) to achieve 'Education for All' goals and targets for every citizen by the year 2015. Pursuant to its constitutional obligations and international commitments, the government is determined to ensure 'Education for All' in the shortest possible time. Active measures are being taken to accelerate primary education in view of Bangladesh's national goals. However, in a world of global market competition, secondary education has also become a part of basic education that should be universally available (Mulford 2002). Secondary schools are vested with the responsibility of imparting knowledge, skills and attitudes essential for individuals to fit into society and be able to

contribute fruitfully to its development. A high school graduate in Bangladesh can expect to earn 200 percent over those with no education (Ilon 2000). Therefore, Bangladesh hopes to gain from secondary education system more enlightened citizens who can be productive participants, domestically and abroad, in various markets and communities.

The Structure of the Education System in Bangladesh

Education in Bangladesh has three major stages: primary, secondary and higher education. Primary education is a 5-year cycle while secondary education is a 7-year one with three sub-cycles: 3 years of junior secondary, 2 years of secondary and 2 years of higher secondary. The entry age for primary education is 6 years. The junior secondary, secondary and higher secondary stages are designed for age groups 11-13, 14-15 and 16-17 years. Higher secondary is followed by higher education in general, as well as technical, technology and medical streams requiring 5-6 years to obtain a Master's degree or its equivalent.

Streams of the Education System

Bangladesh's present system of education is more or less a legacy from the British period (Ali 1986). It is characterized by co-existence of three separate streams running parallel to each other. The mainstream happens to be a vernacular-based secular education system carried over from the colonial past. There also exists a separate religious system of education. Finally, based on the use of English as the medium of instruction, another stream of education, modeled after the British education system, using the same curriculum, has rapidly grown in the metropolitan cities of Bangladesh. Primary level education is provided by two major institutional arrangements (stream): general & madrasa. Secondary education has three major streams:

general, technical/vocational and madrasa. Higher education, likewise, has three streams: general (inclusive of pure and applied science, arts, business and social science), madrasa and technology education. Technology education, in turn, includes agriculture, engineering, medical, textile, leather technology and ICT. Madrasas, functioning parallel to the three major stages, have similar core courses as in the general stream (Primary, Secondary and Postsecondary) but have special emphasis on religious studies. Therefore, at the secondary and higher level, however diverse the above streams may apparently look, they have certain common elements, and there exists scope for re-integration of graduates of one stream with the other at different levels. Figure 1 depicts different streams of the education system in Bangladesh.

Secondary Level Education Institutions in Bangladesh

Post-primary education in the general stream is imparted by junior secondary schools (grade 6-8), secondary schools (grade 6-10) and higher secondary schools, known as Intermediate colleges (grade 11-12). Post primary level madrasas are known as Dakhil madrasa (grades 6-10), and Alim madrasas (grades 11-12). In terms of ownership and management of secondary schools, there are two major types: government secondary schools and non-government secondary schools (including Dakhil madrasas). Nearly 98% of the post primary (secondary and higher secondary) institutions are owned and managed by the private sector (BANBEIS 2006). However, these institutions are private only in name because 100% of their salaries and wages, and the costs of their physical infrastructure development, durable educational supplies and equipment are provided by government. Secondary education institutions in technical and vocational streams include Polytechnics, Vocational Training Institutes

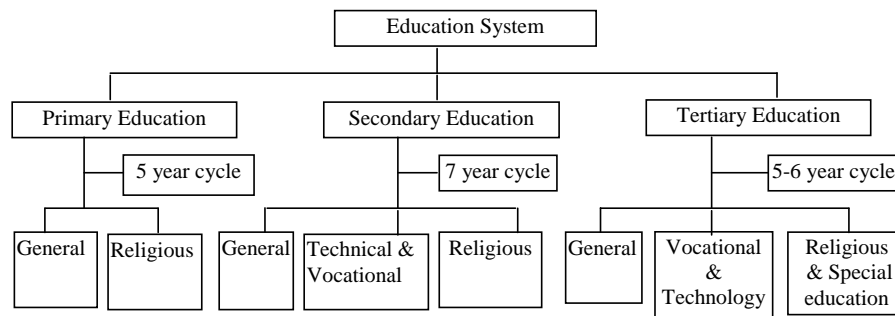


Figure 1 Different streams in education system in Bangladesh

Table1 Number of secondary institutions, teachers and students by education streams

Type of school based on streams	No. of Institutions		No. of Teachers		Enrolment	
	Total	Female	Total	Female	Total	Female
Total Secondary Education (General)	18500	3708	232929	46983	7398552	3868014
Public Secondary School	317	147	7434	2333	221887	106316
Madrasa -Dakhil	6685	1017	98123	9908	2236025	1170220
Madrasa - Alim	1315	91	25634	1803	550813	253207
Total Technical/ Vocational Education	2728	267	18185	3208	241336	62562

Source: BANBEIS (2006)

Table 2 Number of public secondary schools by region

Region	Boys' school	Girls' schools	Total schools
Dhaka	33	25	58
Mymensing	17	14	31
Rajshahi	20	17	37
Chittagong	35	19	54
Comilla	13	10	23
Rangpur	16	22	38
Khulna	15	21	36
Barisal	10	10	20
Sylhet	12	08	20
Total	170	147	317

Source: Sultana & Sultana (2005)

(VTI), Commercial Institutes, Technical Training Centers, Textile Vocational Centers, Agriculture Training Institutes and others. Bangladesh Open University (BOU) also provides distance education for drop-out students at the secondary level with the support of a countrywide network of regional and local centers, radio and television programs. The number of secondary level educational institutions (Post primary), teachers and pupils are presented in Table 1.

The total number of Government/Public schools in 2005 was is 317. Different public secondary schools serve different grades starting from 1, 3, 4, or 6 to 10. A few public schools are educating 11th and 12th graders on a pilot basis since 2007. Table 2 shows the distribution of public secondary schools by region in Bangladesh.

Government secondary schools are concentrated mostly in the urban centers, resulting in a lack of educational access to the majority of children from

rural areas, socio-economically backwards families, girls from remote urban periphery areas and ethnic minorities. The public high schools are generally recognized as model schools in terms of their students' performance in the SSC examination (The Daily Star 2008). The cost of education in these schools is just one third of any private school (The Daily Star 2005). Therefore, low cost of education also draws a large number of admission seekers to the public secondary schools. Also it is difficult to gain admission in the public secondary schools in big cities. In January, 2008, a total of 36,532 students contested for 7,479 seats in the admission tests in Dhaka City's 24 government schools (New Age 2008). Thus parents' interest, students' socioeconomic characteristics, administrative support from the government, teacher competency, and resources (of time, materials, and facility) have made public schools distinct. There are also some residential cadet colleges in Bangladesh, governed and run by the armed forces. These schools and colleges follow the Bangladesh Textbook Board

curriculum but use English as the medium of instruction.

The present scenario of secondary education of Bangladesh is the result of evolution of educational practices in the Indian sub-continent. Historically, Bangladesh has experimented with various educational systems which have left an indelible mark on Bangladeshi society. This article describes and analyses the evolution of secondary education in Bangladesh from the British period to the 21st century.

School Education during the British Colonial Rule

Bangladesh is a new state in an ancient land. The territory constituting Bangladesh was under Muslim rule for over five and a half centuries from 1201 to 1757 A.D. Subsequently, it came under the colonial rule of the British after defeat of the last sovereign ruler Nawab Sirajuddowala in 1757 (Islam 1992). The British came to this subcontinent as merchants but ultimately captured political power and ruled over the Indian sub-continent for nearly 190 years from 1757-1947 (McLeod 2002). During that period Bangladesh was a part of the British Indian provinces of 'Bengal and Assam'. Education in the Indian sub-continent dates back to an indigenous educational system from ancient times, continued through an Islamic style of education in the medieval period as a result of Muslim rule, and inculcated imperialistic education delivered during British colonization. The East India Company and the British Crown were generally indifferent to education in the Indian sub-continent until the early 19th century. Throughout the last decades of the eighteenth century and beginning of nineteenth century, European missionaries and the East India Company established several schools and colleges for developing the educational program of this area (Mukerji 1957). Warren Hastings (1773-1785) the Governor General of the East India Company was sympathetic to Indian traditions and encouraged indigenous Indian thought to the exclusion of Western educational instruction (Mann 2004). In 1781, Kolkatta Alia Madrasa, the first government college in the Indian sub-continent, was set up to produce officials well-versed in Islamic laws and in 1792 'Benaras Sangskrit College' was established by company officials (Chatterjee 1976). But the colonial officials had differences of opinion among themselves regarding the purpose of educating the people of this subcontinent, about the medium of education, management of schools, and the way of expanding educational facilities to the whole country (Ali 1986; Mukerji 1957; Viswanathan 1989).

The East India Company first recognized its responsibility towards education in British India in the Charter Act of 1813 (clause 43) where it highlighted the need to promote and uplift oriental languages and literature as well as increase the knowledge of western sciences among the Indian population (Kumar 1991). Thomas Macaulay (1800-1859), a member of the Governor General's Council, in his influential minute in 1835, articulated the supremacy of the Western culture and English language, supported the education of the upper classes, and made a vigorous plea for spreading Western learning through the medium of English (Ghosh 1993; Mukerji 1957). Consequently in 1837, English was made the language of administration, and thus the East India Company officially entered the education field of this sub-continent. As a result of the new policy there was a rapid growth of English schools and colleges (Mukerji 1957; Seal 1968) and English as the medium of instruction began to dominate the entire educational field (Ghosh 1993; Roy 1993). The indigenous educational institutions had to go through hard times due to financial crisis and the English language attaining dominant status (Chatterjee 1976; Sinha 1978). Most importantly, English became a compulsory subject in the high schools, for matriculation, and a requirement for college and university admissions (Mukerji 1956). However, at the beginning of the nineteenth century a system of liberal English-language schools based on the British model was also instituted in the region that now constitutes Bangladesh (Ali 1986; Nurullah & Naik 1962). According attention and importance to the secondary education system and its expansion, the British established 12 Zila schools and 3 collegiate schools (Public schools) in present Bangladesh land area during the years 1832-1855.

In this context, the celebrated Wood's Educational Despatch of 1854, resulting from an inquiry about education in India by the Select Committee of the British House of Commons, provided the legal foundation for modern public education in Bengal (Bhatt & Aggarwal 1969). Establishment of educational departments in every province, establishment of universities, supervision system, establishment of graded schools, grant-in-aid private schools, teachers' training institutions, creating a comprehensive secular system of education for the diffusion of practical knowledge using both English and the vernacular languages were the major outcomes of the Wood's Despatch (Nurullah & Naik 1951). Secondary education as a distinct level of the total education structure emerged only after the publication of the famous Education Despatch (Mominullah 1984). However, one of the first

documents advocating formal education for girls in Bangladesh (then part of India) is 'Wood's Education Despatch' of 1854. In that document, 'female education' was promoted because it enhanced the educational and moral tone of the people (Jalaluddin & Chowdhury 1997). What educational provision there was for girls focused on 'education for enlightened motherhood' (Chanana 1994): they were being trained to be mothers, rather than --for example-- being prepared for paid employment or for tertiary education. The universities of Calcutta, Madras and Bombay were established in 1857, which had far reaching effects especially on the content, range and scope of secondary education. They dominated secondary schools in every respect and secondary education became necessary for university education.

In 1882, Lord Ripon appointed the first Indian Education Commission with William Hunter as its Chairman (Nurullah & Naik 1962). They suggested leaving secondary education to private enterprise through a system of grants-in-aid, school-end 'entrance examination' and appointment of trained teachers at secondary schools. After the all Indian Education Conference at Simla in 1901, Lord Curzon published his education policy in the form of a government resolution in 1904 which contributed to the increase of vernacular education at the high school level, especially in public schools, catering to the masses (Ali 1986). But elite, European or convent schools used English as the medium of instruction which excluded most Indians on grounds of birth or poverty. Learning in high schools was vigilantly checked by regular inspections and matriculation examinations. The control of textbooks was one of the measures by which the State maintained supervision over the vast body of public schools. The pedagogical content of secondary schools was prescribed by the British Crown; even colonial officials exercised the right to reject textbooks used in private schools such as madrasas (Bhatt & Aggarwal 1969). The schools were strict to follow learning exercises and schedules, or regulations imposed by the British rulers.

Under the reforms of 1919-1921 elementary education was made free within municipalities and rural unions and in Bangladesh the first steps towards universal primary education were taken through the Bengal primary education act 1930 (Memmi 1957). A provincial department of education was established in 1930, and thus began the process of centralization and bureaucratization of education. Consequently, the enactment of the Bengal Education code in the same year was a landmark legislation (The Bengal

Education Code 1931) that created the 'District School Board' as the administrative body for primary and secondary education. A Central Advisory Board was established in 1935, for policy formulation in education recommended by the 'Hertz Committee-1927'. In 1945, a separate Education Department was established under the Central Government and its responsibilities were entrusted to a member of the Central Executive (Nurullah & Naik 1951). Though the British at that time took initiatives to overcome the educational backwardness of the Indian sub-continent (Mann 2004), the education imparted by them did not develop practical skills or technical knowledge; rather it emphasized classical, humanistic curricula in schools to perpetuate the aristocratic tastes and manners of the upper class to create exclusively dependent elite (Ilon 2000; Mukerji 1956; Seal 1968). This elite class, who had job prospects and social mobility at a certain level (Roy 1993; Basu 1934), provided clerical and administrative support to the colonial administration and became faithful customers to British goods (Chatterjee 1994). But, the new elite became alienated from the masses who had little or no access to the new education system (Basu 1952; Bhattacharya 2005; Robb 2002).

Economic and socio-religious mobility were the major hindrances for the poor in British India to enroll in schools. The caste-allied socio-religious restrictions imposed upon the poor prevented them from achieving the new forms of knowledge. The cost of education was another important factor that pushed away the poor from the schools. The direct cost of schooling, expenditures such as books, fees, uniform, and so on, and indirect costs in terms of foregone earnings while the child was at school were key economic factors for the poor who could not overcome these hurdles in order to achieve knowledge. Instead of upliftment of the poor, the colonial government introduced the education policy based on "filtration theory" (Bray 1993). Nurullah and Naik (1951) also criticized the British for not having developed a truly national system of education, for failing to evolve a synthesis of eastern and western cultures, for neglecting indigenous education, and for the absence of any overall plan or consistent drive to reach a predetermined goal.

Secondary Education and Schools in Bangladesh during Pakistani Rule

With the end of the British rule in 1947, the sub-continent was partitioned into two independent countries, India and Pakistan. Bangladesh became one of the provinces of Pakistan and was named East

Pakistan. There was a general awareness of the need to restructure the education system to meet the needs of the new nation. The First Education Conference was held in 1947 in Karachi. In 1949, Maulana Akram Khan Committee on education was established and in 1951, Second Education Congress was held in Karachi (GoP 1947; GoP 1951). Following the reports of Akram Khan Committee and Aatur Rahman Khan Commission 1957, the United Front government envisaged a universal single stream primary and secondary education system for all based on scientific knowledge. The newly formed Sharif Commission on Education (1958) and the 'Curriculum Committee for Secondary Education (classes vi-xii)' under military rule also articulated in their reports a need to shift the focus of school education away from rote memorization and to expand facilities for scientific and technological education (GoP 1960). The Curriculum Committee for Secondary Education (classes vi-xii) produced a report, a document of 647 pages, in a record time of three months. In 1956, the constitution of Pakistan eventually recognized Bangla as one of the national languages. In the successive five-year plans and other national economic policy documents developed during the Pakistan period, the need of modern science education was also articulated but the impact of such policies was not felt in East Pakistan.

Therefore, discarding the traditional single stream secondary education in 1959, separate streams were introduced after Class-8 namely Arts, Science and Commerce. The East Pakistan Intermediate and Secondary Education Ordinance of 1961 spelt out the law regarding establishment of managing committees for secondary schools. Based on this ordinance, regulations were framed at various times on such matters as student fees, admission and registration, holding public examinations and terms of teachers' service. The East Pakistan Secondary Education Board took charge of the affiliation and examination of secondary level institutions. This step was followed by the creation of a School Textbook Board in 1954. Later one Board was split into four on the principle of one Board for each administrative division of the country. These four Boards shared between them the responsibilities of granting recognition to the schools, supply of textbooks, inspection and above all holding two public examinations, one at the end of the year of schooling (Secondary) and the other at the end of the twelfth year (Higher Secondary).

During that time, a student movement (1962-64) was launched against the Sharif Commission, demanding a pro-people education policy. As a result, in 1964,

the new 'Commission on Student Problems and Welfare' was appointed headed by Justice Hamoodur Rahman (GoP 1966). But, with few exceptions, a liberal elite-based secondary education system with very little awareness of life in the countryside was in place. However, the commission report criticized a few elitist secondary educational institutions which did not fit in with principles of equality and social justice (GoP 1966). The commission reported, "The idea of superior and inferior schools does not fit in with our socio economic pattern and principles of equality and social justice as enunciated by Islam which have been declared as the avowed policy of the state in the preamble of our Constitution" (GoP 1966). Curle (1966) points out that during the Ayub Khan regime (1958-1969), Pakistan's education system was elitist and there was apathy towards educating the masses. In 1969, General Yahya Khan's government appointed a committee, with Air Marshal Nur Khan at its head, to overhaul the educational system. This committee recommended Urdu and Bangla, instead of English to be the medium of instruction in Pakistan by 1975 (GoP 1969). This policy put a brake on progress and led the country to technological backwardness. The phenomenon of keeping education exclusive to some in Pakistan was also the legacy of colonial education. However, in the 1960's, one boys' and one girls' secondary school was introduced in each 'Mohukuma' (administrative region) by the Pakistani rulers as public schools.

School Education and Schools in the Bangladesh Era

Economic disparity, extraction of wealth and socio-political repression made East Pakistan very discontented. Starting from the language movement in the year 1952 to establish Bangla as a national language (Alam 1991; Umar 1970), the people of East Pakistan struggled hard for democracy and autonomy, which turned into a war of liberation in 1971 (Zaheer 1994). After a protracted nine-month war, Bangladesh finally achieved independence, inheriting in 1971 a literacy rate of 17.61 per cent of the population of all ages (GoB 2004a).

The first Education Commission in Bangladesh appointed under Dr. Quadrat-e-Khuda submitted its report in 1974. The report emphasized secular education at all levels, future work-relevant technical and vocational education, improved assessment system, letter grading in the assessment of student performance at all stages of education and making primary education from grade 1-8 and secondary from grade 9-12 (GoB 1974). The report firmly

asserted that ‘women’s education should be such as to be of help to them in their domestic life’, and stressed that subjects such as child-care, the nursing of the sick, preservation of health, food and nutrition must be included. It also suggested that girls should be channeled into ‘vocations especially suitable to them’, such as primary-school teaching, nursing, and typing (Jalaluddin & Chowdhury 1997).

An Advisory Committee was appointed in 1978 to have a fresh look at the issues and problems of education (Shahadat 1999) which submitted an ‘Interim Education Policy 1979’ report on 8th February, 1979. The interim education policy document consisting of the recommendations of the National Education Advisory Council, headed by the Ministry of Education, was hastily formulated as a new blueprint for the education sector. The interim policy document emphasized increased literacy so that people could take part in the development of the country. The document established the current educational framework with secondary education consisting of three sub-stages; namely, junior secondary (3 years), secondary (2 years), and higher secondary (2 years). In addition, the document stipulated the following: “(a) terminal examination will be conducted by the District Education Authorities for all stages of secondary education; (b) vocational, technical, agricultural and medical education will be included and integrated into secondary and higher secondary education; (c) there will be provision of skills development in any technical subject at junior secondary and secondary levels.” In regard to madrasa education, the ‘Interim Education Policy’ stipulated that it should be reorganized to ensure its equivalency to general education in such a way that the ‘dakhil’ level would correspond to secondary and ‘alim’ to higher secondary education (GoB 1979; UNESCO 2007).

The Madrasa Education Ordinance was also issued in 1978 and in 1981 the government introduced, for the first time, service rules and salary subvention system for teachers and staff of private secondary institutions. Before 1980 public sector contribution towards salary subvention to non-government educational institutions at secondary and higher secondary level was limited in the form of ‘Dearness Allowance’. Initially teachers used to get 50% of their basic salary quarterly through the district treasury. The office of the Director of Public Instruction (DPI) was upgraded as the Directorate of Secondary and Higher Education (DSHE) in 1981. In 1983 the government formed a cadre named BCS (General Education) and the government college teachers, public secondary school headmasters,

district education officers came under the cadre service. Under the rule of Lt. Gen. Hossain Muhammed Ershad (1982–90), in 1983, the ‘Enam committee’ for administrative reconstruction made 14 subject-based teachers post in each government public school. But in the amended recruitment rules for teachers in 1989, all the posts were made ‘Assistant Teacher’. Teachers’ associations demanded upgrading the status of secondary school teachers as they were getting the status of class-III government employees.

Two military regimes of General Ziaur Rahman (1975-1981) and General H.M. Ershad (1982-1990) changed Bangladeshi identity politics from a secular and ethnic “Bengali” identity to State-based and pseudo-Islamic “Bangladeshi” identity to build political legitimacy and take Bangladesh out of India’s shadow. Education was used as a vehicle for promoting “Bangladeshi” nationalism. The two regimes made constitutional changes to erase secularism by “absolute trust and faith in Allah” and Islam as the “State religion” in 1979 and 1988 respectively. Therefore, during General Ershad’s rule and afterwards there has been unplanned mushrooming of Madrassa/religious schools in Bangladesh. Religious education was used as a tool for attracting votes of religious people and to beat the secular opposition in electoral politics. The Ershad regime made Islamic studies compulsory up to the secondary level amid strong opposition from secular and left leaning parties (Gustavsson 1991). The regime patronized Madrassah education from primary to higher secondary level with government recognition. Furthermore, like different political governments after liberation in 1971, ‘Ershad Government’ took the responsibility of secondary education by nationalizing many schools throughout the country.

Bangladesh was under military-led quasi democracy throughout 1975-1990. During the 1980s, the reports of ‘Majeed Khan Commission 1983’ and ‘Mofiz Commission 1988’ on education were not widely disseminated and like many other reports of the past, were not formally adopted for implementation (Sahadath 1999). Democratic practice has been in existence since 1990s and many changes and development took place at the secondary level of education system. During the early 1990s many public schools went into double shift school and new teaching posts were created, reflecting significant changes. Female students’ stipend program (FSP), increase of government subsidy in monthly pay order (MPO) and a new assessment system at SSC examination were also introduced in 1992. Raynor

and Chowdhury (2004) claim that, “The stipend program has brought about change. Adolescent girls are now visible in large numbers, going to and from school in rural areas--in itself a fundamental change. The female stipend program (FSP) offers an allowance to encourage families to send girls to school, and to help to meet the costs of education.”

During the mid-1990s, the secondary school curriculum was revised, approximately 150,000 teachers received short-term training in the new curriculum; ten teacher-training colleges were upgraded and five new higher teacher training institutes were established. At the end of the 1990s, ‘Shamsul Haque Education Commission 1997’ was formed. Correspondingly, in 2001 and 2003 two other commissions ‘Abdul Bari commission 2001’ and Moniruzzaman Miah Education Commission 2003’ were formed. The latter submitted its report in 2004 and advocated a single-track secondary education system, wider access to education in rural areas, narrowing down teacher-student ratio, upgrading teacher qualifications, reforming the curriculum and teaching methods, and improving the assessment and examination systems at secondary level (GoB 2004b). In different phases the amount of public sector contribution towards salary subvention to non- government educational institutions at secondary and higher secondary level was increased to 60%, 70% and 80% and finally up to 90% in 2001. The remaining 10% is provided by the institutions. Teachers and staff are also given 25% & 50% of their basic salary as festival allowance & limited house rent respectively. Presently the government is giving 100% of salary subvention to the teachers of non-government educational institutions and the disbursement is made monthly through teacher’s personal bank account.

Recently, the major focus of education policy at school levels has switched from “quantity” to “quality”. Reforms are being implemented in school managing committee (SMC), retirement and service benefit of non-government teachers, teacher training, information technology and computer education, secondary curriculum and school-based assessment system (SBA), and English language teaching (GoB 2005; World Bank 2005). ‘Quality Assurance’ is now being pursued to help evaluate schools’ performance using a set of indicators (World Bank 2006). The Sixth Five Year Plan (2003-2008), issued by the Planning Commission, presents the following targets in regard to secondary education: (a) increasing participation at different levels and types of education, such as lower secondary, secondary, and higher secondary levels, including madrasa

education; (b) increasing participation of girls through stipend programs at all levels of secondary education; and (c) increasing quality of secondary education through in-service training of teachers (UNESCO 2007). Despite these initiatives, Bangladesh faces new challenges and demands in the education sector and the secondary education system is still facing problems in delivering quality education (Ahmed 2005).

Even though there have been seven education commissions to date, Bangladesh’s education policy has not been realistic after 39 years of independence. Successive governments in Bangladesh, whether for political motives or real attempts at getting it right, have always advanced legitimate explanations for embarking upon one reform program or the other. Over the years, emphasis was placed on quantity by setting up unnecessary secondary education institutions to satisfy politicians and their constituencies (GoB 2005). These schools don’t have adequate facilities, qualified teachers and above all competent educational administrators (Begum & Bhuyan 2005). So, secondary education in Bangladesh ignores, in a thousand ways, the rules of integral, transformational healthy educational development. Evidently the ineffectual manner by which the policies were implemented ensured that educational planning was social-demand oriented rather than manpower oriented (Mahmud 2003; Sen 2002). The secondary graduates, therefore, suffer with no marketable skills to sell to prospective employers and millions of them roam the city and town streets (Ilon 2000; GoB 2005).

Proposed Education Policy 2009

The present Awami League (AL) government, having won a decisive victory in the recent national elections, is designing another new national education policy. The government formed a sixteen member committee to update the National Education Policy 2000 which was headed by National Professor Kabir Chowdhury (The Daily Prothom Alo 2009). The proposed new education policy was formulated in light of the ‘Quadrat-e-Khuda Commission’ report of 1974 and ‘Shamsul Huq Education Commission Report’ of 1997. This is indeed timely, especially in a globalizing world in which other countries such as China and India have pushed ahead into the 21st century by vigorously engaging in knowledge revolution and human resource development.

The final draft of the National Education Policy 2009 was formally submitted to the Prime Minister on September 7, 2009. The salient features of the

recommendations of the committee include revising the stages of undergraduate education from three to two, the mandatory inclusion of certain compulsory subjects under all streams of education, making education more need-based and formation of a permanent education commission (The Financial Express 2009). The Policy also recommends extending compulsory primary schooling to eight years. Final primary level exams will be held at the end of Class 8 and secondary school scholarships will be awarded based on the results. The new policy also recommends that secondary level studies will extend over four academic years, Classes 9-12, and the government scholarship exams will be taken at the end of Class 10, instead of SSC exams. Final secondary level exams will be held at the end of Class 12. Some fundamental subjects including Bangla, moral education, Bangladesh studies, mathematics, natural environment, social studies, IT and science will be made compulsory in different streams of primary and secondary level curriculum. The policy also calls for some form of technical and vocational education to be introduced at all secondary level institutions. Accordingly, Madrasa education will be restructured by including information technology and vocational training among compulsory subjects. It has also recommended formation of a non-government teachers' commission. Such broad proposals are to be welcomed, especially the one requiring all students to be taught certain compulsory subjects such as science and mathematics at the primary and secondary levels (The Financial Express 2009).

Education is central to realizing national aspirations. In this regard Andaleeb (2009) stresses the need for various stakeholders' commitment to the education sector. He also claims that the education sector is financially challenged. The allocation of financial resources to education in Bangladesh, which is roughly 2.7% of GDP, must be increased significantly. In other countries the comparative numbers are roughly: India 3.2%, Thailand 4.2%, Malaysia 6.2%, UK 5.6 and USA 5.3% (Andaleeb 2009). However, the government should also look into the earlier education policy documents and translate the recommendations into action. Girl's right to education, inclusive education, indigenous children and their right to learn their own languages should be well documented in the policy proposals. Moreover, it must also address environmental issues, health and nutrition, character education, conflict resolution and participation of local government in the education system. It is important to consider whether the government is institutionally prepared for the proposed change. There is much to be

improved upon and strengthened, particularly in areas of capacity building and availability of competent teachers to operationalize the new policy as effectively as possible (The Financial Express 2009). It is also imperative to set up effective and supportive infrastructures, particularly in thrust areas, in order to make education truly useful for the economy.

Designing education policy is a challenging task. Perhaps more time should be devoted to think through the vital issues. Incorporation of various suggestions by concerned quarters should be considered before the policy is finally approved for implementation. The policy also will also require closer and careful examination and be mandated by the country's parliament. The education minister hopes that after finalizing the policy, its full-fledged implementation will begin early next year (The Financial Express 2009).

Conclusion

The education system of Bangladesh is continually undergoing reforms in order to meet the current and future needs and challenges for socio-economic development of the country. In the process, secondary education has seen a number of positive developments. Bangladesh has made significant progress in providing more young people with access to secondary education, increased enrolment (especially for girls), increased the number of schools and teachers, reduced gender inequality in education, revised the curriculum, etc. Even so, in spite of all its achievements, declining quality in secondary education system, which is reflected in public examination results, remains a major concern. The government fully recognizes the urgent need to improve the quality of education alongside its efforts to create equitable access to secondary education. However, the issues of access, equity and quality, being intertwined, require looking at education in totality and in an integrated manner. More investment is also needed in this sector although there are a number of challenges, including lack of financial resources. However, what is of interest to all stakeholders is the identification of factors that will enhance learning in all schools, irrespective of the background of the children that attend them.

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