Bangladesh

SECTOR-SPECIFIC INVESTMENT STRATEGY AND ACTION PLAN

G20 Indicators for Measuring and Maximizing Economic Value Added and Job Creation from Private Investment in Specific Value Chains

Pilot Study Results

UNCTAD

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This Report forms part of the work undertaken by the Inter-Agency Working Group for the Private Investment and Job Creation Pillar of the G20 Multi-Year Action Plan on Development.

I. INTRODUCTION

This report is part of a series of six country pilot studies, carried out by UNCTAD in collaboration with other agencies of the inter-agency working group (IAWG) as phase two of the programme of work on "Indicators for measuring and maximizing economic value added and job creation from private investment in specific value chains."[1]

The objectives of this report are:

1. To provide value-added recommendations to policymakers in Bangladesh on attracting and benefiting from private investment in the textiles and garments value chain. These recommendations must be seen against the backdrop of recommendations on the overall policy framework for investment in the country.[2]
2. To help refine the indicator methodology developed by the IAWG for the G20 and to provide guidance for the meaningful use of development impact indicators in the formulation of policy recommendations in the area of investment.

For the purpose of the country pilot study and the testing of the usefulness of the indicator approach the focus of this report is on the pre-selected textiles and garments value chain only.[3] This value chain is currently a priority for the Government of Bangladesh with respect to industrialization and a priority for efforts to attract private investment, in particular foreign direct investment (FDI). The focus of this report on one pre-selected value chain implies that the indicator approach should help:

1. confirm, nuance or alter current thinking of policymakers on investment priorities
2. identify value chain gaps and opportunities for investment promotion
3. identify prerequisites or challenges for the targeted attraction of investment

This report is based fieldwork and desk research carried out by UNCTAD from November 2011 to May 2012. In the fieldwork a total of 12 meetings with representatives of government agencies, development partners and private sector actors were conducted (see Annex 1), with follow-up discussions as necessary. Data were collected from local statistics sources, in particular from the Bangladesh Bureau of Statistics (BBS). Desk research focused on complementing the data and information collected locally with international comparators in order to establish a reference framework.

The structure of the remainder of this report is as follows:

- Section II will provide a brief overview of the current profile of the textiles and garments value chain in the context of the overall economy.
- Section III will look at the impact of investments in this value chain through the lens of the indicator framework.

[1] Action item 2 of the Private Investment and Job Creation Pillar of the G20 Multi-Year Action Plan for Development agreed at the G20 Seoul Summit in November 2010. This report is to be considered an integral part of the Pillar's work. For further background and explanation of the applied methodology, see the interim report to the G20 Development Working Group (presented at the November 2011 G20 Cannes Summit): "Indicators for measuring and maximizing economic value added and job creation arising from private sector investment in value chains".

[2] The country pilot projects have been designed as an integral part of "Investment Policy Reviews" (IPRs), as carried out by UNCTAD and other agencies of the IAWG (notably the OECD). The broader recommendations of the IPRs are not repeated in this document. See annex 2 for a summary of FDI policies in Bangladesh, based on UNCTAD's Investment Policy Review (UNCTAD, 2012)

[3] The pre-selection of sectors is necessary to narrow the scope of the pilot studies, even though the ultimate aim of the development-impact indicators framework is to help policymakers to also identify the most promising economic sectors for the attraction of investment. Integrating the indicator approach in the IPR process also implies that policymakers indicate sector preferences and priorities.

- Section IV describes the key findings based on the indicator approach within the textiles and garments value chain.
- Section V will draw final conclusions and formulate recommendations, in the form of key elements of an action plan to attract and negotiate high value-adding investment.

II. INVESTMENT PROFILE

The ratio of gross fixed capital formation (GFCF) to GDP in Bangladesh has fluctuated between 23 to 25 per cent for the past decade, with a rising contribution by the private sector. Private investment has increased to around 80 per cent of total investment, up from 68 per cent at the beginning of the millennium (Ministry of Finance, 2011). There has also been some shift towards investment from abroad: the ratio of FDI to GDP has increased from 0.59 per cent in 2000 to 0.96 per cent in 2010.[4] Moreover, the Government has recently promulgated several policy reforms to create a more open and competitive climate for foreign investment, although some restrictions remain (annex 2).

The textiles and garments value chain is almost exclusively in the hands of the private sector and accounts for a large proportion of capital formation in manufacturing. Textiles and garments represented 37 per cent and 9 per cent respectively of investment[5] in manufacturing industries in 2005/06, the latest available year (Annex 3). The Government of Bangladesh offers sizeable incentives to promote the value chain. For instance, in order to encourage textile exports the government permits the import of capital machinery, some spare parts and dyes chemicals at a concessionary rate of duty; similarly import of cotton is duty-free. A 5 per cent (of FOB export price) subsidy for garments exports is in place – conditional on a local content requirement. Many of the government's support policies target the use of local-produced fabrics in the export oriented garment industries.

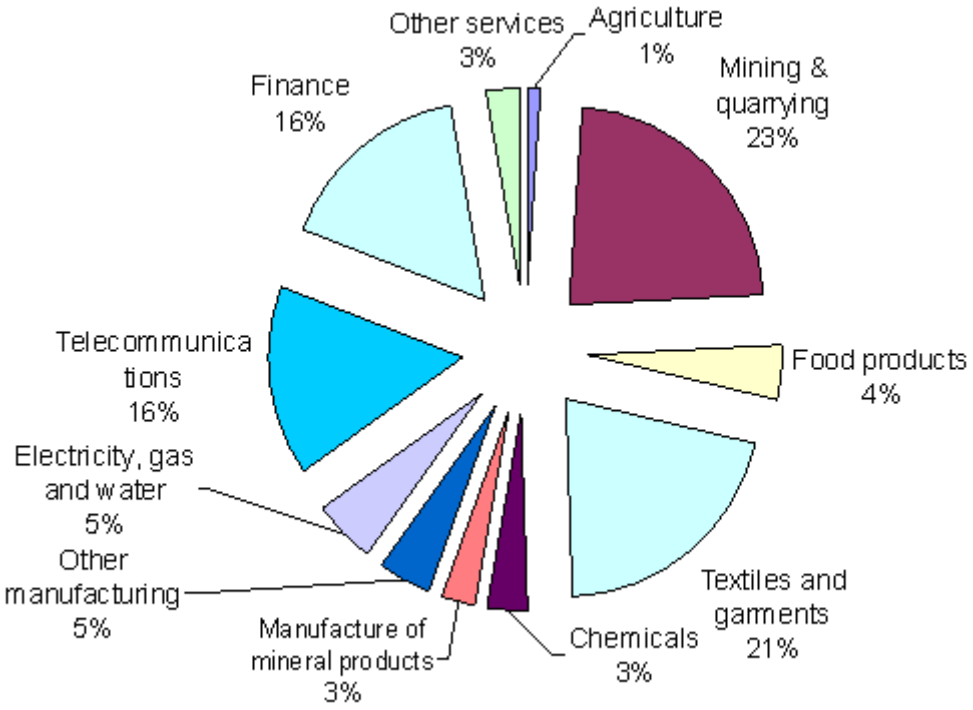
Against this backdrop, the textiles and garments value chain has expanded dramatically over the last few decades in Bangladesh. Garment exports as a significant business activity were established during the mid-1980s with the arrival of foreign investors keen to access Bangladesh's abundant supply of low-cost labor, as well as take advantage of preferences available under the Multi-Fiber Arrangement (MFA).[6] Today the largest export industry, garments occupy a unique position in the Bangladesh economy, additionally driving the growth of textiles and other parts of the economy.

The relatively large share of the textiles and garments value chain in FDI (in 2009 its share of total FDI stock was 21 per cent) has nevertheless to be measured against an overall poor performance by Bangladesh in attracting FDI (UNCTAD, 2012). By way of comparison, the services sector dominates FDI inflows into the country, accounting for 52 per cent of the inward FDI stock of $1.1

[4] These Data are taken from the World Bank's World Development Indicators Global Development Finance databases.
[5] Investment defined as total additions and alterations to fixed assets.
[6] This international "managed trade" regime in the sector caused global dispersion of production by limiting imports from countries that would have a larger volume of exports were they not constrained by their quota allocations (Khondker, Razzaque and Ahmed, 2005).

billion (figure 1). FDI stock in mining and quarrying constitutes for 23 per cent of the total; while, apart from textiles and garments, foreign investment in manufacturing is minimal.

Figure 1: FDI stock in Bangladesh, by sector, 2009

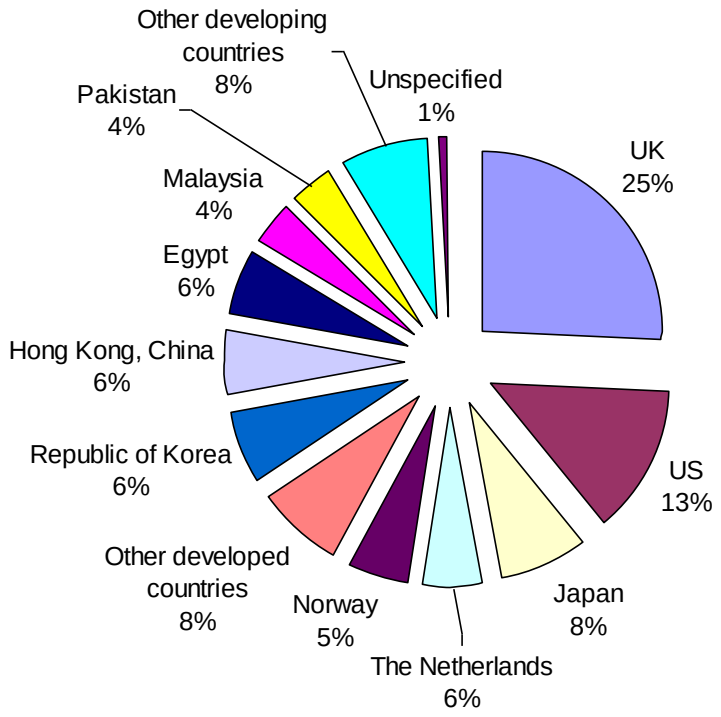


Source: UNCTAD FDI/TNC database.

The United Kingdom, the United States, Japan, the Republic of Korea, Hong Kong, China and Malaysia are among the largest sources of foreign investment in Bangladesh (figure 1); and some of them are also at the forefront in the textiles and garments sector in Bangladesh (tables 2 and 3). However, because of the sheer scale of the sector, it is not dominated by foreign players. Out of 1,654 investment projects registered in garments during 2003 and 2011[7], only 181 or 11 per cent were foreign-originated. Nevertheless, due to the larger scale of foreign investment projects they nevertheless constitute a large share of employment, capital formation and other impact measures. For example, foreign investments registered *outside* of export processing zones (EPZs) accounted for 21 per cent of prospective employment from investment registrations over 2003-2011 (table 1).

[7] Not all of them were eventually implemented

Figure 2: FDI stock in Bangladesh, by geographic origin, 2009



Source: UNCTAD FDI/TNC database.

Table 1: Registered domestic and foreign investments into garments in Bangladesh (excluding EPZs), January 2003 to June 2011

	Domestic investments	Investments with foreign participation	Total
Number of units	1,473	181	1,654
Total investment amount (constant 2010 $ million)	1,304	368	1,672
Average investment amount (constant 2010 $ million)	0.885	3.033	1.070
Employment per million invested (constant 2010 $)	365	336	359
Total employment	476,031	123,750	599,781

Source: Board of Investment.

Notes: The figures only refer to registered investment projects, i.e. no check on realization has been made. Data may also be to some extent biased towards FDI due to some domestic projects not being registered.

Table 2: Largest investment projects into the textiles and garments value chain in EPZs (up to 2009)

Name	Product	Country	Investment ($ million)	EPZ
Ring Shine Textile Ltd.	Textile	Malaysia; Singapore	77.3	Dhaka
YKK Bangladesh Pte. Ltd	Garments Accessories	Japan	70.5	Dhaka
South China Bleaching & Dyeing Factorty Textile	Textile	Republic of Korea	34.7	Dhaka
Titas Sportswear Industries Ltd.	Garments	Republic of Korea	25.2	Chittagong
Universal Jeans Ltd.	Garments	Bangladesh	22.7	Chittagong
Gold Tex Ltd.	Textile	China	21.7	Dhaka
Youngone Hi - Tech Sportswear Ind. Ltd.	Garments	Republic of Korea	21.1	Dhaka
Shasha Denim Ltd.	Textile	Bangladesh	20.8	Dhaka
Kung Keng Textile Company Ltd.	Textile	Malaysia	20.5	Dhaka
Kwun Tong Garments	Knitting & Other Textile Products	British Virgin Islands; Hong Kong, China	19.7	Adamjee
Premier Towels (BD) Ltd.	Terry Towels	Canada; USA; Bangladesh	18.4	Chittagong
EPIC Garments Mfg. Co. Ltd.	Garments	Hong Kong, China	17.1	Adamjee
Dayeu Bangladesh Ltd.	Textile	Republic of Korea	17.1	Dhaka
Nassa Taipai Denims Ltd.	Textile	Taiwan, Province of China; China; Bangladesh	16.8	Comilla
HKD International (CEPZ) ltd.	Tent	Republic of Korea	16.6	Chittagong

Source: BEPZA Annual Report 2008-09.
Note: $ amounts are nominal and of various years.

Table 3: Largest 25 textiles and garments investment projects with foreign participation registered with Board of Investment

	Name of project	Country	Sector/main product	Employment	Year of registration	Constant 2010 $
1	Hualon Corp. Bangladesh Pvt Ltd.	Malaysia	Integrated Textile	300	1994	312.9
2	Bextex Ltd.	UK	Textile Spinning	3,751	2008	167.5
3	Bex-Maru Polyester Limited	Japan	Textile Spinning	50	1994	104.9
4	Bextex Limited. (Beximco Textile Ltd.)	UK	Specialized Textile	200	1994	102.5
5	Buriganga Textiles Ltd.	Singapore	Readymade Garments (Knit Composite)	50	1994	74.7
6	North South Composite Textiles Ltd.	Singapore	Readymade Garments	50	1994	71.2
7	International Textile Mills Ltd.	Japan	Integrated Textile	50	1994	66.1
8	Kohap (Bangladesh) Limited	Republic of Korea	Polyester Yarn	205	1996	64.9
9	Saturn Textiles Ltd.	UK	Readymade Garments (Knit)	3,044	2007	52.4
10	Kader Synthetic Fiber Ltd.	The Netherlands	Polyester Yarn	50	1989	47.6
11	Omni Textiles Mills Ltd.	Hong Kong, China	Composite Textile	375	1999	44.0
12	Padma Textile Mills Ltd.,(unit-4)	Thailand	Textile Spinning	1,175	1997	39.6
13	Denim International Ltd.	USA	Readymade Garments (Knit Composite)	310	1998	36.1
14	Regional Spinning Mills Ltd.	China	Textile Spinning	1,045	1998	33.9
15	Unilliance Textiles Ltd.	UK	Dyeing & Finishing	1,526	2006	32.3
16	Russell Corp Bangladesh Ltd.	UK	Readymade Garments (Knit)	200	1995	30.4
17	Kader Synthetic Fiber Ltd.	The Netherlands	Textile Spinning	251	2004	29.4
18	Daeyu Bangladesh Ltd.	Republic of Korea	Sweater	2,997	1996	27.7
19	Padma Textile Mills Ltd.	UK	Textile Spinning	150	1987	27.4
20	S. F. Textile Limited	Republic of Korea	Blanket	360	2011	26.6
21	My Spun Yarn Ltd.	Hong Kong, China	Textile Spinning	648	2010	26.2
22	Amann Bangladesh Ltd.	Germany	Sewing Threads	308	2011	25.8
23	Uttara Itotex Spinning Ltd.	Japan	Textile Spinning	480	1998	25.7
24	Marhaba Synthetic Mills Ltd.	Hong Kong, China	Polyester Yarn	50	1990	24.8
25	Silver Reed Weaving Mills Ltd.	Hong Kong, China	Textile Weaving	431	2006	24.0

Source: Board of Investment.

Notes: The BoI only registers investment projects outside of EPZs. The figures only refer to registered investment projects, i.e. no check on realization has been made. For example the investment by Bex-Maru Polyester Limited (No. 3) listed was not ultimately undertaken. Data may be biased towards foreign investors since some domestic projects may not be registered.

Apart from the projects reported in table 1, EPZs are home to many of the larger textiles and garments investments, most of which are owned by foreign investors. Companies in EPZs enjoy special benefit packages, including tax holidays, exemption from dividend tax and duty free imports. Out of the largest 65 projects in EPZs, 48 are in the textiles and garments value chain, i.e. the bulk of all projects by number and value established in EPZs. Table 2 shows the largest investment projects in the textiles and garments value chain in Bangladeshi EPZs up to 2009. It is noteworthy that most of the foreign investors are from developing countries, such as China, Hong Kong, China, Malaysia, the Republic of Korea and Singapore. A number of investments are Bangladeshi owned.

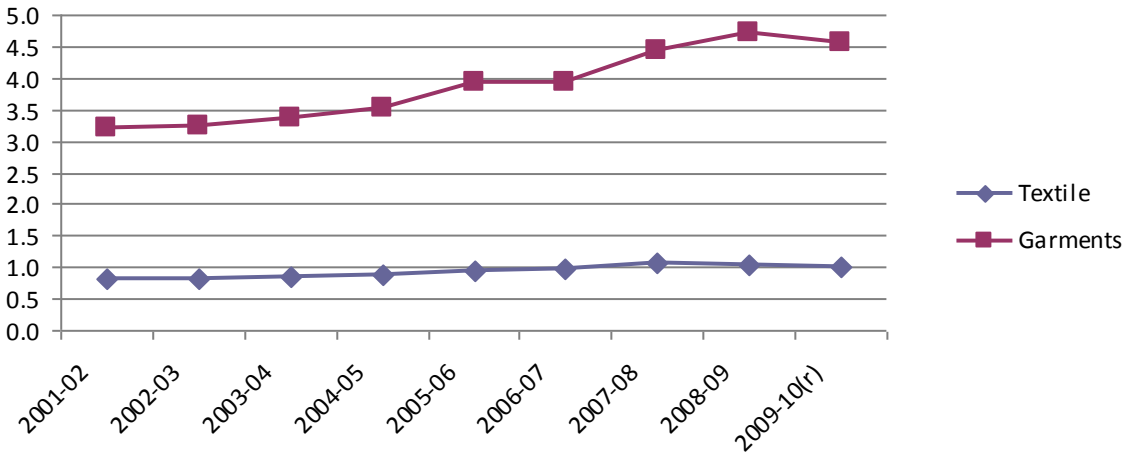
Foreign investments outside EPZs are also sizable in capital terms (table 3) and, indeed, the ones outside EPZs are up to four times as big as the largest within EPZs. In contrast to investments *within* EPZs, developed country TNCs (e.g. from the UK, the USA, Japan, Germany and the Netherlands) are well represented among the largest textiles and garments operations *outside of* EPZs. At the same time, companies from a number of developing countries (e.g. Malaysia, Singapore, Thailand, Hong Kong, China and the Republic of Korea) are also present. None of the 25 largest operations outside of EPZs are Bangladesh owned.

III. INVESTMENT IMPACT

Economic value added

Value added. The textiles and garments value chain contributes roughly 5.5 per cent to GDP in Bangladesh, with about three quarters of this accounted for by the garments sector (figure 3). The combined share has shown a rising trend throughout the past decade, from 4.0 per cent in 2001-02 to 5.6 per cent in 2009-10. Given the importance of the value chain for exports and their share of formal sector employment the value added share is surprisingly low; above all due to the low level of formalization of the economy.

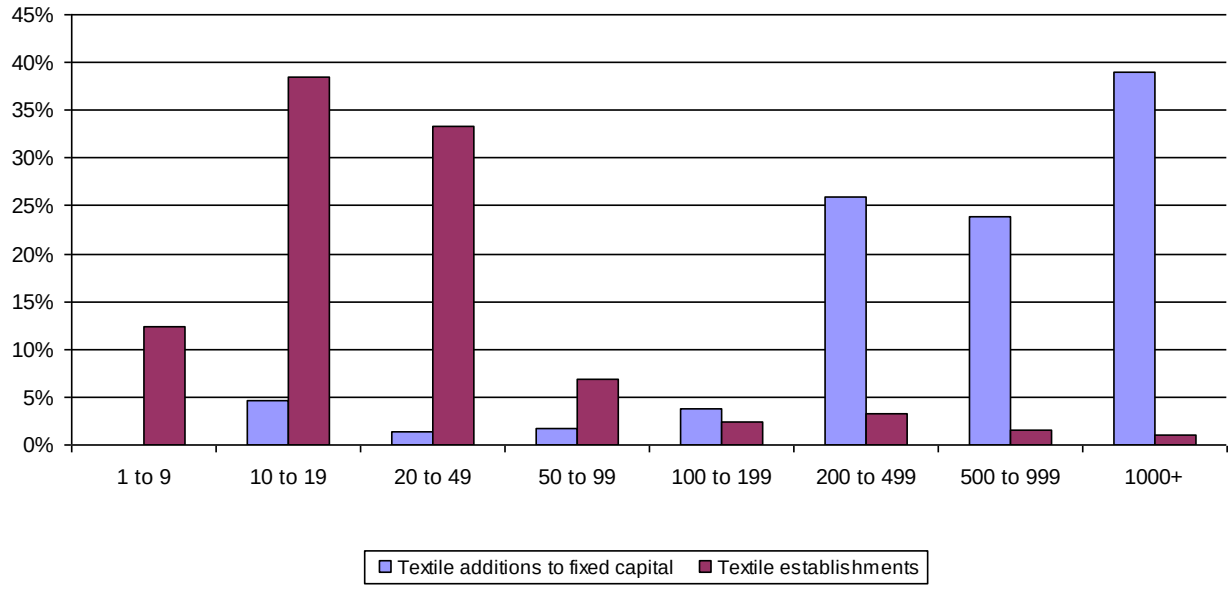
Figure 3: Share of textiles and garments in GDP for Bangladesh



Source: Calculated from Statistical Year Book 2010 (BBS, 2010).
Note: 2009-10 figure is estimated.

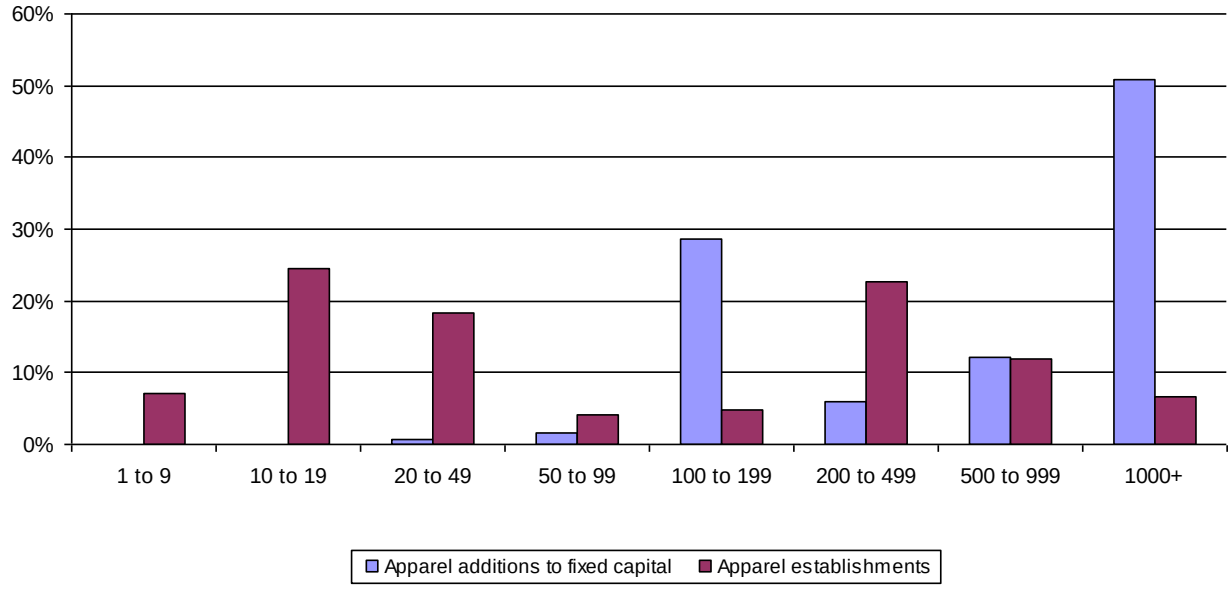
Capital formation. The textiles and garments value chain contributes a large chunk of capital formation in manufacturing, with textiles accounting for 37 per cent and garments for another 9 per cent of total additions and alterations to fixed assets in manufacturing industries in 2005/06. Small establishments do not account for much of this, despite being very numerous. In the textiles sector, establishments with more than 100 employees (8.3 per cent of all establishments) account for 92 per cent of this capital formation; in garments (4.6 per cent of all establishments) the equivalent share is as high as 98 per cent (figures 4 and 5).

Figure 4: Capital formation and establishment size (employment) in textiles in 2005-06 (per cent of total)



Source: BBS, Census of Manufacturing Industries 2005-06.

Figure 6: Capital formation and establishment size (employment) in garments in 2005-06 (per cent of total)



Source: BBS, Census of Manufacturing Industries 2005-06.

Exports. The $15.5 billion level of exports by the garments sector in 2010 accounted for the bulk of exports from Bangladesh (76 per cent), with textiles comprising another 8 per cent. Within the garments sector, traditionally the bulk of exported garments were woven products, i.e. 86 per cent in 1992-93 and 68 per cent in 2001-02. However in recent years, knitwear exports have surpassed those of woven products, so that in 2010 knitwear accounted for 53 per cent of total garments exports. The value chain is thus very important for foreign exchange earnings, especially during a period when the country's balance of payments is increasingly strained (IMF, 2011b).

Table 4: Summary of key quantifiable indicators, 2010 estimates

	Textiles		Garments	
	Value (constant 2010 $ or number)	Share of total economy (%)	Value (constant 2010 $ or number)	Share of total economy (%)
Value added	$1,068 million	1.1%	$3,863 million	3.9%
Capital formation	$430 million (2005-06)	37%	$110 million (2005-06)	9%
Export generation	$1,576 million	8%	$15,500 million	76%
Number of active business entities	12,737 (2005-06)	37% of all establishments in manufacturing	4,532 (2005-06)	13% of all establishments in manufacturing
Number of association member factories (2012)	1,339 (BTMA)		Around 3,500 (Active members of BGMEA and BKMEA)	
Direct taxes paid	$6.5 million (2005-06)	5.5%	$1.77 million (2005-06)	1.3%
Employment	965,462	1.8% of total employment	3,078,664	5.7% of total employment
Wages (average per week)	$17.9	133% of national average	$18.1	135% of national average
Gender wage gap	10% plus for men		34% more for men	
Share of women	29%		34%	
Memorandum:				
FDI stock (2009)	$1,117 million, equivalent to 21% of total FDI stock			
FDI inflows (2005-09)	$555 million, equivalent to 13% of total FDI inflows and 62.5% of total manufacturing FDI			

Source: see Annex 3 for details and sources.
Notes: BTMA is the Bangladesh Textile Mills Association; BGMEA is the Bangladesh Garments Manufacturers and Exporters Association; and BKMEA is the Bangladesh Knitwear Manufacturers and Exporters Association.

Number of business entities. The latest available data on the number of manufacturing establishments covers the period FY2005-06. At that time there were a total of 34,710 manufacturing establishments in the economy, of which textiles and garment manufacturing constituted nearly one-half; textiles alone made up 37 per cent of the total. The high number of textile manufacturing establishments is largely explained by the profusion of small handloom producers. Data from FY2001-02 reveals that only 2.9 per cent of establishments in textile manufacturing employed more than 50 people at that time, whereas 32.9 per cent of garment manufacturing establishments exceeded that level (BBS, CMI 2001-02). However this is changing

rapidly: in 2005-06 the equivalent figure for textiles was 6.9 per cent and that for garments 50.2 per cent (BBS, CMI 2005-06).

Fiscal revenues. Total government revenue in Bangladesh was 10.5 per cent of GDP in 2009 and 10.9 per cent in 2010 (IMF, 2011b: 28). An UNCTAD estimation of the potential tax revenues from the two sectors shows that their share in tax revenues could be up to 14-15 per cent, well above the their share in GDP of 5 per cent. In reality the contribution of the textiles and garments sectors to tax revenues is much lower than this potential level because of many exemptions offered to investors as incentives. Data on corporate income tax was not available, but would be needed to evaluate more precisely the 'fiscal take' from the sectors. Taking into account the various tax exemptions and subsidies, the 'fiscal take' from the two sectors is negligible and might even be negative.[8]

The limited revenues from import duties are a good case in point. The country mainly imports raw materials and semi-processed inputs rather than finished products, as reflected in the much larger revenues from textile (fabrics, yarn, fiber etc.) imports than from garments imports (WITS data). With a view to encouraging new investments and facilitating the existing ones the Government of Bangladesh reduced tariff rates over time. In consequence, Bangladesh has witnessed a falling trend in tariff revenues from textile and garments imports: these declining from more than $1.1 billion in 1994 to less than $0.5 billion in 2008.[9] In addition, the establishment of local backward linkage industries and domestic sourcing has also reduced the volume of imports.

Total employment. Textile and garments manufacturing play a significant role in employment generation in Bangladesh. Combined they account for only 7.5 per cent of total employment (including in the informal sector). The value chain is responsible for 75 per cent of formal sector employment in the manufacturing sector and nearly one-quarter of all formal sector employment. In 2010, formal and informal employment in garment manufacturing stood at 3 million, with an additional 1 million in textiles. Garment manufacturing employment grew at 26.7 per cent CAGR[10] between 2005 and 2010, while textile employment slightly shrunk by 0.4 per cent CAGR over the same period.[11]

Employment by category. The value-chain's occupational structure is highly concentrated, with the bulk of employees working as either textile and garment trades workers (primarily hand-craft positions) or as machine operators. Bangladesh's textiles sector is dominated by hand-craft workers to a surprising degree, with nearly half of employment in craft occupations according to the 2010 labor force survey (BBS, LFS 2010). Garment manufacturing, on the other hand, broadly shows the

[8] Revenues from personal income tax could be significant, with the two sectors accounting for a quarter of formal employment, but with wages being low, many workers will not contribute much. Similarly, textiles and garments account for sizable shares of the formal sector, but tax holidays, favorable depreciation rules and EPZ benefits result in low corporate income tax revenues. Import duties could also be sizable as the two sectors are responsible for roughly a quarter of all imports. However, again, most of these imports are exempted from duties as additional incentives to encourage investment. Taking into account various cash incentives, this might actually tip the balance and make the value chain a net recipient of government funds.

[9] Calculated from WITS data using HS codes 50, 51, 52, 53, 56, 57, 58, 59, 60, 61 and 63.

[10] CAGR is the Compound Annual Growth Rate.

[11] Calculated from data from the Bangladesh Bureau of Statistics.

reverse, with 44 per cent of workers employed as machine operators. Opportunities for occupational advancement are currently limited, as professional and technical occupations represent less than 1 per cent of employment.

Wages. The analysis of wages in the value chain is highly dependent on the choice of comparator. For example, when formal and informal workers are combined, the average weekly earnings of workers in the value-chain appear to be significantly higher than the national average (table 4). Taking only the formal sector into account, however, wages are significantly below average, with those in textiles workers at only 67 per cent of the national average; and those of garment workers at 78 per cent.

Sustainable development (selected indicators)

Labor and social impact. Textile and garment manufacturing represents a crucial source of employment for Bangladeshi women, especially in the formal sector. While men dominate both formal and informal employment in the value chain (29 per cent of jobs are held by women in textiles and 34 per cent in garments), women employed in the two sectors represent roughly 40 per cent of all female employment in the country's formal sector (BBS, LFS 2010). Women are paid significantly less than men, making 84 per cent of a man's average weekly earnings in textiles manufacturing and only 74 per cent in garment manufacturing. Men are more represented among the few professional and technical jobs. Beyond considerations of pay, the benefits workers receive from their employer - such as sick leave, bonuses, paid leave - play an important role in improving their quality of life (table 5). While in many aspects workers in the value chain receive benefits comparable with those of the formal sector as a whole, one area in which they receive less than average is in pension fund contributions.

Table 5: Formal sector workers receiving benefits from their employers, 2010 (per cent)

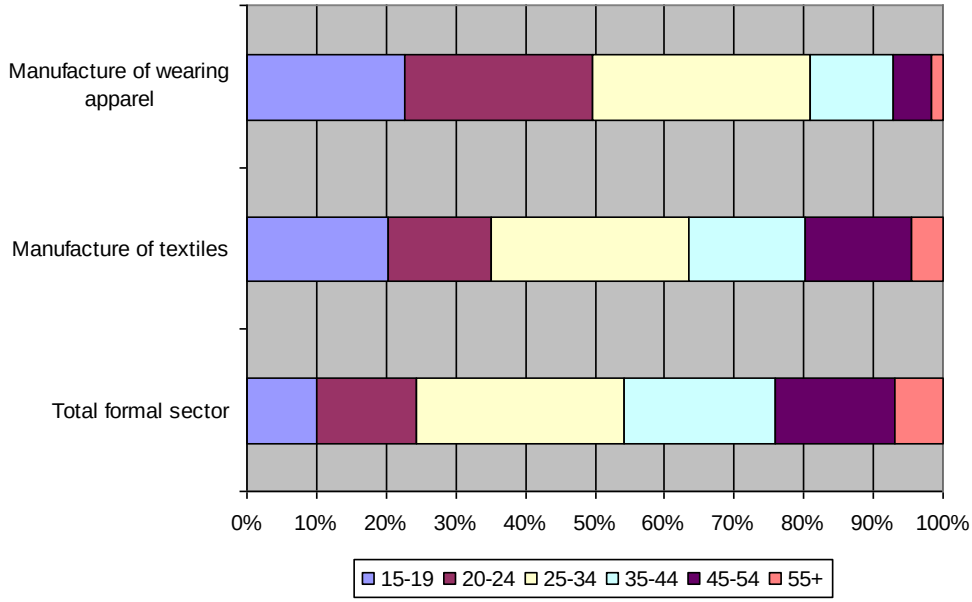
	Textiles	**Garments**	**Total formal sector**
Paid sick leave	76	80	88
Paid holding/vacation leave	76	78	85
Paid maternity leave	35	45	48
Free/subsidized meals	3	11	11
Free/subsidized lodging	2	9	10
Bonus	84	77	81
Working dress	7	19	27
Pension fund contribution	25	19	52

Source: BBS, LFS 2010.

The value chain is also an important employer of young workers. The age structure of employment in both textile and garment manufacturing is strongly skewed to younger age groups. For example,

in 2010 roughly half of formal sector garment manufacturing workers were 24 years old or less (figure 7). Overall, the value-chain accounts for 50 per cent of the country's formal sector employment of youths aged 15 to 19 years old; and 40 per cent of those aged 20 to 24.

Figure 7: Formal sector employment by age group (per cent), 2010



Source: BBS, LFS 2010.

Environmental impact. Textiles dying, washing and finishing are particularly water intensive activities. They make the textile sector the second largest contributor to river pollution in Bangladesh, after tanneries, discharging around 2 million cubic meters of effluents every day. In Dhaka the underground water level is receding quickly and the pollution of all water sources has reached alarming levels.[12] Studies highlight the potential for reducing water usage of 15-18 per cent through the systematic application of various technical measures.[13] A particularly serious concern is the pollution of water with toxic waste, which is among others the result of the use of hazardous materials in textile dyeing.

[12] Catherine Tovey, Senior Water Resources Specialist, World Bank, 'New Opportunities for Green Growth in the Textile Sector: The Bangladesh Responsible Sourcing Initiative', presentation given on May 9th, 2011 in Dhaka within the scope of 'Greening the Supply Chain of the Textile Industry in Bangladesh' workshop jointly organized the World Bank, International Finance Corporation and Natural Resources Defense Council.

[13] Such technical measures are the use of modern machines, with which it is possible to reduce the fabric to water ratio to 1:3 (from the current levels of 1:8) and minimize washing and rinsing operations. Furthermore, insulating steam pipes and building transparent roofs to save energy; reducing spillage of chemicals and improving process control stages to avoid reprocessing and re-dyeing are among the best practices to generate savings and reduce adverse environmental effects during the production processes. See: Susan Keane, Senior Environmental Analyst, Natural Resources Defense Council, 'Responsible Sourcing Initiative: Efficiency Improvements that Prevent Pollution and Save Money', presentation given on May 9th, 2011 in Dhaka within the scope of 'Greening the Supply Chain of the Textile Industry in Bangladesh' workshop jointly organized the World Bank, International Finance Corporation and Natural Resources Defence Council.

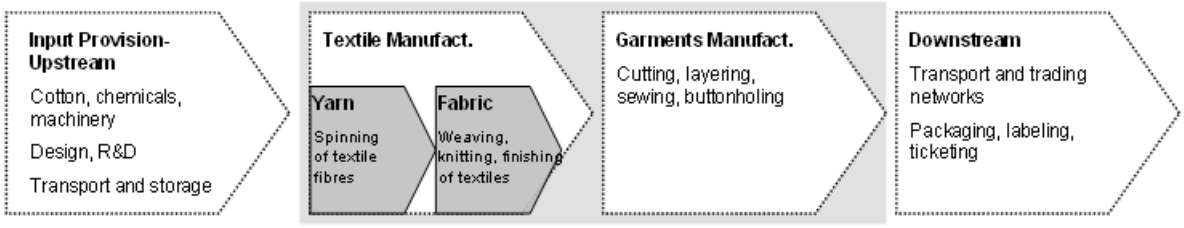
Development impact. Among rural households the income-multiplier effect of the garments sector appears to be the highest in non-agricultural households. In urban areas, the households that have benefited the most from the expansion in garments are those which are primarily poor and less educated. It is evident that despite the low value added of the sector linkage effects, as well as the low pay, the sheer scale of the number of people employed in the garments has had a significant impact on poverty alleviation.[14]

IV. TEXTILES AND GARMENTS VALUE CHAIN: POLICY CHALLENGES AND OPPORTUNITIES

Bangladesh concentrates on the production segments of the textiles and garments value chain

Generally speaking the textiles and garments value chains can be split into the following segments (figure 8): Input provision, which includes the sourcing of actual inputs, e.g. cotton, chemicals or machinery as well as services related to the provision of such inputs, e.g. trading, transport or storage services. In addition, R&D and design stages of the value chain complement those steps necessary before the actual production. Within production, textiles and garment production can be differentiated, i.e. textiles being about the production of the fabric (including spinning, dying, weaving and finishing), while garments are the final product; be it a t-shirt or pair of pants. This differentiation is strictly speaking only relevant for woven textiles and garments since, in the case of knitwear (the other big category of garments), these two steps are largely integrated.[15] Finally, some additional services like packaging and ticketing (adding the price tags) follow after production and, of course, trading and transport services bring the finished product to the retailers and consumers.

Figure 8: Stylized textiles and garments value chains in Bangladesh



Source: UNCTAD.

In the case of Bangladesh, the focus is largely on the central production parts of these value chains For instance, only 2 per cent of the cotton needed in the industry is produced in the country; only in accessories is the country able to meet 80 per cent of the demand (Habib, 2009; Leishman and

[14] "Readymade Garments Exports and Bangladesh's Economy", Abdur Razzaque, Muhammad Jami Hussain and Abu Eusuf, 2008.

[15] There are also two independent associations in the garments sector, largely following the divide between woven garments and knitwear: Bangladesh Garment Manufacturers and Exporters Association (BGMEA), which has a focus on woven garments producers and representing primarily the cutting and sewing units; and the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), which represents the knitwear fabric manufacturers, the fabric dyeing units and the knit garment cutting and sewing units.

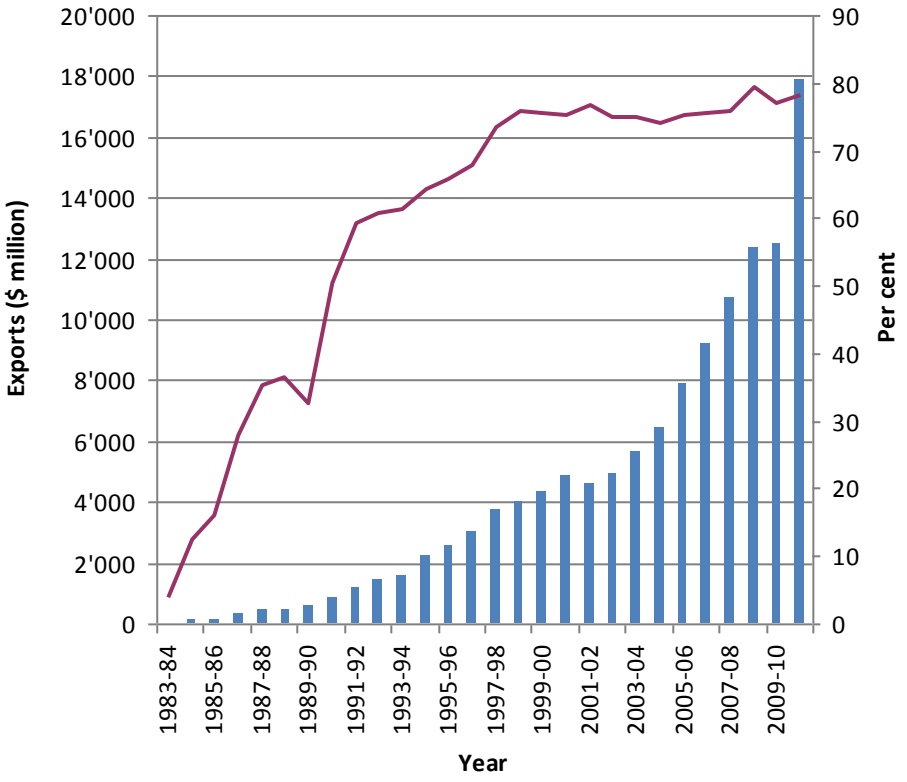
Hussain, 2010). Moreover, this value chain is very export orientated; about half of exports coming from knitwear, with the other half being woven garments. In knitwear, about half of the mills in the country are so-called composite mills that integrate the whole production process, while the other half are mills specialized in one or more of the steps within the production segment. Additionally, in knitwear, there is hardly any sourcing of intermediate textile inputs. This is in contrast to woven garments, where the bulk of the fabric and yarn is still imported (around 65 per cent) and the remainder of the woven fabric is produced domestically.

Garments manufacturing is driving industrial development in Bangladesh

The garments sector is very labor intensive and enjoys a large comparative advantage, built on the abundant availability of cheap labor. In addition, incentives from the government in the form of duty free imports of raw materials and other policy measures have encouraged domestic and foreign investors to engage in the sector. These companies were also attracted by the opportunities offered by the assurance of market access by some international agreements and granted preferences, most prominently the Multi-Fiber Arrangement (MFA), the Generalized System of Preference (GSP), and the EU's "Everything but Arms initiative" (EBA). The sector has grown strongly over the last two decades and, indeed, the good export performance by Bangladesh is solely driven by the garments sector (figure 9). Consequently, the sector's development contributed hugely to the economic and social development of the country.

The number of garment factories and workers is testimony to the exceptional growth of the garments sector in Bangladesh since the mid-1980s. There were only 384 units with a total of 120,000 workers in the sector during 1984-85. At the end of 2011 the size of the garments sector according to the largest industry association BGMEA (Bangladesh Garments Manufacturers and Exporters Association) stood at 5150 units. This includes some non-active facilities and therefore more cautious estimates see the number of factories more around 3,500 (e.g. by BKMEA).

Figure 9: Trend of exports and share of garments in it for Bangladesh



Source: BGMEA.
Note: Absolute amount of exports deviates from UNCTAD estimates used elsewhere in the document.

Textiles sector grew as a backward linkage sector for garments

The textile sector plays an important role in the economy of Bangladesh as well. The traditional textile industry (targeting the domestic market) was not linked to the export oriented garments sector. However, in recent years a new textile sector has emerged which is directly linked to the export-orientated knitwear and woven garments sectors as part of a fuller value chain (figure 8). Nevertheless, there is still further potential in supplying additional fabric to the garments sector as only 34-40 per cent of woven garments use domestically produced yarns and fabrics (Leishman and Hussain, 2010). The textile sector is itself sub-divided into a number of activities, which include: spinning, weaving and fabric processing. In textiles the public sector and private sectors are active, with all public sector mills coming under the control and regulation of the Bangladesh Textile Mills Corporation (BTMC), which is more important as a regulator than as a producer though. Most, if not all, private sector firms are members of the Bangladesh Textile Mills Association (BTMA). According to BTMA over EUR 4 billion have been invested in these mills.[16] The exceptional growth of the textile spinning sub-sector both in terms of unit and capacity since 1995 is documented in table 6. At the end of 2011 the total number of spinning units under BTMA stood at 385 with a combined capacity of 8.70 million spindles, compared to only 84 and 1.7 million

[16] While as the modern textile sector is much more capital intensive than the garments sector, handloom textiles are much less capital intensive. The latter include more than 18 thousand establishments, with only 33 of them having more than 100 employees (BBS, 2010 information on permanent establishments).

respectively in 1995. This has also resulted in yarn production increasing by about four times and cloth production by three times over the 1995–2010 period.

Table 6: Growth in spinning of the primary textile sector

Year	No. of mills	Spindle capacity (millions of spindles)	Growth in no. of mills (%)	Growth in spindle capacity (%)
1995	84	1.70	10.52	19.56
2000	116	2.29	38.09	34.52
2005	230	4.94	98.28	115.67
2011	385	8.70	67.39	76.21

Source: Bangladesh Cotton & Products Annual 2011 & BTMA Directors Report 2011.

Prospects for garments continue to look bright

Global demand for garments is growing in a stable manner. World import values of textile and garments show a clear positive trend (WITS data). In 1996 the world import value of textile and garments was $243.8 billion, which almost doubled during the following 14 years to reach 482.6 billion in 2010. A major factor in this trend is increasing income levels in emerging economies, e.g. China has grown at over 10 per cent per annum over the last two decades (IMF, 2011a; 2012).

Changes in the European Union's (EU) rules of origin for products imported under the GSP offer new opportunities for garments from Bangladesh. The EU's rules of origin changed in January 2011 from two stages to one stage of the production process in order to allow import under the GSP facility. This opened a new door and provided new momentum for the export of garments from Bangladesh. Bangladeshi exporters, using imported fabrics for producing garments in Bangladesh and then exporting to the EU market, are generally eligible for GSP benefits under this new rule. This has increased Bangladesh's export volume to the EU, and may also have helped diversify the range of garment products exported.[17] For the Bangladeshi textiles sector this is of course a negative development as domestic garments producers do not need to source textiles domestically to benefit from the EU GSP preferences.

Important competitors are increasingly moving into higher value added activities, e.g. while the absolute figures are still increasing,[18] the share of clothing in total merchandise exports from China declined from 9.7 per cent in 2005 to 8.2 per cent in 2010; and in the case of India from 8.8 to 5.2 per cent over the same period (WTO, 2011). Part of this trend is because, for example,

[17] See European Union Delegation to Bangladesh Press Release "European Union opens up its market for items to be assembled in Bangladesh", PR/- 12/10, Dhaka, 24 November 2010; and http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageLibrary_ShowContent&propertyType=document&id=HMCE_PROD1_030799#P10_288.

[18] For China, the exports of clothing increased from $74,163 million in 2005 to $129,838 million in 2010. For India the respective figures increased from $9,212 million to $11,246 million (WTO, International Trade Statistics 2007 & 2011).

Chinese companies are moving into higher value added activities such as branding and marketing (Frederick and Gereffi, 2009).[19]

Bangladesh continues to have a very strong comparative advantage in cheap labor. Bangladesh's comparative advantage in garments production is built on the availability of low-cost labor. Table 8 shows that Bangladesh has an advantage over some other important garment producing countries in terms of workers' wages. This advantage will also most likely remain a given in the foreseeable future due to a high population growth that currently translates into labor force growth of 3 per cent p.a. or 2 million young people entering the labor force every year (World Bank, 2007). In addition, the current rate of formalization stands at roughly one fifth of the labor force (World Bank, 2007). With most of the textiles and garments value chain being in the formal sector, this still leaves much room for increasing formal employment. The advantage in low-wage labor translates into strong price advantage for Bangladeshi producers: comparing the prices of Bangladesh's top 8 knitwear and woven export items to the EU 27 market to the prices of selected competitors one finds that for 7 out of 8 woven garment items Bangladesh offers lower prices than Cambodia, China, Indonesia, India and Viet Nam.

Table 8: Worker's wages in Japanese-affiliated firms in different countries

Country	$/month
China	306
Thailand	286
India	280
Philippines	248
Indonesia	205
Viet Nam	123
Cambodia	82
Bangladesh	78

Source: JETRO, 2011: 51.

Reaping the benefits of these bright prospects requires strategic direction

Looking again at the stylized value chain (figure 8) there are several strategic opportunities Bangladesh could pursue to benefit from the bright prospects mentioned above. The four following directions are discussed below:

[19] Currently, the United States has switched to monitoring China's recent investments in developing domestic brands because this now poses much more of a threat to U.S. garment marketers than to pure textile and garment manufacturers (Frederick and Gereffi, 2009).
There are also other competitors that may benefit from these moves out of basic garments like Viet Nam (with 15 per cent share of clothing in total merchandise exports), Honduras (50.8 per cent), Dominican Republic (8.2 per cent) or Morocco (15.6 per cent), but the garments sectors in these countries do not have the same quantitative capacity as Bangladesh does. Bangladesh accounts for 4.5 per cent of world exports in garments, Viet Nam for 3.1 per cent, Honduras for 0.8 per cent, Dominican Republic for 0.2 per cent and Morocco 0.8 per cent (WTO, 2011). In addition, labor costs in those countries are higher (see below).

A) Expansion of existing activities ("*more of the same*")
B) Optimize the contribution of the textiles segment (fabrics) of the value chain ("*filling the linkage gap*")
C) Upgrading to higher value products ("*upgrading*")
D) Moving into adjacent segments of the value chain ("*extending*")

A) Expansion of existing activities ("*more of the same*"): Bangladesh has a clear comparative advantage in labor-intensive production due to its very low wages. It has leveraged this successfully in the past so that the production of basic garments is globally most competitive. With other countries like China and India moving out of such activities, Bangladesh is positioned as a natural next stop (see above).

Expansion faces serious constraints. The most prominent constraints are infrastructure and the business environment, followed by skilled labor shortages and lack of financing. Other studies have dealt in detail with these issues – in particular the infrastructure challenge – so only the essence of these findings is repeated here.

Infrastructure is a bottleneck. From existing studies it is clear that the lack of infrastructure is seriously impeding the further development and expansion of the textiles and garments value chain. It leads, for instance, to the increased lead time for Bangladeshi producers (EC-AIF, 2001; CPD, IFC and SEDF, 2008; The Asian Foundation, 2010). This concerns transport infrastructure, i.e. roads and highways as well as ports.[20] To maintain the quality of the products and to reduce production costs, uninterrupted electricity supply is also needed (CPD, IFC and SEDF, 2008; EC-AIF, 2001). At this point Bangladesh is listed at the very bottom of electricity supply quality internationally, being ranked number 134 out of 139 countries in the World Economic Forum's Global Competitiveness Report 2010-2011 (WEF, 2010); at rank 182 out of 183 in terms of "getting electricity"[21] in the latest World Bank Doing Business ranking; the number of electrical outages in a typical month is more than 90 for textiles and garments manufacturers, while values for competitors such as Indonesia, Philippines and Viet Nam are reported as being only between 0.5 and 2.3; and, finally, almost 80 per cent of garment producers and 42 per cent of textile producers in the country use their own (or shared) generators for electricity supply (World Bank, Data from Enterprise Surveys, 2007);[22] hugely increasing their electricity costs.

Business environment poses challenges. Overall Bangladesh ranks 112th out of 183 countries in the World Bank's Doing Business 2012 ranking.[23] Surveys show that, in particular, corruption has been identified as a critical issue for businesses in Bangladesh. A full 88 per cent of garment firms

[20] Out of 139 countries Bangladesh is ranked 100 with respect to quality of roads; 107th for quality of port infrastructure; and 117th for quality of air transport infrastructure (WEF, 2010).
[21] "Getting electricity" is a combined indicator for obtaining electricity connection in terms of: time required to get a connection (number of calendar days), cost required to get a connection (per cent of income per capita), and number of procedures to get a connection.
[22] In the World Bank Enterprise Survey, also 77 per cent of garment producers and 76 per cent of textiles firms reported electricity to be a major constraint.
[23] See (www.doingbusiness.org).

and 93 per cent of textile firms say they are expected to give gifts to public officials "to get things done". For garments this compares to 10 per cent in the Philippines, 20 per cent in Indonesia and 38 per cent in Viet Nam (World Bank Enterprise Survey, 2007).

Skilled labor is in short supply. At this point, a shortage of skilled workers of 25 per cent of the labor force in the garments industry has been estimated. A third of all garment firms and a quarter of all textiles firms identified an inadequately educated workforce as a major constraint in 2007 (World Bank Enterprise Survey, 2007). In addition, just to maintain its current average rate of growth the industry needs an additional hundred thousand skilled workers each year.[24] Organized skills development is still at an early stage as most training is on the job, and is seldom complemented through other types of training, including in training institutions.[25]

Access to finance is a concern. Some 42 per cent of all firms in the country mention finance as a severe constraint (Bangladesh Investment Climate Assessment, 2008).[26] In an international comparison the percentage of firms identifying access to finance as a major constraint is relatively high in Bangladesh: In garments it is 26 per cent; compared to 35 per cent in the Philippines, 17 per cent in Indonesia and 15 per cent in Viet Nam (World Bank Enterprise Survey, 2007).[27]

B) Optimize the contribution of the textiles segment (fabrics) of the value chain ("*filling the linkage gap*"): With continuous rising global demand for clothing (see above) domestic demand for fabrics and yarn has been mounting for several years. Domestic fabric and yarn manufacturing mills cannot cope with this demand, resulting in increasing dependency on fabrics and yarn imports. Given that only 35 per cent of fabrics used within the woven garments segment of the value chain are sourced domestically, there is major scope for improving the contribution of the textiles segment of the value chain. Bangladesh's textile industry is dominated by small establishments that invest little in their fixed capital (figure 10). Nearly three-quarters of establishments are classified as hand-loom textile producers, who are unlikely to be able to meet the quality requirements of garment manufacturers contracted by international principals. While consolidation may create some economies of scale, there is a need for the creation of an industrial base of producers large and sophisticated enough to meet both the quantity and the quality demands of garment manufacturers and their customers.

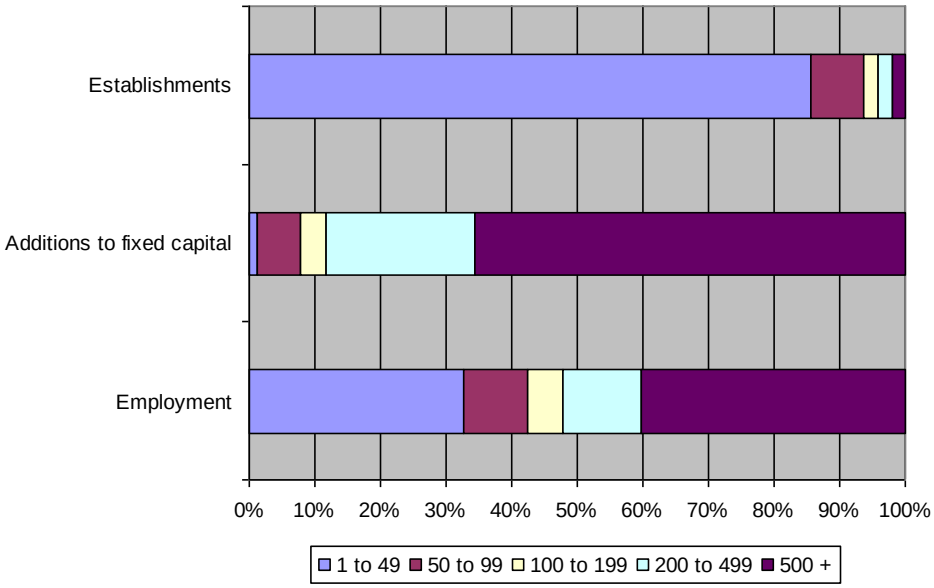
[24] "*A Holistic Approach is needed for Sustainable Development*", Md. Shafiul Islam Mohiuddin, BGMEA, October 2011.

[25] The Government of Bangladesh is currently tackling the task of assessing the demand for skills and creating a sufficient supply in the mid term. This has top political priority; exemplified by the Prime Minister heading the National Skills Development Council – the top body created to improve the situation.

[26] In another study by The Asian Foundation (2010: 24) access to finance was also pointed out by factory owners as a factor affecting competitiveness in Bangladesh.

[27] For textiles the 38 per cent of textile firms identifying access to finance as a major constraint compares to 14 per cent in Indonesia and 17 per cent in Viet Nam (World Bank Enterprise Survey, 2007).

Figure 10: Textiles industry, by size class of establishment, 2005-2006



Source: Survey of Manufacturing Industries, 2005-2006.
Note: Textiles was equated to the BSIC 171 code.

Local textiles production offers the potential to reduce lead times, but also has drawbacks. On the one hand, local sourcing would potentially reduce the lead times of local garment manufacturers; an increasingly important criterion for buyers. Quality issues, however, remain, forcing garment manufacturers to maintain their foreign suppliers. This situation may have been further reinforced by recent changes in the EU rules of origin (see above) rules in the case of GSP preference, which may favor imports over domestic sourcing. An expansion of the textiles industry also has to face turbulent international markets for raw materials and inputs that are not available domestically. A good example is the repercussions in Bangladesh of an Indian export ban for cotton enacted in 2011.

Filling the linkage gap faces similar challenges as the expansion of existing activities (see above), i.e. lack of reliable infrastructure (particularly transport and power), problems in the overall business environment, and the need for additional skilled labor.

Investment requirements in textiles are estimated to amount to several billion dollars. For 2008-09, for instance, the estimated investment requirement in the primary textiles sector for mitigating the demand-supply gap were estimated to stand at a total of over $2 billion, with a huge concentration on spinning ($747 million), weaving ($558 million) and woven fabrics ($435 million).[28] An updated and enlarged estimate by the Ministry of Textile & Jute based on projections for 2014-15 finds investment needs over the 2009/10 to 2014/15 period of more than $3 billion with an even higher concentration on spinning ($1,326 million). These large investment opportunities, combined with the lack of financing in Bangladesh, point to a potential role for foreign investors.

[28] Estimated by Mr. Towfique G. K .M. Hassan, Secretary-General, Bangladesh Textile Manufacturer Association.

C) Upgrading to higher value products: The country's advantage of cheap labor can in principle hold for any labor-intensive production, including in higher value garments manufacturing. Instead of producing basic garments like t-shirts, low wages could also be leveraged in the production of suits and fashionable garment. Some of this is already underway: from 2008-09 to 2009-10 high-value items like men's overcoats, track suits or swimwear (HS 6112 and 6201) grew at rates of 40 to 50 per cent, albeit still only accounting for a small share of garments exports. Exports in basic items like shirts, t-shirts, pullovers or underwear, on the other hand, either grew at single digit rates or (in some cases) even declined.[29] As with the two strategic directions already mentioned, this one faces the same challenges: infrastructure, business environment and skilled labor shortages. The last constraint may be especially challenging as many of the activities to produce higher value items may need skills insufficiently available in Bangladesh. Overall, increasing quality and reducing lead times are important issues for this strategic direction.

Quality is an issue. Bangladeshi producers seem to have problems in producing a quality level sufficient for higher value segments of the market. The import of fabrics in the past has resulted from quality issues as much as the higher prices of locally produced material (Habib, 2009; Leishman and Hussain, 2010).

Lead time is a very important factor in international trade in garments and offers much potential for improvement. The above infrastructure challenges have contributed to the long lead time for Bangladeshi producers of minimum 90-92 days (table 8). Another contributor to the lengthiness of the process is the insufficient capability of backward linkage industries to supply all the raw materials and other inputs demanded by the garments industry (see option B above). For this reason Bangladesh is still heavily dependent on imported raw materials and other inputs for many garment production activities. Further, suppliers lose time due to an adequate transport and power infrastructure; and in some cases garments are forced to incur the high costs of air transport to honor their contracts with buyers. Moreover, air transport infrastructure is also increasingly becoming a bottleneck

Progress has been made with respect to compliance with labor and social standards, but much remains to be done. One area of progress achieved in the garments sector over the past few years is the changing attitudes towards compliance issues by factory owners; increasingly they regard compliance as an investment and not simply as cost. Compliance performance in Bangladesh's garments sector is regarded as satisfactory: there is already close to a child-labor-free production environment; many production plants have proper fire exits; regular health treatment for the workers is provided; and work stations are hygienic (Rahman et al., 2008).[30]

[29] UNCTAD computations based on data from the Bangladesh Export Promotion Bureau.

[30] Bangladesh has made remarkable progress on international labor standards, but some limitations remain. The government ratified seven of the eight fundamental ILO conventions in the areas of freedom of association and collective bargaining, elimination of forced and compulsory labor, elimination of discrimination in respect of employment and occupation, and abolition of child labor. Minimum Age Convention (No. 138) has not yet been ratified but some efforts to eliminate child labor have been in place. In 1995, Bangladesh Garment Manufacturers and Exporter Association (BGMEA) signed a Memorandum of Understanding with support from UNICEF and ILO which provided education and training for previously employed child workers in the garment sector. By the end of 2001, 336 MoU

Table 8: Minimum time required completing a single order for garments in Bangladesh

Step in the production process	Minimum time in days to complete process
Opening back to back L/C	**4-6days**
Raw material production	**15 days**
Shipping time for raw materials	**21 days**
Clearance at the Port	**5 days**
Production of garments	**20 days**
Shipping to importer	**25 days**
Total	**90-92 days**

Source: Abdullah, Y. M. 2004. Journal of Business Administration: Post Multi Fiber Agreement Era and Bangladesh RMG Sector Vol. 30, Number 3 & 4. Institute of Business Administration, Dhaka University, Dhaka, Bangladesh.

D) Moving into adjacent segments of the value chain

D1) Extending backward: Additional potential for backward linkages beyond textiles may be found in input provision to this segment. It may be unlikely that Bangladesh will become competitive in cotton growing or the production of machinery, but producing the necessary chemicals may be worthwhile exploring over the mid term. In addition, it should be looked into the actual capacity in terms of trading, transport and storage necessary for the input provision. Finally, value chain steps like design or R&D could be options, but seem relatively hard to acquire at this point.

D2) Extending forward: An additional small value added may be captured by offering further services on top of the finished garment. Examples are packaging services or already attaching the price tag to the product and shipping it directly to the store (of the buyer or its client).

There is a need for "lead firms". Even just getting "more of the same" will require a significant movement towards the application of international standards for quality labor and CSR or face the prospect of customers moving to other countries. To respond to this danger, lead firms are required that can lead the introduction of necessary changes.

schools had been set up and 8,509 children had been enrolled which corresponds to around 30 per cent of children working in the garment industry during that period. While ratifying the International Covenant on Economic, Social and Cultural Rights, the government reserved Article 8 which recognizes the right of workers to form or join trade unions and protects the right to strike. According to the World Bank's report (2007), less than 5 per cent of the labor force was registered to a trade union which hints the extent of informal economy and restrictions on workers' rights in Bangladesh. Some of the provisions that regulate workers' rights to strike have been subject to criticism by the ILO. In particular, the current regulation requires three-quarters of the members of an organization to consent to a strike and envisages penalties (including imprisonment) if workers take part in an action which is considered unlawful by the government. Progress has also been made with respect to water treatment, but with respect to dying and washing steps an emerging issue seems to be the treatment of the remaining sludge (in many cases still simply being basically "buried" in big holes).

V. CONCLUSIONS AND POLICY RECOMMENDATIONS

As mentioned earlier, the policy advice in this section - posited for ease of exposition as recommendations - arises from the data analysis earlier, based on the impact indicators framework. As such, the analysis and these recommendations need to be considered by policymakers in the context of their wider development goals and the existing policy framework. These processes may well modify the advice, and hence the action plan below can be better aligned, harmonized and integrated with other policy decisions. In doing this, policy-makers should also assess the conditions required to fulfill an action plan, some of which are mentioned below, and act accordingly. The wider policy context and the specificities of sectors and conditionalities will also affect the time scale and sequencing of action plans which are implemented. Finally, it should be borne in mind that the indicators framework is a starting point for decisions about entering, deepening or extending a country's participation in GVCs, not an end point. As such, its application in a particular context may immediately raise more questions than are answered, but in the final analysis understanding better what you need to know is a long way towards the solution.

Following on from the indicator framework analysis in sections III and IV, this section aims at providing an assessment of the four strategic directions for the textiles and garments value chain in Bangladesh (essentially corresponding to the options in section IV). This discussion examines the likely impacts arising from each prospective direction, as well as the key elements of an action plan to attract and negotiate high value-adding investments. Table 9 gives an overview of the likely impact on the economy of each strategic direction. Of course, these strategies are not mutually exclusive.

Development impacts of strategic directions vary as do needs for government action

Direction A. This “more of the same” strategy proposes keeping the existing structure of the value chain in which the textiles and garments sectors account for the bulk of the production, with the latter developed more than the other. Channeling funds and resources in this direction would in turn replicate the impact profile of existing activities. It can be seen as potentially complementary to other directions. Given the current profile of the value chain in Bangladesh this strategy will reinforce impacts especially for exports and employment generation. On the other hand, this strategy is not conducive to other potential impacts, such as building entrepreneurship or capital formation, as it will most likely be achieved through up-scaling of existing operations (limited entrepreneurial impact) and duplication of labour-intensive garments production (limited capital formation). With respect to the gender impact, it can be expected to improve women participation in the workforce as they have above average representation in textiles and garments compared to the economy as a whole. Under the current policy framework fiscal revenues will not increase (except pro rata) since fiscal take from the value chain is limited due to sector subsidies and tax holidays.

Table 9: Strategic directions and their likely impact

Strategic direction	A "*more of the same*"	B "*optimizing*"	C "*upgrading*"	D "*extending*"
Value added				
Capital formation				
Export generation				
Entrepreneurship building				
Fiscal take				
Employment generation – general				
Generation of skilled / technology-intensive employment				
Gender impact				

Source: UNCTAD.

Direction B – "optimizing" is largely about textile production. Given the insufficient and relatively expensive local production of yarn and fabrics, the focus in this strategy would see a shift to the development of the textile sector, as well as a further strengthening of its linkages with the garments sector. The goal is to meet the demand of inputs by the garment manufacturers while sustaining the growth of both sectors. The additional impact is therefore related to the sector's capital intensive and other – but often limited – effects on other areas. Value added of textiles is generally lower than for garments; (indirect) export generation is largely only after further processing in the garments sector; fiscal take (incentives), entrepreneurship development (expanding existing businesses) and employment (capital intensive) will be limited as well; and women employment will not benefit much due to the capital and skill intensity of textile mills producing the exports-orientated garments sector. However, potential benefits in the long run should be highlighted, including extensive capital formation and increased technology usage, accompanied by a skilled workforce that would boost Bangladesh's comparative advantage in international markets. In order derive full potential from this strategy, in the mid and long term, vocational training and middle management education will have to be increased. Furthermore, increased government revenues can be expected since capital-intensive activities suggest a higher likelihood of formalization. It should also be noted that following this direction would require considerably more investment than the other three strategies and thus attracting FDI particularly in this direction would be a viable option.

Direction C – "upgrading" represents the strategy through which Bangladeshi producers can expand their production and increase their profitability by moving into higher-value items. Options may include introducing design elements in production and applying fashion trends in articles such as men and women's suits. This seems a very solid direction with significant impacts across the board. Contributions to value added and export generation are likely to be notable, with the

exception of fiscal take (unless the current tax and customs regime is changed). In addition, employment may be more skewed towards men than in the immediate future due to current skills skills-sets in the country. This strategy could boost innovation - with attendant benefits - and leave room for new businesses. Direction C is also the one for which *compliance* will be an issue of further and increasing importance: in order to maintain a long-term relationship with global leading brands, garments manufacturers have to improve social compliance in areas such as environment and working conditions (CPD, IFC and SEDF, 2008; McKinsey & Company, 2012; The Asian Foundation, 2010).

Direction D – "extending" the value chain to support the main production activities by facilitating the reach to the end consumers, as well as reaching into input provision steps, is another strategic direction. Key activities in this respect would include stimulating R&D, improving logistics and producing labeling for ready-made garments. Since there is scope for higher engagement in these activities, this strategy can be expected to add significantly to entrepreneurship capacity. Further, these activities are associated with higher value added and increased capital formation. Direction D also emphases **lead time reduction**; largely in the context of transport infrastructure. Lead-time can be brought down to less than 60 days by establishing, for example, an efficient Central Bonded Warehouse (CBW) and by operating a deep sea port which could further reduce lead time by an estimated 10 days (McKinsey & Company, 2011). However, extending the value chain in this way may not contribute much in terms of export generation and employment creation, at least not in the short term.

Key issues for consideration for an action plan

All directions discussed above to varying extents rely on some general enabling measures. These include: improved transport infrastructure (roads, highways, railroads, Chittagong port, deep sea port, and airport); improved electricity infrastructure to reduce power outages and strengthen the competitiveness of all industries; an improved overall business environment, including fighting corruption; an enhanced supply of skilled labor, e.g. by strengthening training institutions and processes; and improved access to finance.

With respect to directions B and C attention also has to be paid to **skills upgrading**. Current efforts by the Government of Bangladesh, supported by international organizations such as the ILO, ADB and UNIDO will form the basis for necessary quantification efforts. The work of the HRD pillar is weaved into this and thus will create some of the informational basis for specific strategic initiatives related to the Private Sector and Job Creation pillar. As a complementary effort, UNCTAD is examining the concrete issue of skills development at the firm level.

Key indicator-based findings are needed for a detailed evaluation of direction B, as well as existing concerns about the viability of the current situation because of limited (or maybe even negative net) fiscal revenues from the textiles and garments value chain.

Of all impact categories, fiscal revenue is the only area that always shows a weak impact. This is due to the generous tax exemptions given to new investors. This outcome has been the case for

textiles and garments in the past and, unless action is taken, will most likely also be the case whichever of the above strategic direction pursued (singly or together). Given the strong prospects of the garments sector, in particular, outperforming the rest of the economy, mid-term provisions need to be put in place to ensure that in future years a large part of the economy is not simply left aside when it comes to contributing to the public good. This is not a recommendation to discourage investments into textiles and garments, but rather an underscoring of the need to ensure that these industries also contribute to the funding of essential infrastructure and education (from which these and other sectors will ultimately benefit). Otherwise pursuit of any of the above directions will result in unsustainable development strategies. Importantly, to extent that the above strategic directions encourage the creation of formal business entities, this improves the conditions under which government policies can result in higher fiscal revenues.

Annex 1

Meeting Schedule, 13-16 March 2012 in Dhaka

Date	Time	Meeting
13 March	11.30 am	Bangladesh Textile Mills Association (BTMA)
	2.30 pm	Policy Research Institute
	4.30 pm	Bangladesh Garment Manufacturers and Exporters Association (BGMEA)
14 March	12.00 am	Centre for Policy Dialogue
	4.00 pm	Export Promotion Bureau
15 March	9.30 am	World Bank
	11.30 am	UNIDO
	1.30 pm	Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA)
	3.00 pm	Board of Investment & Ministry of Industry
	5.00pm	M & J Group
16 March	10.00 am	ILO, BBS, UNESCO
	12.00 am	GIZ

Annex 2

FDI Policy in Bangladesh

Bangladesh has elaborated a comprehensive set of policies to guide its development strategy. The overall framework is defined mainly under the Government's Vision 2021 electoral platform, the national poverty reduction strategy and, most importantly, the sixth five-year plan (2011–2015). The latter deals with a number of specific issues, but is complemented by a comprehensive set of sectoral or issue-specific policies. Among those most relevant to investment and FDI are the industrial policy, the policy and strategy for public-private partnerships, the export policy and the policy guidelines for enhancement of private participation in the power sector.

One of the overall development objectives set in Vision 2021 is to transform Bangladesh into a middle-income country by then. The prime role of private investment in achieving this objective is widely recognized in all policies, and the sixth five-year plan identifies private investment needs at about $140 billion over the period. Yet, Bangladesh does not have an investment policy per se, let alone a precisely defined FDI policy or strategy.

The role and potential benefits of FDI are acknowledged in several policies, but Bangladesh has fallen short of defining precisely what it could gain from foreign investment and what it would need to do to achieve FDI attraction objectives. At the moment, Bangladesh seems to be content with claiming that it is one of the economies most open to FDI in the region and that it offers a welcoming environment for foreign investors. Relatively little FDI promotion efforts are made by the Board of Investment (BOI) to promote the country overseas, even though it offers support at the establishment phase to investors.

The actual situation on the regulatory framework, including in terms of FDI entry and establishment and in terms of overall openness to foreign investors is significantly more mixed, however. Bangladesh has also performed very poorly at attracting FDI in the past decades, in spite of being in the most dynamic region of the world. The moderate rising trend in inflows in recent years has been too mute to reverse this poor performance.

Despite priding itself with being fully open to FDI, Bangladesh has put a number of restrictions to entry in the past, and continues to do so to date. Such entry restrictions are not specified in the Foreign Private Investment Promotion and Protection Act (1980), but interspersed in a number of sectoral laws, regulations or policies. Outright bans on FDI and *de facto* restrictions or hurdles have been put in place in the past – or continue to prevail – in garments and textile (industrial policy of 1999), pharmaceuticals (national drug policy of 1982) and telecommunications (various guidelines from the Bangladesh Telecommunication Regulatory Commission), among others. In addition, the industrial policy of 2010 establishes a list of 17 "controlled industries" in which the Government may set maximum shares of foreign ownership and for which approval by the line ministry will be required.

Private investors in Bangladesh also continue to face significant challenges of a regulatory and structural nature, which include the poor quality of infrastructure (first and foremost power and transport), access to skills and governance. These challenges also help explain the poor performance in attracting FDI thus far.

Bangladesh seems intent on stepping up its efforts to improve the overall business climate, however, and to attract higher FDI inflows, among others by addressing weaknesses in

infrastructure. In this respect, the Government is keen to promote public-private partnerships in the power and transport sectors, among others, and to involve foreign investors in the process.

In order to help it move in this direction, the Government of Bangladesh recently requested UNCTAD to provide it technical assistance under the Investment Policy Review (IPR) programme. The IPR, which was launched in March 2012 through a fact-finding mission in Dhaka by an UNCTAD team, will propose strategic and concrete recommendations to improve the regulatory framework for FDI and investment in general, and to put in place a full-fledged policy of FDI promotion and attraction. At the request of the Government, it will place a particular emphasis on the attraction of FDI in key backbone infrastructure, including power, roads and ports, in addition to education and skills development.

Source: UNCTAD draft IPR of Bangladesh.

Annex 3
Breakdown of the Economy and Sectors Under Review by Impact Indicators

Area	Indicators	Details - specifics/measures may vary by industry, value chain segment or type of activity within a segment (e.g. budget hotels versus up-scale ones)	Total economy	Textiles	Apparel
Economic Value Added	• Total value added	• Value added (GDP contribution) of the new/additional economic activity resulting from the investment	GDP : **6,924 (bill. Taka) (current, 2009-2010), i.e. $99,961 million (current end of 2009)** 3,707,070 million BDT (2005) **6,934,795 million BDT (2010)** (Statistics Yearbook 2010) **GDP (current, 2010): $99,689 millions** GDP (current, 2005): $57,628 millions, i.e. $64,317 (constant 2010) **Manufacturing value added (current, 2010): $17,245 millions** Manufacturing value added (current, 2005): $9,140 millions, $10,201 millions (constant 2010) Source: UNCTAD GlobStat	GDP (current, 2009-2010): 74.0 (bill. Taka) (1.1% of total), equ. **$1,068 million (current end 2009 dollars)** Textile value added (current, 2005): BDT48,524 million or USD 832.7 million (constant, 2010) Textile value added (current, 2009): BDT74,006 million or USD 1,089.08 million (constant, 2010) Source: Statistical Yearbook, 2010, BBS	GDP (current, 2009-2010): 267.6 (bill. Taka) (3.9% of total), equ. **$3,863 million (current end 2009 dollars)** Apparel value added (current, 2005): BDT156,942 million or USD 2,693.36 million (constant, 2010) Apparel value added (current, 2009): BDT267,626 million or USD 3,938.41 (constant 2010) Source: Statistical Yearbook, 2010, BBS

	• Value of capital formation	• Contribution to gross fixed capital formation (GFCF)	"Investment" (current, FY2010): BDT978.1 billion (BBS, Statistical Yearbook 2010) Additions and alterations to fixed assets (2005-2006): BDT69.4 billion or USD 1,191 million (constant, 2010) (BBS, Census of Manufacturing Industries) GFCF: 24.5% of GDP (2005), i.e. $14,119 (current), i.e. **$15,758 (constant 2010)** (UN GlobStat) 24% of GDP (2010), i.e. $**23,925 million** (Worldbank WDI database)	25.6 (billion Taka) in additions and alterations to fixed assets (2005-2006) (37% of total), equ. $430 (constant 2010) (BBS, Census of Manufacturing Industries 2005-06)	6.5 (billion Taka) in additions and alterations to fixed assets (2005-2006) (9% of total), equ. $110 (constant 2010 (BBS, Census of Manufacturing Industries 2005-06)
	• Total export generation	• Total export and import generation by value (also calculate net exports)	Total merchandise exports (2010, UNCTADstat): $20,305 million USD (estimate by UNCTADstat) Exports of goods and services: BDT614,681 million (current 2005) or USD 10,548.85 million (constant 2010) BDT1,283,145 million (current 2010) or USD 18,422.76 million (constant 2010) (BBS, Statistics Yearbook 2010)	"Textile yarn and related products" exports (2010, UNCTADstat): $1,576 million USD (8% of total)	"Articles of apparel & clothing accessories" exports (2010, UNCTADstat): $15,500 million USD (76% of total)
	• Number of formal business entities	• Number of businesses in the value chain or value chain element supported by the investment.	34,710 establishments in economy (2005-2006). (BBS, Census of Manufacturing Industries 2005-06)	12,737 establishments in economy (2005-2006), i.e. 37% of total. (BBS, Census of Manufacturing Industries 2005-06) Currently total number of mills under BTMA is 1339. Number of textile spinning mill is 385 most of which are export oriented. (According to BTMA)	4,532 establishments in economy (2005-2006), i.e. 13% of total. (BBS, Census of Manufacturing Industries 2005-06) In Bangladesh maximum number of active factories currently is 3500 (No. of knitwear factories 1500 and Woven factories 2000). There are about 300 to 400 firms working under subcontract. (according to BKMEA)

	• Total fiscal revenues	• Total fiscal take from the economic activity resulting from the investment, through all forms of taxation, including taxes levied from the company as well as from employees	Total government revenues (2009): BDT697.4 billion or USD 10.26 billion (constant, 2010) or 9.2% of GDP. Of which: Taxes: BDT528.7 billion or USD 7.78 billion (constant, 2010), (76% of total revenue). Of which: Taxes on income, profits, and capital gains: BDT134.3 billion or USD 1.98 billion (constant, 2010) Taxes on property: BDT0 billion Taxes on goods and services: BDT200.6 billion or USD 2.95 billion (constant, 2010) Taxes on international trade and transactions: BDT169.8 billion or USD 2.50 billion (constant, 2010) (IMF, GFS database) Direct taxes paid (2005-2006): BDT8.1 billion or USD 139 million (constant, 2010) (BBS, Census of Manufacturing Industries 2005-06) Total receipts by GoB: BDT1,150,430 million (2009-10) or USD 16,929 million (constant, 2010); BDT671,000 million (2005-06) or USD 11,515 million (constant, 2010) Thereof a) Development Receipts: BDT355,590 million (2009-10) or USD 5,232.9 million (constant, 2010); BDT222,320 million (2005-06) or USD 3,815.35 million (constant, 2010) b) Revenue Receipts: BDT794,840 million (2009-10) or USD 11,696 million (constant, 2010); BDT448,680 million (2005-06) or USD 7,700 million (constant, 2010) Of b) there are taxes: BDT639,560 million (2009-10) or USD 9,411 million (constant, 2010) ; BDT361,750 million (2005-06) or USD 6,208 million (constant, 2010)	Direct taxes paid (2005-2006): 445.9 million (nominal) taka (5.5% of total), i.e. $6.5 million (constant 2010) (BBS, Census of Manufacturing Industries 2005-06)	Direct taxes paid (2005-2006): 105.0 million taka (1.3% of total), i.e. $1.77 million (constant 20109 (BBS, Census of Manufacturing Industries 2005-06)

Job creation	• Total Employment	• Total number of jobs generated by the investment, both direct and indirect	**Total number of people in the labour force aged 15+ (BBS, LFS 2010): 54,084,448; average weekly earnings: BDT934.1242 or USD 13.412 (constant, 2010)** **37,882,593 male; average weekly earnings: BDT1191.544 or USD 17.108 (constant, 2010)** 16,201,855 female; average weekly earnings: BDT332.2335 or USD 4.77 (constant, 2010) 47,356,590 employed persons aged 15 years and over (2005-2006) 36,079,828 male 11,276,764 female 3,335,144 people employed in the formal sector (2006) (BBS, Statistical Yearbook 2010)	965,462 employed persons aged 15 years and over (2010) (BBS, LFS 2010), i.e. 1.8% of total 982,971 employed persons aged 15 years and over (2005-2006) (2% of total) 706,777 male 276,196 female (BBS, Statistical Yearbook 2010)	3,078,664 employed persons aged 15 years and over (2010) (BBS, LFS 2010), i.e. 5.7% of total 1,193,400 employed persons aged 15 years and over (2005-2006) (3% of total) 740,944 male 452,455 female (BBS, Statistical Yearbook 2010)
	• Employment by category	• Occupational breakdown of industry employment	47,356,590 employed persons aged 15 years and over (2005-2006) Of which:Professional, Technical: 4.7%Administrative, Management: 0.5%Clerical workers: 2.1%Sales workers: 14.2%Services workers: 5.8%Agriculture, forestry, fishing: 48.4%Production and Transport workers & others: 24.3%Total labor force in 2010: 57.1 million, in manufacturing: 6.7 million (BBS, Statistical Yearbook 2010)	965,462 employed persons aged 15 years and over (2010) Of which:Professionals: n.a.Technical & Associate Professionals: 0%Clercs: 1%Service workers and shop and market sales workers: 7%Craft and related trades workers: 47%Plant and machine operators and assemblers: 27%Elementary occupations: 18%%(BBS, LFS 2010)	3,078,664 employed persons aged 15 years and over (2010) Of which:Professionals: 0%Technical & Associate Professionals: 0%Clercs: 1%Service workers and shop and market sales workers: 24%Craft and related trades workers: 29%Plant and machine operators and assemblers: 44%Elementary occupations: 1%(BBS, LFS 2010)

	• Wages	• Wages and benefits	LFS 2010: Average wage: BDT934.1242, i.e. $13.41 For men: average wage: BDT1191.544, i.e. $17.11 For women: average wage: BDT332.2335, i.e. $4.77 HIES 2010: Gini coefficient (household income): 0.458 Average income per earner in 2010: BDT8,795, i.e. $126 Daily Average Wage Rate of Selected Groups of Industrial Workers in Dhaka: Cotton textile: (Skilled) BDT248.17 or USD 3.563, (Unskilled) BDT176.25 or USD 2.531 Engineering: (Skilled) BDT350.00 or USD 5.025, (Fitter) BDT232.00 or USD 3.331, (Turner) BDT300.00 or USD 4.307 (BBS, Statistics Yearbook 2010)	Daily Average Wage Rate of Selected Groups of Industrial Workers in Dhaka in Cotton textile: Skilled: BDT248.17 or USD 3.563 Unskilled: BDT176.25 or USD 2.531 (BBS, Statistical Yearbook 2010 Average wage in textiles was BDT1,244 per week (men earning 10% more on average) in 2010 (BBS, LFS 2010), equ. $17.9	Average wage was Tk. 1,262 per week (men earning 34% more on average) (BBS, LFS 2010), equ. $18.1
Sustainable development	• Labour impact indicators	• Employment of women · Skills upgrading, training provided; paying particular attention to the creation of transferable skills · Health and safety effects, occupational injuries		Workers in textiles: 965,462 71% male 29% female Wages of men were on average 10% higher. formal employment: 353,888 24% female 76% male (BBS, LFS, 2010)	Workers in apparel: 3,078,664 66% male 34% female Mens wages were on average 34% higher. formal employment: 1,176,380 34% female 66% male Combined the textiles and garments sectors account for 38.5% of formal femal employment. (BBS, LFS, 2010)
	• Social impact indicators	• Number of families lifted out of poverty (wages, family income above subsistence level) · Expansion of goods and services offered, access to			

		and affordability of basic goods and services			
	• Environmental impact indicators	• GHG emissions · Carbon off-set/credits, revenues from carbon credits · Energy and water consumption and efficiency, use of hazardous materials			
	• Development impact indicators	• Development of local resources · Potential crowding in/out effects or risks · Technology diffusion			
	FDI stock		$5,279 million (2009), equ. $5,366 million (constant 2010) (UNCTAD, FDI/TNC database)	$1,099 million (2009), equ. $1,117 million (constant 2010), equivalent to 21% of total FDI stock (UNCTAD, FDI/TNC database)	
	FDI inflow		2005-2009: $4,314 (constant 2010) (UNCTAD, FDI/TNC database)	2005-2009: $555 million (constant 2010), i.e. 12.9% of total (UNCTAD, FDI/TNC database)	

Source: UNCTAD Impact Indicator Analysis, based on information provided by various official sources, secondary literature and company and stakeholder interviews.

Annex 4

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