

The Agreement on Textiles and Clothing: Potential effects on gendered employment in Pakistan

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The government has realized that textile and clothing sector is one sector that offers good prospects for diversification away from traditional commodity exports, for entry into the area of manufacturers, for absorption of large pools of manpower, for crossing the big divide between the rural and urban sectors, for poverty alleviation, *and for gender empowerment* (Ministry of Finance, 2003, emphasis added).

Under the 1995 Agreement on Textiles and Clothing (ATC), the textile import quotas permitted by the 1974 Multi-fibre Arrangement (MFA) were phased out over a ten-year period. In January 2005, any remaining quotas on imports of textiles and clothing were scrapped, thereby liberalizing global trade in these products.¹

The textile and clothing industry is Pakistan's main export engine, accounting for more than two-thirds of its exports. And the economic implications of the expiry of the quota regime have been explored by a number of researchers. While some expect the Pakistani textile industry to remain a competitive supplier of cotton yarns and fabrics because of its cheap labour supply, access to local raw cotton and favourable business environment (USITC, 2004), others emphasize under-investment in technology and the lack of product diversification (Kazmi, 2002).

However, the labour market implications of the ATC – and its effects on gendered access to employment, in particular – have so far been neglected completely. Yet the textile and clothing industry employs a disproportionate share of female labour globally. Women account for more than two-thirds of the industry's global labour force; and employment in

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¹ The term "textiles" should be understood to refer to woven or knit fabric, made from natural or synthetic fibres, filaments or yarns, suitable for further processing into apparel (Oxfam International, 2004). "Clothing" refers to made-up articles, wholly or chiefly of textile materials, commonly to be worn on a human body.

textiles and clothing accounts for almost one-fifth of the global female labour force engaged in manufacturing (Joekes, 1995). Pakistan is no exception in this respect. Besides being of considerable macroeconomic importance, the textile and clothing industry is the largest employer of female workers in Pakistani manufacturing.² An estimated 30 per cent of the industry's workforce is female, as compared with a national average of 15 per cent (Federal Bureau of Statistics, 2003). In the context of "purdah" – i.e. the social seclusion of women, which negatively affects female labour force participation – the strong representation of women in the textile and clothing industry makes the ATC expiry a gender issue of particular interest. Indeed, previous research suggests that trade liberalization typically increases the relative share of female employment in labour-intensive manufacturing (Çağatay, 2001). Whether such an increase is likely to result from the ATC's full implementation in Pakistan will be explored in this article.

Specifically, the objective of this article is to assess the potential implications of the textile quota phase-out for gendered employment in Pakistan and to suggest possible policy responses. It is structured into eight sections. The first reviews selected country experiences and theoretical assumptions regarding the gendered effects of trade liberalization on manufacturing employment. The second section provides an overview of the ATC and its expected impact, and the third introduces the methodological approach followed in this study. The next three sections give an introduction to the Pakistani textile and clothing industry, successively focusing on the sex composition of its workforce and working conditions, its role in international trade, and the role of the quota regime. The seventh section discusses the potential effects of the quota phase-out on gendered employment and working conditions in the Pakistani textile and clothing industry. A final section summarizes the main findings of the study and suggests possible policy responses.

Trade liberalization and gendered employment

Labour-intensive production has been the main driving force of the export-oriented strategy pursued by developing countries over the past 20 years. Textiles and clothing manufacturing in particular has been the classic start-up industry for export-led development (Joekes, 1995). Bangladesh is an extreme case with the textile and clothing sector accounting for 78 per cent of the country's export earnings in 2001, up from 0.4 per cent in 1980-81 (Oxfam International, 2004; see also Joekes, 1995), and employing a predominantly female workforce (Miller and Vivian, 2002).

² Interview with M. Azam (Deputy Secretary, Textile Wing, Ministry of Commerce) conducted at Islamabad on 29 April 2004.

The long-term employment implications of global trade liberalization have been analysed, establishing export-orientation as a crucial factor in increasing the relative share of female employment. Wood (1991) identifies a positive relationship between a country's share of exports to "the North" and the proportion of women in the industrial labour force. Çağatay (2001) gives a more recent overview of empirical findings on the impact of export-orientation on the male/female composition of the workforce. This supports the prediction of a rise in the relative share of female employment as export-orientation increases, especially for manufacturing in developing countries.

These findings can be explained by relating export performance to export prices. All other things being equal, the latter are a positive function of average wages. And since women generally earn lower average wages than their male colleagues, the resulting pay gap may make it more attractive to recruit women in export-oriented industries. The differential allows prices for export goods to be lowered, thereby contributing to an increase in demand for exports. This, in turn, potentially enhances the competitiveness of the firms concerned and, consequently, their growth (Seguino, 2000). Looking at two open economies in East Asia, Berik, Van der Meulen Rogers and Zveglic (2004) show that, contrary to the predictions of neo-classical theory, wage discrimination by sex actually intensifies with trade openness.

Women's lower average wages may not tell the whole story, however. On the one hand, not all export-oriented employment is female. On the other hand, some middle-income countries, such as the Republic of Korea and Mexico, are experiencing an emerging trend of "defeminization" of what used to be typically female occupations. ("Defeminization" refers to a decrease in the proportion of women in the workforce.) Mehra and Gammage (1999) attribute this shift to restructuring in these countries' export industries in connection with the introduction of new technology. Siegmann (2003) explains this by reference to social norms, particularly those concerned with women's reproductive obligations.³ Indeed, women are particularly disadvantaged in regard to jobs requiring advanced technical skills, because of gender gaps in education and female workers' weaker labour market attachment in terms of shorter hours worked and shorter duration of employment – both of which are influenced by the asymmetric gender division of reproductive tasks. Other social norms – in the form of perceptions of appropriate behaviour for women and men, including work

³ Reproductive work refers to activities concerned with the care and development of people, which are performed mostly by women under conditions of unpaid labour. Productive activities, in contrast, refer to income-generating activities, generally linked to the market (Çağatay, 1998).

itself – can lead to the concentration of women in particular industries and occupations, i.e. “occupational segregation”.⁴

Such interaction between reproductive and market work might explain the process of “skill polarization” that results from internationalized production, as identified by Standing (1999). According to him, enterprises introduce technologies that require a small number of highly specialized employees and a large workforce needing little training. This lowers returns to on-the-job continuity and thereby heightens job insecurity, but it also provides an incentive to hire women, whose rates of labour turnover are typically higher. Skill polarization also has another gender dimension in that jobs requiring “craft” skills have traditionally been the domain of men, whereas tasks requiring little skill are associated with women.⁵

Rubery (1988) puts forward three hypotheses regarding the short-term effects of trade liberalization on women’s employment. The first is the “buffer” hypothesis, which views women as a flexible labour reserve whose labour market participation increases in boom periods and decreases in economic downturns. The second is the segmentation hypothesis, which sees occupational segregation as protecting women against being hired and dismissed procyclically. And the third – the substitution hypothesis – assumes male workers to be replaced by female workers during cyclical downswings because of the gender wage gap and women’s lower rates of unionization. The relevance of these patterns to the likely outcome of trade liberalization under the ATC will be explored below.

The Agreement on Textiles and Clothing and its expected impact

In order to protect their domestic industries, developed countries like the United States and various European countries imposed quantitative restrictions on imports of textiles and clothing as from the 1950s. The most restrictive of such arrangements was the MFA, which took effect in 1974. This allowed industrialized countries to impose selective quotas on textile and clothing imports, either unilaterally or under bilateral agreements, and to make such imports subject to high tariffs and non-tariff barriers to trade (NTBs).

⁴ “Occupational segregation” refers to the uneven distribution of women and men across occupational categories. Such segregation can be horizontal or vertical. “Horizontal segregation” refers to the distribution of female and male workers across economic sectors and tasks, whereas “vertical segregation” denotes their distribution within a hierarchic classification of jobs (ILO, 2003).

⁵ Steinberg (1990) shows that the notion of skill itself is a social and gendered construct. Skills typically acquired and used by females are often considered less advanced than those taken over by males.

The ATC, concluded at the Marrakesh ministerial meeting of the World Trade Organization (WTO) in 1994, took over from the MFA in 1995. The new agreement provided for incremental expansion of existing quotas, integration of textile and clothing products into the General Agreement on Tariffs and Trade (GATT), and safeguards to deal with market disruptions during transition.⁶ This process took place between January 1995 and January 2005.

In the first phase of the ATC, which commenced in 1995, countries imposing import quotas integrated into the GATT those products which, in 1990, accounted for “not less than 16 per cent” of the total volume of their textile and clothing imports. The second phase, starting in 1998, included products accounting for “not less than 17 per cent” of those imports; and the third phase – from January 2002 – integrated products accounting for “not less than 18 per cent” of their imports. All remaining textile and clothing products became subject to GATT rules at the end of the implementation period, i.e. as from January 2005. The agreement also stipulated annual growth rates for the quantities of imports and established the Textile Monitoring Body (TMB) as a supervisory body for the implementation of the ATC.

The three-phased abolition of quotas up to the end of 2004 did not lead to significant liberalization of trade in textiles and clothing because the quotas abolished were largely concerned with products “in which developing countries had no comparative advantage” (World Bank, 2004). In other words, importing countries “liberalized” the imports of products that were not subject to restrictions before (Oxfam International, 2004), while they delayed liberalization in sensitive product categories.

As a result, the full implementation of the ATC in January 2005 represented a quantum leap in the liberalization of global trade in textiles and clothing. The previous imposition of quotas had reduced the supply of these goods in the restricted markets and had thus raised their prices. Estimates suggest that an average European family lost about 270 euros a year on account of the higher costs of textiles and clothing induced by the quota regime (Oxfam International, 2004). At the same time, however, the quota regime had depressed prices in unrestricted markets because it diverted some trade to those markets (World Bank, 2004). Since the quota markets accounted for the bulk of global demand for textiles and clothing, the abolition of the quota regime is expected to lead to a global decrease in prices for these products, thereby boosting both global demand and global trade in textiles and clothing.

Based on such basic economics, the abolition of the quota regime is widely expected to produce net welfare gains (see, for example, World

⁶ The objective of GATT rules is to liberalize trade by negotiating down barriers to trade. They imply non-discrimination between trading partners as well as equal treatment of foreign and domestically produced goods. Developing countries are granted special treatment and exceptions from these rules.

Bank, 2004; Oxfam International, 2004). However, there will be winners and losers among the developing countries. Most observers anticipate a major shift in production – and, therefore, employment – to large, cost-efficient producer countries, such as China and India, away from the many smaller exporting countries in Asia, Latin America and Africa (Nordås, 2004; USITC, 2004).

In some developing countries, women working in the textile/clothing sector are expected to be particularly affected as production moves to large countries with huge surpluses of female labour (UNCTAD, 2004). Bangladesh and Sri Lanka, for example, have benefited from the quotas allotted to their textile and clothing exports and are likely to lose hundreds of thousands of jobs – most of them held by women (ITGLWF, 2005). India, by contrast, will most probably be able to expand its market share.

For Pakistan, the consequences are less predictable and will be explored in the following sections. In particular, an attempt will be made to answer two key questions, namely: what are the likely effects of the termination of the quota regime on the performance and structure of the Pakistani textile and clothing industry? And: what are the implications for the male/female composition of the industry's workforce?

Methodology

In order to answer the above questions, ten semi-standardized interviews with textile/clothing industry managers were conducted in Faisalabad in April 2004. Qualitative interviews were chosen as the basis for the analysis because of the paucity of sex-disaggregated data on the industry's workforce. Also, statistics do not reflect the dynamic features of the industry's ongoing restructuring.

The interviewees were asked about the expected effects of and preparations for the phase-out of the quota regime under the ATC, on the one hand, and the sex distribution of employment in their establishments, on the other. The actual production plants were also visited for empirical observation, and interviews were held with key informants, including workers' representatives, experts at the Ministry of Commerce, and industrial association representatives. The qualitative data thus gathered were then triangulated with available statistics and literature sources in order to fill gaps and ensure a more robust analysis (Kelle, 2001). This approach helped partially to overcome limitations of the survey data, such as the small sample size and the focus on a single location and on formal-sector establishments only.

The Faisalabad region was chosen for the purposes of "intensity sampling", i.e. the selection of cases that display variables of interest with high intensity (Patton, 1990). The relevant variable in this case is the region's high concentration of textile and clothing units, both in Faisalabad

itself and in surrounding areas. For the selection of establishments for the semi-standardized interviews and on-site observation, snowball sampling was applied with the assistance of the Department of Fibre Technology at the University of Agriculture in Faisalabad.

The majority of interviews took place in large, composite units that were predominantly export-oriented. However, the establishments varied considerably in size, ranging from Pakistan's largest textile company (with 27,500 employees) to cottage industries employing fewer than ten workers.⁷ Although most of the companies visited integrated several stages of textile processing (e.g. weaving, processing and stitching), one was specialized in dyeing, another in weaving, and yet another in stitching. The latter two were cottage industries. Seven of the ten companies included stitching units, which are of particular importance for female employment. None of the establishments visited supplied the domestic market only: three produced both for export and for the domestic market, and seven were entirely export-oriented. The main export markets of all the companies visited were the quota markets of the United States and the European Union.⁸

The Pakistani textile and clothing industry

When Pakistan came into being, no more than two textile mills were established in the country as a colonial heritage (Ghayur and Zar, 1993). Since independence, however, the Pakistani textile industry has played a crucial role in the country's industrial development. As in other developing countries, the industry's low research-and-development intensity favoured the engagement of domestic companies (Joekes, 1995). The textile sector now accounts for 9 per cent of the country's GDP, 46 per cent of its manufacturing activity, 68 per cent of its export earnings, and 38 per cent of its industrial employment (Board of Investment, 2004; Ministry of Finance, 2004). Forward and backward linkages are also significant, including cotton cultivation and trading services.

The focus of Pakistan's textile and clothing industry is on the early stages of processing, i.e. ginning, spinning and weaving (see table 1). In 2002, Pakistan was the third largest producer of both cotton yarn and cotton cloth, after China and India (APTMA, 2004b and 2004c). Although large-scale mills also make cotton fabric, Pakistan's weaving sector is dominated by small, family-owned power-loom weavers, as shown in table 1. This cottage-industry sector represents about 90 per cent of Pakistan's effective (cotton) weaving capacity. Apparel production units are

⁷ An appendix giving full details on the ten establishments visited is available from the author on request.

⁸ Markets restricting imports of textiles and clothing under the MFA included the United States, the European Union, Canada, and – until 1998 – Norway (Nortrade, 2004).

Table 1. Capacity of Pakistan's textile and clothing sector

Sector	No. of units	Installed capacity	Production
Ginning	1 221	5 488 saws	10 314 million bales
Spinning	445	a) 9 217 million spindles b) 147 852 rotors	1 758 million kg yarn
Weaving			
Composite units	50	20 000-25 000 shuttleless looms	
Independent mills	140	225 000 conventional looms	
Power loom sector			5 600 million m ² (approx.)
Finishing			
Organized sector	106		
Small-scale sector	625		2 700 million m ²
Garment units	5 000	450 000 sewing machines	650 million pc
Terry towels	400	7 600 looms	55 million kg
Canvas	100	2 000 looms	35 million kg
Knitwear	700	21 000 knitting machines	5.50 million pc

Source: Board of Investment (2004).

estimated to number about 5,000 and are mainly located in Karachi and Lahore, with cottage industry accounting for roughly 80 per cent of the total (Ministry of Finance, 2003).

Outsourcing of production was reported to be uncommon among the ten factories visited. Three of them outsourced parts of their production process, but only in case of excess orders. This contrasts with the estimates derived from key informant interviews, according to which about 90 per cent of the work in the textile and clothing industry is sub-contracted, particularly in small and medium-sized plants.⁹ Similarly, Khan (2001) reports that sewing garments is one of the most common activities undertaken by female workers on a sub-contracting basis.

In 2000, the total workforce employed in the textile and clothing industry – including informal employment – totalled 2.3 million, representing about 40 per cent of manufacturing employment.¹⁰ As shown in table 2, the bulk of these workers were employed in weaving and in garment-making. These figures, however, probably underestimate employment in the garment sub-sector: other sources mention at least 700,000 workers (USITC, 2004). This might be because a huge share of Pakistan's garment production takes place in the informal economy, which is not adequately covered by statistics (Khan, 2001). During the past three years alone, this workforce is estimated to have grown by about 330,000. This

⁹ Interviews with H.M. Aslam Zafar (General Councillor U.C. No. 195 Arban) and A. Mutahida Miraj (Labour Federation/Labour Coordinator/Pakistan Sugar Mills Workers Federation), conducted at Faisalabad on 13 and 15 April 2004.

¹⁰ Interview with M. Azam (see note 2 above).

Table 2. Direct employment in textiles, 1999

Sectors	Employment
Weaving (shuttle looms)	675 000
Garments	400 000
Knitting	350 000
Spinning	342 000
Made-ups	100 000
Weaving (shuttleless looms)	75 500
Finishing	35 000
Towelling	27 750
Total	2 005 250

Source: Khan (2003).

additional employment is believed to have been generated mainly by stitching units, which are highly labour-intensive by nature.¹¹ Given the garment industry's potential for promoting future export growth and creating low-cost employment, its workforce could conceivably double again (SMEDA, 2000). This, however, would require significant investment and qualitative improvement. As will be shown below, such investment has not taken place in the Pakistani clothing industry to a sufficient degree. The possibility of a further doubling of employment may therefore be considered optimistic.

This distribution of the workforce is reflected in the empirical data gathered. In the companies surveyed, the largest share of the workforce in composite units was commonly employed in stitching. Among the six composite establishments that had stitching units, the share of the workforce employed in stitching varied between 29 and 60 per cent. Overall, the proportion of female workers ranged from 1 to 50 per cent, with about 20 per cent in five of the ten establishments. The share of female employment was considerably higher in stitching, ranging between 41 and 75 per cent of the total workforce in the stitching units. However, female workers would not work during the evening shifts. This finding differs from the information given in Khan (2001), who reports that women dominate employment in the clothing sector, though it must be remembered that the focus of the survey was on the formal sector. Employment in spinning, weaving and processing was found to be exclusively male. The main reasons given for the horizontal segregation of female workers in stitching were women's constrained mobility due to "purdah" and women's greater skills in tasks like sewing.¹² Other rationales cited were

¹¹ *ibid.*

¹² These two reasons were given in four of the six interviews in which reasons for the segregation were given explicitly.

women's preference for physically less demanding work and their responsibility for reproductive work, such as cooking. Restricted mobility and responsibility for cooking were also the reasons given for why women would work in the morning shift only, thereby highlighting the connection between reproductive and market-based work. Indeed, involvement in reproductive work coupled with the cultural norm of sex segregation at the workplace are obstacles to women's availability for paid employment and reasons that explain the occupational segregation observed. That women in Pakistan have lower average educational attainment than men is unlikely to account for the horizontal segregation of female and male workers in different units within the textiles and clothing industry because machine operators in weaving, processing and stitching are equally unskilled. Rather, the concentration of female workers in stitching units might be more powerfully influenced by the perception that sewing is a task that relates directly to skills women acquire from doing reproductive work.

Observers agree that much remains to be done to improve working conditions in Pakistan's textile and clothing sector, particularly with respect to health and safety conditions.¹³ During the fieldwork conducted for this case study, working conditions in large, composite units were found to be better than in smaller units or cottage industries. Typical health hazards included the cotton or yarn dust inhaled by workers engaged in spinning, weaving, sizing and knitting. This may lead to asthma, tuberculosis, whooping cough (known locally as "black cough") and cancer. A dusty work environment without protective equipment for the workers was observed even in large establishments (three out of ten). The high noise level in some units may impair workers' sense of hearing.¹⁴ Very noisy working environments were noticed in six of the establishments visited. Only in one of them did workers wear earplugs. In the course of processing operations, the chemicals applied for bleaching and dyeing also represent health hazards for the workforce. Resulting health problems include chest illnesses and skin diseases. In four of the seven units that engaged in textile processing, workers did not wear any protective equipment, such as masks, gloves and boots. In the stitching units visited, working conditions were better than in other units. Here, lighting and air quality were usually adequate.

As previously found by Ghayur and Zar (1993), workers were typically regular employees of the companies visited, except for those employed in stitching. In four of the seven establishments that included

¹³ Interviews with H.M. Aslam Zafar and A. Muttahida Miraj (see note 9 above).

¹⁴ *ibid.*

stitching units, the majority of workers engaged in stitching were employed via sub-contractors and paid piece rates.¹⁵

Pakistani wages in textile production are among the lowest in the world, being second only to those paid in Bangladesh (World Bank, 2004). In 2000, hourly wages for spinning and weaving – including medical insurance and fringe benefits – were US\$0.37 per hour. In 2002, they declined to US\$0.34 (USITC, 2004). Wage costs represent 13.9 and 4.6 per cent of all cash costs in apparel and textile production, respectively (World Bank, 2004).

Pakistan's trade in textiles and clothing

Despite low labour costs, Pakistani textile and clothing exports stagnated in the late 1990s, while world exports grew at a rate of about 4 per cent, mainly on account of clothing (SMEDA, 2000). They picked up in 2003, however (Ministry of Finance, 2003). Table 3 shows the distribution of textile and clothing exports across various product categories.

In trade as well, the emphasis is on early stages of the processing chain with cotton fabrics and cotton yarn accounting for large shares of textile and clothing exports. As shown in table 3, however, knitwear and “made-ups” also account for a significant – and increasing – share of exports. This is reflected in the comparative performance of Pakistani textile and clothing exports: Pakistan's share of world trade in cotton yarn is about 30 per cent, and its share of the world cloth trade is 8 per cent (Ministry of Finance, 2004). However, the country's overall share of global textile and clothing exports is only about 1 per cent because of the poor performance of the clothing sub-sector, which generates comparatively higher value-added (Federal Bureau of Statistics, 2004a).

The main buyers of Pakistani cotton fabrics are the United States, China and Turkey. The bulk of cotton yarn is exported to China, South Korea and the United States (Federal Bureau of Statistics, 2004b). Pakistan's export success stories are cotton towels and, even more so, bedwear. Between 1994 and 2002, exports in these product categories increased by 158 and 288 per cent, respectively (see figure 1). Pakistan's exports of bedwear to the world market came a close second to China's (USITC, 2004). The surge in these exports was triggered in 2001 by the European Union's decision to grant Pakistani clothing products duty-free access to its market under the Generalised System of Preferences

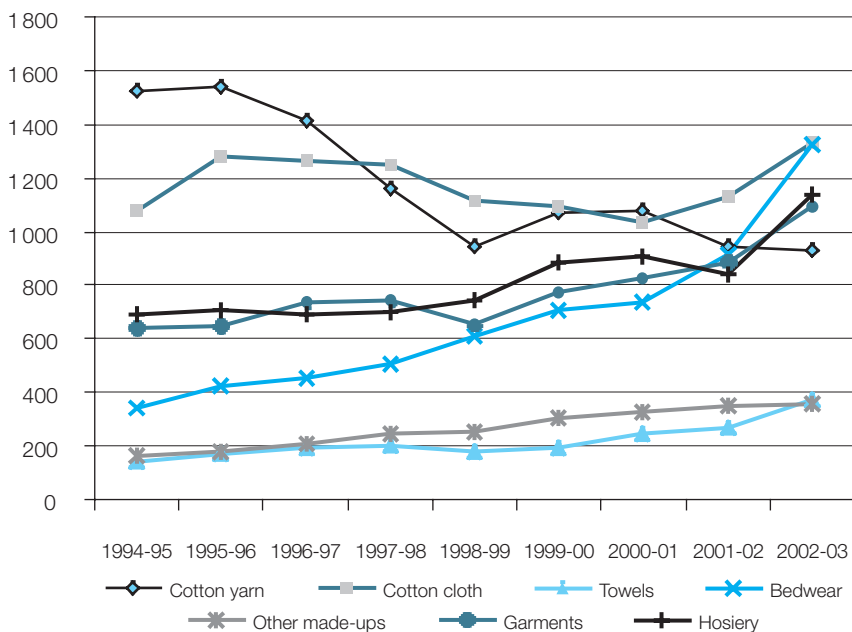
¹⁵ In one exceptional case, this applied to only 10 per cent of the workforce in the stitching unit. Until 2004, all of this company's stitching workers were employed on piece rates. But most of them were then switched to permanent contracts because quality suffered from the time pressure typical of piece-rate work.

Table 3. Exports of textile manufactures, July 2002-May 2004 (PKR million)

	July 2002- May 2003	Percentage of textile exports	July 2003- May 2004	Percentage of textile exports	Percentage change in value
Cotton fabrics	70 514.32	18.69	88 474.13	21.14	25.47
Knitwear	58 907.49	15.62	74 534.70	17.81	26.53
Bedwear	68 742.90	18.22	72 397.00	17.30	5.32
Cotton yarn	50 151.67	13.30	59 960.89	14.33	19.56
Apparel and clothing (excluding knitwear)	57 793.63	15.32	51 545.47	12.32	-10.81
Synthetic textile fabrics	28 995.32	7.69	25 133.74	6.01	-13.32
Textile made-ups (excluding towels and bedwear)	18 930.19	5.02	21 890.43	5.23	15.64
Towels	19 287.02	5.11	20 659.24	4.94	7.11
Tarpaulin and other canvas goods	3 885.03	1.03	3 840.94	0.92	-1.13
Total textile exports	377 207.57		418 436.54		10.93
Total exports	579 282.76		636 720.18		9.92

Source: Federal Bureau of Statistics (2004b).

Figure 1. Major exports of cotton manufactures, 1995-2003 (US\$ million)



Source: APTMA (2004a).

(GSP), officially as a reward for efforts to combat drug production and trafficking (European Commission Delegation to Pakistan, 2001).¹⁶

Pakistan's textile and clothing sector under the quota regime and beyond

Pakistani textile and clothing exports were heavily influenced by the quota regime. In 2001, 48 per cent of the country's textile exports and 87 per cent of its apparel exports were delivered to quota markets, such as the European Union, the United States and Canada (USITC, 2004). The expiry of the quota regime in January 2005 is expected to have significant consequences for the industry.

A report by the United States International Trade Commission, based inter alia on statements by industry organizations, concludes that Pakistan is likely to continue to be a competitive supplier to the United States market, particularly for men's apparel, bed linen, cotton yarn, and cloth (USITC, 2004). Yet Pakistan is in a similar position to that of its competitors in regard to made-up products (World Bank, 2004). And the fact that the degree of similarity with major competitors is higher for made-up products than for textiles suggests that, in contrast to the scenario envisaged by the USITC, this product group will suffer most from increased competition as a result of the full implementation of the ATC. This is reflected in a World Bank (2004) simulation of the effects of the quota phase-out, predicting positive short-run effects on the textile sector, but declining sales of clothing.

According to Pakistan's Small and Medium Enterprise Development Authority (SMEDA, 2000), the textile and clothing sector of the economy suffers from a number of weaknesses, including: a narrow export product base, contamination in cotton, lack of modern ginning, improper dyeing, a focus on low value-added yarns and fabrics rather than made-ups and garments, little activity in the area of synthetic fibres, and a lack of focus on a trained workforce in high value-added industries, such as clothing. The proposed response to these challenges centres on increased attention to garments and made-up products as well as improved quality throughout the textile chain. This, in turn, implies technology upgrading at all stages of textile processing, together with human resources development and improved marketing.

These concerns were only partly addressed in preparations for the phase-out of the quota regime. Asked about their preparations for the phase-out, most managers (eight out of ten) stated that their company had upgraded its machinery. Overall, an amount of US\$4 billion

¹⁶ The European Commission announced the simplification of its GSP scheme on 7 July 2004. According to that announcement, however, the special scheme to combat drug production and trafficking was to expire on 31 December 2005 (European Commission, 2004).

has been invested in the industry between 1999 and 2003 (Ministry of Finance, 2004). The bulk of the investment (47 per cent) went into spinning, whereas the clothing sector (including knitwear) received only 4.8 per cent of the total (Ministry of Finance, 2004), i.e. about one-third of the investment recommended in the SMEDA's (2000) *Textile Vision 2005* (Ministry of Finance, 2003). This pattern was confirmed by the primary information gathered from the survey. Where interviewees specified the type of machinery upgraded, the emphasis tended to be on weaving and processing, rather than on stitching. The greater volume of investment in the upstream stages of textile processing can be partly explained by the much more capital-intensive nature of spinning, weaving and processing as compared to stitching. The main motivations for the investments were cost cuts on chemicals, water and labour (in four of the ten establishments). The upgrade was also associated with expansions of the product range (three out of ten), including movements towards higher value-added products, and capacity increases (six out of ten).

From the exploratory interviews conducted, these preparations appeared to have a number of implications for the workforce. In most cases, interviewees stated that their preparations for the phase-out – particularly effective or planned machinery upgrades – would save labour (in four of the seven cases where workforce implications were explicitly mentioned). This appeared to be especially true of investment in processing (e.g. printing, dyeing) and in knitting. In other words, capacity increases do not necessarily translate into additional jobs, particularly where the aim is to replace old machinery, in which case the increased production capacity can actually lead to a reduction of the workforce. In spinning and weaving, for example, investments were mainly related to the replacement and modernization of existing equipment. And as mentioned above, stitching units were found not to be the primary focus of machinery upgrades (two of the seven companies that had stitching units). However, the scope for labour-saving efficiency improvements here is limited, as one sewing machine has to be operated by one person. Expansions of these units consequently do translate into additional employment: an investment of US\$1 million is estimated to create 500 jobs.¹⁷ Thus, the employment growth discussed above may well be concentrated in the clothing sub-sector only. Indeed, trade union representatives report an overall reduction of the labour force across the industry as a whole because of machinery upgrading.¹⁸

The question which now remains to be answered is that of the consequences these developments will have for the male/female distribu-

¹⁷ Interview with M. Azam (see note 2 above).

¹⁸ Interviews with H.M. Aslam Zafar and A. Muttahida Miraj (see note 9 above).

tion of the workforce in the textile and clothing industry. Will women lose out in technological upgrading? Will female employment become a buffer for trade intensification? In an attempt to answer these questions, the next section draws conclusions from ongoing and anticipated restructuring in the Pakistani textile and clothing industry.

Potential ATC effects on the composition of the workforce by sex

According to Elson (1999), stereotypes that associate masculine/feminine gender roles with particular tasks provide a link between paid labour-market work and unpaid reproductive work, making both spheres “bearers of gender”. Instead of being the outcome of choices of free agents who specialize according to their comparative advantage, the features of the labour market are therefore treated as being shaped by social norms that constrain the actors’ choices.

Pakistan provides a case in point. Male honour is closely interlinked with women’s sexual behaviour, and women’s movements are therefore restricted and controlled through the system of “purdah”, or female seclusion (ADB, 2000). The Pakistani labour market mirrors these patriarchal gender relations: women’s choices of economic activities are more restricted than men’s by prevailing socio-cultural perceptions. This is reflected in the distribution of female and male employment across occupations and economic sectors. Women are highly concentrated in only few occupations and sectors. For example, there is a high concentration of female workers in agriculture and unskilled occupations. These two categories alone account for more than two-thirds of total female employment. By sector, almost 100 per cent of female workers are employed in agriculture, manufacturing, and social and personal services (Federal Bureau of Statistics, 2003).

A finer disaggregation of sectoral employment data would show that even within major industries, employment is segregated by sex. The high concentration of female workers in stitching units or garment production within the Pakistani textile and clothing industry is an example. Furthermore, the fact that women’s reproductive responsibilities are given as a rationale for female workers’ concentration in the morning shift shows how reproductive and market work are interconnected, making the labour market a “bearer of gender”. As will be shown below, this horizontal segregation is crucial to assessing the effects of macro-economic changes such as the full implementation of the ATC.

Based on the qualitative data collected and on previous research, the abolition of the quota regime can be expected to increase demand for some of the products whose exports were previously restricted, such as made-ups and garments. Pakistan, however, is likely to experience increased competition within the product range in which it previously

enjoyed a comparative advantage, particularly in made-ups and low-end garments.

The industry is upgrading its machinery in order to diversify the product range, move into higher value-added products, and respond to buyers' increased pressure for quality improvements. Upgrading is also related to capacity increases. In many cases, such investments can be assumed to be labour-saving (e.g. in weaving, knitting and processing). In stitching, however, the scope for labour-saving investment is limited. Indeed, capacity increases in sewing are positively correlated with employment. Upgrading of machinery here can thus be assumed to translate into additional employment. However, as stated above, it is precisely in these units' products – such as made-ups and garments – that Pakistan is going to face strong competition while the necessary upgrading lags behind. The employment elasticity of investment¹⁹ and capacity increases in stitching could therefore also work the other way round, i.e. translate into a large number of job losses in case of a slump in demand for Pakistani made-ups and garments.

Preparations for the end of the quota regime can be hypothesized to have a number of short-term implications for the male/female composition of the workforce of the Pakistani textile and clothing sector. The workforce in the units affected by labour-saving investments is predominantly male, while capacity increases have a higher positive employment elasticity in those units with a high concentration of female workers. Thus, the net short-term effect may be to increase the relative share of female employment in the industry. In addition, this process induces skill polarization as suggested by Standing (1999). Machinery upgrades substitute for unskilled male labour in the capital-intensive stages of the textile chain. For the remaining workers in these units, average skill requirements increase because they need to operate more sophisticated technology. Meanwhile, in the labour-intensive stages of textile processing, the female share of employment remains relatively high. Taken together, these developments may lead to skill polarization with, on the one hand, a small number of specialized male employees and, on the other, a larger workforce requiring little training, of which a considerable proportion is female. In the short term, horizontal segregation in the Pakistani textile and clothing industry may thus protect female workers against job losses, while leaving male workers more exposed.

The long-term implications of full implementation of the ATC for the male/female composition of the workforce are less clear. They de-

¹⁹ The employment elasticity of investment refers to the extent to which employment increases proportionately with investment.

pend on the structure of the industry and, therefore, on the competitive position of the Pakistani textile and clothing industry in the post-quota era. Three basic scenarios are conceivable. First, the industry's export composition remains at the status quo, as assumed by Khan (2003). Second, Pakistan loses competitiveness in made-ups and garments and specializes in yarn and fabric. Third, the Pakistani textile and clothing industry climbs up the value-added chain and its export composition shifts towards made-ups and, especially, garments as envisaged in the "high road scenario" of the SMEDA's *Textile Vision 2005* (SMEDA, 2000). The first scenario obviously would not change the conclusions drawn above on the short-term outlook. The second scenario would lead to large absolute employment losses because the clothing sub-sector is considerably more labour-intensive than the earlier stages of textile processing. In this case, the industry's horizontal occupational segregation would also imply a significant decrease in the relative share of female employment. The third scenario would translate into large absolute employment gains, coupled with a higher proportion of female employment since the majority of female workers in the textile and clothing industry are employed in the stitching of made-ups and garments.

Several factors make the second scenario the most probable outcome of the industry's restructuring. As mentioned earlier, the degree of similarity of Pakistani products to those of competitors is higher for made-ups than for textiles. This makes it likely that the made-up product groups will suffer most from the termination of the quota system. Besides, the clothing industry has not been the focus of technology upgrading, human resources development and quality improvements – and this factor also may have negative repercussions for the sub-sector, its workforce in general, and for female workers in particular. This outcome would turn the above segmentation hypothesis upside down: the concentration of female employment in sewing/garment production would actually make women more vulnerable to an economic downturn than their male colleagues.

Apart from these effects on the composition of the workforce, the end of the quota regime is likely to have an impact upon working conditions as well. Increased competition in global trade in textiles and clothing will put downward pressure on prices and increase demand for shorter lead times and better quality. It can be assumed that these demands are passed on to the weakest link in the supply chain, namely, the worker (Oxfam International, 2004). For the Pakistani textile and clothing industry, increased cost competition might lead to an increase in precarious forms of employment, particularly piece-rate remuneration for stitching. Such arrangements give the employer more flexibility and reduce overhead costs. For the worker, they imply heightened occupational safety and health risks and a reduction of fringe benefits, such as health insurance. Again, due to the industry's horizontal

occupational segregation, this can be assumed to affect female rather than male workers.

Concluding remarks

In short, the expiry of the quota regime is likely to reduce prices and increase global demand for – and competition in – garments and made-ups. This is bad news for Pakistani producers. In particular, it is improbable that the garment sub-sector will prove internationally competitive in the changed trade environment. This might even be worse news for female workers in the textile and clothing industry because they are concentrated in this vulnerable sub-sector, their employment is characterized by precarious types of contracts, and they have few alternatives for formal employment. Thus, while previous liberalization experiences have tended to increase the relative share of female employment in developing countries, the opening up of international trade in textiles and clothing may actually reduce the proportion of women working in Pakistan's industry. Of course, given the preliminary nature of this analysis, an assessment of real effects will have to be undertaken once the industry has fully adjusted to the expiry of the ATC. Meanwhile, these tentative conclusions do suggest a number of policy recommendations in three broad areas.

First, a deterioration of working conditions is likely to affect women more than men because of their concentration in units where piece rates and other types of precarious contracts are common. This calls for more emphasis on labour standards to protect workers against the harmful consequences of trade intensification, including the establishment of effective enforcement mechanisms to ensure compliance with labour legislation, particularly as regards women's social security coverage for health, maternity, disability and retirement benefits. The right to organize of workers in general and female workers in particular should be emphasized. Companies that protect workers' rights could be given positive incentives to do so, such as tax cuts or subsidies. For the industry, these measures might have the welcome effect of helping to ensure quality, while pre-empting NTBs which might otherwise be expected on grounds of poor labour standards.

Second, displaced female workers have greater difficulty than men in finding alternative jobs due to their higher concentration in only a few sectors of the labour market in Pakistan. In order to protect female workers against long-term job loss, policy responses should therefore include enhanced training opportunities for them and the establishment of information centres on employment opportunities. In addition, the growing quality requirements expected to result from trade liberalization will require a better educated workforce. Yet, while human resource development has been advocated by the SMEDA (2000), the

World Bank (2004) and others (e.g. Kazmi, 2002), it is not reflected in corporate and government policies. And here too, what is needed is a special focus on female workers on account of their greater vulnerability on the labour market.

Third, in order to enhance women's access to jobs, commuter transport services must be improved. Such services could either be provided by the employer or be publicly subsidized. Given the textile and clothing industry's interest in greater access to the supply of female labour, the industry should take the lead here. And this does not only hold true for the textile and clothing industry, but for all other types of industrial employment as well.

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