

# **Restructuring of production and labour under globalization**

**A study of the textile and garment industry in India**

**Indira Hirway**

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### **A study of the textile and garment industry in India**

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Indira Hirway



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# Chapter 1

## Background and approach of the study

### Introduction

The process of globalization has opened up developing countries to global production networks, which have now come to play a key role in world trade. The transnational corporations that control these networks account for around two-thirds of world trade today. The widespread use of international outsourcing in the global production networks allows global producers to shed their non-core activities and focus on higher value-added activities such as design, branding and marketing. Developing countries compete with each other for outsourced production, with the result that producers in these countries come under a variety of pressures to meet the cost, quality and delivery requirements of their clients, at the same time handling fluctuations in orders. They are likely to restructure production and employ different methods of hiring in such circumstances.

To understand the impact of trade liberalization on labour, it is important to study how production is restructured and how labour is restructured as a result.

The main objective of this study is to examine recent developments in the textile and garment industry in India in this context, and investigate their impact on production and labour. The specific objectives of the study are (1) to examine the impact of trade liberalization policies, including the expiry of quotas, on the competitiveness of the industry, on the growth of employment and productivity in the formal and informal sectors, and on different subsectors; (2) to evaluate the changing composition and structure of the industry in the context of the recent changes in the textile policy, that is, how the industry has responded and adjusted in terms of organizing production, use of technology and foreign direct investment (FDI), foreign collaborations, product diversification, recruitment and employment policy, outsourcing and subcontracting, social protection and so on; and (3) to make policy recommendations for enhancing the quantity as well as quality of employment of men and women in different segments of the industry.

The study examines the validity of the policy of promoting exports and treating them as a driver of growth of the industrial sector in general and the textile and garment industry in particular. In other words, the study examines whether the present policy of focusing on export-based industrial development in India is desirable at this stage.

The study also investigates the impact of the global financial crisis on the textile and garment industry in India, particularly on workers and small producers. It draws policy inferences based on this investigation.<sup>1</sup>

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<sup>1</sup> Sponsored by the UNDP India office, a separate study on the impact of the global financial crisis on the industry was conducted between March and August 2009 after the main study was over.

## The textile and garment industry in India

The textile and garment industry is one of the most important in the global markets as well as in India. Global trade in textiles and garments has grown rapidly in recent years, from US\$212 billion in 1990 to \$396 billion in 2003, and is expected to reach \$600 billion in 2010, implying an increase of almost three times in two decades. The industry typifies the development of global production chains in the world economy. In this industry these networks are controlled by transnational corporations, which are traders and retailers and which set terms for others in the production networks. The European Union and the United States together account for 70–80 per cent of the world textile trade and 73 per cent of the world clothing trade. The transnational corporations from these two regions, therefore, enjoy a powerful position in the world economy. They distribute the entire gamut of activities – from design to raw materials to final products and distribution – across different developing countries, depending on their comparative advantages.

India ranks seventh among world exporters, with a 3.8 per cent share in total exports of textiles and garments (6.5 per cent share in value terms). Textiles and garments are also a leading industry in India, producing more than 18 per cent of its total industrial production and accounting for 20 per cent of the total export earnings. The industry employs 38 million persons directly, and ranks second in employment generation after agriculture.

The Indian textile industry is diverse and complex. On the one hand, there is a small, modern, organized formal sector, with sophisticated technology and high labour productivity; on the other, there is the decentralized sector with weavers and artisans in the informal and household sectors. Production of cloth takes place in the mill sector (large-scale units) as well as in the power loom, handloom, and knitting and khadi<sup>2</sup> sectors. While workers in the formal sector are relatively educated and skilled, those in the decentralized sectors are less educated and sometimes illiterate. Though the mill sector dominated before the 1970s, at present it accounts for only 3 per cent of the cloth production. The power loom sector contributes 63 per cent, the handloom sector 13 per cent and the hosiery sector 21 per cent of the total textile production.

Hosiery is a relatively new sector, but it has grown rapidly over the last few decades. The garment (clothing or apparel) industry is again a relatively new phenomenon, growing fast because of the potential of apparel exports. From its modest beginning in the 1970s, it has grown into a gigantic industry spread across the country. It produces about eight billion pieces with a market value of \$28 billion. It employed about 3.54 million persons in 2006–07 (Annual Report, Ministry of Textiles, 2007–08).

Several policy changes in the recent decades have led to increasing integration of the textile and garment industry with the global market. Policies of deregulation and liberalization right from 1985 have had a considerable impact on the organization of

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<sup>2</sup> *Khadi, a traditional cloth in India, is spun and woven by hand. Tools used for the purpose do not use power.*

the industry. It seems to have restructured itself in multiple ways in response to the changing policy environment. This, in turn, seems to have affected the structure and size of the workforce, resulting in precarious employment.

It needs to be noted at the outset that a number of studies have already been conducted by scholars and experts on the textile and garment industry and on labour and employment in the industry in India (Vijaybaskar, 2002; Singh and Sapra, 2007; Narayan, 2008; Swaminathan, 2007; Neetha, 2002; Unni and Bali, 2002). These studies have thrown very useful light on the working of the industry as well as on the condition of workers, including their recruitment, terms of employment, working and living standards and so on. The present study, however, focuses on the restructuring of the industry that has taken place in the last decade and a half in response to policy changes, and the impact of this restructuring on the structure of employment and terms of employment of its workers. The study also examines the impact of liberalization on the shape and structure of the industry and the condition of its workers. The study covers the corporate sector, the small-scale industry (SSI) sector and the household segment in the textile, garment and handloom sectors.

### **Approach of the study**

The study is based on secondary data and review of the available studies as well as on a primary survey.

The major secondary sources of data are the Annual Survey of Industries (ASI), SSI surveys, National Sample Survey Office (NSSO) surveys, Census of India, Trade Statistics, the Ministry of Textiles and its various organizations, handloom and handicraft boards, the ministries of labour and industry, the Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI) and regional chambers of commerce and industry as well as studies conducted by research institutes and universities. These data have been analysed to understand the changing size and composition of the textile industry, the changing characteristics of the industry and its subsectors in terms of technology, products, recruitment of labour and its changing composition, terms of employment including wages, and related matters. The analysis of secondary data provided significant insights into the impact of recent policy changes and the changing global and national environment on the different dimensions of the textile industry in India.

The analysis of the secondary data was followed by a primary survey. Five sets of schedules were designed for the purpose. The first, a semi-structured schedule, was designed for collecting information from industry leaders, industry and export associations, experts, labour organizations, government officials dealing with the industry and its exports etc. This schedule collected information on the activities of the organizations/associations concerned; their views (as well as data) on the impact of recent policy reforms on the textile and garment industry; major concerns and constraints of the industry; performance of production and exports; recent trends in labour and employment in the industry and issues/concerns related to labour;

their comments on the recent policy changes and; their recommendations and suggestions on improving prospects for the industry as well as employment and labour conditions.

Respondents to schedule 1 of the survey included persons from all major textile centres and from among industry/export associations, government organizations and committees, and labour associated with industry. This schedule provided rich information for understanding the industry and a good background for using the primary survey of selected units.

The study selected prominent textile and garment centres for the primary survey in a way that would help throw useful light on restructuring of the industry and on labour and employment in the industry. The analysis of the secondary data as well as extensive canvassing of the first schedule helped in selecting centres for the primary survey.

The large-scale industrial (LSI) units are located mainly in Mumbai, Ahmedabad, Coimbatore, Indore-Devas, Delhi and Kanpur. One unit each was selected from Ahmedabad, Mumbai, Coimbatore, Sanand (Gujarat) and Indore-Devas. The major power loom centres in the country are Surat, Bhivandi, Ichalkaranji, Coimbatore and Erode. Of these, Coimbatore, Bhivandi and Surat were selected for the primary survey. The major garment centres in the country are Tirupur, Delhi, Ahmedabad, Bangalore and Chennai, among others. Ahmedabad and Tirupur were selected for the survey. The number of units was selected carefully, purposively, from each of the centres in a way that they represented the typologies of production.

It must be noted that the selected sample is not large; nor is it representative of the textile and garment industry in India. However, it includes the major typologies of the seven centres and the major types of units located there. The in-depth investigation gives rich information on what is happening in the industry, how the industry is restructuring in response to the present changes in the macro environment and how the changes have affected men and women employed in the industry.

The sample thus consists of LSI, SSI and household (HH) units (Table 1.1). In all, five LSIs, 16 SSIs and 16 HH sector units were selected. Thirty-seven workers were selected from each LSI unit, 10 from each SSI unit and five from each HH unit. The sample consisted of a total of 37 production units and 323 workers located in seven centres in the country.

Schedules 2, 3 and 4 were designed for collecting information from LSI (non-SSI), SSI units and household units, respectively. These schedules collected information about how each unit had adjusted to new policy environments and new developments; the kind of changes it had made in terms of organization of production, technological upgradation, exports and so on, and; about recruitment of workers, wage rates, conditions of work, women workers etc.

It was not easy to get textile and garment units to agree to respond to the schedules.

**Table 1.1 The sample**

| Location     | Large-scale units |           | Small-scale units |            | Household sector |            |
|--------------|-------------------|-----------|-------------------|------------|------------------|------------|
|              | Type-no.          | Workers   | Type-no.          | Workers    | Type-no.         | Workers    |
| Ahmedabad    | Textile-1         | 15        | Garment-3         | 30         | Garment-4        | 25         |
| Sanand       | Garment-1         | 15        |                   |            |                  |            |
| Surat        |                   |           | Textile-2         | 20         |                  |            |
| Tirupur      |                   |           | Garment-4         | 40         | Garment-6        | 25         |
| Bhivandi     |                   |           | Textile-2         | 20         | Textiles-3       | 25         |
| Indore-Devas | Textile-1         | 15        |                   |            |                  |            |
| Coimbatore   | Spinning-1        | 15        | Textile-5         | 48         | Textile-3        | 25         |
|              | Textile-1         |           |                   |            |                  |            |
| <b>Total</b> | <b>5</b>          | <b>75</b> | <b>16</b>         | <b>158</b> | <b>16</b>        | <b>100</b> |

Many units, mainly LSI and SSI, backed out as they were unwilling to share information, particularly with respect to labour and employment. In the case of large units, the resistance was so high that some large units located in Mumbai, Delhi and Gurgaon had to be left out after in-depth discussion with them on the first part of the schedule. These were replaced with similar units located elsewhere. In the case of small-scale units too, some selected units had to be replaced by similar units in the same centres.

**Selected textile and garment centres**

The sample units were located in three major textile centres and two major garment centres of the country. The major characteristics of these centres have been examined systematically in order to understand the working of the selected units.

**1. Surat: India’s power loom centre**

Surat, situated on the banks of the Tapti river, is a major textile centre in south Gujarat. The city has historically been home to professional families of weavers and finishers since ancient times. It is a major production centre for synthetic fibre, used in about 50 per cent of the synthetic fabrics manufactured in India. As per official statistics, exports of synthetic and blended textiles from Surat stood at Rs 10.25 billion in 2003–04 (CMIE, 2007). It also exported more than Rs 16 billion, or about 12 per cent of man-made fibres. Its share of about 40 per cent of synthetic filament fabric exports is a testimony to its importance as a prime sourcing centre of synthetic fabrics. Surat is also known as the “synthetic capital of India”.

Polyester fabrics from Surat are exported to more than 100 countries around the world, including highly competitive markets countries such as the United Kingdom, the United Arab Emirates, Singapore, Saudi Arabia, Russia, Mauritius, Spain, Germany and Italy. Manufacturers in Surat say it offers certain unique advantages for exports, having mastered the art and science of producing exquisite fabrics over the centuries. Hence

fabrics produced there have the unmistakable stamp of quality and latest variety. The lower labour costs ensure that the price of fabrics produced in Surat is competitive. Due to its diversified, small-lot production system, manufacturers are capable of catering to tailor-made orders, which ensures quick response and exclusivity. The centre is also able to execute bulk orders, as the growing number of big units backed by textile professionals can undertake production in line with demand in the global market.

Surat forms the heart of a modern, vibrant centre of textile production. Equipped with more than 500,000 looms, it produces about 600 million metres of polyester filament fabrics annually. There are about 400 processing units; each one has an average capacity of some 20 million linear metres of fabric per annum. Almost 80 per cent of these units produce dress fabrics and sarees (CMIE, 2007).

The centre is also one of the biggest consumers of texturized yarn in India. The fabrics produced in Surat are basically (1) polyester fabrics in georgette, chiffon, crepe, taffeta, cambric, crepe-de-chine, voile, habutae, dobby gingham, yoryu, jacquard, lightweight or heavyweight plain or designed weave, dyed or printed, embroidered or with zari work; (2) made-ups such as scarves, stoles, dupattas and odhanis<sup>3</sup> in exotic shades, intricate patterns and finishes such as dyed, printed and embroidered in metallic stripes, sequins and pearl/beadwork; (3) home textiles that include a wide range of high-quality decor fabrics – upholstery, furnishings, drapes, cushions, throws, duvets, table linen, curtains, drapery, panels etc.; and (4) narrow weaving, for making high-quality elastics, non-elastic tapes, webbing, laces, ribbons, hair bands, bows and cords.

**Predominance of power looms:** A major feature of production of textiles in Surat is the predominance of the small sector, that is, power looms. In fact, it is one of the biggest power loom centres in the country. As per a study conducted by the Centre for Social Studies (CSS) in Surat, the major power loom localities are Katargam, Magdalla and Udhana. Though there are some famous large textile mills in Surat such as Garden Silk Mills, Vardhman Textiles and Poonam Textiles, the main production units are small-scale power looms. The small scale is maintained to take advantage of small sector incentives and subsidies available to the SSI sector and to avoid labour laws, on the one hand, and to retain flexibility of production, on the other. Typically one person owns four–five power loom units. In the course of time, people from Rajasthan and Kolkata have settled in Surat in order to run their textile business.

There are 15,000 power loom units in and around Surat with about 650,000 looms producing more than 20 million metres of grey fabric everyday; and about 300 processing units, most of which function on a job-work basis, that is, they take up work or orders for which they are paid lump sum (CMIE, 2007). Power looms are located in nine major centres in the city.

**Technology in power loom units:** There are three types of power loom machinery

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<sup>3</sup> These are traditional Indian long scarf-like clothing used by Indian women.

available in the market, namely, semi-automatic, rapier and waterjet. Almost 99 per cent power loom machinery in Surat is first-generation semi-automatic. In other words, Surat needs considerable technological upgradation. Some upgradation has already started after the expiry of the Multifibre Arrangement (MFA) and other liberal policies.

The study found that most workers employed in power loom units in Surat are unskilled and come mainly from poor households in Bihar, Orissa, Maharashtra and Uttar Pradesh. The industry faces shortage of skilled workers, mainly because skills are acquired on the job and such workers are always in great demand. A worker usually manages four power looms with one helper.

**Table 1.2   Location of power looms in Surat**

| S. no.       | Location               | No. of units  | Percentage |
|--------------|------------------------|---------------|------------|
| 1.           | Katargam GIDC Old/New  | 4 500         | 30         |
| 2.           | Ved Road               | 1 500         | 10         |
| 3.           | Aryana Farm            | 1 500         | 10         |
| 4.           | Khatodara              | 1 000         | 7          |
| 5.           | Udhna/Udhna Udyognagar | 2 500         | 17         |
| 6.           | Pandesara              | 1 500         | 10         |
| 7.           | Sachin GIDC            | 1 500         | 10         |
| 8.           | Sayan                  | 500           | 3          |
| 9.           | Kim/Pipodara           | 500           | 3          |
| <b>Total</b> |                        | <b>15 000</b> | <b>100</b> |

*Source: Centre for Social Studies.*

**Major areas of concern:** Discussions with leaders of the industry and officials in Surat showed that one major area of concern is the lack of vision and future strategy on the part of power loom units, in the sense that, with the exception of a few units, there is hardly any effort towards modernization of technology. During informal discussions with members of the local association, it emerged that they do not want to invest in modernization, firstly because they are able to manage without it and, secondly, because funds are not available easily.

Most of the owners have a very low educational profile and are unaware of recent developments in textile trends and policy. Despite efforts made by the Ministry of Textiles to raise awareness through workshops and seminars, the impact has been negligible because very few owners have shown interest. Discussions with Garden Silk Mills officials indicated that power loom units believe in copying designs (illegally) and do not want to invest in research and development (R&D). This affects the profit margins of innovative units.

The rising cost of power and labour, which consequently raises the cost of production, is another issue the Surat power loom units face. Moreover, there is a severe labour



crunch between April and June when workers head for their hometowns.

**Blatant violation of labour standards:** One serious concern in Surat is the way labour laws are openly violated. Almost all power loom units, big and small, employ contract and casual labour on a large scale. Except for a small core of permanent employees in management, sales and administration, almost all are temporary, casual or contract workers. Consequently, labour laws are simply not applicable to these workers. According to a labour officer in Surat, very few units are covered under the standard labour laws.

## 2. Bhivandi: A century-old textile town

Bhivandi, another major power loom centre, is different from Surat in many ways. To start with, it produces mainly cotton textiles; Surat manufactures man-made fabrics. This is because it was earlier a handloom centre. Secondly, the units in Bhivandi are much smaller in size and less modern than the power looms in Surat. Thirdly, Bhivandi exports much less than Surat, as its products have not developed a very big export market so far (CMIE, 2007).

An interesting fact that came to light during discussions with industry leaders is that Bhivandi has been a textile town for more than a hundred years. It has a population of 600,000 and is located about 60 kilometres from Mumbai. It is considered a part of the Greater Mumbai metropolitan agglomeration, along with Navi Mumbai and Kalyan, Thane, Ulhasnagar, Dombivali, Mira Bhaynder and the Vasai-Virar region. The town is well connected by railway stations such as Thane and Kalyan.

Bhivandi, inhabited by Maharashtrian and Konkani Muslims, was a small town engaged in agriculture, fishing and handlooms. With the advent of electricity, handlooms began to be replaced by power looms, and it became a textile hub. During the textile mill strike in Mumbai in the 1980s, it grew into a key weaving centre. At present, more than four million people depend directly or indirectly on power looms in Bhivandi. It has a big concentration of cotton and synthetic man-made textile units. Another distinction is that both the textile types are entirely in the small-scale sector.

It emerged during interviews with industry leaders in Bhivandi that it grew fast as a textile centre after most of the mills closed in Mumbai. Since many large units relocated to Bhivandi, it has become a mixture of old and new units. A number of owners run more than one unit to avoid taxes and labour laws. Nearly 80 per cent of them operate more than 20 looms each. With 10 looms, their turnover touches Rs 2 million in four months. They employ workers from Bihar and Uttar Pradesh on a casual or contract basis. Most of the units steal electricity and do not pay taxes.

At present, Bhivandi produces 63 million metres of grey fabric per annum with a total 450,000 looms (CMIE, 2007). There are 100 sizing units, 20 power process houses and 20 hand process houses. According to the present estimate, the power loom units produce 100 per cent cotton, polyester and blended shirting, sarees, suitings etc. There are 6.5 million workers employed in this textile centre. Most of the production,



however, is controlled by traders located in Mumbai, the nearest city.

Textiles from Bhivandi are sold in the local market as well as exported. Labels such as Van Heusen, Allen Solly, Peter England and others are well connected with some units in Bhivandi. The major problem is that most power looms still use old technology and produce low-end products. The overall quality of cloth produced in Bhivandi is not very good.

Our study, however found that modernization has begun in many new units in recent years. Many small-scale units have adopted new technologies by investing in new, imported machinery. The units have also started exporting on a large scale.

**Power looms in Bhivandi:** Power looms in Bhivandi are organized in a way that they avoid both payment of taxes and compliance with labour laws. Most power looms are housed in tiny, cramped workshops. The room is rented out by one, the loom is owned by another and the raw material is bought by a third party. The person contracting the workers manages several small units. It is difficult to pinpoint who is earning profits in the process.

**Training to workers:** The Government of India has established power loom service centres across the country in order to train workers with new textile machinery. Discussions indicated that this training is not sufficient in Bhivandi. As a result, there is a shortage of skilled workers in this textile town. Candidates coming for short courses have either not passed even class X or are less educated. Most workers are trained on the job. Around 90 per cent workers are unskilled and untrained, and are appointed on a temporary basis.

**Areas of concern:** Our discussions with some producers show that, post-1991 economic reforms, China, Taiwan, Republic of Korea and others began dumping cheap textiles in India. Many power looms in Bhivandi found it difficult to survive in the face of this inflow. Due to inadequate support from the government, weavers suddenly found themselves using expensive raw materials and obsolete equipment to compete with the cheap, high-quality imported fabric. According to *Business Today* (April 2003), the textile sector in Bhivandi was in turmoil. Out of 550,000 power loom units, 50,000 units were shut in 2003. The number of jobs lost was 700,000. The impact on the local economy was estimated to be a daily loss of Rs 100 million.

As per the industry association, at present only 30,000 of the total power looms in Bhivandi are modern. The Government of Maharashtra has taken a number of steps to help the power looms in Bhivandi. These include (1) encouragement to private investment in power looms for modernization; (2) ensuring 24x7 electricity supply; (3) improving infrastructure services such as roads, railway connectivity and water supply; (4) encouraging new investments in sectors such as hotels and malls; and (5) providing credit to units for modernization and technology upgradation. Discussions with industry leaders indicate that some improvements are taking place.

Another area of concern is power theft. Bhivandi is known for electricity theft by

power looms. The Maharashtra State Electricity Board has tried to bring discipline in this area. It has decided to charge a fixed monthly rate, whether a loom is running or not. This has created problems for the power looms.

**Concerns related to workers:** Workers in Bhivandi are less educated and mostly unskilled. Usually they are migrants from Bihar and Uttar Pradesh. They are employed as casual or contract workers without any social protection. In the 35 years since the minimum wage for power looms was declared, it has never been adhered to, though it is not even survival wage. Since Bhivandi is a migrant town with a floating population, its local government is far less accountable and gets away with negligence.

An interesting development is that the state government plans to establish a few textile parks in Bhivandi. It has also extended the use of Technology Upgradation Fund Scheme (TUFS) in this town. With these developments, the units are expected to modernize their production technology.

### 3. Tirupur: A town of export excellence

Two major garment centres were selected for in-depth study: Tirupur, the country's biggest garment export centre, and Ahmedabad, a small but vibrant garment centre. As per official statistics, Tirupur is the largest foreign exchange earning town in India. It is the first spot for international buyers of Indian garments from 35 countries. Half of India's total knitwear exports come from Tirupur. The trade policy of 2002–07 called it a town of “export excellence”.

The units specialize in different operations. They have the most modern machinery and the skilled manpower required for particular products. They can deliver customized samples in less than 12 hours, and half a million pieces in a matter of days. The success story of the town is mainly attributed to the entrepreneurial skills of its people, coupled with hard work, commitment to the job, modern technology and products with standard and well-maintained quality.

Till the 1980s, the knitwear industry was producing textile goods mainly for the local market, with some exports to Afghanistan as well as African and East European countries. In the late 1980s, the industry started diversifying by manufacturing and exporting outer garments such as cardigans, jerseys, pullovers, women's blouses and dresses, and shirts, trousers, nightwear, sportswear and industrial wear. During the boom, between 1985 and 1993–94, Tirupur almost doubled the number of units. Its role in the world clothing industry can be identified as one of commercial subcontractor. It caters to low-volume, fashion-oriented garments prone to volatile changes in style and design. This particular market does not easily lend itself to automation. The fast changing nature of international orders, coupled with intense rivalry at both the international and domestic levels for procuring orders, now requires even beginners to contemplate investing in better and more sophisticated machines.

The need to stick to delivery schedules and maintain internationally acceptable standards in quality, finish etc. has had its own impact on production organization. It has not led to all operations being brought under one roof. On the contrary, large manufacturer-exporters and merchant-exporters particularly have teamed up with several enterprises covering different segments of the production process. The exchange of information and assistance among members of the network has enabled the segments to run in tandem (Swaminathan and Jeyaranjan, 1999). Even the large enterprises, which have all operations under their control through the numerous units they have set up in the small-scale sector, have to rely on outside facilities to fulfill their orders on time. Hence, the vertical integration of different processes by large enterprises does not obviate the need to network with others.

As Table 1.3 shows, there are different types of units making different products to complete the value chain. The units are involved in specific operations according to skills and technology. Most of them receive orders for particular products. The maximum (2,500) units are involved in garment making. Embroidery is a traditional craft, and 200 units are involved in this work.

**Table 1.3    Production units in Tirupur**

| Operations                 | No. of units |
|----------------------------|--------------|
| Knitting                   | 1 500        |
| Dyeing and bleaching       | 750          |
| Fabric printing            | 400          |
| Garment making             | 2 500        |
| Embroidery                 | 200          |
| Other ancillary units      | 400          |
| Compacting and calendaring | 250          |
| <b>Total</b>               | <b>6 000</b> |

Exports from Tirupur have increased manifold over the past decades. Their value rose from Rs 186.9 million in 1985 to nearly Rs 4.3 billion in 1991, Rs 35.3 billion in 2001 and Rs 110 billion in 2007. The target for 2012 is Rs 250 billion. The share of Tirupur in the total exports of garments from India increased from 5.42 per cent in 1989 to 16.48 per cent in 2001 (White and Sinha, 2007). Leading brands and chain stores of the world are linked with Tirupur. These are listed as in Table 1.4.

Producers and exporters have formed a large number of industry associations and export associations to take care of their collective interests. The Tirupur Exporters Association, one of the biggest, has 658 life members and 155 associate members.

Till 2002, the garment industry was reserved for the SSI sector. Many producers kept the size of the garment units small to avail of the SSI benefits. However, if all the

**Table 1.4 Major brands and leading chain stores in Tirupur**

| Brands         | Chain stores |
|----------------|--------------|
| Nike           | C&A          |
| Cutter & Buck  | Walmart      |
| Adidas         | Target       |
| Tommy Hilfiger | Sears        |
| Katzenberg     | Mother Care  |
| Van Heusen     | H&M          |

**Table 1.5 Size of workforce in Tirupur garment industry**

| Garment units    |            | Processing units |            |
|------------------|------------|------------------|------------|
| No. of persons   | Percentage | No. of persons   | Percentage |
| 0-50             | 50         | 0-100            | 50         |
| 50-200           | 30         | 101-200          | 35         |
| 200-300          | 20         | 201-300          | 15         |
| <b>All units</b> | <b>100</b> |                  | <b>100</b> |

employees working in these units are included, the size distribution will be as shown in Table 1.5.

About 50 per cent of the garment units (excluding HH units) have less than 50 employees, and no unit has more than 300. In the case of processing units, (excluding the household-based ones), the minimum number of persons is usually around 25 and the maximum can go up to 300. No official figure is available on the number of people employed in the industry. The Tirupur industrial guide estimates that there are 300,000 persons in hosiery and 200,000 in processing. About 200,000 people from the town itself work in these factories and an estimated 300,000 commute daily.

**Organization of production:** The production activities in Tirupur are organized in networks, for example, knotting, cutting and stitching, and finishing activities such as checking, folding and packing are spread over a number of small and big units in a coordinated manner.

Knitting, for instance, is performed by subcontracted units (which take orders from large units), and by units which produce only for their own use as well as for other units. Finishing operations, which consist of three distinct stages – cutting, and stitching and finishing processes (checking, folding and packing) – are the most labour-intensive, and are carried out by the units themselves or by subcontractors. Again, cutting and stitching operations have become highly specialized and are carried out by a distinct group of workers. Stitching takes more than half of the labour time in the whole production process. These activities are carried out in small and household units,

depending on the technology. The finishing process, that is, checking, ironing, folding and packing, is again carried out in small units and household units, depending on the technology being used.

Apart from these main operations, there are a large number of ancillary operations which have become necessary for almost all kinds of fabrics. These are carried out by three kinds of units, namely, units performing these operations for own production, units which undertake this work on contract and units which undertake these operations for own production and on a contract basis.

To sum up, production in Tirupur is based on a kind of network organizations, where small and household units also play an important role.

**Projects by the Tirupur Exporters Association:** The association has undertaken several projects for promoting growth of the garment industry in Tirupur. The major projects are (1) Tirupur Export Knitwear Industrial Complex (TEKIC),<sup>4</sup> (2) Netaji Apparel Park<sup>5</sup> and (3) Textile Eco-Solutions Tamilnadu Ltd (TEST).<sup>6</sup> All these projects are important for the development of Tirupur garments.

A major problem in Tirupur is environmental depletion and environmental pollution, including virtually non-existent sewage systems. The textile and garment industry operates within a small geographical area, putting a huge pressure on the environment and natural resources. As a result, the health and safety of workers as well as of the residents of Tirupur are in danger. For example, the level of total dissolved solids (TDS) in the groundwater has gone up to 5,000–6,000 milligrams per litre (ideally, in potable water the limit should not exceed 500 milligrams). This has led to shortage of potable water. Water is fetched in tankers from areas as far away as 20 kilometres. Another major issue is power supply, which is highly irregular. Thirdly, skilled labour is not available locally. Small producers cannot afford to spend more on training workers (Swaminathan, 2009).

#### 4. The garment industry in Ahmedabad

The garment industry in Ahmedabad is quite a contrast to that in Tirupur. To start with, while Tirupur is the major garment exporting centre in India, industry leaders say that only about 20 per cent of the garment units in Ahmedabad are exporters. Again, against the high value-added, top-end garment exports for world-famous brands and retailers to the US, the EU, Canada etc. from Tirupur, exports from Ahmedabad consist of

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<sup>4</sup> This is a private industrial complex project promoted on 100 acres of land. It consists of 189 industrial sheds with full-fledged infrastructure facilities such as power, water, roads, rain water drainage, sewage, security, post and telecommunications. Investment in this complex has crossed Rs 2 billion and the value of production is estimated at Rs 8 billion per annum.

<sup>5</sup> The park has 52 knitwear manufacturing facilities with a total built-up area of about 2 million square feet with state-of-the-art machinery and world-class infrastructure created with an investment of Rs 3 billion. The park provides direct employment to more than 15,000 persons. The park contributes some Rs 15 billion per annum to the knitwear export turnover of Tirupur.

<sup>6</sup> This marine discharge project will cost Rs 10 billion. Its major aim is to deposit discharged water in the sea, away from the coast, through a network of pipelines.

mainly low and medium value-added garments to Africa, the Middle East and nearby Asian countries.

Secondly, as per the data available with the Government of Gujarat, garment units in Ahmedabad are smaller, with only 119 out of the total of 1,200 registered under the Factories Act. The rest are small-scale units, in addition to the large number of home-based units and home workers. Thirdly, there is a big inflow of foreign direct investment (FDI) into Tirupur and widespread awareness among producers of the prospects in the global market; but garment units in Ahmedabad, except for those registered under the Factories Act, are not fully aware of the new opportunities that have opened up in the global market with economic reforms, expiry of the MFA and removal of the garment industry from the SSI list.

In fact, as the chairman of the Gujarat Garment Association pointed out, many small garment units are keen to understand the changing environment and the new opportunities emerging in the global market. Also, the profile of workers in the garment industry in Tirupur and Ahmedabad differs widely, as the literacy and skill levels of workers in Tirupur are usually superior to those in Ahmedabad. Lastly, the garment industry in Tirupur is much more integrated with the global market, with its larger export of garments and larger imports of machinery and equipment, against the less integrated industry in Ahmedabad. The status of the garment industry, employment and labour conditions in it, therefore, make an interesting study.

Official statistics indicate that the garment industry in Ahmedabad has grown mainly after the late 1980s. It has three types of units, namely, large, small and household. The large factories employ between 200 and 800 workers. There are three garment manufacturing LSIs in Ahmedabad, namely, Arvind Mills Ltd, the Ashima Group and Arvee Denims Ltd. Arvind Mills Ltd has two branches in Ahmedabad, one in Naroda and the other in Santej. The Naroda branch manufactures only denim fabrics and the Santej branch ready-made shirts. Ashima has a Techno Campus in Khokhara and Arvee Denims has manufacturing units in Narol. In addition, there are other middle-level units registered under the Factories Act. In fact, only 119 garment units in the city are registered under the Act.

Small units, including those registered under the Factories Act in Ahmedabad, are concentrated in the Gujarat Industrial Development Corporation (GIDC) industrial estates of Vatva and Odhav, and in Narol and Chanola. Smaller factories and shops employ less than 10 workers and avoid registration under the Factories Act. These units engage between five and 15 or more workers. They operate in large rooms with a number of sewing machines around which the workers are organized. The total number of workers in the small factories/workshops in Ahmedabad was estimated to be 5,966 in 1994–95. It had increased to 20,000 in 2006 (Government of Gujarat, 2007).

There are two types of small-scale units in Ahmedabad: (1) Those that act as outsourcing units for the branded companies and retail stores in India and abroad, especially in the Middle East; and (2) those that act not only as outsourcing units but

also sell products in the open market directly. According to the Garment Manufacturing Association in Gujarat, there are about 5,000 small-scale garment units in the state, spread over Ahmedabad, Surat, Vadodara etc. The major locations in Ahmedabad are Madhavpura, Grain Market, Narol and Gheekanta.

Household units or home workers and home-based workers are at the bottom rung of the hierarchy of garment industry. The number of home-based workers was estimated at 34,957 in 1998 (SEWA, 2005). The proportion of women in SSI and HH units is large. Garment units in Ahmedabad produce jeans, shirts, trousers, Bermudas and denim jackets. Some units manufacture exclusively denim items. The reputed small-scale units involved in exports are Artex, Murlidhar Associates, Libas, Span, Black Belt and Kajal. Their turnover ranges from Rs 20 million to Rs 200 million. They possess machines with modern technology, including imported machinery.

**Garment job centres:** These are typically small units that take up job work from garment exporters/wholesalers or large manufacturers. Outsourcing production in parts is the most common approach adopted by small and big garment makers in the city. This saves them the cost of land and building, machines and equipment and also labour costs, as they manage to employ less than 10 workers. Job centres bring unstitched material from manufacturers and stitch it at their work place as per the design given. These centres work for reputed wholesalers and manufacturers. The rate is paid on per-piece basis.

Our interviews with several leading garment producers showed that most of these job centres in Ahmedabad lack modern machines, as they produce low value-added products. Their maximum annual turnover is approximately Rs 500,000. They engage five to 15 workers as per requirement. All are employed on a contract basis and earn piece rates. The majority of workers are men; women constitute approximately 15 per cent of the total workforce.

There is no fixed criterion for entering this industry, as newcomers with even a little education learn on the job. Initially they are employed as unskilled workers, with the additional responsibility of cleaning and helping in stitching buttons etc.

**Household garment manufacturing units:** Household or home-based garment units are those where people work in homes as piece-rated workers, independent workers or both. Most of these units in Ahmedabad are subcontracted units where payments are made on the basis of the work done. Usually this involves work that can be performed outside the main production units, such as stitching accessories and pockets, fixing zips etc. The majority of home workers in Ahmedabad are women, living in Bapunagar, Khodiyar Nagar and Thakkar Bapa Nagar, while the cloth merchants who give them work are mainly concentrated in nearby markets such as New Cloth Market, Gheekantha and Gantakarn. Some women workers also live in far-off Gomitpur, Maninagar, Dani-limda and Shah-alam areas. There is no formal estimate of the number of HH units or of home workers. However, the approximate number in the three major localities, that is, Bapunagar, Khodiyar Nagar and Thakkarbapa Nagar, is 1,250 units (SEWA, 2005).



**Table 1.6 Area-wise estimated no. of job centres in Ahmedabad**

| S. no.       | Location              | Units (no.)  |
|--------------|-----------------------|--------------|
| 1.           | Bapunagar             | 1 500        |
| 2.           | Gomtipur              | 250          |
| 3.           | Rakhial               | 400          |
| 4.           | Saha-alam             | 250          |
| 5.           | Sarangpur             | 150          |
| 6.           | Khodiyar Nagar        | 1 000        |
| 7.           | Hatkeshwar            | 250          |
| 8.           | Narol                 | 500          |
| 9.           | Vatva                 | 250          |
| 10.          | Dani-limda            | 250          |
| 11.          | CTM                   | 100          |
| 12.          | Idgah estate (Asarva) | 250          |
| <b>Total</b> |                       | <b>5 150</b> |

*Source: Government of Gujarat.*

**Other garment units:** In addition to the above, there are two other types of household garment units which constitute a very small part of the garment manufacturing. These are household garment units (renovating old garments) and independent household producers of ready-made garments. The former are units which remake used jeans imported from Europe. This business was started in Ahmedabad about three years ago, in 2005. The old jeans are first un-stitched, dyed and stitched again to be sold in the market. These units are located mainly in Bapunagar, Soni-ni-chali, Rakhial and Gomtipur. Independent household producers of ready-made garments get orders locally and stitch garments. This segment is at the bottom of running this business. These producers are mainly women who stitch petticoats, school uniforms, blouses and kidswear. Sometimes they supply to big dealers, malls or big shops at low rates. Usually their machinery is old and clothes are of low quality (SEWA, 2005).

## **5. Coimbatore: The Manchester of South India**

Coimbatore is the second largest city of Tamil Nadu and one of the fastest growing cities in India. Situated in the foothills of the Nilgiris, it is known for its pleasant climate, peaceful atmosphere, cosmopolitan outlook and private enterprise. It is one of the most important cotton textile production centres in India. Sir Robert Stanes founded spinning and weaving mills on the northern edge of the town in 1888. Two more mills (Kalleeswara and Somasundra) were set up in 1910. By the 1930s, several textile mills came up around Coimbatore. Apart from the textile industry, the city also has industries such as sugar and cement, iron and steel etc. In fact, there are 6,817 working factories in the district at present.



Our discussions as well as the data available with the industry association in Coimbatore show that its cotton textile industry is fairly diversified, with a well-developed khadi and handloom industry. The khadi units produce goods worth Rs 4.08 million per year. The value of non-khadi handloom textiles is an estimated Rs 1 billion. Handlooms produce four varieties of cloth, namely, cotton textiles (4.33 million metres per year), art silk (116,000 metres), mixture of art silk and cotton (2 million metres) and polyester (87,000 metres), bringing the total production of handlooms to more than 6.5 million metres (2006–07).

Official statistics put the number of tiny, small, medium units and large textile mills in Coimbatore at 3,000. There are 1,065 spinning mills, which produced 462 million metres of yarn in 2006–07. Coimbatore has recently diversified into garment manufacturing. The total workforce in the various mills as on 31 March 2007 was 74,938. The city contributes Rs 10.24 billion in various levies, 90 per cent of which comes from small industries. There are 2,093 small-scale units in the Coimbatore region. Most of these units are located in the Coimbatore Corporation (686) area, employing 4,802 persons. The products in Coimbatore are high-value and relatively sophisticated.

Though some of the major units in this textile centre have shown impressive growth in recent years, Coimbatore is constrained in many ways. One major problem is related to power supply, which is highly irregular with four–five interruptions a day. The industry needs continuous power supply if it has to grow well in the new liberal environment. In addition, there are problems related to high excise duty and high prices of raw materials. These factors have caused some units to shift out of Coimbatore in recent years.

There has been some incidence of closure and sickness of textile units in this city. For example, in the first week of April 2003, nearly 50 per cent of the mills – each with an employee average of 100 (daily wage Rs 75–100) – shut down. The rest are down to single shifts, reducing their capacity by two-thirds. Many have not paid electricity bills which usually range between Rs 200,000 and Rs 800,000, and have sought deferment. According to one estimate, about 350,000 jobs have been lost recently in the city.

In spite of these developments, however, some units have managed to do well because of the strategies they have adopted. Some of the large units in the city have expanded through technological upgradation and new investments. Some small units also have fared well largely by performing outsourced job work for exporting units. It will be useful to study how they have managed access to new opportunities and grow well.

## **Chapter plan**

The study has been divided under six heads. The first, in Chapter 2, discusses the recent policy changes in the textile and garment industry and its changing performance in the context of these changes. Chapter 3 deals with integration of the industry with the global market in terms of expansion of exports, and discusses restructuring of the industry in response to the recent developments. Using secondary data as well as the

primary data, it throws light on the unit-level restructuring in the industry. Chapter 4 discusses labour restructuring and its impact on labour and employment in the industry. Chapter 5 focuses on gender-related issues and Chapter 6 deals with the handloom sector. Chapter 7 makes recommendations for optimizing the benefits from globalization for the industry, mainly for the labour it employs.

## Chapter 2

### Recent developments in the textile and garment industry

#### Trends in production and exports/imports

As observed earlier, the textile and garment industry has a unique place in the Indian economy. It is one of the largest industries in the country, with an 18 per cent share in the total industrial production, accounting for 20 per cent of the total export earnings and employing about 38 million persons directly. In terms of employment generation, this industry is the second largest after agriculture.

The Indian textile industry is highly diverse and complex. It comprises the organized and formal sector, the decentralized sector and, down the line, weavers and artisans in the informal sector. Production of cloth takes place in the mill sector (large-scale units), power loom and handloom sectors, and the knitting, khadi, wool and silk sectors. Though the mill sector was predominant before the 1970s, at present it contributes merely 3 per cent of cloth production. The power loom sector produces 63 per cent of the total textiles in the country, the handloom sector 13 per cent and the hosiery sector 21 per cent (Office of the Textile Commissioner). Hosiery is a relatively new sector, but it has grown rapidly in the last few decades. At present, it produces about 21 per cent of the total textiles. The garment (clothing or apparel) industry is again a relatively new phenomenon, getting a big push from the potential for apparel exports since the 1970s. It has since grown into a gigantic industry spread across the country. The garment industry produces about eight billion pieces worth \$28 billion.

The industry has several positive features that put it at an advantage in the global market. To start with, India has a strong multi-fibre base ranging from natural fibres such as cotton, silk wool among others, to man-made fibres such as polyester, viscose, nylon, acrylic etc. and multiple blends of such fibres. In fact, India ranks third in cotton production. It has a 17.9 per cent share in global production (2006–07) and accounts for 15.1 per cent of the world's consumption (*US Cotton Market Monthly*, April 2007). The country has the largest loomage in the world and the second largest spindlage. Again, it has a wide range of production, with technology ranging from hand-spun – hand-woven khadi – to highly sophisticated IT-based technology (Singh and Kundu, 2005). India has a vast pool of skilled labour, dynamic entrepreneurship and vibrant design capacity. It also has a flexible production system, a huge domestic market and a broad production base. In short, there is within the country itself a good supply chain, from raw materials to the highest value-added products such as garments, and made-ups, that is, towels, carpets and rugs, bed sheets and bed spreads, pillow covers, home furnishing textiles etc.

This chapter is divided into three sections. The first discusses recent developments in the policy environment and in the industry, while the next two analyse trends in production and exports.

## 1. Recent developments in textile policy

### Inward-looking textile and garment industry

An important feature of the textile industry in India till the mid-1980s was that it was inward looking. Under the ISI (import substitution industrialization) strategy, the industry had a domestic focus. The regulatory mechanisms used for the purpose included (a) licensing to start a unit; (b) permission for expanding, renovating and diversifying; (c) reservation – garments were reserved only for the small-scale sector; (d) control on exports and imports; and (e) obligations on spinning mills to produce hank yarn for handlooms/power looms etc. In short, the government controlled the size, location, scale, growth and expansion of the industry from the 1960s to the 1980s (Tewari, 2007).

All these restrictions led to decentralized and segmented production in the industry. The legacy of this policy continues. For example, in 2006, the number of large-scale composite textile mills was only 210. The number, which stood above 1,500 in 1985, began falling in the 1980s: to 1,000 in 1991, down to 281 in 1998–99 and 210 in 2006. Since large-scale spinning mills are technologically and financially viable, their number is still 1,780, though it has marginally increased in recent years. It was 1,543 in 1998 and 1,570 in 2006. The number of SSI spinning mills has also continuously increased: 901 in 1998 and 1,173 in 2006. The number of large-scale weaving mills declined to 199 in 1998, but has shown a marginal increase to 204 in 2006. The number of power looms, however, has continuously increased, reaching 358,000 in 1998 and 434,000 in 2006. The number of looms in the large-scale organized sector is 92,000 (2006) against nearly 1.94 million in the power loom sector in the same year. In short, the small sector is predominant in the spinning as well as weaving sectors, though in recent years there has been a marginal increase in the number of large-scale units, both spinning and weaving.

In the garment industry, all were SSI units till 2002, as garments were reserved for the SSI sector. Small-scale in the garment industry particularly is very small. Only 5 per cent of garment factories had investment more than Rs 10 million. The average investment per unit was \$2,900. This was a clear disadvantage in the global market, compared with the average investment of \$1 million in China and \$2.5 million in Hong Kong (Heerden, Berhonet and Caspari, 2003). Garments are the most fragmented sector in the textile and garment industry. The sector is dominated by subcontractors and fabricators, who control 72 per cent of the manufacturing capacity (Kathuria and Singh, 2004). However, the number of large-scale garment units has risen of late, particularly after the SSI reservation for the sector was removed in 2002.

On the whole, it has been estimated that in the textile and garment industry in India, 80 per cent units are small (SSI + cottage industry) that employ up to 11 workers, 14 per cent units are medium with 21–49 workers and only 6 per cent units are large units with 49-plus workers (UNDP, 2006).

### National Policy on Textiles, 1985

In 1985, there was a turnaround, when policies of deregulation and liberalization were initiated. An Expert Committee on the Textile Industry was set up under the

chairmanship of D. K. Verma to make suggestions for strengthening the industry. Based on its recommendations, the Government of India declared a National Policy on Textiles that started the process of deregulation of the industry. The policy (1) allowed firms to diversify their fabric and fibre base; (2) raised the maximum limit on allowable investment, particularly for small and medium firms; (3) promoted exports through a variety of duty drawback programmes; and (4) encouraged technological modernization of the sector through cheaper credit. The Central government subsequently set up funds for modernization and for importing capital goods and technology. The objective was to boost international competitiveness of the industry. This policy helped in raising exports of textiles and garments.

After 1991, when the liberalization policies were launched officially, several other policy reforms have been introduced. The measures taken relate to de-licensing of some sectors, dereservation, removal of export barriers and slashing of import duties, particularly for exporters. One important measure taken for the garment industry is its removal from the SSI reservation list. There is now less need to outsource work to small units. Again, 100 per cent FDI is now allowed in the garment industry to enable companies to build large-scale plants without incurring export obligations.

A level playing field has been provided to large and small garments manufacturing units by removing excise duty exemption to SSI garments, extending CENVAT (Central value-added tax) to all and bringing power looms into the tax net.

### **National Textile Policy, 2000**

In the context of liberalization, on the one hand, and expiry of the MFA, on the other, the government announced the National Textile Policy in 2000. The vision of the policy is producing cloth of good quality at acceptable prices to meet the growing needs of people, and contributing towards economic growth and the growth of sustainable employment. The major objectives of the policy are to (1) facilitate the textile industry's efforts for attaining a pre-eminent standing in the manufacture and export of clothing; (2) equip the industry for the competitive environment at home and in the global market; (3) enable the industry to build world-class manufacturing capabilities, and encourage FDI as well as R&D for the purpose; (4) sustain the traditional knowledge, crafts, skills and capabilities of weavers; (5) expand productive employment by promoting growth of the industry; and (6) involve and ensure cooperation and partnership between the government, financial institutions, entrepreneurs, firms and non-governmental organizations (NGOs) to achieve these goals.

The thrust areas of the textile policy are technological upgradation, enhancement of productivity, quality consciousness, strengthening of the raw material base, product diversification, export expansion, maximization of employment and integrated development of human resources. A major target is to raise textile and garment exports to \$50 billion in 2010 from the present \$11 billion.

After introducing neo-liberal policies in 1991, India embarked on the policy of liberalizing the internal economy as well as foreign trade. It joined the World Trade

Organization (WTO) on 1 January 1995, and has since been active in its negotiations on various topics. The gradual phasing out of the MFA has been a part of trade liberalization. It has made and is likely to make a greater impact in the coming years, not only on the textile and garment industry, but also on the Indian economy as a whole. It is providing an opportunity to increase exports of labour-intensive products and thereby improve the employment coefficient of the Indian manufacturing sector.

### **Expiry of quotas under the MFA**

The MFA came into existence in 1974 as a trade agreement between some industrialized countries (that is, the US, Europe and Canada) and about 65 developing countries of Asia, Africa and Latin America. It was aimed at protecting jobs in the textile and garment industry in the industrialized countries from cheaper imports from the developing countries. It was meant to be a temporary arrangement under which quotas of imports into the industrialized countries were fixed for the 65 developing countries. The temporary agreement, however, was extended five times and continued till 1995.

In the 1990s, the MFA came to be perceived as a protectionist measure that restricted exports from developing countries to the industrialized countries. In 1994, the Uruguay Round of Multinational Trade Negotiations resulted in an agreement on textile and clothing, and on 1 January 1995, the MFA was replaced by the WTO's Agreement on Textile and Clothing (ATC). Under this agreement, a programme was designed for progressive integration of textiles and garments into GATT 1994 Rules, and for dismantling of the quota in a phased manner by 1 January 2005. It was decided to set up a Textile Monitoring Body (TMB) to supervise the implementation of the ATC.

**Dismantling of quotas does not mean free trade:** It needs to be underlined that dismantling of the quota does not mean there is free global trade in textiles and garments. Firstly, there are trade remedy laws on anti-dumping and countervailing duties and safeguards. Under the ATC, there is also a provision for transitional safeguard mechanisms for exporters and importers. Importers are allowed to protect themselves against any damaging surge in imports during the transition period. Using these safeguards, the US and the EU have restricted imports of textiles and garments from China, as its exports to these countries jumped by more than 100 per cent in many items during the first months of the expiry of the ATC. China agreed to limit the rate of growth of textile and garment exports to the EU to 10 per cent for three years, and to the US to 7.5 per cent per year till 2008. The same measures can be taken against any other country tomorrow, and these can have a very disruptive impact on the exporting countries.

Another restriction on the trade of textiles and garments comes from bilateral agreements, GSP (Generalized System of Preferences) and MFN (most favoured nation) etc. The US and the EU have given preferential treatment to different countries and have entered into bilateral agreements in the post-quota period.<sup>1</sup> For example, a

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<sup>1</sup> Joubert Niel: "Implications of the Terminations of the MFA in T & G Industry", in Tralac Researcher, Western Cape, South Africa, Trade Law Centre for South Africa.

bilateral agreement has been reached between the US and sub-Saharan African countries under the African Growth and Opportunity Act, under which the US will promote exports of garments from these African countries which will use material sourced from it. This agreement has been dubbed as “Asia beater”, and as argued by the Third World Network, it will benefit the US but not so much the African countries; the latter will not remain competitive if they use expensive American material. Bilateral agreements have also been reached between the US and Cambodia; the US and some Latin American countries; the EU and neighbouring transitional economies, and so on. These agreements clearly restrict exports from other developing countries to the US and the EU. Similarly, regional trade agreements (RTAs) and free trade agreements (FTAs) among industrialized and some developing countries are likely to create obstacles for others in trading with the industrialized countries. For example, the NAFTA (North American Free Trade Agreement) has favoured Central America and Caribbean countries at the cost of Asia (Rangarajan, 2005). The EU also has entered into regional agreements with neighbouring “transitional” countries, which have a better access to EU markets than other countries.

Tariffs on imports of textiles and clothing in North American countries and the EU is another barrier to free trade. At present, the US has imposed 11 per cent tariffs on textiles and 14.9–32 per cent on clothing. The EU has imposed 12 per cent tariffs on textiles, 8 per cent on fabrics and 4 per cent on yarn. These tariff rates are still very high. The US has also given preferential treatment to the EU for textile and garment exports in the form of low tariffs. In other words, quotas have gone but tariffs are still there. And lastly, there are non-tariff barriers in the global textile and garment trade, mainly in the form of restrictions based on intellectual property rights (IPRs), technical and safety requirements, labour standards, environmental standards and quality standards of products. Enforcement of these standards is frequently made a precondition to trade enhancement, and countries that do not adhere to these may lose out. In short, phasing out of MFA quotas does not mean free trade in textiles and clothing. The developed countries still have the power to create barriers to free trade of these products in the global market.

**Likely impact of phasing out of MFA quotas on different countries:** The textile and garment industry employs more than 100 million workers across the world. The major export destinations in the industry are the US, the EU and Canada, their collective share in the trade being 27 per cent in 1995 and 31 per cent in 2003. Elimination of the quota to exports to these countries, therefore, is a major development for global trade in textiles and garments.

Several organizations such as the United Nations Development Programme (UNDP), MFA Forum, Ethical Trading Institute (ETI) etc. tried to examine the likely impact of ATC expiry on the different economies (MFA Forum, 2005; ETI, 2004). One major prediction was that there would be a decline in the number of countries exporting to the EU and North America because importers would find it convenient to deal with a small number of countries to buy from. The US Importers Association indicated that



by 2007 its members would be buying from only 10–15 countries.<sup>2</sup> International buyers would prefer to consolidate their supply base by reducing the number of suppliers – though they will not put all their eggs into one basket. They will choose the best deals, based on price, quality, service, speed, flexibility and so on. This will lead to cut-throat competition among the sellers. Some of the smaller countries, without any niche in the global market, stand to lose. Nepal and Lao People's Democratic Republic have already lost very badly.

It was also projected that the countries likely to benefit would be the ones with (a) a strong and diversified production base, with strong forward and backward linkages; (b) strong diverse markets outside the US and the EU; (c) strong vertical linkages in the textile and garment industries; and (d) flexible production and supplies. Also, small countries with a special advantage, a specialization (for example, women's undergarments in Sri Lanka) or a niche in the market would also benefit from the phasing out of MFA. Countries which enter into bilateral agreements or are members of RTAs and FTAs with industrialized countries would also benefit from access to markets in the US, the EU etc. However, production costs or prices will not be the only factors to influence a country's access to global markets. Long-term relationship, timely supplies, consistent quality, professional management, innovative product design etc., as well as compliance with health, labour and safety standards will also be important. In short, there is scope for countries to win if they follow the right kind of policies.

China and India were predicted as winners, and they have also emerged as such, though India is lagging. Among small countries, Bangladesh, Cambodia and Sri Lanka have gained in trade.

India's gains can change considerably by adopting the right kind of policies and taking the right kind of steps for promoting the industry and its exports. It will be useful to study how India is dealing with the phasing out of the MFA, that is, how the Indian government has designed its policy towards the textile and garment industry, how the industry has adjusted to the new challenges and how the labour market has changed, particularly in terms of gender equity.

### **India's aggressive approach to promoting the textile and garment industry**

The textile and garment industry in India is now under a separate ministry that is in charge of policy formulation, planning, development, export promotion and regulation of the entire textile sector. The three statutory bodies of the ministry are the Textile Committee, the Central Silk Board and the Jute Development Council. These agencies are in charge of promotion of production, exports, R&D, market research etc. In addition, there are (a) nine public sector undertakings such as textile corporations for cotton and man-made textiles, jute products, handloom, handicrafts etc.; (b) nine export promotion councils for exports of apparel, cotton textiles, handicrafts, power loom, handloom and woollen products etc.; (c) eight research associations; and (d) eight

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<sup>2</sup> Recently, Walmart indicated it will reduce the number of countries from which it will buy products from 63 in 2004 to 12, and 80 percent of supplies would come from four–five countries only (ITGLWF press release, 2005).



advisory bodies to cater to the needs of the different subsectors of the industry.

The major schemes under the ministry include:

- Technology Upgradation Fund Scheme (TUFS)
- Package for the organized textile industry
- Technology Mission on Cotton (TMC)
- The GSP scheme
- Power loom schemes
- Jute Technology Mission (JTM)
- Jute Manufacturing Development Council
- Scheme for Integrated Textile Parks
- Textile Workers' Rehabilitation Fund scheme

The TUFS is a flagship scheme of the textile ministry. It was introduced in 1999 to improve technology and modernize the industry. After a slow start, it has now picked up and is expected to make Rs 250 billion worth investments in the coming five years. The highest investment under the TUFS has gone to Tamil Nadu, followed by Gujarat, Maharashtra, Punjab, Rajasthan, Andhra Pradesh, Chandigarh, Delhi, Haryana, Himachal Pradesh, Karnataka, Kerala etc. The scheme has been fairly successful and though small-scale sector units are not very active so far, they are gradually entering the scheme.

There are six special schemes designed to promote power loom technology upgradation, expansion and diversification, improved designing and for group insurance of power loom weavers (Office of the Textile Commissioner, 2005). The package for the organized textile industry has been designed to provide relief and help to units to modernize, to expand and to diversify. Silk units also are included in this scheme. The Scheme for Integrated Textile Parks (SITP) has been launched by merging two schemes, namely, the Apparel Parks for Exports and the Textile Centre Infrastructure Development Scheme (TCIDS). The apparel parks scheme was launched in 2002 with a view to promoting exports of apparels. These parks are to be set up by state governments. They will have the best infrastructure and state-of-the-art machinery, and will be bound to export their products. The state governments concerned may also relax labour laws in these parks to provide labour flexibility. The integrated parks may also be set up in the special economic zones (SEZs), in which case the special provisions of the SEZs would be applicable to them. In case these are set up outside the SEZs, the proposal may be pursued with the Ministry of Commerce and Industry to declare the ITP as SEZ, if so desired. The scheme targets industrial clusters/locations with high growth potential, which require strategic intervention by way of world-class infrastructure support. The TCIDS was introduced by the Government of India in 2002 for modernizing infrastructure facilities at major textile

centres in the country<sup>3</sup> by providing roads, testing facilities, common effluent plants, power supply design centres, warehousing facilities, exhibition marketing places, human resource development (HRD) facilities etc. The Market Development Assistance Scheme (MDA) for exporters is operated by the Ministry of Commerce. The main objective of the scheme is to assist individual exporters in overseas promotional activities. It also assists export promotion councils. Its major activities include information and contacts, helping in duty/anti-dumping cases initiated abroad and any other marketing-related problems in other countries.

In addition, the Government of India and state governments have undertaken projects and schemes to promote specific sectors/subsectors in production and exports. By promoting R&D in different areas, the government also supports the private sector. In addition, there are public-private partnership (PPP) projects, such as promotion of technical textiles in the coming years.

### **Response from the private sector**

Private sector units in the industry as well as their associations and federations have responded very positively to the new policies and schemes of the Ministry of Textiles and to opportunities opened up after the expiry of the MFA. The CII got a study done on prospects for the industry in the coming years (*The Hindu*, 12 April 2004). Regional CII centres, including the one in Chennai, have worked out plans to take advantage of the new opportunities. Similar steps have been taken by the Textile Association,<sup>4</sup> FICCI and many regional bodies of private industries. These industry groups have tied up with their counterparts in the EU and the US to help their members.\* They have also organized seminars and meetings to improve contacts and interactions; organized exhibitions and trade fairs at home and abroad and; helped in capacity building as well as in accessing benefits of different promotional schemes. PPPs are now engaged in the tasks of modernization, technology transfer, organizing trade fairs and exhibitions, export promotion as well as in helping units get access to assistance from global organizations for information on overseas markets.

In short, there is euphoria in the industry, as it is booming – expanding, innovating and diversifying. About Rs 500 billion has been invested in the last five years and the CII expects Rs 1,400 billion worth of additional investments in the coming five years. All the subsectors of the textile and garment industry seem keen to take advantage of the new opportunities created by the exit of the quotas. On the one hand, the handloom and handicraft sector is working hard to change its operations to fit into the competitive global market; on the other, there are small and medium units that want access to the

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<sup>3</sup> These centres included Tirupur, Coimbatore, Karur, Bangalore, Delhi-Noida-Gurgaon, Panipat, Ludhiana, Ahmedabad, Mumbai, Bhivandi, Ichalkaranji, Meerut, Surat, Solapur, Salem, Kolkata (knitting), Chennai, Cannannor, Amritsar, Baddi (Himachal Pradesh), Malegaon, Bhiwara, Burhanpur and Varanasi-Mau.

<sup>4</sup> The Textile Association (India) is the foremost largest textile professional body of India. It was set up in 1939. At present, it has more than 22,000 members from all over India. Its main office is based in Mumbai.

\* CII has tied up with four EU textile bodies for promoting exports of textiles and garments (*The Hindu*, 15 November 2005).

full benefits of the Apparel Parks Scheme to grow and to export. Power looms in Surat, Bhivandi and Ichalkaranji are preparing to modernize and expand; knitwear producers in Tirupur are modernizing and expanding by attracting foreign capital (machinery) and foreign collaborations.

Textile units are rapidly ramping up their capacity and upgrading their technologies. Welspun India (Ahmedabad), the world's fifth largest terry towel maker, is setting up a new factory to produce additional 13,000 tonnes of towels a year and 100,000 metres of bed sheets a day. Forty per cent of its capacity was booked even before production commenced. Raymond Mills (Bangalore) is investing \$45 million to add 10 million metres to its denim capacity in India, and is also setting up a multi-million-dollar plant to produce fibres and garments in Thailand. The Aditya Birla Group is setting up an acrylic fibre plant in Thailand. Arvind Mills, which supplies to GAP, Levi's and VS, has increased its denim capacity and diversified into knitwear. Reliance has bought Trevira from Germany for \$97.5 million, and is now the world's largest polyester producer with a capacity of 1.8 million tonnes per year. There are many similar cases.

India has started investing in a big way at home and overseas, buying mills and collaborating with large units abroad. It is emerging as a major player in the textile and garment industry in the global market. According to Nayan Parikh, Chairman of the Textile Committee, India will surpass the target of exports of \$50 billion by 2010.\*

### **Appreciation of the rupee against the dollar**

An important development in the recent years has been the appreciation of the Indian rupee against the US dollar. It started at the end of 2006, and the rupee lost more than 12 per cent against the dollar in 2007. It touched the highest level in nearly 10 years at 39.16 per dollar in November. Without going into the debate as to whether this is a good policy or bad, it needs to be noted that this appreciation has affected exports of textiles and garments in multiple ways: Firstly, it has made exports more expensive not only in the US, but also in other countries, as the US dollar is an international currency. Many exporting units have suffered huge losses, resulting in retrenchment of labour and cuts in production. Though this is not reflected on the macro level, newspaper reports show that many units have suffered because of this. Secondly, imports have become cheaper, facilitating import of machinery and encouraging flow of FDI. Thirdly, the appreciation has encouraged import of cheaper textiles and garments, giving tough competition to domestic producers.

Global competition is not based solely on the cost of production, but also on the quality of products, product specialization as well as adherence to labour and environmental standards. The adverse impact of rupee appreciation (that is, the rising costs of imported raw materials and machinery) can be countered by improving quality and better conformity to standards. It has been observed that units providing high value-added products with stable quality have done fairly well despite the appreciating rupee.

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\* Based on the discussions the author of this study had with the Chairman.

In addition, though they have not been very effective, duty drawback and incentives have helped exporters to some extent.

In short, the industry is focused on taking full advantage of opportunities that have emerged following the economic reforms. The following section discusses recent trends in production in textiles and garments.

2. Production in the textile and garment industry

Recent trends

The Indian textile and garment industry is highly complex. It produces a wide range of products, from fibres – both natural and manmade – to textiles of different kinds to garments. It has multiple technologies, from hand-spun, hand-woven to highly computerized IT-based technology in small household units as well as large, modern, high-tech units.

At the top end of the industry are large units, spinning units and composite units. As Table 2.1 shows, the number of spinning mills increased rapidly after 1981, marginally declining in the three years to 2006. The number of composite mills rose between 1981 and 1991, but began falling in 2003. The number of spindles and rotors installed in these mills rose sharply between 1991 and 2003. The number of looms declined with the rapid growth of the power loom sector.

Table 2.1 Spinning mills and composite mills, 1981–2006

| March-end | Spinning mills (no.) | Composite mills (no.) | Spindles installed (million) | Rotors installed (no.) | Looms installed (thousand) |
|-----------|----------------------|-----------------------|------------------------------|------------------------|----------------------------|
| 1981      | 45                   | 278                   | 21.23                        | –                      | –                          |
| 1991      | 777                  | 285                   | 26.67                        | 67                     | 178                        |
| 2001      | 1 599                | 276                   | 36.10                        | 379                    | 119                        |
| 2006      | 1 570                | 210                   | 34.14                        | 395                    | 73                         |

Source: Ministry of Textiles.

– Not available.

In short, the number of large units, particularly composite textile mills, has declined in recent years. However, the number as well as capacity of spinning mills has increased considerably over the same period. Composite mills that have survived are, however, doing very well. These units are integrating vertically and horizontally, expanding, diversifying and prospering.

The large units are small in number but well organized and managed. They are at the top end in terms of technology upgradation, value chain and diversification. They produce high value-added, high-tech products, and are leading in export markets.

The textile and garment industry has grown mainly in the small decentralized sector – at least till the early years of this century. SSI spinning mills have gradually increased

**Table 2.2 Structure of the textile industry in India**

| <b>Spinning mills</b> | <b>1997–98</b> | <b>2000–01</b> | <b>2002–03</b> |
|-----------------------|----------------|----------------|----------------|
| Large and medium      | 1 782          | 1 846          | 1 857          |
| SSI                   | 801            | 996            | 1 146          |
| <b>Total</b>          | <b>2 583</b>   | <b>2 906</b>   | <b>3 021</b>   |
| % of SSI mills        | 31.01          | 34.27          | 37.93          |
| <b>Weaving mills</b>  |                |                |                |
| Large and medium      | 187            | 203            | 209            |
| SSI                   | 35 100         | 37 400         | 38 000         |
| <b>Total</b>          | <b>35 287</b>  | <b>37 603</b>  | <b>38 209</b>  |
| % of SSI mills        | 99.47          | 99.46          | 99.45          |

*Source: Tewari, 2007.*

their percentage share between 1997–98 and 2002–03. In the case of weaving mills, 99 per cent units are SSI units. The SSI sector has clearly acquired a dominant position in this industry.

All garment units were SSI, production being reserved for the small-scale sector till recently. The small scale in the garment industry particularly is very small. Only 5 per cent of garment factories had an investment exceeding Rs 10 million. The average investment per unit in the garment industry was \$2,900 in India, a clear disadvantage in the global market. The average investment was \$1 million in China and \$2.5 million in Hong Kong (Heerden, Berhonet and Caspari, 2003). Garments are still the most fragmented segment in the industry, dominated by subcontractors and fabricators who control 72 per cent of the manufacturing capacity (Kathuria and Singh, 2004).

On the whole, it has been estimated that in the textile and garment industry in India, 80 per cent units are small (SSI + cottage industry) employing up to 11 workers each, 14 per cent units are medium with 21–49 workers and only 6 per cent units are large units employing 49-plus workers (UNDP, 2006).

### **Trends in growth of production**

All the major subsectors of the textile industry have shown a reasonably good rate of growth in production between 1991 and 2005–06 (Table 2.3).

Production of yarn almost doubled between 1991 and 2005; that of cloth more than doubled over the same period and; production of blended and 100 per cent non-cotton yarn as well as blended and 100 per cent non-cotton fabrics increased by more than one and a half times. The compound annual rate of growth during the past decade and a half was 4.43 per cent for yarn and 5.26 per cent for all textiles put together. Details of the subsectors throw more light on the nature and composition of growth.

**Table 2.3 Growth of textile production, 1991 to 2005–06**

| Subsector                              | Unit                 | 1991          | 2005          | CARG (%)<br>1991–2005 |
|----------------------------------------|----------------------|---------------|---------------|-----------------------|
| <b>Non-SSI</b>                         |                      |               |               |                       |
| Spindles                               | Million              | 26.67         | 34.24         | 1.68                  |
| Rotors                                 | Thousand             | 67.00         | 385.00        | 12.36                 |
| Looms                                  | Thousand             | 178.00        | 86.00         | -4.73                 |
| <b>Spun yarn (all)</b>                 |                      |               |               |                       |
| Cotton                                 | Million kg           | 1 450         | 2 521         | 3.76                  |
| Blended                                | Million kg           | 234           | 588           | 6.34                  |
| 100% non-cotton                        | (Million kg)         | 122           | 349           | 7.26                  |
| <b>Total</b>                           | <b>Million kg</b>    | <b>1 806</b>  | <b>3 458</b>  | <b>4.43</b>           |
| <b>Sector-wise production of cloth</b> |                      |               |               |                       |
| Mill                                   | Million sq. m        | 2 376         | 1 656         | -2.38                 |
| Handloom                               | Million sq. m        | 4 123         | 6 108         | 2.65                  |
| Power loom                             | Million sq. m        | 13 262        | 30 626        | 5.74                  |
| Hosiery                                | Million sq. m        | 2 827         | 10 418        | 9.08                  |
| Khadi, wool, silk                      | Million sq. m        | 390           | 769           | 4.63                  |
| <b>Total</b>                           | <b>Million sq. m</b> | <b>22 978</b> | <b>49 577</b> | <b>5.26</b>           |
| <b>Fibre-wise production of cloth</b>  |                      |               |               |                       |
| Cotton                                 | Million sq. m        | 14 647        | 23 873        | 3.31                  |
| Blended                                | Million sq. m        | 2 712         | 6 298         | 5.78                  |
| 100% non-cotton                        | Million sq. m        | 5 229         | 18 637        | 8.84                  |
| Khadi, wool, silk                      | Million sq. m        | 390           | 769           | 4.63                  |
| <b>Total</b>                           | <b>Million sq. m</b> | <b>22 978</b> | <b>49 577</b> | <b>5.26</b>           |

*Source: Ministry of Textiles, 2007.*

*CARG: Compound annual rate of growth.*

**Production of fibres:** As seen above, India produces a range of fibres, from natural fibres such as cotton, silk and wool to man-made fibres such as polyester, viscose, nylon, acrylic etc., to multiple blends of such fibres, and filament yarn. Cotton is the predominant fibre with an 80 per cent share in the total production of fibres (2005–06). It is followed by man-made fibres with about 19 per cent share and silk and wool less than 1 per cent.

India produced 3,586.85 million kg fibre in 2001–02 and 5,176.61 million kg fibre in 2005–06, implying an increase of 44.40 per cent during the five years. Production of

**Table 2.4 Production of fibres in India**  
(million kg)

| Fibre             | 1991<br>production | %<br>share | 2001-02<br>production | %<br>share | 2005-06<br>production | %<br>share | CARG (%)      |               |               |
|-------------------|--------------------|------------|-----------------------|------------|-----------------------|------------|---------------|---------------|---------------|
|                   |                    |            |                       |            |                       |            | 1991-<br>2001 | 2001-<br>2006 | 1991-<br>2006 |
| Raw cotton        | 1 450              | —          | 2 686                 | 74.88      | 4 148                 | 80.01      | 6.36          | 7.51          | 6.79          |
| Man-made<br>fibre | 234                | —          | 834                   | 23.26      | 968                   | 18.69      | 13.55         | 2.51          | 9.28          |
| Raw wool          | 122                | —          | 49.50                 | 1.38       | 45.30                 | 0.87       | -8.63         | -1.47         | -6.00         |
| Raw silk          | —                  | —          | 17.35                 | 0.48       | 17.31                 | 0.33       | —             | -0.038        | —             |
| <b>Total</b>      | <b>1 806</b>       | <b>100</b> | <b>3 586.85</b>       | <b>100</b> | <b>5 178.61</b>       | <b>100</b> | <b>7.10</b>   | <b>6.31</b>   | <b>6.80</b>   |

*Source: Ministry of Textiles, 2007.*

cotton increased at the highest rate, by 54.30 per cent, taking its share from 75 per cent to 80 per cent. Though production of man-made fibres increased 16.08 per cent, its share in the total production declined from 23.26 per cent in 2001-02 to 18.69 per cent in 2005-06. In absolute terms, production of both silk and wool declined as well as their share in the total fibre production.

**Production of yarn:** The main types of yarn produced in India are cotton, 100 per cent non-cotton (man-made), and blended. As expected, cotton yarn is the predominant yarn, constituting around 80 per cent of the total production.

Production of yarn in the post-reform period increased sharply, as Table 2.5 shows. The CARG in production of yarn between 1980-81 and 1990-91 was 3.6 per cent; production increased by 5.64 per cent in the next decade. Though slower between 2001 and 2006, the overall CARG in the post-reform period was more than 4 per cent. The production of blended yarn and 100 per cent non-cotton yarn more than doubled in the post-reform period.

**Production of cloth:** The major varieties of the textiles produced in India include cotton textiles, 100 per cent non-cotton textiles, blended textiles and other textiles (such as wool, silk and khadi). Table 2.6 shows that, since the reforms began, the share of cotton textiles has continuously declined to less than half the total production in 2005-06; non-cotton textiles have gained and the share of blended textiles has, with some fluctuations, grown only marginally.

The total production of cloth showed an increase of 6.22 per cent CARG in the period 1991-2001. It declined to 2.78 per cent CARG between 2001 and 2006. The overall CARG since the introduction of the reforms, however, was 4.92 per cent.

**Table 2.5 Yarn production in India**  
(million kg)

| Year            | Cotton        | Blended/<br>mixed | 100%<br>non-cotton | Total       |
|-----------------|---------------|-------------------|--------------------|-------------|
| 1980–81         | 1 067 (82.20) | 144 (11.09)       | 87 (6.70)          | 1 298 (100) |
| 1990–91         | 1 510 (82.79) | 207 (11.35)       | 107 (5.87)         | 1 824 (100) |
| 2000–01         | 2 267 (71.74) | 646 (20.44)       | 247 (7.82)         | 3 160 (100) |
| 2005–06         | 2 521 (72.90) | 588 (17.00)       | 349 (10.09)        | 3 458 (100) |
| <b>CARG (%)</b> |               |                   |                    |             |
| 1981–1991       | 3.53          | 3.69              | 2.09               | 3.46        |
| 1991–2001       | 4.14          | 12.05             | 8.72               | 5.64        |
| 2001–2006       | 1.78          | -1.55             | 5.93               | 1.51        |

Source: Ministry of Textiles, 2007.

Figures in brackets denote percentage share in total yarn production.

Note: Blended yarn includes cotton mixed with viscose/ polyester and others; polyester, mixed with viscose and others and; polyester cotton and viscose mixed. Non-cotton yarn or man-made yarn includes viscose, polyester, acrylic and other yarn.

**Table 2.6 Production of cloth by fibre base**  
(% share)

| Year            | Cotton | Blended | 100%<br>non-<br>cotton | Khadi,<br>wool, silk | Total  | Total<br>production<br>(million sq. m) |
|-----------------|--------|---------|------------------------|----------------------|--------|----------------------------------------|
| 1991–92         | 63.74  | 11.80   | 22.76                  | 1.70                 | 100.00 | 22 978                                 |
| 2001–02         | 47.03  | 14.96   | 36.48                  | 1.53                 | 100.00 | 42 034                                 |
| 2005–06         | 48.15  | 12.70   | 37.59                  | 1.55                 | 100.00 | 49 577                                 |
| <b>CARG (%)</b> |        |         |                        |                      |        |                                        |
| 1991–2002       | -2.99  | 2.40    | 4.83                   | -1.04                |        | 5.64                                   |
| 2001–2006       | 0.39   | -2.69   | 0.50                   | 0.21                 |        | 3.36                                   |
| 1991–2006       | -1.73  | 0.46    | 3.18                   | -0.57                |        | 5.26                                   |

Source: Ministry of Textiles, 2007.

Hosiery has shown the highest growth, 9.08 per cent, since reforms began (Table 2.7). This is followed by cloth produced in power looms, which shows an annual increase of 5.74 per cent. Since both are small-scale, the data indicate that production of cloth in the SSI sector has grown at the highest rate, its contribution to the total being 83.00 per cent.

The table also shows a drastic decline in the share of textiles in the large-scale sector. This share, which was falling even before reforms began, had declined more by 2005–06, implying that more than 94.00 per cent production of textiles is now in the



decentralized and hosiery sector. Significantly, production in the mill sector also declined in absolute terms at the rate of 2.38 per cent per year.

However, the total production of textiles has shown a dramatic improvement in the post-liberalization period. It has increased at an annual compound rate of 5.26 per cent between 1991–92 and 2005–06. The highest growth rate has been observed in hosiery, exceeding that in the power loom sector. Hosiery production has grown more than three times in the 15 years, its share in the total being more than one-fifth in 2005–06. Textile production in power looms also grew rapidly, raising the share of power looms in the total, but growth in handloom production of cloth has been much slower, its share in the total shrinking between 2001–02 and 2005–06. Production of silk, wool and khadi has also marginally declined over the decade and a half.

**Table 2.7    Sector-wise production of cloth**  
(% share)

| Year            | Mill  | Handloom | Powerloom | Hosiery | Khadi,<br>wool, silk | Total  |
|-----------------|-------|----------|-----------|---------|----------------------|--------|
| 1991-92         | 10.34 | 17.94    | 57.72     | 12.30   | 1.70                 | 100.00 |
| 2001-02         | 3.68  | 18.04    | 59.93     | 16.81   | 1.53                 | 100.00 |
| 2005-06         | 3.34  | 12.32    | 61.77     | 21.01   | 1.55                 | 100.00 |
| <b>CARG (%)</b> |       |          |           |         |                      |        |
| 1991-2002       | -3.83 | 5.70     | 6.01      | 8.69    | 4.67                 | 5.64   |
| 2001-2006       | 0.63  | -1.95    | 1.79      | 3.59    | 1.63                 | 3.36   |
| 1991-2006       | -2.38 | 2.65     | 5.74      | 9.08    | 4.63                 | 5.26   |

*Source: Ministry of Textiles, 2007.*

Production in the mill sector has declined in the post-reforms period at 2.38 per cent CARG, while production of handloom cloth has increased at a low 2.65 per cent per annum.

A look at the state-wise distribution of textile production shows that the numbers of large-scale composite mills and large-scale (non-SSI) weaving mills is very small compared to that of power looms in all the states: Gujarat has 54 composite mills and 38 non-SSI weaving mills; Tamil Nadu has 22 composite mills and 18 non-SSI weaving mills; and Maharashtra has 73 composite mills and 71 non-SSI weaving mills.

### Private, public and cooperative mills

In order to protect the employment of workers of closed textile mills, the Government of India set up National Textile Corporation (NTC) in the 1980s to nationalize many of these closed and sick mills. Several governments also set up state textile corporations (STCs) which took closed mills under their operation. The NTC and STCs under Central and state government control, respectively, could not perform well and ran up huge losses. With the initiation of economic reforms in 1991, however, the

**Table 2.8**      **State-wise distribution of composite mills, non-SSI weaving mills and power looms**  
(2005–06)

| State          | Composite mills | %          | Non-SSI weaving mills | %          | Power loom units | %          |
|----------------|-----------------|------------|-----------------------|------------|------------------|------------|
| Gujarat        | 54              | 27.14      | 38                    | 20.77      | 32 183           | 7.64       |
| Tamil Nadu     | 22              | 11.06      | 18                    | 9.84       | 74 316           | 17.64      |
| Maharashtra    | 73              | 36.68      | 71                    | 38.79      | 214 308          | 50.88      |
| Rajasthan      | 8               | 4.02       | 15                    | 8.20       | 4 018            | 0.95       |
| Punjab         | 4               | 2.01       | 10                    | 5.46       | 3 661            | 0.87       |
| Haryana        | 2               | 1.01       | 6                     | 3.28       | 2 655            | 0.63       |
| Madhya Pradesh | 12              | 6.03       | 8                     | 4.37       | 30 666           | 7.28       |
| Karnataka      | 7               | 3.52       | 4                     | 2.19       | 24 579           | 5.84       |
| Andhra Pradesh | 1               | 0.50       | 6                     | 3.28       | 9 687            | 2.30       |
| Uttar Pradesh  | 16              | 8.04       | 7                     | 3.83       | 25 129           | 5.97       |
| <b>Total</b>   | <b>199</b>      | <b>100</b> | <b>183</b>            | <b>100</b> | <b>421 202</b>   | <b>100</b> |

*Source: Ministry of Textiles, 2007; Office of the Textile Commissioner, 2008.*

government decided to close loss-making units gradually. As a result, in 2005–06 the share of public sector mills in the total production of textiles declined to a mere 1.56 per cent. Public sector units produced 26.82 million square metres of cloth during the year (Ministry of Textiles, 2006).

### **Per capita availability of cloth**

There was some 50 per cent increase in the per capita availability of textiles in the post-reforms period, from 22.87 square metres in 1991–92 to 36.10 square metres in 2005–06 (Table 2.9). Though the total production of textiles more than doubled, up 115 per cent, the per capita availability grew at a low rate due to the increase in population.

The table also shows that the highest increase in the availability has been in 100 per cent non-cotton textiles and in blended textiles. The lowest increase has been observed in cotton textiles – 19.40 per cent.

### **Summing up**

To sum up, the textile industry showed a good growth rate in the period after the initiation of economic reforms in 1991. The compound annual rates of growth of fibres, yarn and textiles were 6.80, 4.43 and 5.26, respectively, for the period from 1991 to 2006. When these rates are viewed for different years, it shows that there has been a decline in the rates of growth during 2001–06. This setback seems to be due to temporary factors, such as appreciation of the rupee against the US dollar etc. With the

**Table 2.9 Per capita availability of textiles**  
(sq. m)

| Year               | Cotton           | Blended         | 100%<br>non-cotton | Total          |
|--------------------|------------------|-----------------|--------------------|----------------|
| 1991–92            | 13.71<br>(59.95) | 2.90<br>(12.68) | 6.26<br>(27.37)    | 22.87<br>(100) |
| 1996–97            | 16.24<br>(55.43) | 3.98<br>(13.58) | 9.08<br>(30.99)    | 29.30<br>(100) |
| 2001–02            | 14.82<br>(46.36) | 4.69<br>(14.67) | 12.46<br>(38.97)   | 31.97<br>(100) |
| 2005–06            | 16.37<br>(45.35) | 4.32<br>(11.97) | 15.41<br>(42.69)   | 36.10<br>(100) |
| <b>CARG (%)</b>    |                  |                 |                    |                |
| 1991–92 to 2001–02 | 0.78             | 4.92            | 7.13               | 3.41           |
| 2002–06            | 2.01             | (1.63)          | 4.34               | 2.46           |
| 1991–92 to 2005–06 | 1.19             | 2.69            | 6.19               | 3.09           |

*Percentage share in brackets.*

positive attitude of the government, on the one hand, and the growing enterprise of the industry on the other, clearly the industry is poised for rapid growth in the coming years.

### 3. Integration with the global market

#### Exports and imports of textiles and garments

The integration of India's textile and garment industry with the global economy started mainly after the National Policy on Textiles, 1985, initiated liberalization. Exports of textiles and garments picked up, as described earlier. This section discusses the growing integration of the industry with the global market and studies performance on the export and import fronts.

#### India's competitiveness in the global market

The textile and garment industry in India enjoys several advantages: a strong multi-fibre base; the largest loomage and the second largest spindlage in the world; a wide range of products and production technology, ranging from hand-spun to highly sophisticated IT-based technology (Singh and Kundu, 2005) and; a vast pool of skilled labour, dynamic entrepreneurship and vibrant design capacity. It also has a flexible production system, a huge domestic market and a wide production base within the country.

Exports by the textile industry include textile items (fibre, yarn and fabrics) and ready-made garments as well as jute items, coir and coir products and handicrafts, that is, handloom products and carpets. This analysis excludes coir and jute, which together

constitute 2.3 per cent of total exports. The performance of the textile and garment industry in the global market can be broadly studied over two periods: from 1985, when the liberalization policies were launched, to 2003, just before the expiry of the quotas and post-quota period, that is, from 2004 to 2006–07.

### **Export performance in 1985–2003**

Textile and garment exports performed very well during the period 1985–2003. Though India started late, largely due to its inward-looking textile policy, exports of textiles and garments increased rapidly after liberalization in 1985 (Figure 3.1). Exports showed a continuous increase from 1985 to 2003, that is, just before the quotas expired. The value of textile exports in dollar terms increased several times in the past 23 years, from \$1 billion in 1980 to \$6.8 billion in 2003. Exports of garments also increased from a mere \$30 million in 1970 to \$1 billion in 1990 and \$6.6 billion in 2003. Taken together, India's textile and garment exports accounted for 21 per cent of merchandise exports in 2003, up from 3.8 per cent in 1970 (Ministry of Textiles, 2005).

In rupee terms, textile exports increased from Rs 20 billion in 1990–91 to Rs 168 billion in 2003: fabric exports increased from Rs 11 billion to Rs 52 billion, yarn exports from Rs 5 billion to Rs 58 billion and made-ups (towels, carpets and rugs, bed sheets and bed spreads, pillow covers, home furnishing textiles and the like) from Rs 4.5 billion to Rs 58 billion.

India's share in the global textile and garment market increased from 1.5 per cent in 1975 to 3.3 per cent in 2003. It also acquired a significant position in the US and EU markets. India currently exports 83 per cent of its total clothing exports and 52 per cent of textile exports to the US and the EU. In other words, liberalization policies opened up the global market, particularly the two markets important for the industry.

It is interesting to note that FDI has played a marginal role, if at all, in the development of the industry. Though the industry produces 18 per cent of the national industrial production, its share in FDI has been less than 1 per cent. Even after the introduction of the economic reforms in 1991, the share has not increased. Between 1991 and 2002, the industry received Rs 1.08 billion FDI, or 1.03 per cent of the total FDI that came to India. This share has remained the same subsequently. The impact of FDI or foreign firms has been quite negligible, as FDI and foreign technology have not played much role in raising exports of textiles and garments (Tewari, 2007). In other words, exports increased mainly through domestic capital, effort and technology. This is different from other countries. In the case of China, for example, firms with foreign investment accounted for one-third of apparel exports, while in India the top 10 companies exporting textiles and apparels are all domestic ones.\*

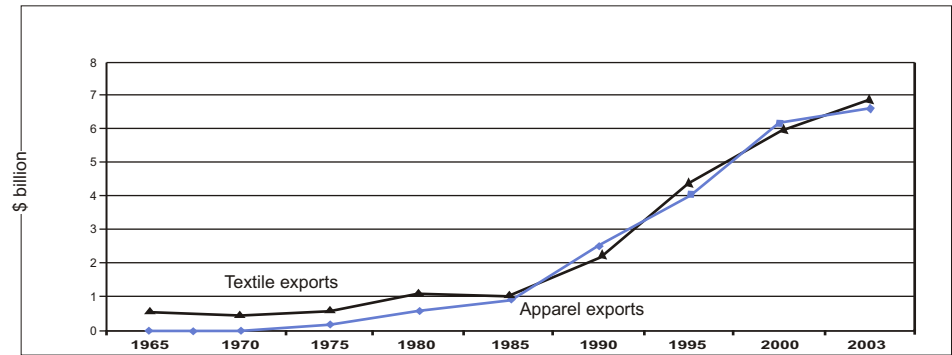
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\* These include Arvind Mills, Indian Rayon, Raymond Mills, Indo Rama Synthetics, Gokaldas Exports, Alok Industries, Welspun Group, Abbishek Industries, Bombay Dyeing and Mahavir Spinning Mills.

Another interesting feature of India's exports is that their growth preceded the entry of global buyers. Indian exports increased without any significant presence of global buyers such as Walmart, Nike and others. These buyers entered much later, in the late 1990s. This is again in contrast to what happened in other countries. Also, the industry integrated with the global market without India entering into any regional trade agreement or free trade agreement with other countries.

The inward-looking policy of the past that allowed growth of domestic industry seems to be responsible for this performance. The SSI-dominated and segmented structure of the industry, a consequence of the inward-looking strategy, inadvertently helped exports in the post-liberalization and post-quota period (Tewari, 2007). The industry developed due to protectionist policies; the large and diversified base of the industry was possible because of the inward-looking policy that enabled the industry to grow to meet the large local market; the textile machinery industry developed to meet local needs and; a sound technology was created within the country. The segmentation and decentralization arising from the pressure in the past to remain in the SSI sector forced firms to learn how to manage batch products and variability in orders. It made them efficient and flexible, which helped them in the global markets, particularly for small EU buyers. This prevented Walmartization of the industry in India (that is, spread of Walmart-type large stores). Again, it helped in developing designing, because many small and medium units did their own designing. As Nike pointed out, for new and complicated designs buyers today prefer India to other countries, including China. India's public and private fashion institutions are a great strength in the garment industry, which is capable of catering to the changing trends and demands. And lastly, India's small-batch production has offered an opportunity for firms to capture the market for high-end value-added, higher quality, automatized apparels of complex and variable design.

**Figure 2.1    Growth of India's textile and garment industry:  
A structural break in 1985–86**



*Source: Computed from UN Trade Statistics and data from Chatterjee and Mohan, 1993.*

*Note: The exports show an increase from 1985–86, when the liberalization policies were initiated. The increase continued after 1990, when India adopted neo-liberal policies. The rate of increase in the case of garments seems to have declined marginally after 2000.*

## India's competitiveness in the post-quota period

As seen earlier, the prospects of a country in the post-quota period will be determined by (a) the domestic base and supply chain of the industry; (b) its characteristics and their strength in the global market; (c) public policy responses; (d) responses from the industry; and (e) trade agreement such as bilateral trade agreements (BTAs), FTAs, RTAs and so on. Several studies on the competitiveness of the Indian textile and garment industry in the global market, keeping in mind these factors (PHDCCI, 2005, Tewari, 2007; Singh and Kundu, 2005; Dev, 2007), have identified both constraints and industry potential.\*

To start with, as seen above, the segmented structure can prove to be a major constraint after the expiry of quotas. As Dev (2007) observes, India's competitiveness in the post-quota period has been adversely affected by the predominance of small-scale units and fragmented structure of the industry, because (1) India is not in a position to meet large demand from global buyers such as Walmart and Nike, which account for 40 per cent of US and EU retail markets; (2) India's response is likely to be mainly in the high value-added, upper-end market and not much in the low-end, low value-added market that is more labour-intensive and can provide massive employment to low-skilled workers; and (3) small units, with their relatively high costs (compared with the costs of overseas large-scale units) find it difficult to survive in the domestic market due to increased competition from abroad.

In short, the relatively more labour-intensive small and medium sector in the country finds it difficult to compete with the large-scale units in the global market. As Dev (2007) puts it, it is not labour laws but the historical legacy of reservation for SSIs that is a constraint for the industry in the expanding global markets.

Scholars such as Tewari (2007) argue, on the contrary, that the small scale has inadvertently helped the industry in the post-quota period. Protectionist policies led to a large and diversified base, a well-developed textile machinery industry and a sound technology base within the country.

The proliferation of designing institutions has also helped India's competitiveness in the market. Its fashion institutions – in both the public and private sectors – are a great strength. The garment industry is capable of catering to changing trends and demands. Its small-batch production capabilities also offer an opportunity for firms to capture the market for high-end, value-added, automated apparels of complex and variable design. The segmented structure of the industry is therefore both a major constraint and an advantage.

Both the industry and the Government of India have developed strategies and schemes to overcome limitations by forming umbrella organizations of exporters and expanding the size of units through vertical and horizontal integration.

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\* A 2005 study by PHDCCI (Punjab, Haryana and Delhi Chambers of Commerce and Industry) said the industry would remain competitive.

As the UNDP Tracking Report (2006) pointed out, the Indian industry faces several other constraints, such as low skills/productivity of labour in the SSI and household segment; absence of technological upgradation; poor infrastructure; cumbersome trade procedures; poor market information for producers and potential exporters; lack of adequate finances; inconsistent quality of products and; poor R&D efforts. Again, the government and industry associations are trying to address these constraints through several programmes and measures.

### **Competition from other countries**

India is likely to face tough competition from some other countries. As the study by Singh and Kundu (2004) has shown, China, followed by Vietnam, Bangladesh and Malaysia, poses a major threat to India after the expiry of the MFA. In the competitive environment after the quotas, countries have tried to cut costs in multiple ways. For example, the Philippines has excluded the garment sector from the purview of the Minimum Wages Act; Dominican Republic and El Salvador have exempted the wages of textile and garment workers from the cost of living index; Mauritius has increased working days to seven a week without additional remuneration etc. China has a clear advantage due to its low labour standards, as Chinese textile workers are reported to be working for 12–14 hours a day, seven days a week for low wages without any labour rights. The Chinese government declared the textile industry “a pillar of the nation” and invested \$21 billion during 2002–05 to increase production capacity, backed by a cut in labour cost by different means, on the one hand, and under-cutting the prices of export goods, on the other (ITGLWF press release, 2005). It has been argued that other countries are being forced to lower their own labour standards to face competition from China.

Despite the constraints, however, India’s prospects in the post-quota period have been ranked high by most studies. A WTO study showed that India’s comparative advantage in textiles is 4.67 (against 3.18 in China) and in garments 3.90 (against 3.64 in China) – which indicates good prospects for the country. In short, India’s success depends on how it faces the challenges in the global market in the coming years. In the final analysis, its success in terms of large export gains will depend on public policy in this sector and responses from the industry. The textile industry has clear advantages in the competitive global market, and though there are some problems, they are not insurmountable. The net outcome depends on how the industry fights the constraints and how it uses its strengths.

The performance so far indicates that the industry is poised for a boom and, if supported adequately, will perform well in the coming years.

### **Exports of textiles and garments in the post-liberalization period**

Overall, exports have done well in the post-reforms period, with cotton and man-made textiles, ready-made garments and handicrafts together showing a 12.06 per cent CARG between 1992–93 and 2006–07. The highest growth rate (16.08 per cent) has been observed in the case of man-made textiles, followed by garments and cotton textiles, the rate of growth of exports of both being above 12 per cent. The lowest

growth has been reported by handlooms at 6.06 per cent.

Figure 2.2 indicates that there have been some fluctuations in exports, with a long-term positive trend. For example, there is a fall observed in 2005, when the value of the Indian rupee appreciated against the US dollar. However, the exports continued increasing thereafter. Exports of handlooms, however, have remained stagnant in recent years.

Figures 2.3 presents pie diagrams of the composition of exports in the years 1992–93 and 2005–06, respectively. Figure 2.3 shows that in 1992–93, the largest share in the total textile exports was that of ready-made garments; cotton textiles had the second largest share, followed by handlooms and man-made textiles.

Figure 2.2 Exports of textiles and garments, 1992–93 to 2006–07

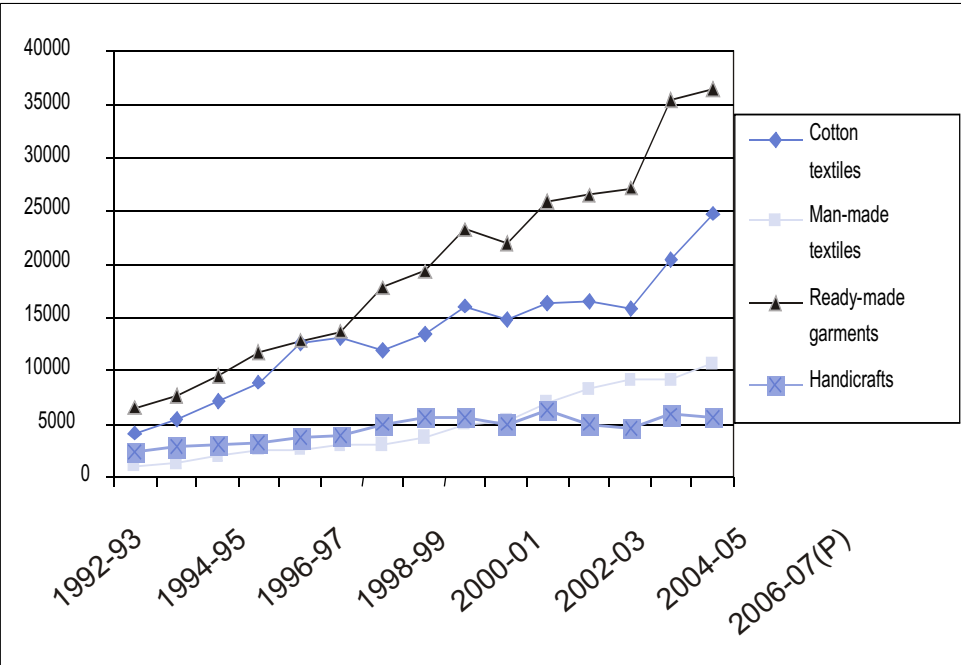
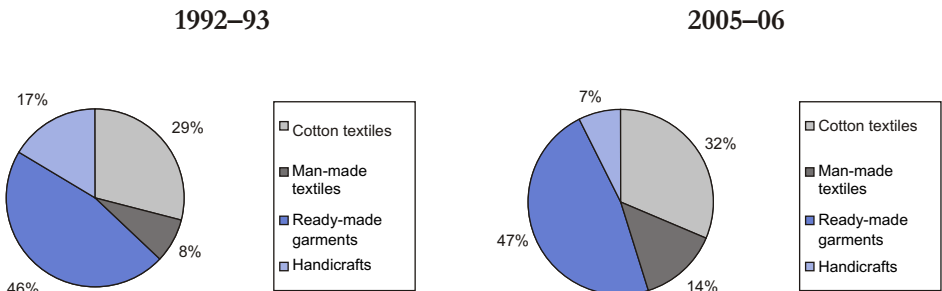


Figure 2.3 Percentage share of subsectors in exports





In 2006–07, however, the share of ready-made garments has increased by 1 per cent, to 47 per cent, while the share of cotton textiles in the total exports has increased from 29 per cent to 32 per cent. The share of handlooms has declined considerably, to 7 per cent from 17 per cent, while the share of man-made textile has almost doubled from 8 per cent to 14 per cent. It is clear that ready-made garments and cotton textiles take the major share of exports.

### **India's exports by countries**

The EU and the US are the main destinations for the country's exports, with a total share of 73 per cent in garments and 52 per cent in textile exports from India. Of the total exports of garments, 47 per cent are exported to the EU, followed by 36 per cent to the US. The rest 17 per cent are exported to Japan, the Middle East and Africa, among others. Of the total exports of textiles, 29 per cent are exported to the EU, 23 per cent to the US and the remaining 48 per cent to the rest of the world. It is important to note that the joint share of the EU and the US has increased dramatically in the past decade, when it was 50 per cent in the case of garments and 32 per cent in the case of textiles (UNDP, 2006). The expiry of quotas to the EU, the US and Canada is therefore an important landmark for India.

The US is the biggest destination for Indian exports of textiles and garments, followed by EU countries and Japan. Exports to the US and the EU constitute 55 per cent of total exports. Exports to the “rest of the world” have increased rapidly too, constituting 45 per cent of the total textile exports and 16 per cent of total exports of garment exports from India (CMIE, 2007).

### **Imports of textiles and garments**

India imports four major items for the textile and garment industry, namely, fibre (raw cotton, raw silk, flax and jute and man-made fibre), semi-raw material (fibre waste: wool, cotton, silk and man-made fibre waste), yarn (silk, yarn, wool yarn, cotton yarn, man-made filament yarn and flax and jute yarn) and fabrics. Its major imports come from China (about 40 per cent), followed by Hong Kong, the US, Australia, South Korea and Thailand, each of which constitute 4–5 per cent of the total imports (2005–06).

Raw silk is imported mainly from China (98 per cent share in 2005–06, with imports worth Rs 7.80 billion out of Rs 7.98 billion); raw cotton (long stapled) is imported mainly from Egypt and the US (their share comes to about 63 per cent, followed by smaller shares of Sudan, Turkmenistan, Tajikistan, Uzbekistan etc.; raw wool is imported mainly from Australia and New Zealand (the combined imports from these countries stood at 62 per cent in 2005–06), followed by China, the UK, Italy and Turkey and; man-made fibres are largely imported from Thailand and Malaysia (polyester staple fibre), Austria and Australia (viscose staple fibre) and Spain and Japan and Thailand (acrylic staple fibre).

**Table 2.10** Textile exports, 1992-93 to 1999-2000  
(Rs million)

| Item                   | 1992–<br>93      | 1993–<br>94     | 1994–<br>95     | 1995–<br>96      | 1996–<br>97      | 1997–<br>98      | 1998–<br>99      | 1999–<br>2000    | 2000–<br>01      | 2001–<br>02      | 2002–<br>03      | 2003–<br>04      | 2004–<br>05      | 2005–<br>06      | 2006–07<br>(P)   | CARG<br>(%)  |
|------------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Cotton                 | 4 093.07         | 5 474.85        | 7 153.47        | 8 822.16         | 12 656.63        | 12 953.51        | 11 868.41        | 13 465.31        | 16 031.02        | 14 697.99        | 16 267.77        | 16 542.24        | 15 924.43        | 20 369.27        | 24 819.54        | 12.77        |
| Man-made<br>textiles   | 1 141.43         | 1 373.6         | 2 008.03        | 2 581.93         | 2 561.34         | 3 057.91         | 3 027.62         | 3 705.27         | 5 003.06         | 5 191.24         | 6 859.97         | 8 368.83         | 9 214.25         | 9 029.9          | 10 684.16        | 16.08        |
| Ready-made<br>garments | 6 505.67         | 7 668.07        | 9 655.23        | 11 672.29        | 12 740.9         | 13 721.57        | 17 756.37        | 19 344.58        | 23 239.82        | 22 027.52        | 25 815.4         | 26 589.13        | 27 069.07        | 35 358.49        | 36 541.55        | 12.19        |
| Handicrafts            | 2 357.84         | 2 781.28        | 2 971.17        | 3 335.93         | 3 784.92         | 3 982.08         | 4 950.25         | 5 692.73         | 5 679.46         | 5 051.41         | 6 378.14         | 4 987.36         | 4 555.37         | 5 819.89         | 5 697.64         | 6.06         |
| <b>Total</b>           | <b>14 098.01</b> | <b>17 297.8</b> | <b>21 787.9</b> | <b>26 412.31</b> | <b>31 743.79</b> | <b>33 715.07</b> | <b>37 602.65</b> | <b>42 207.89</b> | <b>49 953.36</b> | <b>46 968.16</b> | <b>55 321.28</b> | <b>56 487.56</b> | <b>56 763.12</b> | <b>70 577.55</b> | <b>77 742.89</b> | <b>12.06</b> |

*P: Provisional.*

Table 2.11 Percentage of textile exports, 1992-93 to 1999-2000

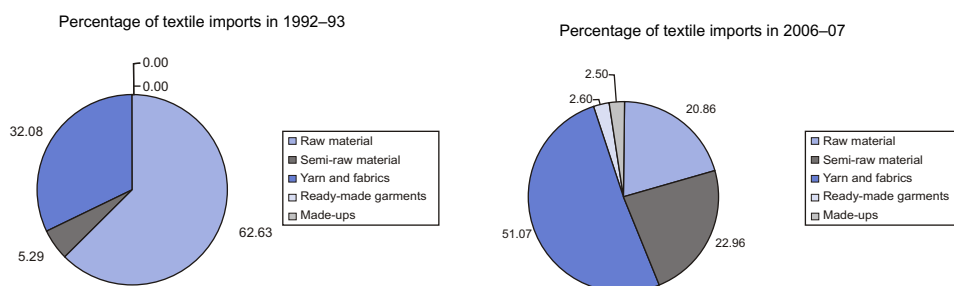
[illegible]

**Table 2.12 Imports of textiles, 2005–06**

| Item                       | Rs million      | %            | Main countries                          |
|----------------------------|-----------------|--------------|-----------------------------------------|
| <b>Fibres</b>              |                 |              |                                         |
| Raw cotton                 | 7 036.6         |              | China, US, Sudan                        |
| Raw silk                   | 7 977.7         |              | China, Brazil                           |
| Raw wool                   | 9 658.9         |              | Australia, New Zealand, China           |
| Man-made fibre             | 2 062.1         |              | Spain, Thailand, Austria, Malaysia etc. |
| <b>Sub-total</b>           | <b>26 735.3</b> | <b>39.61</b> |                                         |
| <b>Yarn</b>                |                 |              |                                         |
| Silk yarn                  | 1 748.7         |              | China                                   |
| Cotton yarn                | 5 64.8          |              | Pakistan, China                         |
| 100% non-cotton yarn       | 1 916.9         |              | Nepal, China, Thailand                  |
| Man-made yarn (mixed yarn) | 7 324.9         |              | China, Korea, Malaysia, Indonesia       |
| <b>Sub-total</b>           | <b>11 545.3</b> | <b>17.10</b> |                                         |
| <b>Fabrics</b>             |                 |              |                                         |
| Silk                       | 7 897.2         |              | China, Republic of Korea                |
| Woollen                    | 1 875.9         |              | Italy, China, Japan                     |
| Cotton                     | 11 760.9        |              | China, Hong Kong, Pakistan              |
| Man-made                   | 7 657.0         |              | China, Republic of Korea                |
| <b>Sub-total</b>           | <b>2 919.1</b>  | <b>43.26</b> |                                         |
| Apparel and clothing       | 5.7             |              | China, Hong Kong, Nepal                 |
| <b>Total imports</b>       | <b>67 477.3</b> | <b>100</b>   |                                         |

Source: Foreign Trade Statistics of India, different volumes.

**Figure 2.4 Composition of textile imports by India, 1992–93 and 2006–07**



As Table 2.12 shows, fabrics constitute the largest share of textile imports into India, followed by fibres and yarn. Import of garments has started only recently, and constitutes around 0.5 per cent of the total imports of textiles by the country.

Table 2.13 presents data on the imports of textiles during the period 1992–93 and 2006–07. It shows that the CARG of imports of textiles has been 16.26 per cent, a fairly high rate. The highest increase has been experienced by semi-raw materials, followed by yarn and fabric. The import of raw materials has been lower, its CARG being 8.04 per cent. On the whole, it appears that imports have increased in a way that they provide raw material and intermediary goods for textile exports.

The pie diagrams in Figure 2.4 show that the composition of imports has changed radically during this period. The share of raw materials (fibres) has declined drastically. Against this, the share of yarn and fabrics has increased and the share of semi-raw materials has increased substantially. The figure also shows that new items have entered the import basket, though their shares are still very low. These items are made-ups (explained above) and ready-made garments.

### Summing up

The discussion in this chapter indicates that the textile and garment industry has prospered under the policies of liberalization. There has been a spurt in production as well as exports of textiles and garments in the past decade and a half. Liberal policies, expiry of the MFA, government schemes to promote the industry as well as private sector initiatives have contributed to the growth. Despite a slight setback in recent years, mainly due to the appreciation of the Indian rupee against the US dollar, the industry has managed very well. Some large Indian companies are modernizing, diversifying, expanding in India and abroad, as well as rapidly upgrading their technology to establish themselves in the global market. It appears that Indian firms, large and small, are adjusting well in the new environment where global production networks in the industry are strengthening themselves.

That is not to say there are no problems or constraints. Some of the old ones, such as inadequate infrastructure, power shortage, unstable quality of production, lack of adequate finances as well as new concerns, such as the falling dollar, still prevail. The industry as well as the government will have to address these in the coming years.

**Table 2.13 Textile imports, 1992-93 to 2007-08**  
(Rs million)

| Item                         | 1992-93          | 1993-94          | 1994-95          | 1995-96          | 1996-97          | 1997-98          | 1998-99          | 1999-2000        | 2000-01          | 2001-02          | 2002-03          | 2003-04          | 2004-05           | 2005-06           | 2006-07           | CARG (%)     |
|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|--------------|
| Raw material                 | 8 408.40         | 7 740.40         | 13 753.90        | 14 831.90        | 10 198.70        | 10 790.74        | 13 203.80        | 23 995.86        | 23 393.95        | 35 046.68        | 29 052.60        | 32 983.30        | 27 847.40         | 26 790.60         | 26 825.50         | 8.04         |
| Semi-raw material            | 710.20           | 1 261.00         | 4 438.60         | 5 021.10         | 315.60           | 4 654.26         | 2 908.74         | 11 512.05        | 12 555.66        | 16 619.16        | 22 865.70        | 21 805.40        | 25 266.20         | 28 231.40         | 29 526.00         | 28.21        |
| Yarn and fabrics             | 4 307.10         | 7 166.30         | 10 349.80        | 11 997.00        | 0.00             | 15 187.27        | 19 219.08        | 11 819.43        | 14 530.50        | 18 305.10        | 24 664.40        | 33 141.80        | 44 518.50         | 60 738.60         | 65 663.00         | 19.92        |
| Ready-made garments          | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 699.38           | 978.30           | 1 725.28         | 1 159.30         | 1 778.30          | 1 495.50          | 2 515.90          | 0.00         |
| Made-ups                     | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 1 144.52         | 1 910.46         | 1 719.48         | 1 912.60         | 3 756.70         | 2 694.00          | 2 744.20          | 3 213.40          | 0.00         |
| <b>Total textile imports</b> | <b>13 425.70</b> | <b>16 167.70</b> | <b>28 542.30</b> | <b>31 850.00</b> | <b>10 514.30</b> | <b>30 632.27</b> | <b>35 331.62</b> | <b>49 171.24</b> | <b>53 368.87</b> | <b>73 415.70</b> | <b>79 654.60</b> | <b>93 465.50</b> | <b>101 821.60</b> | <b>121 020.70</b> | <b>128 574.70</b> | <b>16.26</b> |

**Table 2.14 Percentage of textile imports, 1992-93 to 2007-08**

| Item                | 1992-93       | 1993-94       | 1994-95       | 1995-96       | 1996-97       | 1997-98       | 1998-99       | 1999-2000     | 2000-01       | 2001-02       | 2002-03       | 2003-04       | 2004-05       | 2005-06       | 2006-07       |
|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Raw material        | 62.63         | 47.88         | 48.19         | 46.57         | 97.00         | 35.23         | 37.37         | 48.80         | 43.83         | 47.74         | 36.47         | 35.29         | 27.35         | 22.14         | 20.86         |
| Semi-raw material   | 5.29          | 7.80          | 15.55         | 15.76         | 3.00          | 15.19         | 8.23          | 23.41         | 23.53         | 22.64         | 28.71         | 23.33         | 24.81         | 23.33         | 22.96         |
| Yarn and fabrics    | 32.08         | 44.32         | 36.26         | 37.67         | 0.00          | 49.58         | 54.40         | 24.04         | 27.23         | 24.93         | 30.96         | 35.46         | 43.72         | 50.19         | 51.07         |
| Ready-made garments | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 1.42          | 1.83          | 2.35          | 1.46          | 1.90          | 1.47          | 2.08          | 2.60          |
| Made-ups            | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 2.33          | 3.58          | 2.34          | 2.40          | 4.02          | 2.65          | 2.27          | 2.50          |
| <b>Total</b>        | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

Source: Foreign Trade Statistics of India, DGCIIS, Kolkata.

## Chapter 3

### Restructuring of production and labour

The discussion so far shows that the textile and garment industry is getting increasingly integrated with the global economy at a fast rate. Against 4–6 per cent annual growth rate of production of textiles and garments, exports are increasing at more than 12 per cent per year. The percentage of production exported has continuously increased during the past decade or so.

To put it differently, the process of globalization has increasingly exposed the textile and garment industry to global production networks, which now play a key role in international trade. The transnational corporations, which control the networks and account for around two-thirds of the world trade, have focused on higher value-added activities such as design, branding and marketing, and are using international outsourcing extensively to shed their non-core activities to developing countries. Developing countries compete with each other for outsourced production and, under pressure to meet the cost, quality and delivery requirements of their clients as well as to handle fluctuating order volumes, they restructure their production as well as hiring practices. The expiry of the quotas seems to have accelerated the process of restructuring of production units.

With the gradual opening of the global market for textile and garment products, demand constraints are fewer. The constraints are mainly on the supply side, and producers are trying to fight these by restructuring their production in a way that they are able to gain a larger share of the global market, that is, they are restructuring production to meet the specific nature of the increasing demand.

The three major pressures in the new environment that have encouraged the industry to restructure are (1) the need to acquire better bargaining power in the global market by increasing the size of the unit and control over the value chain; (2) the need for flexibility in the production structure for adjusting to the fluctuating demand in a volatile market; and (3) the need to reduce the cost of production to remain competitive.

This chapter studies (1) the restructuring of production by large and small textile and garment units and (2) the restructuring of labour and employment by these units in response to the restructuring of production. These processes have been studied separately for large, organized sector units and for small, unorganized sector units.

#### 1. Restructuring of production

##### A. Restructuring of production in large units

This study is divided into two parts: Part 1 refers to collection of information from large units about the changes they have introduced in the recent decade and a half in technology upgradation and modernization, expansion of production capacity,

adoption of flexible production systems to adjust to volatile demand, vertical integration for control over the complete value chain and so on. This information was collected from nine large units spread over major textile centres in the country. It was collected from their websites and through using semi-structured schedules and open discussions.

The other part of the information collected was about their specific performance, including their costs and profits, recruitment strategies, wages paid to workers, terms of employment and labour contract, social security provided to workers etc. This information was given by them on condition that their names will not be disclosed. In fact, several large companies withdrew their support when it came to providing these data. This is because they were not willing to share such information. It became necessary to replace many of the units by those that agreed to provide the required information. In all, full information could be collected from five large units.

The presentation of the findings therefore starts with the information collected through semi-structured open discussions. The specific information collected through structured schedule has been analysed later without naming the units (Tables 3.1–3.4).

### **Discussions with selected large units**

**Arvind Mills Ltd:** Arvind Mills, set up in 1931 in Ahmedabad, has emerged as a “true Indian multinational group of companies” in the global market. It is the largest denim producer of blends and denims in India and the third largest denim producer in the world. It is now a Rs 20 billion (\$500 million) company, flagship of the Lalbhai Group. Arvind Mills has selected some core products and by focusing on these has emerged as a global company. The company’s mission is “to achieve global dominance in selected business around our core competencies, through continuous product and technical innovations, customer orientation and a focus on cost effectiveness”. In order to take full advantage of the post-quota regime as well as the new liberal environment, the company went in for vertical integration through massive investments, technological upgradation and entering into contracts with major foreign brands. As Sanjay Lalbhai, Managing Director of Arvind Mills, said in an interview, “vertical integration is the order of the day” to control large part of value chains and to improve bargaining in the global market. Arvind Mills now produces a wide range of fabrics, production of which includes processes from spinning, weaving, dyeing and printing to processing etc. The fabrics include denim, shirting, khakis, knitwear and voiles. It also produces garments such as shirts, jeans and other formal and informal wear. It has entered into contracts with famous international retailer brands such as Marks & Spencer, Levi Strauss, NEXT, Invista, GAP, Nike, Reebok, Eddie Bauer etc. Arvind Mills aims at achieving a 7–8 per cent share in textile and garment exports from India in the coming three years, and 15–16 per cent by 2010.

**S. Kumars:** S. Kumars Group, founded in 1948 by the Kasliwals in Indore (Madhya Pradesh), is another leading textile and garment company in India. From a modest turnover of Rs 5 million in 1948, the company’s turnover has grown to Rs 10 billion. The goal of the company is to achieve a “total wardrobe solution”. The unit has

expanded capacity in the recent decade and a half through vertical integration by weaving a variety of fabrics, processing these and manufacturing a variety of garments. It produces home textiles, uniform fabrics, a variety of blended fabrics as well as a variety of garments – shirts, suits, trousers, casuals, ties etc. S. Kumars has developed its own brands, some of the famous ones being Reid & Taylor and Tamarind. Like Arvind Mills, manufacturing plants of S. Kumars are spread all over India – Dewas, Bangalore, Mysore and Mumbai. S. Kumars aims at acquiring a dominant position in global trade.

**Gokuldas Exports:** Gokuldas Exports is the largest garment exporting company in India. The company was set up by the Hinduja (Madanlal Hinduja) in the 1970s. It started exporting in 1979 on a small scale, but expanded dramatically after 1985, particularly after 1991 when economic reforms were introduced. Since the expiry of the MFA, the company has grown even more. At present, it has 47,000 employees in its 46 state-of-the-art manufacturing facilities with a production capacity of 2.5 million garments a month. It produces highly customized apparel for leading US and European brands with strengths in fashion and in-house design. The company has a global presence and most modern technology. The company exported about Rs 10 billion worth of garments in 2007.

According to Managing Director Rajendra Hinduja, the company has a large value chain under its own control and a significant presence in the global market.

**Garden Silk Mills:** “A vertically integrated textile manufacturing company,” Garden Silk Mills is located at a major textile centre, Surat. The company is a leading polyester yarn manufacturer, fabric maker, design maker and manufacturer of select apparels for women. Garden Mills is known in India and abroad for its exclusive range of printed pure silk chiffon, cotton and viscose. With its multiple manufacturing units, the company has a sales turnover of about Rs 15.14 billion (2007). The company says its strength lies in its modern technology, large size and vertical integration.

Garden Silk Mills has 68 dealers and 293 retail outlets in 65 cities in India. It also exports to the EU (the UK, France, Portugal, Spain and Greece), the Gulf countries, the US, Australia and East Asia, Africa and South America.

**Raymond Mills:** Raymond Mills is another major company, headquartered in Mumbai, with production units spread all over the country. The mills, set up in 1944, produced cheap and coarse low-priced blankets in the beginning. Gradually they grew into a large group of companies producing a variety of fabrics and garments. This gave the group complete control over the value chain in order to play a dominant role in the global market. Today it has a capacity of 33 million metres in wool and blended fabrics and commands more than 60 per cent market share in worsted suiting in India. It has 20,000 designs and colours of suiting fabrics – perhaps the largest in the world. Its exports cover 50 countries, including the EU, the US, Japan and the Middle East.

It has expanded vertically to gain control over the value chain and improve its bargaining power in the global market. The company has therefore set up a large



apparel manufacturing unit, one of the largest in the country, equipped with modern technology. It produces apparels under famous global brands such as Manzori, Park Avenue, Color Plus, Zapp and Notting Hill. The major strength of the company is its vertical and horizontal integration aimed at providing customers “the total textile solution”. Few companies in the world have such a large variety of wool-blended suitings to cater to customers across age groups, occasions and styles. Raymond Industries plans to invest \$45 million to add 10 million metres to its denim capacity, and is also setting up a multi-million-dollar plant to produce fibre and garments in Thailand. With a \$500 million turnover now, Raymond Mills is one of the largest in this market. The group has 11 manufacturing companies and six joint ventures spread all over the country. In the recent decade, the company has expanded in a big way in India and abroad. For example, it has acquired new brands (Color Plus), launched new brands (Zapp) and set up new units in France, Italy etc. as well as in India.

**Welspun Group:** A \$3 billion group, Welspun Group is one of the fastest growing Indian conglomerates. With a presence in 50 countries and more than 20,000 employees and 50,000 shareholders, the group is an amalgamation of expertise, resources, opportunities and engineering excellence. Its clients include J.C. Penny, Target, Walmart and Mobil. The group started in 1985 as a small textile unit, and has diversified and expanded, particularly after 1991.

The mission of Welspun Group is “to emerge as a global leader” through technological upgradation and large-scale investments. It has 10 firms, producing home textiles – terry towels, bed sheets, bath robes, shower curtains, bath rugs – as well as manufacturing pipe and coatings, spread over countries such as the UK, Mexico, Portugal etc. The world’s fifth largest terry towel maker, the group has set up a new factory to raise its capacity by 13,000 tonnes of towels a year and 100,000 metres of bed sheets a day. Some 40 per cent of its production is already booked in the global market. It has been focusing on becoming a market leader through vertical and horizontal integration.

**Modern Terry Towels:** Modern Terry Towels is a relatively new company set up in 1993 in Sanand, Gujarat. It started with technical collaboration from Ashton’s of England, which owns the Christy brand. It produces 9,000 tonnes of towels. It is a fully vertically integrated company, spinning, weaving and processing with state-of-the-art machines. It produces bath towels, beach towels, bathrobes, other towels and related products.

**Super Spinning Mills:** Super Spinning Mills, Coimbatore, was established in 1962 with an initial capacity of 12,000 spindles. In four decades, it has expanded to 130,000 spindles spread over three operational units. The company now produces grey fabric as well as glazed mercerized and dyed cotton yarn. It has carved a niche for itself on the textile map of the country. With the adoption of global standards of quality, the company produces superior-quality textiles and a variety of garments. After its recent expansion, including vertical integration – forward integration into garment manufacturing – the mill has a production capacity of 50,000 kg per day. SARA

Apparels and Fashion, a new unit set up by the company, is a massive styling unit in Coimbatore. It offers garments made out of 100 per cent Pima and blends/Giza and blends, and eco-friendly yarn using imported organic cotton and spun silk yarn (silk blended with viscose). This unit produces 5,000 polo shirts per day and 9,000 pieces of basic round-neck garments per day. The company has expanded both regionally and internationally over the years. The mill is exporting its products to 15 countries, including Republic of Korea, Italy, Germany, Spain, Portugal, Switzerland, Serbia, Malaysia, China, Taiwan, Mauritius, Bangladesh and the UAE.

**Lakshmi Mills Company Ltd:** Lakshmi Mills was set up in 1910 by the late G. Kuppaswamy Naidu. Over the years the company has expanded, and after the economic reforms and expiry of the MFA, it has grown into a major company in south India. The company now has three units that manufacture yarn and fabric. The Coimbatore unit has 41,952 spindles and 245 looms, the Palladam unit 55,055 spindles and 672 rotors, and the Kovilpatti unit 58,512 spindles. The current annual turnover of the company is Rs 1.5 billion and total exports Rs 160 million per annum.

The company manufactures 100 per cent combed cotton yarn, polyester cotton and blended yarn, as well as open-end yarn of 10s. It also manufactures 100 per cent micro modal yarn, micro modal/cotton blended yarn, 100 per cent micro tencel yarn, tencel/cotton blended yarn and static yarns. The range includes single and doubled yarns for knitting and weaving for both the domestic and export markets. It has yarn depots in Mumbai, Ahmedabad, Kolkata and Tirupur to sell its products. The company also manufactures fabrics of different varieties.

For control over the complete value chain, the company has now expanded and begun manufacturing garments for the top end of the market, backed by technological up-gradation. This includes new casual-wear brands for men, women and children made from super-soft modal yarn from Lenzing, Austria. Tyche Life brings international styling, bright colors and exotic prints, with emphasis on comfortable fashion. The products are mainly exported to the UK, Italy, Spain, Turkey, Singapore, Dubai, Indonesia and Sri Lanka.

There is, therefore, evidence that large units in the industry are modernizing, expanding through backward and forward integration to gain control over value chains, and are fast integrating with the global market.

### **Analysis of performance of selected LSI units**

The sample for the primary survey included five large units spread over different regions (Mumbai, Coimbatore, Ahmedabad, Indore and Surat). These five units have specialized in different products, such as denim, terry towels, synthetic fabrics, cotton textiles, hosiery, shirts and jeans, kidswear, sportswear and other garments – all high-quality, for the top end of the market in India and abroad.

All the five units have strengthened their vertical integration to acquire control over a complete value chain and have expanded in a big way by setting up units across the

country and even outside. These are all exporting units, the destinations being the EU, the US, Canada, Africa, the Middle East and Asian countries (Table 3.1). The average production of these units is Rs 7.4 billion (2006–07) and, on an average, they export about 36 per cent of their production.

**Table 3.1 LSI production, exports and destination, 2006–07**

| Unit         | Value of exports<br>(Rs million) | % of exports to<br>value of production | Destination           |
|--------------|----------------------------------|----------------------------------------|-----------------------|
| 1            | 2 014.9                          | 30.10                                  | EU, US, Canada        |
| 2            | 1 000.0                          | 89.50                                  | EU, US                |
| 3            | 160.0                            | 10.67                                  | Middle East, Africa   |
| 4            | 1 333.9                          | 34.23                                  | EU, Japan, China etc. |
| 5            | 1 290.0                          | 12.90                                  | EU, Middle East       |
| <b>Total</b> | <b>9 798.8</b>                   | <b>36.49</b>                           |                       |

All the units have gone in for technological upgradation in the last five years (Table 3.2). Two units are also seeking foreign collaboration. One important advantage of foreign collaboration, as argued by the two units, is that it gives them an entry into foreign markets. Three units have entered into contract with reputed global brands such as GAP, Nike, Next, Color Plus, Zapp, Invista, Reebok etc. for production, and have links with global retailers to sell their products abroad. They use imported machinery and one unit also imports raw materials to produce global products. Three units also have tried to develop their own brands, though not very successfully. All of them have expanded and/or added new products for better bargaining power in the global market.

**Table 3.2 LSI technological upgradation, collaboration and licensing from foreign brands**

| Unit | Tech<br>upgradation | Tech<br>upgradation<br>(FDI) | Licensing<br>foreign<br>brands | Import<br>machinery | Import<br>raw<br>material | Created<br>own<br>brands | New<br>products<br>expansion |
|------|---------------------|------------------------------|--------------------------------|---------------------|---------------------------|--------------------------|------------------------------|
| 1    | Yes                 | –                            | Yes                            | Yes                 | –                         | Yes                      | Yes                          |
| 2    | Yes                 | Yes                          | Yes                            | Yes                 | –                         | Yes                      | Yes                          |
| 3    | Yes                 | –                            | –                              | –                   | –                         | –                        | Yes                          |
| 4    | Yes                 | –                            | –                              | –                   | Yes                       | –                        | Yes                          |
| 5    | Yes                 | Under<br>progress            | Yes                            | Yes                 | Yes                       | Yes                      | Yes                          |

It is important to note, however, that the appreciation of the Indian rupee recently (against the US dollar) has hurt them, leading to a decline in production as well as exports (Table 3.3). The units are too big to be affected seriously by this – also because this is a short-term phenomenon. The units do, however, demand that the government compensate them adequately to help them retain their markets.

**Table 3.3 LSI performance, 2003–04 to 2006–07**

| Unit | % change in<br>production | % change in<br>exports |
|------|---------------------------|------------------------|
| 1    | -15.62                    | -13.56                 |
| 2    | -7.59                     | -10.83                 |
| 3    | +0.51                     | 0.00                   |
| 4    | +14.51                    | -13.05                 |
| 5    | +3.98                     | +5.85                  |

**Subcontracting part of the production:** The study showed that all the units are outsourcing production whenever possible (Table 3.4). Subcontracts are given to experienced small producers, with the required conditionality. All the units agreed that subcontracting some parts of production to outside units is an important strategy for survival and growth. We observed that the scope for subcontracting is relatively less in textiles compared to garments because of technological reasons. Spinning is usually not given out, as it needs to be done by skilled labour with specialized spinning machines. Weaving of quality cloth such as world-class denim, shirting or khakis for the top end of the market needs to be carried out by skilled labour under professional supervision, though weaving of some textiles can be outsourced. Processing and finishing can be outsourced. In the case of garment manufacturing, a number of activities such as stitching, fixing accessories, folding, packing etc. can be outsourced – even for high value-added products.

**Table 3.4 Subcontracting and outsourcing by LSI units**

| Unit | Whether<br>subcontracting | Details                                                           |
|------|---------------------------|-------------------------------------------------------------------|
| 1    | Yes                       | Housekeeping, cloth processing, washing and ironing               |
| 2    | Yes                       | Grading, packing, stitching, fixing accessories, housekeeping     |
| 3    | Yes                       | Yarn processing, cloth processing, parts of garment manufacturing |
| 4    | Yes                       | Processing of cloth, housekeeping, part of garment manufacturing  |
| 5    | Yes                       | Grading and general helper etc.                                   |

In short, the large units seem to be reorganizing their production in the following ways:

**Upgradation of technology:** It is observed that large textile units are rapidly ramping up capacity and upgrading technology through foreign direct investment (FDI), by entering into agreements on technology with foreign firms or by expanding their

capacity with investments in general.<sup>1</sup>

**Increasing production capacity:** A major restructuring has occurred in terms of increasing the size of production units because global buyers of textiles and garments now prefer, particularly after the expiry of quotas, to deal with a small number of large units, mainly with vertically integrated ones. The increase in capacity was aimed at meeting large demand and establishing control over a large value chain through vertical integration. A larger size with vertical integration enhances the bargaining power of production units, on the one hand, and enables them to control the production chain, on the other. As Sanjay Lalbhai, Managing Director of Arvind Mills Ltd, put it, “vertical integration is the order of the day” (*Times of India*, 2007). Vertical integration is taking place by establishing both forward and backward linkages.<sup>2</sup> As the Apparel Export Promotion Council (AEPC) has observed, the number of exporting firms has declined drastically in the recent years. Where it is not feasible to increase the size of production immediately through vertical integration, units are expanding through horizontal integration. This is being done by umbrella kind of organizations or through a relatively larger producer buying products from a large number of small producers.<sup>3</sup> Horizontal integration has also been observed in Tirupur, where units integrate horizontally to form an umbrella organization, a loose form of organization, to promote exports.

**Flexible production systems:** Since they recognize the need for flexibility in the production structure in the context of unstable and fluctuating global demand, large units are adapting accordingly. In the new environment there is need for specialized production with shorter runs in place of the earlier, standardized long-term production. There is, therefore, a need for greater reversibility and responsiveness to fast-changing demands from customers. Production flexibility is achieved through disaggregating production into different units within or outside the premises of factories. The former implies disaggregation of production processes into separate smaller units within the factory premises, while the latter implies subcontracting parts of production to smaller units outside the factory. In both events, the main unit keeps the overall control of production in its own hands. In the case of textile units, for example, producers require a mix of specialized machines as well as versatile or multi-purpose machines to respond to changing production needs. For the sake of flexibility, they frequently subcontract parts of the production process to outsiders within or outside the factory. Subcontracting of production reduces the risk for large units, on the one hand, and reduces the cost of production (by saving on cost of land and building etc. and of labour), on the other. In the case of the garment industry,

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<sup>1</sup> *Arvind Mills, one of the world's largest denim producing companies that supplies material to GAP, Levi's and VS, has increased its denim capacity and diversified into knitwear. Reliance Industries has bought Trevira from Germany for \$97.5 million and is now the world's largest polyester producer with a capacity of 1.8 million tonnes per year.*

<sup>2</sup> *Arvind Mills has invested in garment manufacturing and they now produce jeans and T-shirts. Tirupur, the hot spot of garments, is no more only small-scale, as several units are expanding by producing knitted yarn and related products. Several small-scale units in Coimbatore also have modernized aggressively with backward linkages to turn the town into a cluster of medium and large units.*

<sup>3</sup> *In discussions with the Chairman of the Textile Committee. In Ahmedabad, for example, it is observed that some garment producing units have increased their exports by linking up with several small manufacturing units.*

production flexibility comes from subdividing the production process into smaller parts and allotting these to subcontractors.<sup>4</sup> In short, on the one hand, large units expand to gain more control over the value chain and more bargaining power; on the other hand, they decentralize the production process to distribute risk and to achieve flexibility in production.

**Minimizing costs to remain in competition:** Another kind of pressure on the industry that leads to restructuring of production units is the higher level of competition in the global market. In the new environment, particularly after the expiry of quotas, there is cut-throat competition among developing countries for markets in industrialized countries, particularly the EU and North America, the biggest buyers. Since the transnational corporations in industrialized countries hold the power to outsource manufacturing to different countries, there is keen competition for this outsourced production. Though the quality of products, timely delivery of products etc. have a role in the global distribution of production, cost is perhaps the most important consideration. The industry is therefore under tremendous pressure to reduce the cost of production.

One means of cutting down costs is through partly outsourcing production to small informal units, including household units. This reduces the overhead costs for large manufacturers, that is, the cost of land and building (space), power, infrastructure etc. Outsourcing also reduces their risk because part of the risk is passed on to smaller units; it also reduces labour costs. Another way of lowering costs is employing non-permanent workers who do not have to be paid wages and benefits as per established labour standards. These are contract, casual or temporary workers who can be employed at lower wages without any social security benefits.

Large-scale units seem to have adopted both means. They employ temporary, contract and casual workers on a massive scale within the factory and also subcontract parts of production to small informal units. Smaller units also adopt the same strategy of employing temporary, contract and casual workers on the premises and subcontracting their work to household units or to home-based workers.

The net result is that at the higher end of the industry the average size of the unit is increasing, either through vertical or horizontal integration; at the lower end, production is disaggregated and decentralized among a large number of small informal units, including home-based workers. This gives better bargaining power to production units, on the one hand, and flexibility of production, on the other. Such flexibility ensures adequate capacity to meet fluctuating demand, passes on the risk to smaller units and lowers the cost of production.

### **Restructuring of production in small units**

Small-scale units are of two types: units which are doing job work (assigned on a per-

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<sup>4</sup> For example, while keeping control over the total production, units in Tirupur subcontract tasks such as cutting and stitching, folding and packing, and computerized embroidery to smaller units, including household units.

order basis) for large units and for exporters on a subcontracting basis and; units which are subcontracting as well as doing independent business.

For the primary survey, a sample of SSI units has been selected from five textile and garment centres, namely, Tirupur, Ahmedabad, Surat, Bhivandi and Coimbatore (Table 3.5).

**Table 3.5 The SSI sample**

| Centre             | Product  |          | Total     |
|--------------------|----------|----------|-----------|
|                    | Garments | Textiles |           |
| Ahmedabad          | 3        | —        | 3         |
| Bhivandi           | —        | 2        | 2         |
| Coimbatore         | —        | 4        | 4         |
| Surat              | —        | 2        | 2         |
| Tirupur            | 5        | —        | 5         |
| <b>Grand total</b> | <b>8</b> | <b>8</b> | <b>16</b> |

In the case of Ahmedabad, one unit is a job centre, which hires workers on contract to produce garments subcontracted from export units. The other two are garment manufacturers which export low- and medium-value garments through an agent/middleman, and produce garments as well as subcontract some production. In the case of Coimbatore, Surat and Bhivandi, all the units are small power loom units or processing units which export textiles with the support of agents/associations or directly. While the units in Bhivandi and Coimbatore produce mainly cotton textiles, the Surat units produce 100 per cent non-cotton and blended fabrics. The Tirupur units produce high value-added products and export to the EU, the US, Canada and other countries. Table 3.6 lists the major products of these units.

**Table 3.6 Products manufactured by SSI units**

| Centre     | Product                                                                                  |                                                                       |
|------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|            | Textiles                                                                                 | Garments                                                              |
| Ahmedabad  | Nil                                                                                      | Sarong, jeans, kidswear, womenswear                                   |
| Bhivandi   | Shirting, other cotton textiles                                                          | —                                                                     |
| Coimbatore | Grey cotton cloth, poplin, poplin, blended textiles                                      | —                                                                     |
| Surat      | 100 per cent non-cotton textiles, blended textiles, lion georgette polyester, Poonamdani | —                                                                     |
| Tirupur    | Nil                                                                                      | Sportswear, knitted garments, T-shirts, womenswear, kidswear, pyjamas |



The average investment in these units varies from Rs 260,000 in Coimbatore to Rs 10.84 million in Tirupur (Table 3.7). The average installed capacity of the Ahmedabad units is high because only the relatively large units can export garments from that centre. Smaller units produce low/medium value-added products for the domestic market. The annual turnover is the highest in Tirupur, indicating high value-added production of these units. The Tirupur units seem to get good prices for their products. The amounts of profit vary across the centres.

**Table 3.7 SSI investment, turnover and profits**  
(Rs million)

| Centre     | Investment<br>per unit | Annual turnover<br>per unit | Net profit<br>per unit |
|------------|------------------------|-----------------------------|------------------------|
| Ahmedabad  | 10.50                  | 24.00                       | 2.40                   |
| Bhivandi   | 9.00                   | 1.31                        | 0.72                   |
| Coimbatore | 2.67                   | 8.34                        | 0.65                   |
| Surat      | 13.00                  | 24.26                       | 2.32                   |
| Tirupur    | 10.84                  | 38.00                       | 3.82                   |

All the SSI units are also exporters. In the case of garment units, exports constitute up to 90 per cent of their output while in the case of textile units, exports constitute 40–50 per cent of their output (Table 3.8). The Tirupur garment units export to the US, the EU, Canada and others such as the Middle East; the Ahmedabad units export mainly to Dubai and the Middle East and some African countries. The textile units in Surat export to the Middle East, the EU and North America; the Bhivandi and Coimbatore units export to the Middle East and to some African countries.

**Table 3.8 Percentage of products exported and destination of exports**

| Centre     | % of<br>production exported    | Destination<br>of exports      |
|------------|--------------------------------|--------------------------------|
| Ahmedabad  | 93.43 –<br>directly/indirectly | Dubai, Middle East             |
| Bhivandi   | 46.73                          | African countries, Middle East |
| Coimbatore | Job work for exporters         | Middle East, Africa            |
| Surat      | 36.85                          | EU, US, Middle East            |
| Tirupur    | 95.41                          | EU, US, Canada, Middle East    |

### Impact of recent developments

Recent developments such as liberalization policies, dereservation of the garment industry from the SSI list, appreciation of the Indian rupee against the US dollar etc. have affected these units in multiple ways:



**Technological upgradation and capacity expansion:** The recent developments have been viewed as opening up of new opportunities for the industry. The first response from these units has been technological upgradation and expansion of production capacity. As Table 3.9 shows, about 60 per cent units have gone in for technological upgradation and expansion. By improving productivity, they are able to reduce the cost of production and sell their products to exporters/middlemen/agents or in the global market.

**Table 3.9 SSI technological upgradation and expansion in the last 5 years**

| Centre     | Tech upgradation | Imported machinery | New products | Subcontracting to others | Expanding by vertical integration |
|------------|------------------|--------------------|--------------|--------------------------|-----------------------------------|
| Ahmedabad  | 2                | 2                  | –            | 2                        | –                                 |
| Bhivandi   | 2                | –                  | –            | 1                        | –                                 |
| Coimbatore | 1                | 1                  | –            | 1                        | –                                 |
| Surat      | 2                | 1                  | 1            | 1                        | 1                                 |
| Tirupur    | 5                | 4                  | 2            | 3                        | 2                                 |

*Source: Primary survey.*

The table indicates that all the units have upgraded their technology, and eight units (50 per cent) have imported machines for the purpose. All the industry leaders interviewed for the study said the garment units have imported machinery from Germany and other EU countries, while the textile units have imported machinery from Germany, Switzerland and Japan. No small unit has gone in for foreign collaboration, which is understandable, given the size of the units. None of the units imports raw materials. However, four units (one in Surat and three in Tirupur) have added new products. Interestingly, three SSI units – all garment units – have subcontracted part of their work to home-based units/workers.

The tasks subcontracted are stitching, embroidery, fixing buttons and accessories. This is because the units find it cheaper to get these jobs through low-paid home workers. Since these units do not have enough space to accommodate more workers, it is cheaper to outsource. About half of the units are outsourcing part of their work to home-based workers/units. This is to reduce the cost as well as the risk.

Getting FDI is no easy task for SSIs, firstly because most of them are doing subcontracted work for others, and secondly because they are too small to attract foreign collaboration. None of the units has received any FDI so far.

**Impact of appreciation of the rupee against the US dollar:** The most important impact of the appreciation of the Indian rupee against the US dollar has been in terms of reduction in exports and/or loss of export markets. About 75 per cent of the units have experienced a fall in exports (through their parent unit where applicable), as exports have become relatively expensive in the global market. The decline in exports (job work production) has been 10–25 per cent.

The SSI units have adopted different strategies to fight this decline. Some units have been forced to direct their products to domestic markets. Two units have tried to divert their exports to South Asian countries. Most have reduced production in the last two or three years. All the units say the government has not done enough to help them cope with the appreciation of the rupee against the US dollar. The Surat SSIs, however, conceded that they should not depend entirely on the cost factor for access to the global market. They should also improve their quality to increase exports.

The major suggestions made by the units are on government policy. They have suggested (1) an increase in the duty drawback, (2) tax relief to compensate for the loss of exports and (3) an increase in subsidies equal to the loss in exports. In short, they want the government to compensate them so that they can remain in the global market.

It can be seen that a definite role has emerged for the SSI sector in the new environment. The units are subcontractors for large units or for export units which manufacture only a part of their exports; or they produce for exports, supported by industry/export associations. Their main focus is on expanding business for access to new opportunities by producing (in most cases) low or medium value-added products. Their main strategy is to reduce production cost by minimizing labour costs or by outsourcing some parts of production to home workers. The units are also trying to upgrade technology and enhance capacity to remain competitive.

**Functioning and restructuring of household units**

The sample of the household (HH) units covers 16 household units: six in the textile sector and 10 in the garment sector. As Table 3.10 shows, the textile units have been selected from Coimbatore and Bhivandi while the garment units are from Tirupur and Ahmedabad. Except the two units in Coimbatore, none of the others are registered. They operate informally as household units.

**Table 3.10    The household unit sample**

| District    | Product  |          | Total |
|-------------|----------|----------|-------|
|             | Textiles | Garments |       |
| Ahmedabad   | 0        | 4        | 4     |
| Tirupur     | 0        | 6        | 6     |
| Coimbatore  | 3        | 0        | 3     |
| Bhivandi    | 3        | 0        | 3     |
| Grand total | 6        | 10       | 16    |

The household garment units produce relatively low value-added products in Ahmedabad and high value-added products in Tirupur. The Ahmedabad units produce kidswear, caftans, jeans, trousers and womenswear, while in Tirupur they produce polo shirts, kidswear, Bermudas, shorts, women’s tops and undergarments, coloured T-shirts and so on. As for textiles, Bhivandi produces low value-added cloth, mainly cotton and blended textiles, while Coimbatore produces good quality cotton textiles

and silk/blended sarees of high value. All the units are producing for exporting units to a small or large extent.

**Table 3.11 Location and disposal of production in HH units**

| Type of product    | Location of unit                              | All sale to sub-contractor | 50% or more sale to sub-contractor | All sale to market | Job work | With agent's help | Total     |
|--------------------|-----------------------------------------------|----------------------------|------------------------------------|--------------------|----------|-------------------|-----------|
| Textiles           | Outside home of the employer in a hired place | 1                          | –                                  | 0                  | 0        | –                 | 1         |
|                    | Inside employer's home in a separate room     | 1                          | 4 (2+2)                            | 0                  | 1        | –                 | 6         |
|                    | Within home of employer                       | 0                          | 2 (1+1)                            | 0                  | –        | 1                 | 3         |
|                    | <b>Total</b>                                  | <b>2</b>                   | <b>6 (3+3)</b>                     | <b>0</b>           | <b>–</b> | <b>1</b>          | <b>6</b>  |
| Garments           | Outside home                                  | 1                          | 1                                  | 0                  | 1        | –                 | 3         |
|                    | Inside home in a separate room                | 3                          | 2                                  | 0                  | –        | –                 | 5         |
|                    | Inside home                                   | 1                          | –                                  | 0                  | 1        | –                 | 2         |
|                    | <b>Total</b>                                  | <b>5</b>                   | <b>3</b>                           | <b>0</b>           | <b>2</b> | <b>–</b>          | <b>10</b> |
| <b>Grand total</b> |                                               | <b>7</b>                   | <b>6</b>                           | <b>0</b>           | <b>3</b> | <b>1</b>          | <b>16</b> |

Seven of the total 16 household units (43.7 per cent) effect all of their sale to subcontractors, while six units sell more than half of their production to the subcontractor and the rest in the market. That is, 37.5 per cent of the units dispose of their products in the market as well as to subcontractors. Three units are into job work. All garment units sell their product to subcontractors, fully or partly (Table 3.11).

Three textile units operate from within the home of the owner/employer, while one unit operates from a nearby hired room. Six units work in a separate room within the home of employer/owner. Household units are now expanding to gain from the growing business, and as their own accommodation is not adequate, they hire a room nearby to carry on production. This was observed particularly in Tirupur.

### Dependence on subcontractors

Even when household units sell their production to contractors, the support received from them is minimal (Table 3.12). Almost all the units pay for the energy they use, for skill training, for credit (if needed) and machinery. They also pay the house rent (if they have to rent it) and use their own premises for carrying out production; and pay for travel cost, taxes and some raw materials sometimes. Raw materials are usually provided

**Table 3.12    Dependence on subcontractors in HH units: Who pays**

| District        | Raw material |                    | Fuel/energy |         | House rent |         | Machinery/equipment |                    | Travelling etc. |          | Taxes      |         |
|-----------------|--------------|--------------------|-------------|---------|------------|---------|---------------------|--------------------|-----------------|----------|------------|---------|
|                 | Contractor   | Bought from market | Contractor  | HH unit | Contractor | HH unit | Contractor          | Bought from market | Contractor      | Own cost | Contractor | HH unit |
| <b>Textiles</b> |              |                    |             |         |            |         |                     |                    |                 |          |            |         |
| Coimbatore      | Y            | Y                  | N           | Y       | N          | Y       | N                   | Y                  | N               | Y        | N          | Y       |
| Bhivandi        | Y            | Y                  | N           | Y       | N          | Y       | N                   | Y                  | N               | Y        | N          | Y       |
| <b>Garments</b> |              |                    |             |         |            |         |                     |                    |                 |          |            |         |
| Ahmedabad       | Y            | Y                  | N           | Y       | N          | Y       | N                   | Y                  | N               | Y        | N          | Y       |
| Tirupur         | Y            | Y                  | N           | Y       | N          | Y       | N                   | Y                  | N               | Y        | N          | Y       |

by both subcontractors and the household unit.

Subcontractors usually provide product design and some raw materials. They collect market information and design products based on that. The subcontractors also ensure that the workers have the necessary skills and are able to produce what they want. As Table 3.13 shows, of the total production cost, that of raw materials and machinery is the highest, followed by the cost of fuel, travelling and house rent (which also includes imputed cost). While the raw materials are largely provided by subcontractors, the other costs are borne by the household units. The cost of machinery includes largely the maintenance and repair costs as well as installments of loans when loan repayments are taken to buy machinery.

**Table 3.13    Value of raw materials in HH units**  
(annual, Rs)

| District        | Raw material cost/unit | Fuel/power cost | House rent (imputed) | Travelling cost | Machinery/equipment paid cost | Taxes | Any other cost |
|-----------------|------------------------|-----------------|----------------------|-----------------|-------------------------------|-------|----------------|
| <b>Textiles</b> |                        |                 |                      |                 |                               |       |                |
| Coimbatore      | 64 066                 | 2 700           | 2 000                | 3 000           | 1 500                         | 0     | 0              |
| Bhivandi        | 10 000                 | 1 200           | 3 600                | 500             | 2 500                         | 0     | 0              |
| <b>Garments</b> |                        |                 |                      |                 |                               |       |                |
| Ahmedabad       | 102 500                | 11 920          | 24 600               | 4 800           | 6 000                         | 0     | 0              |
| Tirupur         | 215 300                | 22 100          | 60 800               | 11 200          | 12 000                        | 0     | 0              |

The machinery used in the textile and garment household units in the four centres reveals that the machinery used in the Tirupur units is more sophisticated than that in other centres (Table 3.14). This machinery includes not only sewing machines, jacks, over-lock and flat-lock machines, but also net machines, Amota machines, cutting and pat-lock machines, ironing machines, Surba and Pulier machines etc. The Ahmedabad household units usually have sewing machines, cutting tables, inter-lock and embroidery machines. The Bhivandi units have power looms and related equipment, while the Coimbatore units also have simple looms.

**Table 3.14 Value of annual output in HH units, 2006–07**

| District   | Type of product | No. of units | Production per unit (Rs) | Net earning (Rs) |
|------------|-----------------|--------------|--------------------------|------------------|
| Ahmedabad  | Garments        | 4            | 350 000                  | 50 000           |
| Tirupur    | Garments        | 6            | 576 000                  | 150 000          |
| Coimbatore | Textiles        | 3            | 225 000                  | 65 000           |
| Bhivandi   | Textiles        | 3            | 185 000                  | 55 000           |

The value of annual output varies widely, as the table shows. The value in Tirupur is higher because of the high value-added products as well as more production at the units.

**Major areas of concern for household units**

A major area of concern for the household units is the hidden costs. They spend a considerable amount on energy, travelling, equipment and repairs, some raw materials as well as house rent in some cases. However, these costs are not recognized by the subcontractors. The rising prices of some of these items are adding to their costs without any corresponding increase in the piece-rate wages, a matter of concern for them.

**Table 3.15 Major areas of concern for HH units**

| Centre       | Type of product | Type of concern    |              |               |                         |                            |
|--------------|-----------------|--------------------|--------------|---------------|-------------------------|----------------------------|
|              |                 | Inadequacy of work | Irregularity | Other support | Rejection of production | Any other problem          |
| Coimbatore   | Textiles        | 0                  | 0            | 1             | –                       | –                          |
| Bhivandi     | Textiles        | 1                  | 1            | 1             | 1                       | –                          |
|              | <b>Total</b>    | <b>1</b>           | <b>1</b>     | <b>2</b>      | <b>–</b>                | <b>–</b>                   |
| Ahmedabad    | Garments        | 0                  | 2            | 2             | 1                       | –                          |
| Tirupur      | Garments        | 0                  | 2            | 4             | 3                       | Inspection is done in unit |
| <b>Total</b> |                 | <b>0</b>           | <b>4</b>     | <b>6</b>      | <b>4</b>                |                            |

The other concerns include rejection of products by the contractor and adequacy as well as regularity of work. As Table 3.15 shows, irregularity of work rather than adequacy is a major problem. Since the demand fluctuates depending on orders received by subcontractors, sometimes there is too much work, calling for long hours of work; at other times the pressure of work is much less. Since deadlines are important in this business, adherence to deadlines is a big strain. Another problem, reported by a unit in Tirupur, is the inspections done by the subcontractor to press for work. Some

units also say the contractors do not provide adequate support in areas such as access to credit for buying machines, technical support for machinery and equipment etc.

### **Impact of recent developments on household units**

One major impact of recent developments in the industry, including the increase in exports (due to liberalization policies, the expiry of quotas etc.) has been that many HH units want to expand into small-scale enterprises. Several have now gone in for technological upgradation and expansion in capacity, particularly in Tirupur and Ahmedabad, where units have bought more machinery/equipment and hired additional space nearby. Household units in Ahmedabad are also keen to expand as “there is better scope in this industry than before”. They want to work more and buy more machines and equipment to improve production and income.

Similarly, the textile HH units in Coimbatore are aware of the improved opportunities in the industry. As “exports earn higher incomes”, they are interested in strengthening their linkages with exporting subcontractors. In the case of Bhivandi, however, prospects do not appear to be very bright as yet. One concern of most HH units is about access to credit, skills and technological support for expansion. Several HH units have increased production 100 per cent or more during the past five years. Two units in Tirupur have also been able to get credit from banks for buying machinery.

A related impact has been on hiring to meet urgent deadlines as well as to expand production capacities. There is also some improvement in skill training and capacity building. Though there is a temporary setback in some parts due to a decline in exports with the fall in the value of the dollar, the general trend is to expand business.

## **2. Restructuring of labour and employment**

Restructuring of production as discussed above is reflected in the restructuring of labour and employment in this industry. It needs to be noted, however, that several distortions have been taking place in the labour market, particularly for industrial workers even before the economic reforms were introduced in India. These distortions resulted in a low rate of growth of employment, on the one hand, and a decline in the quality of employment, on the other. These processes seem to have been intensified in the post-reforms period, as there is a need to reduce the risk emanating from the volatile or unstable global market as well as minimize the cost of production for access to the highly competitive market abroad.

As seen above, most production units are moving towards acquiring highly capital-intensive technology (leading to low growth in employment), making production structures flexible and minimizing labour costs. These have affected workers in this industry. The dynamics of the changes that are taking place in hiring workers in the industry are discussed below.

### **A. Labour and employment in large-scale units**

The large-scale units located in the organized sector are covered under all the major laws that regulate conditions of work, wages, social security and industrial relations.

However, for flexibility in production to adjust to the volatile and fluctuating global market and cost reduction to survive and gain in the highly competitive market, the large units are observed to be adopting the following strategies:

- They outsource or subcontract part of the production process to smaller units outside the factory premises so as to pass on the risk to smaller units and to reduce the cost of production, that is, the cost of building, machinery and other overheads. This has resulted in an increased use of contractors within the factory premises for specific tasks as well as outsourcing part of production work to units outside.
- They also reduce labour costs by (1) hiring “non-permanent” workers as far as possible, (2) paying workers low wages and (3) paying them little or no benefit in terms of social security.
- They provide minimum facilities in the work place to reduce the cost of provision of these facilities.

**Core and periphery employees:** It appears that large companies divide the employees into two categories, namely, core and periphery. Core employees are critical for the functioning of the company. They include top and medium-level managers, technical officers at high levels and other workers with rich skills and experience. Periphery employees include those not so critical for the functioning of the factory and who are not in short supply. They generally include (1) supervisory and semi-supervisory staff, (2) clerical staff in sales and administration, (3) skilled and unskilled workers not in short supply in the market and (4) unskilled production workers, sweepers, loading/unloading workers etc. The core employees are usually employed as “permanent” employees, with all benefits given to them under the laws relating to the conditions of work, wages and social protection. Some of them are also employed as “regular workers”, enjoying a certain degree of employment security (one month’s notice for removal, for example).

Periphery workers are employed as temporary staff (clerical workers in sales, administration), contract workers (skilled and semi-skilled production workers) and casual workers on daily basis (unskilled workers). Temporary workers mainly fill posts that are regular, in the sense that they are needed for the regular functioning of the unit, but the unit does not want to bear the burden of their social security cost. Contract workers are employed largely for specific production tasks, where a certain level of productivity is important and where a contractor can be made responsible for the supply as well as productivity of workers. For example, contract workers in a large textile mill can be employed for processing work or for cutting, sizing etc. Casual or daily workers usually perform unskilled work such as cleaning, sweeping, loading, unloading and transporting. They receive the lowest wages and are at the bottom in the hierarchy of workers.

As Table 3.16 shows, the average employment in the five selected LSI units varies between 670 and 9,170, the average being 1,834. Of these, 374 are women (20 per cent).

**Table 3.16 Employment by occupation and skill levels in LSI units**

| Type of employment        | Unit |       |       |     |     | Total | Average | Percentage distribution of total workers | Percentage distribution of men and women workers |
|---------------------------|------|-------|-------|-----|-----|-------|---------|------------------------------------------|--------------------------------------------------|
|                           | 1    | 2     | 3     | 4   | 5   |       |         |                                          |                                                  |
| Manager                   |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 0    | 10    | 0     | 0   | 0   | 10    | 2       | 0.11                                     | 0.56                                             |
| Men                       | 12   | 62    | 25    | 3   | 10  | 112   | 22.4    | 1.22                                     | 1.52                                             |
| Total                     | 12   | 72    | 25    | 3   | 10  | 122   | 24.4    | 1.33                                     | 1.33                                             |
| Supervisory               |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 0    | 23    | 30    | 1   | 0   | 54    | 10.8    | 0.59                                     | 3.00                                             |
| Men                       | 73   | 88    | 50    | 14  | 30  | 255   | 51      | 2.78                                     | 3.46                                             |
| Total                     | 73   | 111   | 80    | 15  | 30  | 309   | 61.8    | 3.37                                     | 3.37                                             |
| Sales                     |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 2    | 10    | 30    | 0   | 0   | 42    | 8.4     | 0.46                                     | 2.33                                             |
| Men                       | 9    | 42    | 100   | 10  | 0   | 161   | 32.2    | 1.76                                     | 2.18                                             |
| Total                     | 11   | 52    | 130   | 10  | 0   | 203   | 40.6    | 2.21                                     | 2.21                                             |
| Administrator             |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 0    | 14    | 10    | 1   | 0   | 25    | 5       | 0.27                                     | 1.39                                             |
| Men                       | 2    | 66    | 40    | 10  | 22  | 140   | 28      | 1.53                                     | 1.90                                             |
| Total                     | 2    | 80    | 50    | 11  | 22  | 165   | 33      | 1.80                                     | 1.80                                             |
| Production (skilled)      |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 0    | 173   | 0     | 50  | 0   | 223   | 44.6    | 2.43                                     | 12.4                                             |
| Men                       | 495  | 3 272 | 1 000 | 110 | 298 | 5175  | 1 035   | 56.43                                    | 70.20                                            |
| Total                     | 495  | 3 445 | 1 000 | 160 | 298 | 5398  | 1 079.6 | 58.86                                    | 58.86                                            |
| Production (semi-skilled) |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 18   | 62    | 850   | 33  | 0   | 963   | 192.6   | 10.50                                    | 53.53                                            |
| Men                       | 250  | 238   | 200   | 79  | 40  | 807   | 161.4   | 8.80                                     | 10.95                                            |
| Total                     | 268  | 300   | 1 050 | 112 | 40  | 1 770 | 354     | 19.30                                    | 19.30                                            |
| Unskilled/manual          |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 0    | 27    | 0     | 0   | 0   | 27    | 5.4     | 0.29                                     | 1.50                                             |
| Men                       | 13   | 56    | 0     | 0   | 0   | 69    | 13.8    | 0.75                                     | 0.94                                             |
| Total                     | 13   | 83    | 0     | 0   | 0   | 96    | 19.2    | 1.05                                     | 1.05                                             |
| Others                    |      |       |       |     |     |       |         |                                          |                                                  |
| Female                    | 0    | 0     | 300   | 150 | 5   | 455   | 91      | 4.96                                     | 25.29                                            |
| Men                       | 88   | 0     | 100   | 200 | 265 | 653   | 130.6   | 7.12                                     | 8.86                                             |
| Total                     | 88   | 0     | 400   | 350 | 270 | 1 108 | 221.6   | 12.08                                    | 12.08                                            |
| Total workers             |      |       |       |     |     |       |         |                                          |                                                  |
| Women                     | 20   | 319   | 1 220 | 235 | 5   | 1 799 | 359.8   | 19.62                                    | 100                                              |
| Men                       | 942  | 3 824 | 1 515 | 426 | 665 | 7 372 | 1 474.4 | 80.38                                    | 100                                              |
| Grand total               | 962  | 4 143 | 2 735 | 661 | 670 | 9 171 | 1 834.2 | 100                                      | 100                                              |

Source: Field survey.



About 9 per cent are managers, department heads and supervisors and in sales and administration. The rest are in production and related activities and in housekeeping. Among production workers, skilled production workers are the most important, and constitute 58.87 per cent of the total. These workers, as seen earlier, do not necessarily possess formal qualifications but have acquired skills on the job. Semi-skilled production workers constitute 19.30 per cent of the total while 1.05 per cent employees (20) are unskilled workers. In addition, 12.08 per cent are casual workers engaged in transport, loading and unloading, sweeping and cleaning, housekeeping etc.

Except in one unit, there is no woman in a managerial position. Women are predominantly production workers, mainly semi-skilled and unskilled. They are also employed as casual workers, and in sales and administration, mainly at the clerical level.

### **Employment status of workers**

As expected, not all are “permanent” employees entitled to all benefits related to social security, leave of different kinds etc. Of the total workers, 28 per cent are permanent employees and 48.20 per cent have a “regular” job but are not entitled to the benefits to which “permanent” employees are entitled. These are “temporary” employees; 15.9 per cent are contract workers, and 9.6 per cent are daily casual workers; 8.3 per cent employees are “other” workers, implying contract-cum-casual workers, short-term workers etc. In short, the large units do not carry the responsibility of providing social protection and leave etc. to all workers.

Table 3.17 shows that the majority of managers (89 per cent) are permanent employees and more than one-fifth employees in sales and administration are “permanent”. The rest are “regular” but “temporary”, because unlike permanent workers they can be terminated without notice period. Since skilled workers are important for production, 37.50 per cent are “permanent” and 57.40 per cent “regular”. Below them all, namely, semi-skilled, unskilled and casual, are either on contract or are casual workers. Contract workers are usually employed through contractors while casual employees have highly unstable jobs. To put it differently, more than two-thirds of LSI workers have non-permanent employment. Investigations for the study showed that none of the LSI units has employed a single “permanent” production worker in the past eight–ten years. The table indicates that these units pay full benefits only to 28–30 per cent of their employees.

### **Profile of workers**

**Age composition:** Most employees in the LSI units are in the 15–50 years age group. About 11 per cent are between 50 and 60 years of age. As Table 3.18 shows, all are employed either in administration or in supervisory work. All production workers – skilled, semi-skilled and unskilled – are in the 35–50 age group. It seems the LSI units do not employ child workers.

**Education levels:** Managers, followed by supervisors, are the most qualified employees. All managers are technically or professionally qualified. Though a few supervisors have studied up to class X, all the rest are technically qualified. The

**Table 3.17 Employment status in LSI units**

| Type of employment |              | Share in employment (%) |                     |               |              |              |               |
|--------------------|--------------|-------------------------|---------------------|---------------|--------------|--------------|---------------|
|                    |              | Permanent               | Regular (temporary) | Contract      | Daily casual | Other        | % of total    |
| Manager            | Women        | 90.00                   | 10.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | Men          | 85.00                   | 15.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>89.00</b>            | <b>100.00</b>       | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b>  | <b>100.00</b> |
| Supervisor         | Women        | 10.00                   | 90.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | Men          | 25.00                   | 75.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>22.50</b>            | <b>77.50</b>        | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b>  | <b>100.00</b> |
| Sales              | Women        | 10.00                   | 90.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | Men          | 20.00                   | 80.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>17.50</b>            | <b>82.50</b>        | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b>  | <b>100.00</b> |
| Administrator      | Women        | 10.00                   | 90.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | Men          | 20.00                   | 80.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>15.50</b>            | <b>84.50</b>        | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b>  | <b>100.00</b> |
| Skilled            | Women        | 10.00                   | 90.00               | 0.00          | 0.00         | 0.00         | 100.00        |
|                    | Men          | 40.00                   | 57.40               | 2.60          | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>37.50</b>            | <b>57.50</b>        | <b>2.50</b>   | <b>0.00</b>  | <b>0.00</b>  | <b>100.0</b>  |
| Semi-skilled       | Women        | 0.00                    | 0.00                | 22.40         | 0.00         | 77.60        | 100.00        |
|                    | Men          | 0.00                    | 1.60                | 82.50         | 0.00         | 15.90        | 100.00        |
|                    | <b>Total</b> | <b>0.00</b>             | <b>0.90</b>         | <b>54.50</b>  | <b>0.00</b>  | <b>44.70</b> | <b>100.00</b> |
| Unskilled          | Women        | 0.00                    | 0.00                | 100.00        | 0.00         | 0.00         | 100.00        |
|                    | Men          | 0.00                    | 0.00                | 100.00        | 0.00         | 0.00         | 100.00        |
|                    | <b>Total</b> | <b>0.00</b>             | <b>0.00</b>         | <b>100.00</b> | <b>0.00</b>  | <b>0.00</b>  | <b>100.00</b> |
| Other              | Women        | 0.00                    | 0.00                | 0.80          | 0.00         | 99.20        | 100.00        |
|                    | Men          | 0.00                    | 0.00                | 9.00          | 85.90        | 5.10         | 100.00        |
|                    | <b>Total</b> | <b>0.00</b>             | <b>0.00</b>         | <b>7.90</b>   | <b>74.40</b> | <b>17.70</b> | <b>100.00</b> |
| <b>Grand total</b> | <b>Women</b> | <b>11.00</b>            | <b>20.20</b>        | <b>23.60</b>  | <b>0.00</b>  | <b>45.20</b> | <b>100.00</b> |
|                    | <b>Men</b>   | <b>32.00</b>            | <b>42.20</b>        | <b>14.60</b>  | <b>11.20</b> | <b>2.00</b>  | <b>100.00</b> |
|                    | <b>Total</b> | <b>28.00</b>            | <b>48.20</b>        | <b>15.90</b>  | <b>9.60</b>  | <b>8.30</b>  | <b>100.00</b> |

*Note: Temporary workers have a short-term job.*

education levels of employees in administration and sales categories are slightly different, as they do not possess technical qualifications but instead are graduates in different disciplines (Table 3.19).

It is important to note that except for 9 per cent of male skilled production workers, none of the production workers has any formal technical qualifications. Most have

**Table 3.18 Age composition of workers in LSI units**

| Type of employment |              | Age group  |              |              |              |            | Total      |
|--------------------|--------------|------------|--------------|--------------|--------------|------------|------------|
|                    |              | 0–14       | 15–35        | 35–50        | 50–60        | 60+        |            |
| Manager            | Women        | 0.0        | 0.0          | 100.0        | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 0.0          | 100.0        | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>0.0</b>   | <b>100.0</b> | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| Supervisor         | Women        | 0.0        | 5.6          | 27.8         | 66.70        | 0.0        | 100        |
|                    | Men          | 0.0        | 6.7          | 26.7         | 66.70        | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>6.1</b>   | <b>26.9</b>  | <b>66.7</b>  | <b>0.0</b> | <b>100</b> |
| Sales              | Women        | 0.0        | 100.0        | 0.0          | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 33.3         | 67.7         | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>66.7</b>  | <b>33.33</b> | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| Administrator      | Women        | 0.0        | 5.60         | 27.80        | 66.70        | 0.0        | 100        |
|                    | Men          | 0.0        | 3.30         | 30.00        | 66.70        | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>4.50</b>  | <b>28.80</b> | <b>66.70</b> | <b>0.0</b> | <b>100</b> |
| Skilled            | Women        | 0.0        | 0.0          | 100.0        | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 50.00        | 50.00        | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>0.0</b>   | <b>100.0</b> | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| Semi-skilled       | Women        | 0.0        | 100.0        | 0.0          | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 100.0        | 0.0          | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>100.0</b> | <b>0.0</b>   | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| Unskilled          | Women        | 0.0        | 50.0         | 50.0         | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 67.7         | 33.3         | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>63.2</b>  | <b>36.8</b>  | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| Other              | Women        | 0.0        | 100.0        | 0.0          | 0.0          | 0.0        | 100        |
|                    | Men          | 0.0        | 100.0        | 0.0          | 0.0          | 0.0        | 100        |
|                    | <b>Total</b> | <b>0.0</b> | <b>100.0</b> | <b>0.0</b>   | <b>0.0</b>   | <b>0.0</b> | <b>100</b> |
| <b>Grand total</b> | <b>Women</b> | <b>0.0</b> | <b>49.8</b>  | <b>45.1</b>  | <b>5.2</b>   | <b>0.0</b> | <b>100</b> |
|                    | <b>Men</b>   | <b>0.0</b> | <b>41.3</b>  | <b>30.0</b>  | <b>28.7</b>  | <b>0.0</b> | <b>100</b> |
|                    | <b>Total</b> | <b>0.0</b> | <b>46.6</b>  | <b>41.4</b>  | <b>12.0</b>  | <b>0.0</b> | <b>100</b> |

studied below class X and have acquired skills through formal or on-the-job training. About 15 per cent semi-skilled, 32 per cent unskilled and 72 per cent casual workers are illiterate. The rest have studied up to class X.

As expected, women workers are less qualified than the men. Of the total women workers, 15 per cent are illiterate; the percentage is 8.3 among men. Also, against 4.5 per cent of women employees with graduation or higher qualifications, more than 11 per cent male employees are graduates or have higher qualifications.

**Table 3.19 Education and skill levels of employees in LSI units**  
(%)

| Type of employment   | Sex          | Illiterate  | Up to class V | Up to class X | Technical certificate | Technical diploma | Graduates   | Post-graduate | Professional qualification | Total         |
|----------------------|--------------|-------------|---------------|---------------|-----------------------|-------------------|-------------|---------------|----------------------------|---------------|
| Manager              | Female       | 0.0         | 0.0           | 0.00          | 0.0                   | 20.00             | 50.0        | 0.0           | 30.00                      | 100.00        |
|                      | Male         | 0.0         | 0.0           | 0.00          | 0.0                   | 16.50             | 27.2        | 14.6          | 41.70                      | 100.00        |
|                      | <b>Total</b> | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>   | <b>0.0</b>            | <b>17.30</b>      | <b>26.9</b> | <b>14.4</b>   | <b>41.30</b>               | <b>100.00</b> |
| Supervisor           | Female       | 0.0         | 0.0           | 0.00          | 0.0                   | 100.00            | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | Male         | 0.0         | 0.0           | 2.30          | 7.9                   | 64.40             | 21.5        | 4.0           | 0.00                       | 100.00        |
|                      | <b>Total</b> | <b>0.0</b>  | <b>0.0</b>    | <b>1.70</b>   | <b>5.9</b>            | <b>73.40</b>      | <b>16.0</b> | <b>3.0</b>    | <b>0.00</b>                | <b>100.00</b> |
| Sales                | Female       | 0.0         | 0.0           | 0.00          | 0.0                   | 0.00              | 0.0         | 32.8          | 67.20                      | 100.00        |
|                      | Male         | 0.0         | 0.0           | 0.00          | 1.0                   | 1.40              | 1.0         | 38.3          | 58.40                      | 100.00        |
|                      | <b>Total</b> | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>   | <b>0.7</b>            | <b>1.10</b>       | <b>0.7</b>  | <b>37.0</b>   | <b>60.40</b>               | <b>100.00</b> |
| Administrator        | Female       | 0.0         | 0.0           | 0.00          | 0.0                   | 0.00              | 0.0         | 50.0          | 50.00                      | 100.00        |
|                      | Male         | 0.0         | 0.0           | 4.30          | 0.0                   | 1.10              | 4.3         | 45.2          | 45.20                      | 100.00        |
|                      | <b>Total</b> | <b>0.0</b>  | <b>0.0</b>    | <b>3.50</b>   | <b>0.0</b>            | <b>0.90</b>       | <b>3.5</b>  | <b>46.0</b>   | <b>46.00</b>               | <b>100.00</b> |
| Skilled              | Female       | 0.0         | 80.0          | 20.00         | 0.0                   | 0.00              | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | Male         | 4.6         | 76.9          | 9.10          | 9.1                   | 0.20              | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | <b>Total</b> | <b>2.6</b>  | <b>78.3</b>   | <b>15.10</b>  | <b>4.1</b>            | <b>0.00</b>       | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>                | <b>100.00</b> |
| Semi-skilled         | Female       | 10.0        | 40.0          | 50.00         | 0.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | Male         | 20.0        | 7.3           | 72.70         | 0.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | <b>Total</b> | <b>14.9</b> | <b>15.8</b>   | <b>65.30</b>  | <b>4.0</b>            | <b>0.0</b>        | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>                | <b>100.00</b> |
| Unskilled            | Female       | 10.0        | 30.0          | 60.00         | 0.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | Male         | 27.4        | 0.0           | 72.60         | 0.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | <b>Total</b> | <b>32.0</b> | <b>0.0</b>    | <b>68.00</b>  | <b>0.0</b>            | <b>0.0</b>        | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>                | <b>100.00</b> |
| Other                | Female       | 80.0        | 7.50          | 7.50          | 5.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | Male         | 60.0        | 10.0          | 30.00         | 0.0                   | 0.0               | 0.0         | 0.0           | 0.00                       | 100.00        |
|                      | <b>Total</b> | <b>72.0</b> | <b>7.50</b>   | <b>21.50</b>  | <b>0.0</b>            | <b>0.0</b>        | <b>0.0</b>  | <b>0.0</b>    | <b>0.00</b>                | <b>100.00</b> |
| <b>Total workers</b> | Female       | <b>15.0</b> | <b>20.0</b>   | <b>60.20</b>  | <b>0.0</b>            | <b>2.5</b>        | <b>0.0</b>  | <b>1.2</b>    | <b>1.10</b>                | <b>100.00</b> |
|                      | Male         | <b>8.3</b>  | <b>27.8</b>   | <b>42.30</b>  | <b>6.0</b>            | <b>3.9</b>        | <b>2.0</b>  | <b>4.0</b>    | <b>5.70</b>                | <b>100.00</b> |
|                      | <b>Total</b> | <b>5.0</b>  | <b>28.5</b>   | <b>51.30</b>  | <b>3.6</b>            | <b>3.3</b>        | <b>1.2</b>  | <b>2.9</b>    | <b>4.30</b>                | <b>100.00</b> |

Source: Field survey.

To put it differently, most production workers lack have technical qualifications. They are trained in the course of employment – either because of shortage of qualified workers or because the units want to reduce the cost of hiring qualified workers.

### Training and capacity building

All the LSI units have a training policy as well as a department for training and capacity building. There is a small regular staff for training and/or outside experts are invited. In the case of three units, employees are sent out, even abroad, for training and exposure. The areas of training are usually quality control, ISO certification, technical training, and training in supervision and management. Women employees are also trained in housekeeping. However, all this training is meant mainly for managerial, supervisory, technical and sales/administrative staff. On an average, each of the LSI units had organized 15–20 such training programmes during the last year.

For production and lower ranking workers, there are few training programmes. Interestingly, two of the five units have organized training on HIV/AIDS for their workers. Most other training is conducted on the job as and when needed, and its duration ranges from two hours to two days. In three units, in-house formal training was also conducted. The duration was two–three days, and the cost was borne by the units. Women production workers were included in these programmes. It appears that LSI units manage mainly with on-the-job training as far as production workers are concerned.

### Method of recruitment

The LSI units recruit employees using different methods, depending on the nature and level of employees. The most popular way of recruitment is through private consultants and private recruitment agencies: 9.5 per cent were recruited through newspaper advertisements. Table 3.20 shows that almost all employees in managerial/supervisory positions and in sales and administration have been recruited by these two methods. Some supervisory and administrative staff (almost one-third) has also been recruited through contacts or recommendations.

**Table 3.20 Methods of recruitment in LSI units**  
(%)

| Type of employment      | Advertisement newspaper | Private consultant/<br>recruiting agency | Contacts/<br>recommendation | Employment exchange | Contractor  | Total        |
|-------------------------|-------------------------|------------------------------------------|-----------------------------|---------------------|-------------|--------------|
| Manager                 | 25.0                    | 50.0                                     | 25.0                        | 0.0                 | 0.0         | 100.0        |
| Supervisor              | 0.0                     | 66.7                                     | 33.3                        | 0.0                 | 0.0         | 100.0        |
| Sales                   | 33.3                    | 66.7                                     | 0.0                         | 0.0                 | 0.0         | 100.0        |
| Administrator           | 0.0                     | 66.7                                     | 33.3                        | 0.0                 | 0.0         | 100.0        |
| Production skilled      | 0.0                     | 0.0                                      | 0.0                         | 50.0                | 50.0        | 100.0        |
| Production semi-skilled | 0.0                     | 0.0                                      | 0.0                         | 50.0                | 50.0        | 100.0        |
| Unskilled manual        | 0.0                     | 0.0                                      | 0.0                         | 0.0                 | 100.0       | 100.0        |
| Others                  | 0.0                     | 0.0                                      | 0.0                         | 0.0                 | 100.0       | 100.0        |
| <b>Total workers</b>    | <b>9.5</b>              | <b>38.8</b>                              | <b>13.5</b>                 | <b>19.0</b>         | <b>19.0</b> | <b>100.0</b> |

Production workers are employed through contractors, and through employment exchanges. In short, contractors play an important role in recruiting production workers, while advertisements/private recruitment agencies are important in hiring managerial and administrative staff.

The LSI units do not give written contracts of employment to all their workers (Table 3.21). These are reserved for managerial/supervisory and sales/administrative staff. Half the managers and one-third of the administrative and sales staff have been given written contracts. All unskilled and casual workers operate under informal non-written contracts.

**Wages and working conditions in LSI units**

Salaries and wages of LSI employees are presented separately in Tables 3.22 and 3.23.

For each category, the average monthly salary of women workers is less than that of men workers. This could be largely due to the segregation of work between men and women workers. In the case of salaries in the sales, administration and accounts departments, the low salary of women could be because women perform primarily clerical work, while men are in higher positions. Even in the same category of work (for example, middle managers), the unequal salaries of women workers could be due to lack of experience or lower qualifications.

As for wages of production workers, these are determined by the Wage Board or by agreements arrived at by workers and employers (Table 3.23). These rates are also influenced by labour productivity, inflation etc., on the one hand, and the bargaining power of the union, on the other. In the case of non-permanent workers, wages are

**Table 3.21 Nature of contracts in LSI units**  
 (%)

| Type of employment      | Written contract | Informal contract | No contract | Total        |
|-------------------------|------------------|-------------------|-------------|--------------|
| Manager                 | 50.0             | 0.0               | 50.0        | 100.0        |
| Supervisory             | 33.3             | 0.0               | 66.7        | 100.0        |
| Sales                   | 33.3             | 0.0               | 66.7        | 100.0        |
| Administrator           | 33.3             | 0.0               | 66.7        | 100.0        |
| Production skilled      | 0.0              | 33.3              | 66.7        | 100.0        |
| Production semi-skilled | 0.0              | 33.3              | 66.7        | 100.0        |
| Unskilled manual        | 0.0              | 100.0             | 0.0         | 100.0        |
| Others                  | 0.0              | 100.0             | 0.0         | 100.0        |
| <b>Total workers</b>    | <b>23.8</b>      | <b>19.0</b>       | <b>57.1</b> | <b>100.0</b> |

**Table 3.22 Average monthly salary in LSI units**  
 (Rs)

| Type of employment | 2006–07 |        |
|--------------------|---------|--------|
|                    | Women   | Men    |
| Top manager        | 0       | 23 750 |
| Middle manager     | 10 792  | 14 792 |
| Supervisor         | 5 250   | 8 750  |
| Sales              | 9 500   | 13 750 |
| Administrator      | 3 040   | 6 040  |

determined in different ways. For contract workers, rates are determined by the contractors concerned, and the unit does not usually follow up the actual payment of wages. In the case of other workers – casual workers and temporary workers – market forces also have a role to play.

**Table 3.23 Daily wage rates of production workers in LSI units**  
(Rs)

| Type of employment             | 2006–07 |     |
|--------------------------------|---------|-----|
|                                | Women   | Men |
| Production worker skilled      | 200     | 223 |
| Production worker semi-skilled | 115     | 130 |
| Manual worker unskilled        | 60      | 60  |
| Average wage rate              | 115     | 131 |

*Note: These refer to the rates determined by the Wage Board.*

**Working conditions in units:** Since all these units are governed by the Factories Act, 1948, the working conditions on the premises are determined by the clauses of the Act. It was observed that many of the clauses have been implemented in these units (Table 3.24). A work shift is of eight hours per day for all workers, with a break of 30 minutes. All units have enough light, ventilation, temperature, clean air, as well as first-aid kits, measures for occupational safety (boots, masks and well-laid-down machinery) and for occupational health. The only facilities missing were child care centres for children of workers. It was argued that this was because the number of children of “permanent” production workers was not enough to warrant such a facility.

Investigations for the study, however, showed that in the case of two units, the surroundings were very filthy and no proper care was being taken for disposal of discharges in this highly polluting industry. The number of workers was also much larger than what the facilities could accommodate. Since the facilities were primarily meant for “permanent” and “regular” workers, they were far from adequate in these two units.

**Benefits given to employees:** Apart from wages, workers are also entitled to benefits such as paid weekly holidays, casual leave, earned leave, provident fund (PF)/pension and gratuity, dearness allowance (that is, earnings linked with price rise), maternity benefits and so on. It was observed that all facilities are ensured for “permanent” workers only. “Regular” and “temporary” workers get paid weekly holiday and casual leave in all the units. Four out of the five units also give them PF. However, they are being denied other benefits. In other words, production workers get these benefits as per their employment status. “Permanent” production workers are entitled to all the stipulated benefits, while weekly holidays, casual leave and PF are given to “regular” workers. The rest are denied all these benefits, particularly if they are “daily” workers. The benefits received by non-daily workers depend on the contractors who hire them.

**Table 3.24 Working conditions in LSI units**

| Unit         | Ventilation<br>in factory/<br>room | Adequate<br>light | Temperature | Safety   | Clean<br>air | Drinking<br>water | Occupational<br>health | First-aid/<br>medical<br>kit | Clean<br>surrounding<br>toilet | Women's<br>toilet | Child<br>care<br>centre | Any<br>other |
|--------------|------------------------------------|-------------------|-------------|----------|--------------|-------------------|------------------------|------------------------------|--------------------------------|-------------------|-------------------------|--------------|
| 1            | 1                                  | 1                 | 1           | 1        | 1            | 1                 | 1                      | 1                            | 1                              | 1                 | 0                       | 0            |
| 2            | 1                                  | 1                 | 1           | 1        | 1            | 1                 | 1                      | 1                            | 1                              | 1                 | 0                       | 0            |
| 3            | 1                                  | 1                 | 1           | 1        | 1            | 1                 | 1                      | 1                            | 1                              | 1                 | 0                       | 0            |
| 4            | 1                                  | 1                 | 1           | 1        | 1            | 1                 | 1                      | 1                            | 1                              | 1                 | 0                       | 0            |
| 5            | 1                                  | 1                 | 1           | 1        | 1            | 1                 | 0                      | 1                            | 1                              | 1                 | 0                       | 0            |
| <b>Total</b> | <b>5</b>                           | <b>5</b>          | <b>5</b>    | <b>5</b> | <b>5</b>     | <b>5</b>          | <b>4</b>               | <b>5</b>                     | <b>5</b>                       | <b>5</b>          | <b>0</b>                | <b>0</b>     |

*Source: Primary survey.*

In short, these LSI units have been successful in shirking their responsibility of providing minimum benefits and facilities to all their workers on the pretext that they are not their direct employees.

### **‘Decent’ work and labour standards**

All the five units fully agreed with the desirability of “decent” work-related labour standards. They even agreed on the right to “freedom of association” and “dialogue” between workers and managers. The units agreed that adhering to labour standards helps improve productivity and reduce the cost of production in the medium term. Interestingly, they also agreed that unemployment insurance is necessary to help workers in times of frictional unemployment (that is, not structural, temporary, or arising due to short-term event or crisis). Asked why all employees are not covered under the labour standards, they said they could not afford “permanent” workers in an unstable global market.

### **B. Labour and employment in SSI units**

As stated earlier, the sample of SSI units includes 16 units, eight each from the textile and garment sectors, located in Bhivandi, Surat and Coimbatore (textiles), and in Tirupur and Ahmedabad (garments).

As expected, SSI units have a small staff at the managerial level and in sales and administration. On an average, there are 1.7 managers and 1.8 supervisors in these units, or three–four managers-cum-supervisors per SSI unit. Similarly, there are one–two persons in sales and three–five persons in administration. That is, each unit has seven–nine employees. The majority are production workers – skilled, semi-skilled and unskilled. This is because, given the scale of operation, these units do not need many people in the managerial and administrative categories. On an average, 32 are skilled workers, 15 semi-skilled, and four–five are unskilled and casual workers.

The share of women in the total SSI employment is 3.25 per cent, which is slightly better than that in the LSI sector. However, except for a unit in Tirupur, women are



**Table 3.25 Employment in SSI units, 2006–07: Sex ratio**

| Type of employment | Sex                | Ahmedabad     | Bhivandi     | Coimbatore  | Surat        | Tirupur       | Total        | Percentage duration of total | Percentage duration of total male and female |
|--------------------|--------------------|---------------|--------------|-------------|--------------|---------------|--------------|------------------------------|----------------------------------------------|
| Manager            | Female             | 0.00          | 0.00         | 0.00        | 0.00         | 0.20          | 0.06         | 0.10                         | 0.34                                         |
|                    | Male               | 4.00          | 0.50         | 0.80        | 0.00         | 1.40          | 1.25         | 2.10                         | 2.97                                         |
| Supervisor         | Female             | 2.50          | 0.00         | 0.00        | 0.00         | 0.60          | 0.50         | 0.84                         | 2.85                                         |
|                    | Male               | 8.50          | 1.50         | 0.60        | 1.00         | 2.60          | 2.38         | 3.99                         | 5.66                                         |
| Sales              | Female             | 2.00          | 0.00         | 0.00        | 0.00         | 0.00          | 0.25         | 0.42                         | 1.42                                         |
|                    | Male               | 9.00          | 0.00         | 0.00        | 2.50         | 0.00          | 1.44         | 2.41                         | 3.42                                         |
| Administrator      | Female             | 1.00          | 0.00         | 0.00        | 0.00         | 0.20          | 0.19         | 0.32                         | 1.08                                         |
|                    | Male               | 7.00          | 1.00         | 0.20        | 2.00         | 0.60          | 1.50         | 2.52                         | 3.57                                         |
| Skilled            | Female             | 22.50         | 0.00         | 1.20        | 0.00         | 19.00         | 9.13         | 15.31                        | 51.99                                        |
|                    | Male               | 67.00         | 11.00        | 3.00        | 21.00        | 33.40         | 23.75        | 39.83                        | 56.47                                        |
| Semi-skilled       | Female             | 7.50          | 0.00         | 0.60        | 0.00         | 15.80         | 6.06         | 10.16                        | 34.51                                        |
|                    | Male               | 0.00          | 0.50         | 0.20        | 2.00         | 26.20         | 8.56         | 14.36                        | 20.35                                        |
| Unskilled          | Female             | 8.50          | 0.00         | 0.20        | 1.00         | 0.00          | 1.25         | 2.10                         | 7.12                                         |
|                    | Male               | 16.00         | 0.50         | 1.20        | 3.00         | 0.80          | 3.06         | 5.13                         | 7.28                                         |
| Other              | Female             | 0.00          | 0.00         | 0.00        | 1.00         | 0.00          | 0.13         | 0.22                         | 0.74                                         |
|                    | Male               | 1.00          | 0.00         | 0.00        | 0.00         | 0.00          | 0.13         | 0.22                         | 0.31                                         |
| <b>Total</b>       | <b>Female</b>      | <b>44.00</b>  | <b>0.00</b>  | <b>2.00</b> | <b>2.00</b>  | <b>35.80</b>  | <b>17.56</b> | <b>29.45</b>                 | <b>100.00</b>                                |
|                    | <b>Male</b>        | <b>112.50</b> | <b>15.00</b> | <b>6.00</b> | <b>31.50</b> | <b>65.00</b>  | <b>42.06</b> | <b>70.53</b>                 | <b>100.00</b>                                |
|                    | <b>Grand total</b> | <b>156.50</b> | <b>15.00</b> | <b>8.00</b> | <b>33.50</b> | <b>100.80</b> | <b>59.63</b> | <b>100.00</b>                | <b>100.00</b>                                |

absent from the management category. Their presence in the supervisory category is marginally better. Women are important largely in the category of production workers – skilled, semi-skilled and unskilled. They are also important as casual workers employed for washing and cleaning, sweeping, loading/unloading and the like.

Since most SSI units do not want to bear the burden of “permanent workers”, they employ minimum numbers in that category (Table 3.26). The status of “permanent workers” is given to managers, supervisors, a part of the small staff in sales and administration, and a few production workers. That is, only about 14 per cent are permanent workers. The majority of production workers are on contract or temporary, while unskilled production and casual workers are hired on a daily basis. About 80 per cent in the sales department are contract workers, mainly engaged in direct sales of products in the market.

**Table 3.26 Status of employees in SSI units**  
(%)

| Worker's status | Manager       | Supervisor    | Sales         | Administrator | Skilled       | Semi-skilled  | Unskilled     | Other         |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Permanent       | 85.71         | 10.56         | 5.11          | 33.33         | 10.26         | 0.00          | 0.00          | 0.00          |
| Regular         | –             | 20.00         | 6.11          | 66.67         | 17.60         | 0.00          | 0.00          | 0.00          |
| Temporary       | 14.29         | 69.44         | 7.41          | 0.00          | 11.42         | 57.78         | 20.55         | 0.00          |
| Contract        | 0.00          | 0.00          | 81.48         | 0.00          | 29.25         | 42.22         | 19.18         | 0.00          |
| Daily casual    | 0.00          | 0.00          | 0.00          | 0.00          | 31.48         | 0.00          | 60.27         | 100.00        |
| Other           | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          |
| <b>Total</b>    | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

### Recruitment in SSI units

It is interesting to note that some 47 per cent employees in the SSI units were recruited through contacts and recommendations (Table 3.27). Being small, they depend on less formal means for recruitment. About 12 per cent of employees were recruited through advertisement in newspapers, most of these in the managerial/supervisory/administrative categories.

**Table 3.27 Recruitment and contract in SSI units**  
(%)

| Type of employment | Advertisement/<br>newspaper | Private consultant/<br>recruiting agency | Contacts/<br>recommendation | Employment exchange | Contractor   | Other       | Direct recruitment | Total      |
|--------------------|-----------------------------|------------------------------------------|-----------------------------|---------------------|--------------|-------------|--------------------|------------|
| Manager            | 33.33                       | 0.00                                     | 66.67                       | 0.00                | 0.00         | 0.00        | 0.00               | 100        |
| Supervisor         | 9.09                        | 27.27                                    | 54.55                       | 0.00                | 0.00         | 0.00        | 9.09               | 100        |
| Sales              | 0.00                        | 0.00                                     | 100.00                      | 0.00                | 0.00         | 0.00        | 0.00               | 100        |
| Administrator      | 37.50                       | 12.50                                    | 50.00                       | 0.00                | 0.00         | 0.00        | 0.00               | 100        |
| Skilled worker     | 0.00                        | 11.11                                    | 0.00                        | 0.00                | 55.27        | 0.00        | 33.33              | 100        |
| Semi-skilled       | 0.00                        | 14.29                                    | 42.86                       | 8.57                | 14.29        | 10.00       | 10.00              | 100        |
| Unskilled          | 0.00                        | 0.00                                     | 0.00                        | 0.00                | 11.11        | 33.33       | 55.56              | 100        |
| Other              | 0.00                        | 0.00                                     | 100.00                      | 0.00                | 0.00         | 0.00        | 0.00               | 100        |
| <b>Total</b>       | <b>12.82</b>                | <b>20.51</b>                             | <b>48.72</b>                | <b>5.13</b>         | <b>2.56</b>  | <b>2.56</b> | <b>7.69</b>        | <b>100</b> |
| <b>Grand total</b> | <b>12.24</b>                | <b>8.33</b>                              | <b>46.94</b>                | <b>3.16</b>         | <b>14.08</b> | <b>2.04</b> | <b>10.20</b>       | <b>100</b> |

Production workers – skilled, semi-skilled and unskilled – are recruited mainly through contracts and recommendations, contractors and direct recruitment. The SSI units also use employment exchanges sometimes. In short, the SSI units use more informal methods, that is, contacts, recommendations, direct recruitment and contractors.

Table 3.28 shows that the SSI units do not give written contracts to all employees.

**Table 3.28 Occupational status of workers, by employment status in SSI units**  
(%)

| Nature of contract | Manager       | Supervisor    | Salesman      | Administrator | Skilled       | Semi-skilled  | Unskilled     | Other         | Total         |
|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Written contract   | 100.00        | 22.22         | 0.00          | 33.33         | 25.00         | —             | —             | 0.00          | 30.95         |
| Formal non-written | 0.00          | 33.33         | 66.67         | 0.00          | 0.00          | 33.33         | 33.33         | 0.00          | 19.05         |
| Informal           | 0.00          | 44.44         | 33.33         | 66.67         | 75.00         | 66.67         | 66.67         | 100.00        | 50.00         |
| <b>Total</b>       | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

*Source: Primary survey.*

Except for managers, supervisors, administrative staff and 25 per cent skilled workers, no employee received any written contract of employment, while all managers did. Formal non-written contracts were given to sales persons, supervisors and one-third semi-skilled and unskilled workers. All the rest were under informal unwritten contracts. In other words, there were no explicit terms of employment agreed upon by both parties in a formal manner.

**Profile of workers:** More than 55 per cent of the workers in the SSI units were in the 15–35 age group. Some 40 per cent were in the 35–60 age group; the rest were 60-plus. The units had not employed any child labour.

A clear pattern that emerged was that employees in non-production categories were better educated (Table 3.29). Many of them had technical diplomas or were graduates. All the managers and supervisors were graduates and above, or held technical diplomas. Among skilled production workers, 31 per cent had technical certificates and 3.20 per cent had a technical diploma. Of the remaining production workers, 11–12 per cent were illiterate, 20 per cent had studied up to class V and more than 60 per cent up to class X.

The SSI units do consider trained manpower as an important requirement in the new policy environment. Of the 16 units, 12 stated that they consider skilled manpower as a critical input in the new environment, and four reported that they “somewhat” agree with this need. However, being small they are not able to provide training in their units. They said they need help from government or industry associations in this area. Asked how they ensure technically qualified staff/workers, a common response was that they hire qualified people and technically experienced manpower (54.55 per cent units), and/or train them on the job (48.32 per cent units stated this). Only two units in Tirupur said they send workers for outside training or organized in-house training programmes. Since the Tirupur units produce relatively high value-added products, their training needs seem different. On the whole, the SSI units give training within the production unit, usually on the job.

**Table 3.29 Educational and skill qualifications of employees in SSI units**  
(%)

| Status of employees | Illiterates  | Up to class V | Up to class X | Technical certificate | Technical diploma | Graduate    | Total       | Post-graduate |
|---------------------|--------------|---------------|---------------|-----------------------|-------------------|-------------|-------------|---------------|
| Manager             | 0.00         | 0.00          | 4.55          | 0.00                  | 4.55              | 86.36       | 4.55        | 100.00        |
| Supervisor          | 0.00         | 0.00          | 4.08          | 4.08                  | 4.08              | 87.76       | 0.00        | 100.00        |
| Sale                | 0.00         | 0.00          | 14.81         | 0.00                  | 74.07             | 11.11       | 0.00        | 100.00        |
| Administrator       | 0.00         | 0.00          | 0.00          | 0.00                  | 29.63             | 70.37       | 0.00        | 100.00        |
| Skilled             | 5.00         | 15.00         | 46.87         | 30.13                 | 3.20              | 0.00        | 0.00        | 100.00        |
| Semi-skilled        | 0.00         | 16.54         | 81.89         | 0.00                  | 0.00              | 1.57        | 0.00        | 100.00        |
| Unskilled           | 16.85        | 28.77         | 54.38         | 0.00                  | 0.00              | 0.00        | 0.00        | 100.00        |
| Other               | 10.00        | 0.00          | 90.00         | 0.00                  | 0.00              | 0.00        | 0.00        | 100.00        |
| <b>All workers</b>  | <b>11.55</b> | <b>19.90</b>  | <b>43.69</b>  | <b>11.99</b>          | <b>9.63</b>       | <b>2.64</b> | <b>0.31</b> | <b>100.00</b> |

*Source: Primary survey.*

### **Wages and conditions at work**

According to managers/owners of all the SSI units, wages of workers are determined by the market. There is no wage board and no award based on any agreement between employers, labourers and government departments. As expected, top managers are paid the highest monthly salary: Rs 15,000–25,000 in Tirupur, Rs 15,000–20,000 in Ahmedabad, Rs 9,400 in Bhivandi, Rs 9,000 in Coimbatore and Rs 15,500 in Surat. Middle managers and supervisors get a lower salary, Rs 8,000–12,000 per month. The others in sales and administration receive an average monthly salary of Rs 8,000–10,000. Women are paid less in all categories, because of both discrimination and occupational segregation.

Production workers are paid much lower salaries. Skilled production workers earn the highest daily wages (Table 3.30). Men earn Rs 200 in Surat, Rs 360 in Tirupur and Rs 280 in Coimbatore, while women skilled workers earn much less: Rs 65 in Bhivandi, Rs 100 in Ahmedabad and Rs 150 in Tirupur. This could be due to women being employed part-time and/or division of work between men and women. Semi-skilled workers earn lower wages and manual workers get even less in daily wages. The gender wage gap, interestingly, is the lowest in the case of unskilled work. This is perhaps because (1) the skill gap is narrower, (2) there is less occupational segregation and (3) most women in this category work full-time with men.

As for the working conditions (Table 3.31), the majority of units provide adequate ventilation and light, adequate temperature, clean air, drinking water, medical kit and occupational safety, according to their managements. The validity of these claims is discussed in the next chapter.

According to the units, the problem is mainly with respect to provision of separate toilet for women, child care and clean surroundings. No unit has a child care centre, and

**Table 3.30 Average daily wages of production workers in SSI units, 2006**  
(Rs)

| Worker status           | Ahmedabad |     | Bhivandi |     | Coimbatore |     | Surat |     | Tirupur |     |
|-------------------------|-----------|-----|----------|-----|------------|-----|-------|-----|---------|-----|
|                         | Women     | Men | Women    | Men | Women      | Men | Women | Men | Women   | Men |
| Skilled production      | 100       | 350 | 100      | 200 | 65         | 280 | 0     | 200 | 150     | 360 |
| Semi-skilled production | 100       | 200 | 80       | 150 | 125        | 145 | 0     | 120 | 100     | 200 |
| Unskilled               | 100       | 200 | 80       | 90  | 0          | 100 | 80    | 100 | 90      | 100 |

none has a separate toilet for women, the argument being that they do not employ women on a long-term basis. The next chapter examines the availability of the provisions from the workers' point of view.

**Table 3.31 Working conditions in SSI units**  
(% providing facilities)

| District   | Ventilation | Light | Temperature | Safety | Clean air | Drinking water | Occupational health | First-aid/medical kit | Clean surrounding |
|------------|-------------|-------|-------------|--------|-----------|----------------|---------------------|-----------------------|-------------------|
| Ahmedabad  | 100         | 100   | 50          | 100    | 50        | 100            | 100                 | 100                   | 50                |
| Bhivandi   | 50          | 50    | 50          | 50     | 0         | 100            | 50                  | 100                   | 0                 |
| Coimbatore | 80          | 80    | 80          | 80     | 80        | 80             | 80                  | 60                    | 80                |
| Surat      | 100         | 100   | 100         | 100    | 100       | 100            | 100                 | 100                   | 50                |
| Tirupur    | 60          | 60    | 60          | 60     | 60        | 60             | 60                  | 60                    | 60                |

The working hours are very long, ranging from 10 in Tirupur to 12 in Surat and Bhivandi (Table 3.32). Usually there is only one break, of about 30 minutes, for relaxing. At six days a week, the weekly working hours come to 60–72 hours, with far from adequate daily breaks. It is reported that the occupational safety and health of workers in the SSI units are at risk. Six units reported that the occupational health of workers was at risk from pollution, while two units reported danger to safety arising from ergonomic reasons. Textiles and garments being a polluting industry, these are serious concerns. The next chapter discusses this in more detail.

As for other benefits to production workers, these units do not provide them paid weekly holiday, earned leave, provident fund, gratuity etc. (Table 3.33). The benefits are extended mainly to “permanent” employees in administration and management at different levels. Almost all managers get these benefits. However, since not all of them are “permanent”, only 10–30 per cent of employees in administration get the benefits. In the case of skilled production workers, about 10 per cent get the benefits. The rest of the workers do not. In short, only a small fraction of the workers get these very basic benefits.

**Table 3.32 Working hours, breaks and work-related problems in SSI units**

| District   | Average hours/<br>per day | Average recess time<br>(minutes) | Problems arising from<br>pollution | Ergonomic problem |
|------------|---------------------------|----------------------------------|------------------------------------|-------------------|
| Ahmedabad  | 10                        | 30.0                             | 1                                  | 1                 |
| Bhivandi   | 12                        | 30.0                             | 0                                  | 0                 |
| Coimbatore | 11                        | 32.0                             | 2                                  | 0                 |
| Surat      | 12                        | 30.0                             | 2                                  | 2                 |
| Tirupur    | 10                        | 44.0                             | 0                                  | 0                 |

**Table 3.33 SSI units giving benefits, by employment status (%)**

| Employee      | Casual leave | Earned leave | Gratuity | PF     | Maternity benefits | Others |
|---------------|--------------|--------------|----------|--------|--------------------|--------|
| Manager       | 100.00       | 100.00       | 100.00   | 100.00 | 85.71              | 0.00   |
| Supervisor    | 21.12        | 10.56        | 10.56    | 10.56  | 0.00               | 0.00   |
| Sales         | 10.22        | 5.11         | 5.11     | 5.11   | 0.00               | 0.00   |
| Administrator | 33.33        | 33.33        | 33.33    | 33.33  | 11.11              | 0.00   |
| Skilled       | 20.52        | 10.26        | 10.26    | 10.56  | 0.00               | 0.00   |
| Unskilled     | 0.00         | 0.00         | 0.00     | 0.00   | 0.00               | 0.00   |
| Casual        | 0.00         | 0.00         | 0.00     | 0.00   | 0.00               | 0.00   |

**Views on ‘decent’ work:** It is interesting to note that despite this poor set of benefits, the managers/owners of the SSI units believe that “decent work” should be provided to all workers. That is, they believe that workers deserve minimum conditions of work and social protection. About 70–80 per cent units agree that workers deserve decent work and 20 per cent units “somewhat” agree with this. When asked why they do not provide “decent” work or minimum labour standards, the response was that “they cannot afford” these in the present competitive market.

### C. Labour and employment in household units

The sample of HH units includes 16 units, six from the textile sector and 10 from the garment sector. The average employment in the household units is 4.61 persons in textiles and 5.45 in garments. The highest employment is in Tirupur, 5.76, followed by

5.00 in Ahmedabad. Coimbatore has the lowest employment of 3.00 persons and Bhivandi has 4.67. On an average, the proportion of hired workers is larger than that of family workers. This indicates that the household units are expanding production using hired workers. The share of women workers is higher: It is significantly higher than that of men workers in the garment units and slightly higher than that of male workers in textiles.

Not all are full-time workers. However, their proportion is not very high. Overall, 16.67 workers are part-time. Of these, about 12 per cent are family workers and the rest are hired workers. Three-fourths of the part-time workers are women.

**Profile of workers**

**Age composition:** Majority of workers in the household units are 15–35 years of age (72 per cent). An additional 24 per cent are in the 35–50 age group, implying that 96 per cent workers are between 15 and 50 years of age. About 3 per cent of workers belong to the 50–65 age group, and most are women. Though some children were seen working, they were not included because they worked for less than two hours a day (as per ILO norms, children working for less than two hours a day cannot be considered child labour). It is possible, however, that some of them worked for longer periods.

**Educational levels:** As expected, the level of education is not very high. Hired workers are more educated than family workers and men more educated than women. Except for a few workers in Ahmedabad, no worker is a graduate or more. However, a few workers (7.69 per cent) have acquired technical education (Table 3.34). In spite of

**Table 3.34 Educational levels of HH workers**  
(%)

| District             | Product      | Education   |              |              |                  |             |                       | Total         |
|----------------------|--------------|-------------|--------------|--------------|------------------|-------------|-----------------------|---------------|
|                      |              | Illiterate  | Class I-V    | Class VI-X   | Higher secondary | Graduate    | Technical certificate |               |
| Coimbatore           | Textiles     | 5.00        | 30.77        | 46.15        | 10.38            | 0.00        | 7.69                  | 100.00        |
| Bhivandi             |              | 10.00       | 33.33        | 56.67        | 0.00             | 0.00        | 0.00                  | 100.00        |
|                      | <b>Total</b> | <b>6.70</b> | <b>32.00</b> | <b>50.00</b> | <b>8.00</b>      | <b>0.00</b> | <b>4.00</b>           | <b>100.00</b> |
| Ahmedabad            | Garments     | 0.00        | 28.57        | 28.57        | 28.57            | 14.29       | 0.00                  | 100.00        |
| Tirupur              |              | 3.29        | 47.14        | 37.14        | 11.43            | 0.00        | 0.00                  | 100.00        |
|                      | <b>Total</b> | <b>8.93</b> | <b>33.93</b> | <b>33.93</b> | <b>17.86</b>     | <b>5.36</b> | <b>0.00</b>           | <b>100.00</b> |
| <b>Total workers</b> |              | <b>6.17</b> | <b>33.33</b> | <b>40.74</b> | <b>14.81</b>     | <b>3.70</b> | <b>1.23</b>           | <b>100.00</b> |

low educational achievements, the workers have acquired skills mainly through on-the-job training.

Wages and working conditions

It needs to be noted that there are no legal minimum wages to be followed by the units. There are no awards given by the government or wages agreed upon by workers’ organizations. Market forces mainly determine the wage rates, and pressure from the supply side tends to dampen wage rates. The wage rates vary from Rs 250 per day in Tirupur to Rs 80 in Bhivandi. The rates are examined in the next chapter.

Working hours in the household units are long, expanding much beyond eight hours a day (Table 3.35). The average working hours per day are nine in Coimbatore and 8.5 in Bhivandi, 10.5 in Ahmedabad and 10–11 hours in Tirupur. Since the wage/income of workers depends on the quantum of work done, there is a tendency to put in long hours at work. The low rates of earnings also contribute to the need for working long hours. Another factor is the pressure of work and time-bound orders.

Table 3.35 Working hours in HH units

| District   | Product  | Hours per day<br>(average) |               |
|------------|----------|----------------------------|---------------|
|            |          | Part-time                  | Full-time (8) |
| Coimbatore | Textiles | 4.5                        | 9.0           |
| Bhivandi   |          | 3.5                        | 8.5           |
| Ahmedabad  | Garments | 5.5                        | 10.50         |
| Tirupur    |          | 6.0                        | 10.0–11.0     |

Source: Field survey.

Crammed in small homes or in small rooms, the household units are unable to provide a decent working environment for their workers. They claim, however, that they all provide adequate ventilation, light, temperature, drinking water and break during working hours (Table 3.36). Since the production is carried out in homes, some of the facilities are always “available”. The problem areas in basic facilities at the work place are first-aid kits, clean surroundings, occupational health and separate toilets for women. The next chapter will examine the access of workers to these facilities.

Out of the total 16 units, six units observe a weekly holiday (usually Sunday). Of these six units, four are in Tirupur and two are in Bhivandi. These are not necessarily



**Table 3.36 Working conditions in HH units**

| Centre       | Product  | 1         | 2         | 3         | 4         | 5         | 6         | 7        | 8        | 9        | 10       | 11        | 12        |
|--------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|-----------|-----------|
| Coimbatore   | Textiles | 3         | 3         | 3         | 2         | 3         | 3         | 3        | 1        | 3        | 1        | 3         | 2         |
| Bhivandi     |          | 4         | 3         | 2         | 2         | 3         | 3         | 0        | 0        | 1        | 1        | 3         | 3         |
| Ahmedabad    | Garments | 6         | 5         | 0         | 4         | 2         | 4         | 1        | 0        | 1        | 0        | 4         | 1         |
| Tirupur      |          | 6         | 6         | 6         | 4         | 6         | 6         | 3        | 0        | 2        | 1        | 6         | 4         |
| <b>Total</b> |          | <b>16</b> | <b>16</b> | <b>16</b> | <b>12</b> | <b>14</b> | <b>16</b> | <b>7</b> | <b>1</b> | <b>7</b> | <b>3</b> | <b>16</b> | <b>10</b> |
| %            |          | 100       | 100       | 100       | 75.00     | 87.50     | 100       | 43.75    | 6.25     | 43.75    | 18.75    | 100       | 62.50     |

*Source: Field survey.*

*Note: 1=Ventilation; 2=light; 3=temperature; 4=occupational safety; 5=clean air; 6=drinking water; 7=women's toilet; 8=child care centre; 9=occupational health; 10=first-aid kit; 11=break during working hours; 12=clean surroundings.*

paid holidays. No worker – hired or family worker – has any social protection such as maternity leave and benefits, pension/provident fund, health insurance, gratuity etc. They also do not enjoy paid casual, earned or medical leave. In short, this work is totally unprotected from the social security point of view.

### Summing up

Globalization has had a significant impact on large, small and household units in the textile and garment industry. Since these export-oriented units are keenly interested in accessing new markets and thereby expanding the size of their production and earnings, they are restructuring production to maximize their benefits under globalization. The pressures that the global market is exerting on production units include the need to (1) improve productivity and efficiency by upgrading technology and acquiring skills; (2) expand the size of the unit to compete in the global market; (3) acquire flexibility in production to be able to adjust to the volatile global market; and (4) minimize the cost of production in the highly competitive global market. Large-scale, small-scale and household units have, to a small or large extent, restructured their production in response to these pressures.

This restructuring is reflected in the manner in which the labour is employed by these units. To start with, LSI units have subcontracted production to smaller units and employed contract labour as well as temporary and casual workers on the factory premises for different tasks to reduce risk and the costs of production and labour. It is important to note that many LSI units have not employed a single “permanent” worker in the last decade or so. The SSI units have also used the strategy of subcontracting part of production to smaller units and to home-based units. They have also tried to reduce the employment of “permanent” workers to avoid labour laws. Household units, working under pressure from contractors, have little choice but to reduce costs to the minimum.

The inevitable consequence of these developments is that workers get low wages in precarious conditions and with no social protection. In short, integration of the industry with the global market seems to have promoted a race to the bottom as far as workers are concerned.

## Chapter 4

### Labour and employment in the textile and garment industry

The previous chapter discussed the impact of recent developments on the textile and garment industry in India, and analysed how production units in this industry have restructured to maximize their gains and the way this is reflected in the restructuring of labour. This chapter studies the status of workers in these units, as reported by the workers themselves. Though the units claim that they provide some facilities and benefits to workers, workers have reported that they do not get these benefits to the extent claimed.

This chapter is divided into two sections: The first analyses the secondary data, while the second presents the working and living conditions of workers in the selected LSI, SSI and HH units.

#### Insights from secondary data

##### Increase in employment

The first major impact of the new policies seems to be a rapid increase in employment in this industry, arising from its rapid growth. The employment generated increased from 34.42 million in 2001 to 40.15 million in 2006–07, a 16.64 per cent growth in five years (Table 4.1). According to an estimate by the Textile Committee, the increase in employment will be 25 million by 2010, bringing the total employment in the industry to about 60 million. Of the additional 25 million, more than half, that is, 13–15 million, will be needed in the apparel sector (11 million skilled labour as estimated by AEPC, 2005).

**Table 4.1 Employment in the textile and garment industry in India**

| S. no.       | Sector                                                                                           | 2001<br>(million) | 2006–07<br>(million) |
|--------------|--------------------------------------------------------------------------------------------------|-------------------|----------------------|
| 1.           | Cotton/man-made fibre/yarn textile/mills<br>(including SSI spinning and exclusive weaving units) | 1.07              | 1.10                 |
| 2.           | Man-made fibre/filament yarn (including texturizing)                                             | 0.11              | 0.20                 |
| 3.           | Decentralized power looms                                                                        | 4.15              | 4.25                 |
| 4.           | Handlooms                                                                                        | 12.00             | 12.40                |
| 5.           | Knitting                                                                                         | 0.30              | 0.50                 |
| 6.           | Processing                                                                                       | 0.24              | 0.30                 |
| 7.           | Woollens                                                                                         | 1.20              | 1.30                 |
| 8.           | Ready-made garments (including knitwear)                                                         | 3.54              | 6.80                 |
| 9.           | Sericulture                                                                                      | 5.57              | 6.03                 |
| 10.          | Handicrafts                                                                                      | 5.84              | 6.77                 |
| 11.          | Jute industry                                                                                    |                   |                      |
|              | (1) Organized jute industry                                                                      | 0.20              | 0.20                 |
|              | (2) Decentralized jute industry                                                                  | 0.20              | 0.30                 |
| <b>Total</b> |                                                                                                  | <b>34.42</b>      | <b>40.15</b>         |

*Source: Planning Commission, New Delhi.*

The table also shows that the handloom sector, in both textiles and clothing, has a unique place in India. Being manpower-intensive, it employs a large number of workers, 17.84 million (2003) (12 million in weaving and 5.84 million in garments and related work), constituting about 50 per cent of the total employment in this industry. Production is highly decentralized, and products range from home linen, carpets, rugs, durries and home furnishings to garments and fabrics (textile policies, 1985 and 2000).

The study excludes jute and woollen textiles from its purview.

### Workers in the organized and unorganized sectors

About 90 per cent of workers in the industry are in the unorganized sector (Table 4.2). In the case of women, 96.57 per cent are in the unorganized sector, while the percentage is 86.39 in the case of men workers. Also, the garment industry has a larger percentage of unorganized workers compared with that in the textile industry.

**Table 4.2    Employment in the organized and unorganized sectors, by sex, 1999–2000**  
(%)

|                       | Organized    | Unorganized  | Total      |
|-----------------------|--------------|--------------|------------|
| Textiles              |              |              |            |
| Men                   | 15.98        | 84.02        | 100        |
| Women                 | 2.60         | 97.40        | 100        |
| <b>Total</b>          | <b>11.29</b> | <b>88.71</b> | <b>100</b> |
| Garments              |              |              |            |
| Men                   | 7.26         | 92.74        | 100        |
| Women                 | 6.64         | 93.36        | 100        |
| <b>Total</b>          | <b>7.09</b>  | <b>92.91</b> | <b>100</b> |
| Textiles and garments |              |              |            |
| Men                   | 13.61        | 86.39        | 100        |
| Women                 | 3.43         | 96.57        | 100        |
| <b>Total</b>          | <b>10.24</b> | <b>89.76</b> | <b>100</b> |

*Source: NSSO Round, 1999–2000.*

### Employment lags gains in output and productivity

A careful view of past trends shows that, as in the case of other industries in India, employment in this industry also has not kept pace with the growth in output and capital (Table 4.3).

A striking feature is that both textiles and garments have shown a rapid growth in output since 1989–90. It has been particularly phenomenal in the organized sector,

where capital has grown 13–15 per cent per year. Growth in employment in the organized textile industry was negative up to 1993–94, and was a mere 0.21 per cent of annually thereafter. Clearly, the organized textile industry has failed to generate much employment in spite of its high growth. In the organized garment industry, the output has grown at a much higher rate, at 27 per cent per year between 1989–90 and 1993–94. Employment also grew at a high rate of 17.30 per year. After 1993–94, the organized sector has shown a drastic decline in growth of both output (2.20 per cent) and employment (3.73 per cent).

**Table 4.3 Trends in average annual rate of growth of output and employment in textile and garment industry**  
(%)

| Product              | Organized |            |         | Unorganized |            |         |
|----------------------|-----------|------------|---------|-------------|------------|---------|
|                      | Output    | Employment | Capital | Output      | Employment | Capital |
| <b>Textiles</b>      |           |            |         |             |            |         |
| 1984–85 to 1989–90   | 5.91      | -2.41      | 3.70    | 3.50        | -5.63      | -19.92  |
| 1989–90 to 1993–94   | 6.41      | -0.34      | 14.75   | -2.88       | -2.43      | 5.62    |
| 1993–94 to 1999–2000 | 2.86      | 0.21       | 13.29   | 6.26        | -0.16      | 4.28    |
| <b>Garments</b>      |           |            |         |             |            |         |
| 1984–85 to 1989–90   | 20.41     | 11.15      | 3.70    | -29.52      | -41.34     | -76.13  |
| 1989–90 to 1993–94   | 26.97     | 17.30      | 14.75   | 6.24        | 1.52       | 23.61   |
| 1993–94 to 1999–2000 | 2.20      | 3.73       | 13.29   | 14.40       | 14.44      | 4.28    |

In the unorganized textile sector, the rate of growth of output as well as of employment was negative during 1989–1994. Though production picked up thereafter, employment continued to decline. This indicates the rising capital intensity of the textile industry over time. In the unorganized garment industry, the rate of growth of output showed a big jump to 14.40 per cent per year after 1993–94, from 6.24 per cent between 1989 and 1994. Employment also has grown at a high rate of 14.44 per cent per year.

In short, it is clear that the textile industry has become increasingly capital-intensive, while the garment industry has shown a higher rate of growth of employment. The unorganized garment sector, particularly, has shown a high rate of growth of employment.

That is, the organized garment sector is becoming more capital-intensive while the unorganized garment sector is becoming more labour-intensive.

**Feminization of the workforce**

The proportion of women workers is rising very rapidly across the textile and garment industry, according to the data since 1994–95 (Table 4.4). The annual rates of growth of employment for men have been 0.1 per cent in textiles and 8.2 per cent in the garment industry. The corresponding rates for women are much higher, 1.5 and 33.1, respectively. It is clear that the number of women in the garment industry is growing. As seen above, most of this employment has been in the unorganized sector, mainly as home-based workers.

**Table 4.4 Annual rate of growth of employment, 1994–95 to 2000–01**  
(%)

| Sector   | Men | Women | Total employment<br>(men + women) |
|----------|-----|-------|-----------------------------------|
| Textiles | 0.1 | 1.5   | 0.8                               |
| Garments | 8.2 | 33.1  | 16.4                              |

*Source: NSSO Rounds.*

It appears that the share of home-based workers in the total workers is significant in both textiles and garments: 58.5 per cent and 53.7 per cent, respectively (2000–01). This proportion has declined in the case of the textile industry (the increase has been very high in absolute numbers) between 1994 and 2001, while it has increased in the case of the garment industry. The increase is particularly very high for home-based women in the garment industry, who constitute 93.1 per cent of total female workforce (Table 4.5).

The table shows that after 1994–95, both the textile and garment sectors showed a rapid growth of unorganized and home-based employment of women. The share of home-based women workers in the total unorganized workforce is much higher in textiles and garments (almost half the workers are home-based) than in the manufacturing sector as a whole, which has 46.3 per cent home-based workers. This clearly indicates that women predominate as home-based workers, compared with men workers.

**Table 4.5 Growth in home-based workers, 1994–95 to 2000–01**  
(%)

| Sector   | Share of home-based workers in total workers |       |                          |         |       |                          |
|----------|----------------------------------------------|-------|--------------------------|---------|-------|--------------------------|
|          | 1994–95                                      |       |                          | 2000–01 |       |                          |
|          | Men                                          | Women | Total home-based workers | Men     | Women | Total home-based workers |
| Textiles | 52.1                                         | 87.4  | 60.6                     | 40.1    | 64.3  | 58.5                     |
| Garments | 45.7                                         | 58.9  | 48.8                     | 39.1    | 93.1  | 53.7                     |

There is an interesting decline in the share of home-based workers in the textile industry between 1994–95 and 2000–01. This indicates that textiles are shifting to non-home-based venues gradually, maybe for technological reasons. The overall trend shows that giving out work to home workers has been used as a strategy for cost reduction by textile and garment units, particularly the garment industry.

**Employment, value addition and labour productivity in the unorganized sector**  
 Significant changes have taken place in the value added and labour productivity of workers in the textile and garment industry, in both the organized and unorganized segments.

Both textiles and garments show a higher growth rate in the value added in the post-reform period compared with the pre-reform period (Table 4.6). In fact, the increases have been significant, from 2.88 per cent pre-reform to 6.26 per cent post-reform in the case of textiles, and from 6.24 per cent to 14.40 per cent in the case of garments. The growth in labour productivity also has been significant in the case of textiles. However, growth in employment per year has been much lower at 0.16 per cent per year for textiles. In the case of garments, labour productivity has declined between 1994 and 2000, while employment has increased at a much higher rate of 14.4 per cent per year. This once again indicates that the textile industry has acquired higher capital intensity during 1994–2000.

**Table 4.6   Annual rate of growth in employment, value added and labour productivity in the unorganized sector**  
 (%)

| Product         | Value added | Employment | Labour productivity |
|-----------------|-------------|------------|---------------------|
| <b>Textiles</b> |             |            |                     |
| 1984–90         | 3.50        | -5.63      | 9.13                |
| 1989–95         | -2.88       | -2.43      | -0.45               |
| 1994–2000       | 6.26        | -0.16      | 6.42                |
| <b>Garments</b> |             |            |                     |
| 1984–90         | -29.52      | -41.34     | 11.82               |
| 1989–95         | 6.24        | 1.52       | 4.72                |
| 1994–2000       | 14.40       | 14.44      | -0.05               |

*Source: NSSO Rounds.*

In the garment industry, however, there is an increase in the growth rate of value added and in employment, but labour productivity has declined by 0.05 per cent per year. This indicates de-skilling or declining labour productivity in the garment sector. This implies that the unorganized garment sector is experiencing lower productivity in the post-reform period.

### Wage rates and gender wage gap

Table 4.7 presents data on daily wage rates received by men and women workers in the different subsectors of the textile industry between 1974–79 and 2002–05. The table shows that the highest daily wages are being paid to workers in the cotton textile units – both men and women – followed by woollen textiles, synthetic textiles and garment manufacturing. That is, both men and women garment workers get the lowest wages. Women workers in the garment industry are being paid the lowest wages in the entire textile and garment industry (Rs 37.83 per day).

**Table 4.7 Trends in average daily earnings, by sex, 1974–79 to 2002–05**  
(Rs)

| Industry           | 1974–79 |        | 1985–92 |        | 2002–05 |        | Gender wage gap male/female (%) |      |      |
|--------------------|---------|--------|---------|--------|---------|--------|---------------------------------|------|------|
|                    | Male    | Female | Male    | Female | Male    | Female | 1974                            | 1985 | 2002 |
| Cotton textiles    | 14.60   | 11.63  | 42.8    | 29.74  | 78.10   | 73.24  | 1.25                            | 1.04 | 1.07 |
| Woollen textiles   | 13.80   | 8.22   | 35.8    | 35.96  | 69.30   | 59.24  | 1.67                            | 1.00 | 1.17 |
| Synthetic textiles | 0.00    | 0.00   | 40.6    | 42.28  | 62.40   | 40.86  | 0.00                            | 0.96 | 1.53 |
| Garments           | 11.30   | 7.12   | 34.00   | 18.61  | 60.60   | 37.83  | 1.58                            | 1.83 | 1.90 |

*Source: Occupational Wage Survey, Labour Bureau, Government of India.*

The gender wage gap, an important indicator of the gender inequalities in the labour market, is a statistical indicator that measures the gap between the wages of men and women workers.<sup>1</sup> As the table shows, there are wide variations in wages across subsectors as well as across men and women in the textile and garment industry in India. The variations (as reflected in co-efficient of variations) are higher for women than for men. This indicates instability in the wages of women workers compared with those of men. These differences are because of the different levels of productivity, on the one hand, and the differences in the employment status of workers, on the other. With workers predominantly home-based, self-employed and subcontracted, the garment industry has the lowest wage rate, and women are at the bottom of the rung.

The gender wage gap is the highest in the garment sector (2002–05), followed by synthetic textiles, woollen textiles and cotton textiles. These gaps seem to be originating from occupational segregation of men and women as well as from gender discrimination.

<sup>1</sup> The gender wage gap is frequently calculated as a raw gender wage gap using the ratio of average wage rate of women (annual, monthly, weekly, daily or hourly) to that of men. As is well known, the wage gap arises due to occupational segregation as well as due to pure discrimination. The measure for occupational segregation is an index of dissimilarity which explains the occupational wage gap between men and women, while unexplained wage gap refers to gender-based discrimination, which is measured through a residual technique, also called Oaxaca decomposition.



Figure 4.1 Gender wage gap trends in the textile and garment industry

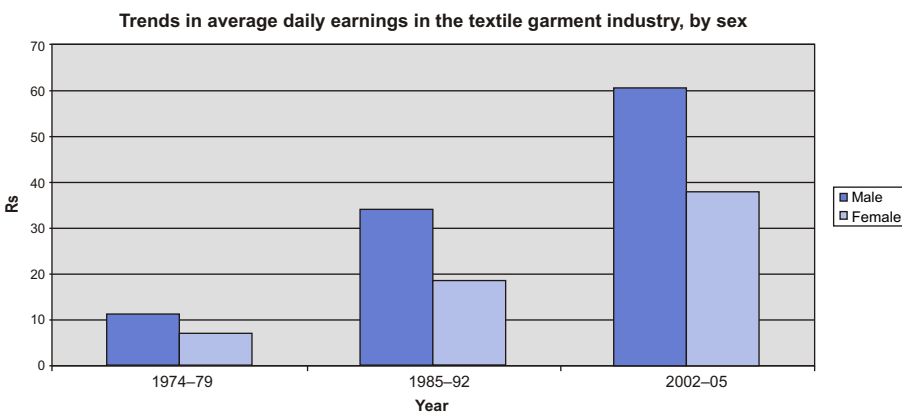
A. Cotton textiles



B. Synthetic textiles



C. Ready-made garments



As the charts show, the gender wage gap has increased in all sectors of the textile and garment industry except cotton textiles, which needs careful investigation.

**Wage gaps in the organized and unorganized sectors:** Wage rates (average daily wage rates) in the organized sector are higher than those in the unorganized sector. However, it is interesting to note that the gender wage gaps also are wider in the organized sector than in the unorganized sector (Table 4.8). This could be due to the wider gap between the occupation-wise wages in the organized sector, that is, between casual production workers and highly skilled workers. As women predominate in low-level occupations, they have lower average wages, while the average wage rate is higher in the case of men as they are predominant in skilled jobs and as permanent workers. Also, the occupation-wise differences in wages are lower in the unorganized sector due to the small size of the units, less qualified/less paid management personnel and predominance of relatively less skilled production workers.

Once again, as the table indicates, wages are higher in the textile sector than in the garment sector, largely emanating from the higher capital intensity in the textile sector.

**Table 4.8    Wage rates in textile and garment industry, by sex and sector, 1999–2000**  
(Rs)

| Sector                              | Organized     |              | Unorganized         |              |
|-------------------------------------|---------------|--------------|---------------------|--------------|
|                                     | Male          | Female       | Male                | Female       |
| Textiles                            | 120.49        | 39.38        | 59.21               | 29.45        |
| Ratio (male/female)                 |               | 3.05         | Ratio (male/female) | 2.01         |
| Garments                            | 96.15         | 54.00        | 65.60               | 36.61        |
| Ratio (male/female)                 |               | 1.78         | Ratio (male/female) | 1.79         |
| <b>Total (textile and garments)</b> | <b>117.56</b> | <b>46.14</b> | <b>60.63</b>        | <b>31.33</b> |
| Ratio (male/female)                 |               | 2.54         | Ratio (male/female) | 1.94         |

*Source: NSSO 55th Round, 1999–2000.*

**Gender wage gap in different segments of workers:** Neither the organized sector nor the unorganized sector is homogeneous, as each covers a variety of workers. Workers in the unorganized sector include casual and temporary, job workers (that is, piece-rated workers) or subcontracted workers, home workers, home-based workers (including independent workers), part-time workers, concealed workers such as illegal workers, child labour etc., agency workers and so on. Also, organized sector workers are permanent, regular, temporary or casual workers. Therefore, broadly, these workers can be divided into regular and casual workers and then into home-based and non-home-based workers. There is evidence (Table 4.9) to show that within regular and casual workers as well as within home-based and non-home-based workers, there are significant sex-based wage differentials.

**Table 4.9** Daily wages of home-based and non-home-based workers, by sex, 1999–2000 (Rs)

| Workers        | Textiles |        |       | Garments |        |       | All manufacturing |        |       |
|----------------|----------|--------|-------|----------|--------|-------|-------------------|--------|-------|
|                | Male     | Female | Ratio | Male     | Female | Ratio | Male              | Female | Ratio |
| <b>Regular</b> |          |        |       |          |        |       |                   |        |       |
| Home-based     | 57.32    | 23.68  | 2.42  | 46.44    | 109.74 | 0.42  | 48.01             | 27.48  | 1.75  |
| Non-home-based | 87.18    | 33.12  | 2.63  | 82.17    | 51.57  | 1.59  | 116.05            | 58.45  | 1.99  |
| <b>Casual</b>  |          |        |       |          |        |       |                   |        |       |
| Home-based     | 42.44    | 27.36  | 1.55  | 38.56    | 27.65  | 1.39  | 43.21             | 25.1   | 1.72  |
| Non-home-based | 55.53    | 32.72  | 1.70  | 45.86    | 35.03  | 1.31  | 56.78             | 37.04  | 1.53  |

Source: NSSO 55th Round.

An interesting finding of the table is that the highest wages are earned by regular non-home-based male workers, while the lowest wages are earned by casual home-based workers. The wages of regular workers are higher than those of casual workers, and the wages of non-home-based workers are higher than those of home-based workers.

The gender wage gap is generally higher in the case of regular workers, both home-based and non-home-based, than in the case of casual workers. The highest wage gap, in textiles, garments and in all manufacturing, is in the case of non-home-based regular workers. It is indeed worth noting that the gender wage inequalities are the highest at the top end of the labour market, that is formal, organized and supposedly more professionally managed. The lowest gender wage gap is the narrowest in the case of casual workers.

To sum up, analysis of the secondary data shows that there has been a considerable increase in employment in the textile and garment industry. Though the increase is not commensurate with the increase in labour productivity, it is significant in terms of numbers. It has, however, been largely in the unorganized sector and more for women than for men, leading to feminization of the industry. Again, the increase in wages has lagged far behind the increase in labour productivity.

As far as gains in wages are concerned, the organized sector is far ahead of the unorganized sector; and men workers are far ahead of women workers. An important consequence of this has been the widening gender wage gap in the industry. The secondary data and literature also shows that the quality of employment has declined in the industry with the increasing share of the unorganized sector.

The following section presents the results of the primary survey. It throws more light on the details and dynamics of employment and labour in this industry.

Analysis of primary data

The study has drawn a sample of workers from seven textile and garment manufacturing centres in India. The sample includes 35 production units and 322 workers drawn from these units: 15 each from large units, ten each from SSI units and five each from HH units. There are 229 male and 93 female workers in the sample. Though small, it is fairly representative of the typologies of employment as it is a stratified sample selected from the different types of textile and garment centres. While 75 workers are from large units, 151 workers are from SSI units and 96 from HH units.

It needs to be noted that this sample includes non-professional and non-managerial staff, that is, it includes production and other workers. In the case of HH workers, it includes owner-managers also. This section describes the main characteristics of the workers, which throws a light on the terms of employment and conditions of work.

Household characteristics of workers

**Social groups:** The religion and caste profile of workers has its roots in the history of the textile centres and in the tradition of hiring workers for specific operations or tasks. For example, many textile and garment units hire workers belonging to Scheduled Caste (SC) and Other Backward Class (OBC) groups, almost in all the centres. Again, Hindus are predominant, while Muslims are seen mostly in certain operations such as weaving (men) and garment manufacturing (women). Being poor, they are usually observed to be working as casual wage earners.

Table 4.10 Social groups of workers

| Units      | Social groups (no.) |     |      |        |       | Religion (no.) |        |        |        |
|------------|---------------------|-----|------|--------|-------|----------------|--------|--------|--------|
|            | SC                  | ST  | OBC  | Others | Total | Hindu          | Muslim | Others | Total  |
| LSI        | 44                  | 3   | 10   | 18     | 75    | 70             | 1      | 4      | 75     |
| SSI        | 79                  | 4   | 22   | 46     | 151   | 143            | 2      | 6      | 151    |
| HH         | 52                  |     | 23   | 21     | 96    | 69             | 22     | 5      | 96     |
| Total      | 175                 | 7   | 55   | 85     | 322   | 282            | 25     | 15     | 322    |
| % of total | 54.3                | 2.2 | 17.1 | 26.4   | 100.0 | 87.58          | 7.76   | 4.66   | 100.00 |

SC: Scheduled Castes; ST: Scheduled Tribes; OBC: Other Backward Classes.

**Household incomes and assets:** There is a considerable gap between household incomes (which includes incomes earned by other household members also) as well as assets of workers employed in large, small and household units. Table 4.11 indicates that the highest average annual household income is observed in the case of LSI workers, followed by household sector and then SSI workers. The income of a worker in the SSI sector is an average 70 per cent of the income of a household in the LSI sector while household sector workers earn on an average 90 per cent of the income of LSI households. This is perhaps because the household sector income includes profits as well.

The typical LSI household is ahead of the rest with respect to the value of assets/appliances etc., the average value of these assets being Rs 139,000 for LSI households. Households in the SSI and household sectors have much fewer assets, about 30-35 per cent of those in LSI households.

As many as 282 worker households out of the total of 322 (87.86 per cent) have only one occupation, that is, the occupation in which the worker in the sample is employed. Secondary occupations are observed mainly in the case of SSI and casual workers.

**Personal characteristics of workers**

**Age composition of workers:** Some striking features of Table 4.12 are that (1) the majority of workers are in the 15–35 age group. Workers in this group are particularly predominant in the HH sector: 72.1 per cent of HH women workers and 79.4 of HH men workers belong to this group; (2) in the case of LSI workers, 22.6 per cent men are in the 50–60 age group. This seems to be because of historical reasons. The corresponding percentage for SSI and HH units is 22.4 and 10.4, respectively; and (3) workers in the 60-plus age group are seen mainly in the HH sector.

**Table 4.11 Household incomes, assets and debt**  
(Rs)

| Units                     | Average annual<br>HH income | Average value of<br>HH consumption<br>assets | Average<br>HH debt |
|---------------------------|-----------------------------|----------------------------------------------|--------------------|
| LSI                       | 81 143.57                   | 138 525.23                                   | 20 533.33          |
| SSI                       | 58 178.15                   | 45 125.83                                    | 23 221.19          |
| HH                        | 74 214.54                   | 41 091.67                                    | 19 796.88          |
| <b>All<br/>households</b> | <b>68 308.27</b>            | <b>65 677.61</b>                             | <b>23 903.42</b>   |

**Table 4.12 Age composition of workers, by sex and type of unit**  
(%)

| Type of<br>unit  | Sex           | 0–14<br>years | 15–35<br>years | 36–50<br>years | 50–60<br>years | 60+<br>years | Total        |
|------------------|---------------|---------------|----------------|----------------|----------------|--------------|--------------|
| LSI              | Male          | 0.0           | 42.6           | 35.9           | 22.6           | —            | 100.0        |
|                  | Female        | 0.0           | 48.4           | 43.1           | 8.2            | 0.0          | 100.0        |
| SSI              | Male          | 0.0           | 68.4           | 7.1            | 22.4           | 2.0          | 100.0        |
|                  | Female        | 0.0           | 73.6           | 17.0           | 9.4            | 0.0          | 100.0        |
| HH               | Male          | 0.0           | 79.1           | 7.5            | 10.4           | 3.0          | 100.0        |
|                  | Female        | 0.0           | 72.4           | 10.3           | 13.8           | 3.4          | 100.0        |
| <b>All units</b> | <b>Male</b>   | <b>0.0</b>    | <b>65.9</b>    | <b>9.2</b>     | <b>23.1</b>    | <b>1.7</b>   | <b>100.0</b> |
|                  | <b>Female</b> | <b>0.0</b>    | <b>66.3</b>    | <b>12.9</b>    | <b>9.7</b>     | <b>1.1</b>   | <b>100.0</b> |

**Marital status of workers:** The distribution of workers in terms of their marital status shows that of the total women workers, more than 40 per cent have never been married, or are widowed, separated or deserted. The percentage of never married women is the highest among LSI workers, which could be because this sector has adopted a strategy of employing young unmarried girls. The percentage of never married workers is 80 in the LSI sector, followed by the HH (38.46) and SSI sectors (23.08). Conversely, the percentage share of married women is high in the HH sector (71.69). This is because married women find it convenient to work in HH units. Interestingly, the percentage of workers widowed or deserted is also higher among women than among men workers.

**Table 4.13 Unit-wise profile of workers: Marital status**  
(%)

| Type of unit     | Sex           | Never married | Separated   | Deserted    | Widowed     | Married      | Total         |
|------------------|---------------|---------------|-------------|-------------|-------------|--------------|---------------|
| LSI              | Male          | 75.38         | 0.00        | 1.54        | 1.54        | 21.54        | 100.00        |
|                  | Female        | 20.00         | 0.00        | 0.00        | 0.00        | 80.00        | 100.00        |
|                  | <b>Total</b>  | <b>69.33</b>  | <b>0.00</b> | <b>1.33</b> | <b>1.33</b> | <b>28.00</b> | <b>100.00</b> |
| SSI              | Male          | 75.76         | 1.01        | 1.01        | 2.02        | 20.20        | 100.00        |
|                  | Female        | 71.15         | 3.85        | 0.00        | 1.92        | 23.08        | 100.00        |
|                  | <b>Total</b>  | <b>74.17</b>  | <b>1.99</b> | <b>0.66</b> | <b>1.99</b> | <b>21.19</b> | <b>100.00</b> |
| HH               | Male          | 50.00         | 0.00        | 0.00        | 1.43        | 48.57        | 100.00        |
|                  | Female        | 71.69         | 3.85        | 0.00        | 3.85        | 21.46        | 100.00        |
|                  | <b>Total</b>  | <b>52.08</b>  | <b>0.00</b> | <b>0.00</b> | <b>2.08</b> | <b>35.83</b> | <b>100.00</b> |
| <b>All units</b> | <b>Male</b>   | <b>67.95</b>  | <b>0.43</b> | <b>0.85</b> | <b>1.71</b> | <b>29.06</b> | <b>100.00</b> |
|                  | <b>Female</b> | <b>58.50</b>  | <b>2.27</b> | <b>3.00</b> | <b>2.27</b> | <b>32.95</b> | <b>100.00</b> |
|                  | <b>Total</b>  | <b>66.46</b>  | <b>0.93</b> | <b>0.62</b> | <b>1.86</b> | <b>30.12</b> | <b>100.00</b> |

**Educational profile of workers:** The educational profile of the workers is not very impressive, particularly in SSI and HH units, and in the case of women. Of the total workers, 15.22 per cent are illiterate, all in the SSI and HH sectors. A majority of them are women. In fact, it is interesting to note that of the total women workers, 50 per cent are either illiterate or below the primary level (that is, studied below class IV). The percentage is slightly better in the case of men.

It seems that units exporting low value-added products do not need a highly educated workforce, as they manage to provide them the required skills through on-the-job training. The proportion of workers educated beyond secondary school is 3–4 per cent in the case of SSI and HH sectors, and above 15 per cent in the case of LSI units. This again indicates that to get into the production of high value-added products, workers need a higher level of education, beyond secondary school and even graduation. It is important to note that the percentage of less literate workers is relatively high in the garment industry, perhaps because it is more informal and more unorganized.

**Table 4.14 Unit-wise profile of workers: Sex, education and skills**  
(%)

| Units            | Sex           | Illiterate   | Primary      | Secondary school | Graduate    | Post-graduate | Other       | Total         |
|------------------|---------------|--------------|--------------|------------------|-------------|---------------|-------------|---------------|
| LSI              | Male          | 9.30         | 30.77        | 44.62            | 3.77        | 0.08          | 4.62        | 100.00        |
|                  | Female        | 15.00        | 24.00        | 60.00            | 0.00        | 0.00          | 0.00        | 100.00        |
| SSI              | Male          | 7.12         | 48.48        | 41.31            | 6.06        | 2.02          | 0.00        | 100.00        |
|                  | Female        | 14.62        | 42.31        | 11.15            | 1.92        | 0.00          | 0.00        | 100.00        |
| HH               | Male          | 14.29        | 37.14        | 41.43            | 4.29        | 1.43          | 1.43        | 100.00        |
|                  | Female        | 19.23        | 30.77        | 50.00            | 0.00        | 0.00          | 0.00        | 100.00        |
| <b>All units</b> | <b>Male</b>   | <b>11.11</b> | <b>34.62</b> | <b>43.59</b>     | <b>6.84</b> | <b>2.14</b>   | <b>1.71</b> | <b>100.00</b> |
|                  | <b>Female</b> | <b>26.14</b> | <b>35.23</b> | <b>37.50</b>     | <b>1.14</b> | <b>0.00</b>   | <b>0.00</b> | <b>100.00</b> |

**Part-time and full-time employment:** How much employment in terms of number of days per year (2006–07) is available to workers? Table 4.15 provides data on these. The share of part-time work is the lowest in LSI units and the highest in HH units, where women at home also can work as and when they get time.

**Table 4.15 Part-time and full-time work**

| Units        | Part-time | Full-time  | Total workers | Average no. of days per year (part-time) | Average no. of days per year (full-time) | % of part-time workers |
|--------------|-----------|------------|---------------|------------------------------------------|------------------------------------------|------------------------|
| LSI          | 2         | 73         | 75            | 280                                      | 316                                      | 2.66                   |
| SSI          | 5         | 146        | 151           | 255                                      | 331                                      | 2.70                   |
| HH           | 10        | 86         | 96            | 305                                      | 312                                      | 11.62                  |
| <b>Total</b> | <b>15</b> | <b>305</b> | <b>322</b>    | <b>290</b>                               | <b>322</b>                               | <b>4.96</b>            |

### Conditions at work

Work conditions primarily include physical conditions at the work place, occupational hazards and occupational diseases, facilities such drinking water, crèche etc., housing and sanitation, cleanliness in surroundings, employment contract, wage rates and wage payment, and social protection provided to workers.

Any assessment of conditions of work needs to be done in the context of some standard norms for working conditions. The concept of “decent work” of the ILO can be used here as representing standard norms for conditions of work. According to the ILO, “decent work” for labour means conditions of “freedom, equity, safety and human dignity”. Its basic components are (1) productive and secure work, (2) protection of labour rights, (3) adequate pay, (4) social protection and (5) tripartite approach and social dialogue (ILO, 1999).

This section analyses the conditions of work of textile and garment workers in the context of the concept of “decent work”.

### Nature and status of employment

Skilled workers are not necessarily formally qualified in skills (that is, holding technical certificate, diploma or a degree) but have worked on skilled jobs for a number of years. Semi-skilled workers have less experience while unskilled workers are primarily performing manual work.

It needs to be noted that the majority of women workers are semi-skilled or unskilled workers (Table 4.16). The percentage of skilled workers is the highest among the workers employed in large units and it is the lowest in the workers employed in HH units. It appears that they are predominantly employed as unskilled and semi-skilled workers.

**Table 4.16 Workers by occupation and sex: No. and %**

| Unit            | Owner/<br>manager | Skilled            | Semi-<br>skilled  | Unskilled         | Total               |
|-----------------|-------------------|--------------------|-------------------|-------------------|---------------------|
| LSI             |                   |                    |                   |                   |                     |
| Men             | 0 (0.00)          | 40 (71.43)         | 5 (8.93)          | 11 (19.64)        | 56 (100.00)         |
| Women           | 0 (0.00)          | 3 (27.27)          | 1 (9.09)          | 7 (63.64)         | 11 (100.00)         |
| <b>Combined</b> | <b>0 (0.00)</b>   | <b>43 (64.18)</b>  | <b>6 (8.95)</b>   | <b>18 (26.87)</b> | <b>67 (100.00)</b>  |
| SSI             |                   |                    |                   |                   |                     |
| Men             | 0 (0.00)          | 39 (47.56)         | 22 (26.83)        | 21 (25.61)        | 82 (100.00)         |
| Women           | 0 (0.00)          | 17 (35.42)         | 2 (4.16)          | 29 (60.42)        | 48 (100.00)         |
| <b>Combined</b> | <b>0 (0.00)</b>   | <b>66 (47.14)</b>  | <b>24 (17.15)</b> | <b>50 (35.71)</b> | <b>140 (100.00)</b> |
| HH              |                   |                    |                   |                   |                     |
| Men             | 3 (5.40)          | 29 (52.36)         | 11 (20.37)        | 11 (20.37)        | 54 (100.00)         |
| Women           | 0 (0.00)          | 13 (41.94)         | 8 (25.81)         | 10 (32.25)        | 31 (100.00)         |
| <b>Combined</b> | <b>2 (2.20)</b>   | <b>43 (47.25)</b>  | <b>19 (20.88)</b> | <b>27 (29.67)</b> | <b>91 (100.00)</b>  |
| <b>Total</b>    |                   |                    |                   |                   |                     |
| Men             | 2 (0.99)          | 123 (60.89)        | 38 (18.81)        | 39 (19.31)        | 202 (100.00)        |
| Women           | 0 (0.00)          | 33 (33.67)         | 9 (9.17)          | 56 (57.16)        | 98 (100.00)         |
| <b>Combined</b> | <b>2 (0.67)</b>   | <b>156 (52.00)</b> | <b>47 (15.66)</b> | <b>95 (31.67)</b> | <b>300 (100.00)</b> |

The majority of workers are temporary, contract or casual (Table 4.17). Only 5.36 per cent workers are covered under the established labour laws. All women workers employed in small and HH units are non-permanent workers.

### Wage rate, wage incomes and mode of wage payment

The mode of wage payment is different in different types of industries. In large-scale units, for example, wages are time rates, that is, paid on monthly basis or for the number



**Table 4.17 Employment status of workers: Type, no. and %**

| Unit            | Family            | Permanent         | Regular           | Temporary          | Contract          | Casual            | Total               |
|-----------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|---------------------|
| LSI             |                   |                   |                   |                    |                   |                   |                     |
| Men             | 0 (0.00)          | 9 (15.25)         | 10 (16.95)        | 12 (20.34)         | 18 (30.51)        | 10 (16.95)        | 59 (100.00)         |
| Women           | 0 (0.00)          | 1 (10.00)         | 0 (0.00)          | 3 (30.00)          | 6 (60.00)         | 0 (0.00)          | 10 (100.00)         |
| <b>Total</b>    | <b>0 (0.00)</b>   | <b>10 (14.49)</b> | <b>10 (14.49)</b> | <b>15 (21.74)</b>  | <b>24 (34.78)</b> | <b>10 (14.50)</b> | <b>69 (100.00)</b>  |
| SSI             |                   |                   |                   |                    |                   |                   |                     |
| Men             | 0 (0.00)          | 6 (6.12)          | 10 (10.20)        | 42 (42.86)         | 36 (36.73)        | 4 (4.09)          | 98 (100.00)         |
| Women           | 0 (0.00)          | 0 (0.00)          | 5 (9.43)          | 34 (64.15)         | 9 (16.98)         | 5 (9.44)          | 53 (100.00)         |
| <b>Total</b>    | <b>0 (0.00)</b>   | <b>6 (3.97)</b>   | <b>15 (9.93)</b>  | <b>76 (50.33)</b>  | <b>45 (29.80)</b> | <b>9 (5.97)</b>   | <b>151 (100.00)</b> |
| HH              |                   |                   |                   |                    |                   |                   |                     |
| Men             | 23 (34.33)        | 0 (0.00)          | 0 (0.00)          | 29 (43.28)         | 11 (16.42)        | 4 (5.97)          | 67 (100.00)         |
| Women           | 1 (3.45)          | 0 (0.00)          | 0 (0.00)          | 16 (55.17)         | 12 (41.38)        | 0 (0.00)          | 29 (100.00)         |
| <b>Total</b>    | <b>24 (25.00)</b> | <b>0 (0.00)</b>   | <b>0 (0.00)</b>   | <b>45 (46.88)</b>  | <b>23 (23.96)</b> | <b>4 (4.16)</b>   | <b>96 (100.00)</b>  |
| <b>Combined</b> |                   |                   |                   |                    |                   |                   |                     |
| <b>Men</b>      | <b>23 (9.83)</b>  | <b>16 (6.84)</b>  | <b>20 (8.55)</b>  | <b>91 (38.89)</b>  | <b>66 (28.21)</b> | <b>18 (7.68)</b>  | <b>234 (100.00)</b> |
| <b>Women</b>    | <b>1 (1.08)</b>   | <b>0 (0.00)</b>   | <b>5 (5.38)</b>   | <b>55 (59.14)</b>  | <b>27 (29.02)</b> | <b>5 (5.38)</b>   | <b>93 (100.00)</b>  |
| <b>Total</b>    | <b>24 (7.57)</b>  | <b>17 (5.36)</b>  | <b>23 (7.26)</b>  | <b>138 (43.53)</b> | <b>92 (29.02)</b> | <b>23 (7.26)</b>  | <b>317 (100.00)</b> |

Source: Primary survey.

of days worked in a month. In small-scale and HH units, wages are paid on the basis of the work done, that is, piece-rated basis. For the purpose of comparing the wage rates in the different types of units, daily wage rates have been computed based on eight hours of work put in by workers.

It will be seen from Table 4.18 that the daily wage rate of production workers is the highest for men employed in large units (Rs 156.83), followed by women workers in large units (Rs 96.00). The wages are the lowest for workers in the HH sector. Women invariably earn lower wage rates than their male counterparts. The overall daily wage rates for men and women, Rs 95.47 and Rs 72.31, respectively (for similar hours worked but with different work and different employment status), are indeed very low.

The wage gap between men and women workers is the widest among workers in large units, followed by workers in the HH and SSI units. A bigger gender wage gap in the household units than in the small sector indicates that women in homes earn much less than men in home-based work, perhaps because women are hired in home-based work mainly as part-timers.

**Table 4.18 Daily wages of production workers**  
(Rs)

| Type of unit | Sex          | Average wage rate | Male wage rate/<br>female wage rate |
|--------------|--------------|-------------------|-------------------------------------|
| LSI          | Male         | 156.83            | 1.62                                |
|              | Female       | 96.00             |                                     |
|              | <b>Total</b> | <b>150.05</b>     |                                     |
| SSI          | Male         | 82.34             | 1.10                                |
|              | Female       | 74.71             |                                     |
|              | <b>Total</b> | <b>80.24</b>      |                                     |
| HH           | Male         | 77.05             | 1.41                                |
|              | Female       | 54.55             |                                     |
|              | <b>Total</b> | <b>56.38</b>      |                                     |

*Note: These wage rates refer to the wages actually paid to workers and not the rates fixed by the Wage Board.*

Permanent workers, as expected, earn the highest wages on an average, Rs 175 for men and Rs 100 for women (Table 4.19). Regular workers, mainly employed in large units, come next in terms of the daily wage rate earned. At the bottom, however, are casual workers. Men casual workers earn, on an average Rs 94 per day and women Rs 65 per day.

The gender wage gap is the widest in the case of permanent workers, followed by regular workers. This seems to be largely because of the occupational segregation of women in low-wage/salary work. The narrowest wage gap is among temporary workers. Next are casual workers with a 1.32 gender wage gap against 1.75 in the case of permanent workers.

The predominant mode of payment of wages is piece-rated, as 64 per cent of the total – 60 per cent of men and 76 per cent of women workers – receive piece-rated wages (Table 4.20). The highest percentage of piece-rated workers, 90 (91 in the case of men and 89 in the case of women) is in the case of workers employed in home-based work; the lowest is in the large sector (2.67). Workers on time-rated wages are paid daily wages mainly in the SSI sector; 77.48 per cent workers in the SSI sector and 90.63 per cent workers in HH units get piece-rated wages. This is because these units primarily work on subcontract basis.

About 40 per cent workers employed in large units receive time-rated monthly wages whereas 50 per cent of them receive time-rated daily wages. In general, women workers usually receive piece-rated wages compared with men workers.

**Table 4.19 Daily wage rate by employment status**  
(Rs)

| Employment status | Sex           | Average wage rate | Male/female (%) |
|-------------------|---------------|-------------------|-----------------|
| Permanent         | Male          | 175.00            | 1.75            |
|                   | Female        | 100.00            |                 |
|                   | <b>Total</b>  | <b>160.00</b>     |                 |
| Regular           | Male          | 126.38            | 1.63            |
|                   | Female        | 77.14             |                 |
|                   | <b>Total</b>  | <b>121.16</b>     |                 |
| Temporary         | Male          | 77.53             | 0.98            |
|                   | Female        | 78.98             |                 |
|                   | <b>Total</b>  | <b>78.09</b>      |                 |
| Contract          | Male          | 92.06             | 1.64            |
|                   | Female        | 56.06             |                 |
|                   | <b>Total</b>  | <b>84.37</b>      |                 |
| Casual            | Male          | 94.00             | 1.44            |
|                   | Female        | 65.00             |                 |
|                   | <b>Total</b>  | <b>87.70</b>      |                 |
| <b>Overall</b>    | <b>Male</b>   | <b>95.46</b>      | <b>1.32</b>     |
|                   | <b>Female</b> | <b>72.31</b>      |                 |
|                   | <b>Total</b>  | <b>89.14</b>      |                 |

The practice of payment of wages on piece-rated basis is most common in the garment industry. About 86 per cent workers employed in garment industry are paid on piece-rated basis, against 61 per cent in the textile industry. In the case of garments, 12.22 per cent workers are paid time-rated daily wages and 1.11 per cent time-rated monthly wages. The corresponding figures for textiles are 32.07 per cent and 3.80 per cent.

The study shows that the periodicity of payment of wages is monthly, weekly or daily.

### Benefits received by workers

In addition to wages, workers are expected to receive some basic benefits such as paid weekly holiday, medical leave, casual leave and dearness allowance to maintain the real value of wages etc.

The conditions are very unfavourable (Table 4.22). About 88 per cent workers reported that they do not get a paid weekly holiday. This could be partly due to the fact that they

**Table 4.20 Mode of payment of wages, by type of units**  
(%)

| Type of wages              | Sex          | LSI           | SSI           | HH            | Total         |
|----------------------------|--------------|---------------|---------------|---------------|---------------|
| Piece rate                 | Male         | 3.08          | 73.74         | 91.43         | 59.40         |
|                            | Female       | 0.00          | 84.62         | 88.46         | 76.14         |
|                            | <b>Total</b> | <b>2.67</b>   | <b>77.48</b>  | <b>90.63</b>  | <b>63.98</b>  |
| Month rate<br>(time-rated) | Male         | 33.85         | 1.01          | 1.43          | 10.26         |
|                            | Female       | 80.00         | 9.62          | 3.85          | 15.91         |
|                            | <b>Total</b> | <b>40.00</b>  | <b>3.97</b>   | <b>2.08</b>   | <b>11.8</b>   |
| Daily rate<br>(time-rated) | Male         | 55.38         | 25.25         | 7.14          | 28.21         |
|                            | Female       | 20.00         | 5.77          | 3.85          | 6.82          |
|                            | <b>Total</b> | <b>50.67</b>  | <b>18.54</b>  | <b>6.25</b>   | <b>22.36</b>  |
| Others                     | Male         | 7.69          | 0.00          | 0             | 2.14          |
|                            | Female       | 0.00          | 0.00          | 3.85          | 1.14          |
|                            | <b>Total</b> | <b>6.67</b>   | <b>0.00</b>   | <b>1.04</b>   | <b>1.86</b>   |
| <b>Grand total</b>         |              | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

**Table 4.21 Mode of wage payment in textiles and garments**  
(%)

| Type of unit       | Piece rate   | Time rate<br>(monthly) | Time rate<br>(daily) | Others      | Total         |
|--------------------|--------------|------------------------|----------------------|-------------|---------------|
| Textiles           |              |                        |                      |             |               |
| Male               | 54.86        | 1.39                   | 40.28                | 3.47        | 100.00        |
| Female             | 85.00        | 12.50                  | 2.50                 | 0.00        | 100.00        |
| <b>Total</b>       | <b>61.41</b> | <b>3.80</b>            | <b>32.07</b>         | <b>2.72</b> | <b>100.00</b> |
| Garments           |              |                        |                      |             |               |
| Male               | 86.27        | 0.00                   | 13.73                | 0.00        | 100.00        |
| Female             | 84.62        | 2.56                   | 10.26                | 2.56        | 100.00        |
| <b>Total</b>       | <b>85.56</b> | <b>1.11</b>            | <b>12.22</b>         | <b>1.11</b> | <b>100.00</b> |
| <b>Grand total</b> |              |                        |                      |             |               |
| <b>Male</b>        | <b>59.40</b> | <b>10.26</b>           | <b>28.21</b>         | <b>2.14</b> | <b>100.00</b> |
| <b>Female</b>      | <b>76.14</b> | <b>15.91</b>           | <b>6.82</b>          | <b>1.14</b> | <b>100.00</b> |
| <b>Total</b>       | <b>63.98</b> | <b>11.80</b>           | <b>22.36</b>         | <b>1.86</b> | <b>100.00</b> |

are paid on piece-rated basis. Again, casual leave is not available to 88 per cent and medical leave is denied to 97 per cent. Earned leave is available to less than 1 per cent: Regular increments or dearness allowances are available to less than 1 per cent workers, largely to “permanent” workers in the large non-SSI sector. Though provident fund is now

**Table 4.22 Percentage of workers receiving benefits**

| Units<br>Benefit     | LSI  |     |      | SSI |      |     | HH   |      |      | Total |     |      |
|----------------------|------|-----|------|-----|------|-----|------|------|------|-------|-----|------|
|                      | M    | F   | T    | M   | F    | T   | M    | F    | T    | M     | F   | T    |
| Paid weekly holidays | 12.5 | 0.0 | 10.7 | 9.2 | 9.4  | 9.3 | 13.4 | 10.3 | 12.5 | 10.7  | 9.3 | 12.5 |
| Casual leave         | 12.5 | 0.0 | 10.7 | 9.2 | 9.4  | 9.3 | 13.4 | 10.3 | 12.5 | 10.7  | 9.3 | 12.5 |
| Medical leave        | 32.8 | 0.0 | 28.0 | 5.1 | 11.3 | 7.3 | 3.0  | 3.4  | 3.1  | 28.0  | 7.3 | 3.1  |
| Earned leave         | 7.8  | 0.0 | 6.7  | 1.0 | 0.0  | 0.7 | 0.0  | 0.0  | 0.0  | 6.7   | 0.7 | 0.0  |
| Increments           | 23.4 | 0.0 | 20.0 | 5.1 | 11.3 | 7.3 | 0.0  | 0.0  | 0.0  | 20.0  | 7.3 | 0.0  |
| DA                   | 14.1 | 0.0 | 12.0 | 0.0 | 1.9  | 0.7 | 0.0  | 0.0  | 0.0  | 12.0  | 0.7 | 0.0  |
| PF                   | 40.6 | 0.0 | 34.7 | 4.1 | 0.0  | 2.6 | 0.0  | 0.0  | 0.0  | 34.7  | 2.6 | 0.0  |
| Pension              | 1.6  | 0.0 | 1.3  | 0.0 | 1.9  | 0.7 | 0.0  | 0.0  | 0.0  | 0.4   | 1.1 | 0.6  |
| Gratuity             | 26.6 | 0.0 | 22.7 | 1.0 | 0.0  | 0.7 | 0.0  | 0.0  | 0.0  | 7.9   | 0.0 | 5.6  |
| Medical leave        | 32.8 | 0.0 | 28.0 | 5.1 | 11.3 | 7.3 | 3.0  | 3.4  | 3.1  | 12.2  | 7.5 | 10.9 |
| Maternal benefits    | 1.6  | 0.0 | 1.3  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 0.4   | 0.0 | 0.3  |
| Maternity            | 0.0  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 0.0   | 0.0 | 0.0  |
| Any other            | 0.0  | 0.0 | 0.0  | 0.0 | 3.9  | 1.3 | 0.0  | 0.0  | 0.0  | 0.0   | 2.2 | 0.6  |

*Note: M-male workers; F-female workers; T-total workers.*

*Maternity benefits refer to allowances such as medical allowances, while maternity leave refers to leave for maternity only.*

**Table 4.23 Working hours put in during a day**  
(%)

| Units        | 8 hours      |              |              | 8.5–10 hours |              |              | 10+ hours    |              |              | Total         |               |               |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
|              | Male         | Female       | Total        | Male         | Female       | Total        | Male         | Female       | Total        | Male          | Female        | Total         |
| LSI          | 87.50        | 9.09         | 76.00        | 0.00         | 0.00         | 0.00         | 12.50        | 90.91        | 24.00        | 100.00        | 100.00        | 100.00        |
| SSI          | 24.49        | 30.19        | 26.49        | 14.29        | 11.32        | 13.25        | 61.22        | 58.49        | 60.26        | 100.00        | 100.00        | 100.00        |
| HH           | 26.87        | 34.48        | 29.17        | 11.94        | 20.69        | 14.58        | 61.19        | 44.83        | 56.25        | 100.00        | 100.00        | 100.00        |
| <b>Total</b> | <b>42.79</b> | <b>29.03</b> | <b>38.82</b> | <b>9.61</b>  | <b>12.90</b> | <b>10.56</b> | <b>47.60</b> | <b>58.06</b> | <b>50.62</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

mandatory in all units employing more than 10 persons, it is denied to 97 per cent workers.

It is to be underlined that (1) it is only in the non-SSI sector that a fraction of workers are receiving the benefits, (2) men are slightly better placed compared with women and (3) the garment industry defaults the most in terms of payment of these benefits.

### Hours of work, weekly holiday and leave

It is worth noting that 25 per cent of workers in the large sector reported that their working hours exceed eight per day. The corresponding percentage was 74.5 in the case of SSI units and 73 per cent in HH units; 60 per cent of SSI workers and 56 per cent of HH workers reported that they put in more than 10 hours. In all, only 38.8 per cent are working for eight hours. The percentage of female workers putting in long hours (eight-plus hours) is much more than men workers: 70.97 and 67.21, respectively.

Table 4.24 shows that even regular/permanent workers put in long hours of work. The percentage working for up to eight hours is the highest among regular/permanent workers, followed by casual and contract workers. It is significant that about half of the workers put in more than 10 hours a day.

**Table 4.24 Percentage distribution of workers by working hours and employment status**  
(%)

| Employment status  | Up to 8 hours |             |             | 8–10 hours |             |             | 10+ hours   |             |             | Total        |              |              |
|--------------------|---------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
|                    | Male          | Female      | Total       | Male       | Female      | Total       | Male        | Female      | Total       | Male         | Female       | Total        |
| Permanent/regular  | 62.3          | 16.7        | 58.2        | 4.9        | 66.7        | 10.4        | 32.8        | 16.7        | 31.3        | 100.0        | 100.0        | 100.0        |
| Temporary          | 20.2          | 20.0        | 20.1        | 16.7       | 5.5         | 12.2        | 63.1        | 74.5        | 67.6        | 100.0        | 100.0        | 100.0        |
| Contract           | 45.5          | 44.4        | 45.2        | 4.5        | 18.5        | 8.6         | 50.0        | 37.0        | 46.2        | 100.0        | 100.0        | 100.0        |
| Casual             | 72.2          | 0.0         | 52.6        | 11.1       | 0.0         | 8.7         | 16.7        | 0.0         | 21.7        | 100.0        | 0.0          | 100.0        |
| <b>All workers</b> | <b>42.8</b>   | <b>29.0</b> | <b>38.8</b> | <b>9.6</b> | <b>12.9</b> | <b>10.6</b> | <b>47.6</b> | <b>58.1</b> | <b>50.6</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |

### Physical conditions at work

These conditions basically refer to the working environment in a production unit laid down in the Factories Act, 1948. Though non-factory units are not covered under the Factories Act, these are some of the basic humane conditions of work. It is important to view the working conditions against these norms and norms that ensure basic conditions in a work place.

**Conditions in the work place:** Though claims are made by employers, managers and owners that they provide at least good working conditions to workers, the workers report that these claims are not true. Ventilation is available only to 71 per cent workers: 97.3 per cent in large non-SSI units, 67 per cent in SSI units and 57 per cent in HH units. But clean air is available to 93 per cent LSI workers, 63 per cent SSI workers and 86 per cent HH workers. Adequate lighting is again available to 76 per cent workers: 99 per cent, 71 per cent and 66 per cent, respectively, in large non-SSI, SSI and HH units. Similarly good temperature is available to 91 per cent of non-SSI workers, 68 per cent SSI and 6.76 per cent HH sector. It is clear that these basic facilities are not available to all the workers.

It was noticed during field visits that small and household units usually try to cut down their production costs by putting too many machines and too many workers in small spaces. In many units, small particles keep floating in the air because no care is taken to keep the working environment clean. In a large number of cases, too many machines were crammed into a small room with hardly any space for ventilation and space to move around. Again, the temperature was high and very uncomfortable. Lighting was usually poor because cheap bulbs were being used. Some power looms in Surat and Bhivandi as well as small garment units involved were hot, unhealthy and suffocating. Even large units frequently had particles floating in the air without workers wearing masks. The situation in household units was also bad in cases where homes were small and where there was no specific place for working.

In Surat it was observed that workers live in shockingly unhygienic, cramped spaces. Some even live where they work. They lack basic facilities such as water or sanitation. Diseases are rampant. Around 80 per cent workers suffer from tuberculosis as they breathe impure/dusty air. The dirty living conditions, with no proper toilets and open drains, make workers even more vulnerable to several other diseases such as malaria or cholera.

**Table 4.25 Working conditions**  
(% workers reporting yes)

| Units                                    | LSI   |        |       | SSI   |        |       | HH    |        |       | Grand total |        |       |
|------------------------------------------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------------|--------|-------|
| Sex                                      | Male  | Female | Total | Male  | Female | Total | Male  | Female | Total | Male        | Female | Total |
| <b>Physical conditions in work place</b> |       |        |       |       |        |       |       |        |       |             |        |       |
| Ventilation                              | 27.07 | 11.83  | 22.67 | 27.51 | 41.94  | 31.68 | 17.03 | 17.20  | 17.08 | 27.95       | 11.83  | 23.29 |
| Adequate light                           | 27.51 | 11.83  | 22.98 | 29.26 | 43.01  | 33.23 | 19.65 | 20.43  | 19.88 | 76.42       | 75.27  | 76.09 |
| Temperature                              | 22.71 | 10.75  | 19.25 | 30.13 | 37.63  | 32.30 | 22.71 | 22.58  | 22.67 | 75.55       | 70.97  | 74.22 |
| Clean air                                | 25.76 | 11.83  | 21.74 | 24.89 | 41.94  | 29.81 | 25.76 | 25.81  | 25.78 | 76.42       | 79.57  | 77.33 |
| <b>Facilities at work place</b>          |       |        |       |       |        |       |       |        |       |             |        |       |
| Drinking water                           | 27.95 | 11.83  | 23.29 | 37.55 | 45.16  | 39.75 | 24.89 | 29.03  | 26.09 | 90.39       | 86.02  | 89.13 |
| First-aid/ medical kit                   | 20.09 | 10.75  | 17.39 | 23.14 | 27.96  | 24.53 | 11.79 | 10.75  | 11.49 | 55.02       | 49.46  | 53.42 |
| <b>Occupational health and safety</b>    |       |        |       |       |        |       |       |        |       |             |        |       |
| Occupational safety                      | 18.34 | 10.75  | 16.15 | 21.40 | 32.26  | 24.53 | 19.65 | 17.20  | 18.94 | 59.39       | 60.22  | 59.63 |
| Occupational health                      | 18.78 | 10.75  | 16.46 | 23.58 | 44.09  | 29.50 | 18.34 | 17.20  | 18.01 | 60.70       | 72.04  | 63.98 |

*Note: Toilets are available, but usually far away from the place of work.*

**Facilities at work:** The three basic facilities necessary in any work place are drinking water, toilet and first-aid or medical kit. The access of workers to these facilities, however, was not satisfactory. Drinking water was available to 90 per cent workers, and the rest, mainly in small units, were expected to go to nearby public places or to bring their own supply. First-aid kit was available only to half the workers. This is indeed a serious matter in an industry where accidents are not infrequent. Workers from large units also complained about the lack of this basic medical facility. The toilet facility was available only to 60 per cent workers and to 40 per cent women workers.

In SSI units, they did not consider it necessary to provide a separate toilet to their workers. In fact, this is not considered as an essential facility on the plea that workers can always go to nearby facilities or relieve themselves outside in the open. The canteen was available mainly to LSI workers. The others went out of the factory/unit for a cup of tea. Women workers did not have this facility in SSI and HH units.

All the workers from large units reported availability of drinking water at the work place, while the corresponding percentage was 87 for HH and 85 for SSI sector workers. Similarly, only 30 per cent HH workers and 50 per cent of SSI workers reported the availability of first-aid facility, and 74 per cent in the case of LSI units.

**Occupational health and safety:** According to the workers, occupational health and safety do not seem to be important to employers. Workers also do not consider this very important as they are frequently unaware of the dangers. About 69 per cent of the workers in LSI units, 52.3 per cent in SSI units and 60 per cent the HH sector reported that they had no serious problems with their occupation-related health and safety. In all, 60 per cent said they did not face any occupation-related problems.

There are several sources of occupational diseases and lack of safety in the industry:

- Large numbers of machines crammed into small rooms as observed in the power loom, garment and other small units are a danger to the safety of workers.
- Too many noisy machines running continuously in small and home-based units are a major source of noise pollution. This can severely impair the hearing faculties of workers. During the field work this was observed in many textile and garment units.
- Polluted air in work places and indiscriminate discharge of effluent outside were observed not only in the case of small units, but also in the case of large units. In one of the large modern companies investigated, dirty water was observed being thrown out without treatment, leading to filthy surroundings.
- There is little awareness on the part of employers as well as workers about ergonomics. It was observed that uncomfortable machines and their layout, ergonomically inefficient chairs and stools resulted in backache and headache among workers. Most small units lacked adequate light and ventilation.
- Women workers particularly sat in uncomfortable positions with respect to the height of machines and seating arrangements, leading to bad posture.

The unfortunate part of the story is that none of these conditions are reported as these units are not inspected by factory inspectorates, because these units fall outside the purview of the Factories Act. Since most workers are non-permanent, they are not covered under the law. They cannot and do not complain to the factory inspectorates or to any authorities.

Only a few workers reported occupational diseases or lack of safety. Some 7 per cent men, and none of the women workers, complained about uncomfortable machines and other ergonomic problems. Again, 20 per cent of workers from small units complained about polluted air and water in and around the work place. Workers in powerloom units suffer from occupational diseases such as hearing impairment/deafness due to continuous exposure to very high decibels of sound.



## Unhealthy surroundings

It is extremely important to report the dirty surroundings of the textile and garment units in most localities and centres observed during the field studies. Except for a few responsible large units and some small units, all the units were seen to be careless about the cleanliness of the surroundings. Indiscriminate discharge of waste was almost the rule rather than the exception. In the case of SSI and HH units, clean surroundings were always conspicuous by their absence. In discussions with industry leaders as well as labour representatives, serious concern was expressed about the health hazards caused by pollution inside and outside factories. However, no concrete data is available on this.

The case of Tirupur has been well documented by Swaminathan (2007). She has reported that (1) the units engaged in dyeing and bleaching operations in Tirupur have disposed of effluents indiscriminately, which have accumulated in the Orathupalayam dam; (2) these have also damaged the Noyyal river flowing through the town; (3) the polluted river and polluted environment have affected the livelihood of people in the surrounding areas; and (4) their health has also been seriously affected. The case has now gone to the Tamil Nadu High Court. Similarly, environmental pollution by textile units has been reported in some prominent textile centres such as Jetpur in Gujarat, Ichalkaranji in Maharashtra, Kanpur in Uttar Pradesh etc. (*Down To Earth*, July 2005, March 2004, September 2007 etc.). There is no doubt that the pollution created by this industry deserves more attention than is being given today.

## Housing facilities for workers

Overall, 80 per cent workers own homes, while 20 per cent live in rented houses. As expected, this percentage is high for LSI workers (98.4 per cent for men and 100 per cent for women), and low for SSI and HH sector workers: 78.10 per cent and 67.70 per cent, respectively.

However, the three basic facilities, namely, potable drinking water, electricity and separate bathroom/toilet are not always available. The condition of SSI and HH workers is particularly poor, with SSI workers being worse off than home-based workers. Overall, 70 per cent workers have drinking water at home; 53 per cent have electricity at home; 47 per cent have a separate bathroom and 42 per cent have a separate toilet.

## Skill training and capacity building

Manufacturing of textiles and garments needs training of different levels. The need for better skills has increased in the recent years thanks to the increased opportunity to export. The skills required for the industry range from operating simple machines to highly sophisticated ones. There is also a need for unskilled workers, even in large units, for work such as loading and unloading, cleaning, cutting and packaging etc.

Formal training to workers either in-house or outside the premises is not very common.

**Table 4.26 Housing and basic facilities in homes of workers**  
(%)

| Units        | Sex           | Own/<br>rented home |             | Water       |             | Electricity |             | Separate<br>bathroom |             | Separate<br>toilet |             |
|--------------|---------------|---------------------|-------------|-------------|-------------|-------------|-------------|----------------------|-------------|--------------------|-------------|
|              |               | Own                 | Rented      | At<br>home  | Outside     | At<br>home  | Outside     | At<br>home           | Outside     | At<br>home         | Outside     |
| LSI          | Male          | 98.4                | 1.6         | 95.3        | 4.7         | 71.9        | 28.1        | 79.7                 | 20.3        | 70.3               | 29.7        |
|              | Female        | 100.0               | 0.0         | 90.9        | 9.1         | 45.5        | 54.5        | 36.4                 | 63.6        | 54.5               | 45.5        |
|              | <b>Total</b>  | <b>98.7</b>         | <b>1.3</b>  | <b>94.7</b> | <b>5.3</b>  | <b>68.0</b> | <b>32.0</b> | <b>73.3</b>          | <b>26.7</b> | <b>68.0</b>        | <b>32.0</b> |
| SSI          | Male          | 80.6                | 19.4        | 69.4        | 30.6        | 50.0        | 50.0        | 30.6                 | 69.4        | 27.6               | 72.4        |
|              | Female        | 73.6                | 26.4        | 34.0        | 66.0        | 32.1        | 67.9        | 41.5                 | 58.5        | 34.0               | 66.0        |
|              | <b>Total</b>  | <b>78.1</b>         | <b>21.9</b> | <b>57.0</b> | <b>43.0</b> | <b>43.7</b> | <b>56.3</b> | <b>34.4</b>          | <b>65.6</b> | <b>29.8</b>        | <b>70.2</b> |
| HH           | Male          | 65.7                | 34.3        | 76.1        | 23.9        | 50.7        | 49.3        | 43.3                 | 56.7        | 35.8               | 64.2        |
|              | Female        | 72.4                | 27.6        | 62.1        | 37.9        | 65.5        | 34.5        | 51.7                 | 48.3        | 51.7               | 48.3        |
| <b>Total</b> | <b>Male</b>   | <b>67.7</b>         | <b>32.3</b> | <b>71.9</b> | <b>28.1</b> | <b>55.2</b> | <b>44.8</b> | <b>45.8</b>          | <b>54.2</b> | <b>40.6</b>        | <b>59.4</b> |
|              | <b>Female</b> | <b>79.8</b>         | <b>20.2</b> | <b>70.2</b> | <b>29.8</b> | <b>52.8</b> | <b>47.2</b> | <b>46.9</b>          | <b>53.1</b> | <b>41.9</b>        | <b>58.1</b> |

LSI units provide such training: 11 per cent workers reported that they did receive formal training inside or outside the factory premises. The cost of the training was borne by the units. It is observed that LSI units hire trained or qualified workers, frequently those trained in smaller units. As a result, even when they frequently need highly skilled workers, they manage by providing short-term or on-the-job training. As their managers pointed out, they have to organize only short-term training for some workers.

**Table 4.27 Training during the past 5 years, by type of unit**  
(%)

| Units        | Given training |               |               | On the job    |               |               | In-house      |               |               | Outside       |             |               |
|--------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|---------------|
|              | Male           | Female        | Total         | Male          | Female        | Total         | Male          | Female        | Total         | Male          | Female      | Total         |
| LSI          | 23.53          | 0.00          | 11.43         | 40.00         | 0.00          | 19.05         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00        | 0.00          |
| SSI          | 76.47          | 100.00        | 88.57         | 60.00         | 100.00        | 80.95         | 100.00        | 0.00          | 100.00        | 100.00        | 0.00        | 100.00        |
| HH           | 0.00           | 0.00          | 0.00          | 40.00         | 40.00         | 40.00         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00        | 0.00          |
| <b>Total</b> | <b>100.00</b>  | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>0.00</b> | <b>100.00</b> |

In the case of SSI units, 60 per cent workers reported that they received training, but 80 per cent of them received on-the-job training within the premises of the unit. In the job centres in Ahmedabad, almost all workers received on-the-job training. As for workers in home-based units, none had received any formal training. All had been trained on the job. In short, the most prominent method of training is on the job, particularly for SSI and HH workers.

**Table 4.28 Loss of job and retrenchment**  
(%)

| Employment status  | Sex           | No job loss | Job lost    | Retrenchment allowance (Rs) |
|--------------------|---------------|-------------|-------------|-----------------------------|
| Permanent          | Male          | 100.0       | 0.0         | 0.0                         |
|                    | Female        | 100.0       | 0.0         | 0.0                         |
|                    | Total         | 100.0       | 0.0         | 0.0                         |
| Temporary          | Male          | 81.3        | 18.8        | 0.0                         |
|                    | Female        | 80.0        | 20.0        | 0.0                         |
|                    | Total         | 80.6        | 19.4        | 0.0                         |
| Contract           | Male          | 90.0        | 10.0        | 0.0                         |
|                    | Female        | 80.0        | 20.0        | 0.0                         |
|                    | Total         | 87.8        | 12.2        | 0.0                         |
| Casual/other       | Male          | 25.0        | 75.0        | 0.0                         |
|                    | Female        | 90.0        | 10.0        | 0.0                         |
|                    | Total         | 40.0        | 60.0        | 0.0                         |
| <b>Grand total</b> | <b>Male</b>   | <b>0.0</b>  | <b>0.0</b>  | <b>0.0</b>                  |
|                    | <b>Female</b> | <b>0.0</b>  | <b>0.0</b>  | <b>0.0</b>                  |
|                    | <b>Total</b>  | <b>80.4</b> | <b>19.6</b> | <b>0.0</b>                  |

Workers, however, do understand the importance of training, as 27.08 per cent of workers from home-based units and 12.58 per cent from small-scale units pointed out that formal/good training can have many advantages. The most important advantage was increase in wages, followed by upward mobility and change of jobs.

Women do not seem to receive much formal training. All women workers reported nil or on-the-job training.

### **Loss of job and protection against it**

Losing a job is not uncommon in the highly competitive environment. About 19 per cent workers reported loss of job in the last five years. All these are temporary or contract workers. The reasons given for the loss of job were that the company was downsizing, closing or changing its products. No retrenchment allowance was given.

It is observed that in the process of restructuring of units (which has increased in the competitive environment under the liberalization policies), downsizing of workers has increased considerably. Though the industry as a whole is doing well, there will be some units that will be downsizing or closing due to restructuring. It is necessary to protect workers during the period of frictional unemployment and help them in moving from one employment to another. The former requires unemployment insurance, while the latter requires employment services such as counselling, information on jobs available

(labour market information service), training and retraining facilities and assistance in getting new jobs. Such an employment service is beyond the capacity of the present employment exchanges in the country. As a result, workers who lose jobs may have to fend for themselves.

The study by Breman (2003) has documented this vulnerability of organized textile workers very accurately. The study shows that in the wake of large-scale closure of textile mills in the 1980s and 1990s, workers suffered not only in terms of loss of job, but also in terms of non-payment of their dues, including social security payments. Due to inadequate employment services, these workers were forced to fall back on precarious low-paid unorganized sector jobs.

**Membership of trade unions**

Only one-tenth of the workers reported that they were trade union members. All of them are male and 65 per cent of them LSI workers. The rest are SSI workers. Trade unionism is totally absent in the case of HH workers – hired wage workers as well as owner or family workers. The reasons for not enrolling or not forming a trade union, according to the workers, are (1) employers have prohibited or they do not like it, (2) their job will be in danger and (3) as a casual, contract or temporary worker, membership of a trade union will imply no renewal of contract/work. In short, most workers are not members because their jobs are at stake.

All the union members are from textile units. None of the workers employed in the

**Table 4.29   Trade union membership**  
(%)

| Type of unit   | Sex           | Yes         | Reasons for not joining trade union |                        |                       |                              |
|----------------|---------------|-------------|-------------------------------------|------------------------|-----------------------|------------------------------|
|                |               |             | Employer disapproves                | Prohibited by employer | Job will be in danger | Contract will not be renewed |
| LSI            | Male          | 31.3        | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | Female        | 0.0         | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | <b>Total</b>  | <b>26.7</b> | <b>6.7</b>                          | <b>9.3</b>             | <b>1.3</b>            | <b>9.3</b>                   |
| SSI            | Male          | 5.2         | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | Female        | 0.0         | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | <b>Total</b>  | <b>2.0</b>  | <b>25.2</b>                         | <b>6.0</b>             | <b>0.7</b>            | <b>5.4</b>                   |
| HH             | Male          | 0.0         | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | Female        | 0.0         | 0.0                                 | 0.0                    | 0.0                   | 0.0                          |
|                | <b>Total</b>  | <b>0.0</b>  | <b>15.6</b>                         | <b>1.0</b>             | <b>0.0</b>            | <b>2.3</b>                   |
| <b>Overall</b> | <b>Male</b>   | <b>12.7</b> |                                     |                        |                       |                              |
|                | <b>Female</b> | <b>0.0</b>  |                                     |                        |                       |                              |
|                | <b>Total</b>  | <b>9.0</b>  | <b>18.0</b>                         | <b>5.3</b>             | <b>0.6</b>            | <b>0.6</b>                   |

garment units is a member of any trade union. Also, all the trade union members are in the categories of permanent, regular or contract workers. The percentage of trade union members who are contract workers is the lowest at 5 per cent.

It is interesting to note, however, that most of them appreciate the advantages of a strong trade union. Only 38 workers of 323 workers (11.8 per cent) said trade unions are not necessary. The rest said the major uses of a trade union are (1) it helps in improving wages/salary, (2) solves problems at work and (3) contributes to the overall well-being of workers. Even home-based workers agreed.

### **Emerging issues**

The discussion in this chapter indicates that the rapid integration of the textile and garment industry with the global market has had an adverse impact on the wages and conditions of its workers. A rapid deterioration is observed in the conditions in which they work and live.

They are deprived in multiple ways: To start with, there is no employment security for a majority of them. The proportion of “permanent” workers entitled to all major facilities and benefits is low, and declining. As a result, most of them are deprived of their basic rights as workers. They work at low wages and do not get paid more even when labour productivity goes up. They work in miserable conditions, where basic health and safety are at stake. A majority of them neither get basic benefits such as paid weekly holiday, casual leave, medical leave etc., nor do they receive any social protection in events of crisis such as death, injury, sickness, old age, maternity etc. If they lose their jobs due to downsizing, closure or restructuring of production units, they have nothing to fall back on in terms of retrenchment allowance, unemployment insurance, training/retraining facilities or help in searching for new jobs. In short, with low wages, on the one hand, and the various insecurities, on the other, most workers have become highly vulnerable to small and big changes. As the next chapter examines in depth, the condition of women is much worse than those of men in all major areas.

Due to their low educational achievements as well as poor facilities in training and capacity building, these workers have a poor chance of upward mobility in the labour market. To a large extent, they are trapped in the vicious circle of low capabilities, low productivity, low wages and dim prospects in the labour market.

On top of all the deprivations and poor conditions, these workers are not allowed to form unions and mobilize collective strength to fight for their rights. With their precarious jobs depending on the will of employers, they are most reluctant to form or join unions. These unions, which could help them in bargaining for a better deal at work, appear to be out of the reach of these workers. In short, the industry has geared itself to gain from the new opportunities in the global market in such a way

that workers are unable to share the gains. Workers have gained almost nothing except more employment.

This raises certain important concerns related to the condition of workers:

**Absence of comprehensive laws to regulate working conditions:** The first major concern is the fact that at present the country does not have a set of laws that regulate comprehensively the working and living conditions of workers employed in non-factory units. Available laws – such as the Payment of Wages Act, 1936, the Minimum Wages Act, 1948, the Workmen’s Compensation Act, 1923, the Equal Remuneration Act and the Contract Labour (Regulation and Abolition) Act, 1970 – have limited content and coverage. They are also implemented indifferently by an equally indifferent machinery, with the result that they have, if at all, made an extremely limited impact. A few social welfare schemes, designed and implemented in a scattered manner, also are not able to provide any significant social security to workers. A set of labour laws are urgently needed to regulate comprehensively the working conditions in the unorganized/informal sector.

**Informalization of formal employment using loopholes in the labour laws:** The discussion in this chapter has shown that it is easy to find loopholes in the present set of the labour laws covering the organized formal sector. Units covered under the Factories Act have been able to avoid the law by using loopholes, hiring contract, temporary and casual workers (on the factory premises) who are outside the purview of the law. These “innovative” ways of employing non-permanent workers are used to such an extent that many SSI units employ up to 100 or more and yet stay out of the ambit of the Factories Act or related labour laws. These loopholes need to be plugged effectively.

**Right to form labour unions:** Though the right to form associations is a fundamental right in the Constitution of India, and though formation of labour unions is viewed as a basic right of all workers (also included in the Core Conventions of the ILO which all ILO member States agreed to observe regardless of the ratification status), production units have been able to prevent workers from forming or joining unions. It is surprising that in spite of this right given to workers, they are still threatened with job loss if they join unions. It is extremely important to examine this issue and take steps to ensure that workers enjoy this right.

**Employment exchanges and employment services:** Employment services have been set up in the country to help workers find a job or a new job when they lose one. Employment exchanges are also expected to provide (1) labour market information to inform workers of job opportunities in the economy and (2) help them in acquiring training and retraining in the trades where jobs are available. Unfortunately, these



services have almost totally failed in providing this support to workers who lose jobs frequently in the new competitive labour market. No lesson has been learnt from the NRF (National Renewal Fund) experiences to draw up a strategy for helping workers who might lose their jobs.

These concerns have important policy implications, which will be discussed in depth in the last chapter.

## Chapter 5

### Women workers in the textile and garment industry

#### Predominance of women workers

Analysis of the secondary data in Chapter 3 has shown that (1) women are predominant in this industry and (2) their proportion in the total employment is continuously increasing in this industry, more so in the garment sector. Some important insights that emerge from an analysis of the secondary data can be reiterated as follows:

- Though the proportion of unorganized workers is higher in the industry in general (as in the economy), the proportion of unorganized women workers is much higher than that of men workers.
- Employment of women in this industry is increasing at a much faster rate than that of men. The annual average rates of increase in employment have been 0.1 per cent and 1.5 per cent for men and women workers, respectively, in the textile sector and 8.2 per cent and 33.1 per cent, respectively, in the garment sector. That is, feminization of labour is happening rapidly in this industry.
- The share of home-based workers in employment of women in the industry is much higher than that of men. This is because women find it convenient to work at home, on the one hand, and employers prefer work to be performed outside their unit, on the other.
- The gender gaps in the major labour market outcomes in the textile and garment sector are significant and rising. This indicates deterioration of the position of women in relation to that of men in the labour market.
- The gender wage gaps are significant and are observed to be rising rapidly in all the components of the market. Interestingly, the wage gap is much higher in the organized segment of the market than in the unorganized segment.

In the background of these insights, the present chapter examines the dynamics of the inferior position of women in the labour market in the context of trade liberalization. The chapter is divided into two sections: The first section analyses the dynamics of the inferior status of women workers in the industry, while the next deals with inferences and implications of the analysis.

#### 1. Pressures of globalization on women's employment

The two major pressures of globalization on industrial units that affect employment of workers in general and of women in particular are the need to be flexible in order to adjust to the volatile global market and the need to minimize the cost of production to compete with other countries/other units. Employing women can be an important



strategy here, as they prefer flexibility in terms of time and location of work. It is also easy to segment the labour market for women, as they are perceived as meek and quiet, and are willing to work hard at lower wages.

LSI units prefer to employ them as “temporary” workers in sales and administration and as contract and casual labour for production and other manual work (Table 5.1). SSI units, which try to avoid the Factories Act and other regulatory legislation by keeping the workforce size small, find women useful as a temporary, casual and flexible resource. Similarly, in household units, women fit in very well as unpaid family workers.

**Table 5.1    Employment of men and women in LSI, SSI and HH units**  
(%)

| Unit  | Manager | Supervisor | Sales | Administrator | Skilled<br>production<br>worker | Semi-skilled<br>production<br>worker | Unskilled<br>production<br>worker | Other<br>casual<br>worker | Total  |
|-------|---------|------------|-------|---------------|---------------------------------|--------------------------------------|-----------------------------------|---------------------------|--------|
| LSI   |         |            |       |               |                                 |                                      |                                   |                           |        |
| Men   | 1.52    | 3.65       | 2.18  | 1.90          | 67.20                           | 10.45                                | 4.87                              | 8.56                      | 100.00 |
| Women | 0.56    | 3.00       | 2.33  | 1.54          | 12.90                           | 53.57                                | 13.77                             | 12.29                     | 100.00 |
| SSI   |         |            |       |               |                                 |                                      |                                   |                           |        |
| Men   | 2.44    | 2.44       | 2.44  | 4.88          | 58.54                           | 21.95                                | 7.32                              | 0.00                      | 100.00 |
| Women | 0.00    | 11.11      | 0.00  | 0.00          | 40.00                           | 33.33                                | 4.51                              | 11.11                     | 100.00 |
| HH    |         |            |       |               |                                 |                                      |                                   |                           |        |
| Men   | 50.00   | 0.00       | 0.00  | 0.00          | 0.00                            | 50.00                                | 0.00                              | 0.00                      | 100.00 |
| Women | 11.11   | 0.00       | 0.00  | 0.00          | 55.56                           | 33.33                                | 0.00                              | 0.00                      | 100.00 |

*Source: Primary survey.*

In the hierarchy of employment, women are almost nowhere as managers, except for a very small share in a few units. Only one out of the five LSI units has hired women managers; there is no woman manager in the SSI units; and in the HH units only a small percentage can be called managers. Women work in administration and sales departments, mainly as clerical workers, and as production and casual workers on the shop floor. In LSI units they are predominant as semi-skilled and unskilled workers, whereas in SSI and HH units they are important as skilled production workers also. Women are also predominant in casual work such as sweeping, cleaning, housekeeping, loading/ unloading and so on.

In the hierarchy of employment status, too, women lag behind men in several respects (Table 5.2). For example, 90 per cent of women employees in the LSI units and 99 per cent in SSI units are non-permanent, that is, not entitled to the benefits of permanent workers. The corresponding figures for male workers are 32 per cent and 14 per cent, respectively. By contrast, their numbers are much higher as casual and contract workers. Women are employed as temporary workers in the sales and administration departments of LSI units. In the HH units, none is reported as a permanent worker, as the term is used only for those entitled to the benefits meant for permanent workers under labour laws.

**Table 5.2 Employment status of men and women in LSI, SSI and HH units**  
(%)

| Unit  | Permanent | Regular and temporary | Contract | Casual | Other | Total  |
|-------|-----------|-----------------------|----------|--------|-------|--------|
| LSI   |           |                       |          |        |       |        |
| Men   | 27.60     | 43.20                 | 14.61    | 12.24  | 2.30  | 100.00 |
| Women | 11.11     | 20.10                 | 23.60    | 0.00   | 45.23 | 100.00 |
| SSI   |           |                       |          |        |       |        |
| Men   | 14.00     | 30.77                 | 32.69    | 11.54  | 0.00  | 100.00 |
| Women | 10.00     | 16.12                 | 22.65    | 51.02  | 0.00  | 100.00 |
| HH    |           |                       |          |        |       |        |
| Men   | 0.00      | 50.00                 | 25.00    | 25.00  | 0.00  | 100.00 |
| Women | 0.00      | 50.00                 | 0.00     | 50.00  | 0.00  | 100.00 |

Source: Primary survey.

### Education and skills of women workers

A part (and only a part) explanation for this state of affairs could be the low educational qualification of women workers. As Table 5.3 shows, a larger proportion of women workers is illiterate or educated up to class V, compared with the proportion of men workers. Similarly, there are fewer women among the relatively better educated workforce.

**Table 5.3 Education and skills of workers in LSI, SSI and HH units**  
(%)

| Unit   | Illiterate | Up to class V | Up to class X | Technical certificate | Technical diploma | Graduate | Post-graduate | Professional qualification | Total  |
|--------|------------|---------------|---------------|-----------------------|-------------------|----------|---------------|----------------------------|--------|
| LSI    |            |               |               |                       |                   |          |               |                            |        |
| Male   | 8.30       | 27.80         | 42.30         | 6.00                  | 3.90              | 2.00     | 4.00          | 5.70                       | 100.00 |
| Female | 15.40      | 33.50         | 38.20         | 0.00                  | 5.50              | 5.00     | 1.20          | 1.10                       | 100.00 |
| SSI    |            |               |               |                       |                   |          |               |                            |        |
| Male   | 4.23       | 16.63         | 45.81         | 17.43                 | 8.90              | 5.70     | 1.21          | 0.00                       | 100.00 |
| Female | 19.05      | 45.60         | 31.89         | 1.48                  | 0.00              | 1.20     | 0.74          | 0.00                       | 100.00 |
| HH     |            |               |               |                       |                   |          |               |                            |        |
| Male   | 13.41      | 51.15         | 27.03         | 8.11                  | 0.00              | 0.47     | 0.00          | 0.00                       | 100.00 |
| Female | 9.09       | 72.73         | 18.18         | 0.00                  | 0.00              | 0.00     | 0.00          | 0.00                       | 100.00 |

Source: Primary survey.

### Wages and benefits at work

As expected, women earn much less than men . To start with, their monthly salaries are much lower in the LSI and SSI units. Table 5.4 shows that against the average monthly salary of Rs 15,764 of male managers and supervisors in LSI units, the average salary of women managers/supervisors is Rs 5,345. This is almost one-third the average salary of men in the same category. Similarly, the average monthly salary of men and women

employees in administration and sales is Rs 8,945 and Rs 6,526, respectively. These gaps could be because (1) women are performing lower categories of work (only clerical work in administration, for instance) and (2) they enjoy “temporary” status against the “permanent” status of some men workers. There are also large gaps in the daily wages earned by men and women production workers in the LSI units. Such gaps are observed in the SSI and HH units also. Once again, the gaps are largely due to the division of work between men and women workers in these units.

**Table 5.4 Average daily wages of men and women in LSI, SSI and HH units**  
(Rs)

| Unit         | Manager and supervisor | Administrator and sales worker | Skilled production worker | Semi-skilled production | Unskilled and casual worker |
|--------------|------------------------|--------------------------------|---------------------------|-------------------------|-----------------------------|
| LSI          |                        |                                |                           |                         |                             |
| Men          | 15 764.00              | 8 943.33                       | 213.00                    | 130.00                  | 105.00                      |
| Women        | 5 347.33               | 6 526.67                       | 200.00                    | 115.00                  | 70.00                       |
| SSI          |                        |                                |                           |                         |                             |
| Men          | 10 113.00              | 866.67                         | 218.00                    | 133.00                  | 85.00                       |
| Women        | 1 233.33               | 533.33                         | 123.00                    | 97.00                   | 76.00                       |
| HH           |                        |                                |                           |                         |                             |
| Men          | 8 880.00               | 0.00                           | 0.00                      | 63.00                   | 0.00                        |
| Women        | 0.00                   | 0.00                           | 0.00                      | 48.00                   | 0.00                        |
| <b>Total</b> |                        |                                |                           |                         |                             |
| <b>Men</b>   | <b>34 757.00</b>       | <b>9 810.00</b>                | <b>431.00</b>             | <b>326.00</b>           | <b>98.00</b>                |
| <b>Women</b> | <b>6 580.66</b>        | <b>7 060.00</b>                | <b>263.00</b>             | <b>190.00</b>           | <b>72.00</b>                |

Do women get the necessary facilities and amenities that they need at work and for motherhood? The study answers mostly in the negative (Table 5.5).

Women-specific needs can be broadly divided into two categories: (1) Those related to conditions of work, such as separate toilet for women, child care centre, provision of nursing break etc. and (2) those related to social protection, such as paid maternity leave, payment of maternity expenses and related expenses. In addition, women also need flexible timings and part-time work.

**Table 5.5 Special facilities and social protection for women workers in LSI, SSI and HH units**  
(%)

| Units | Paid maternity leave | Maternity benefits | Nursing break | Part-time work | Flexible timing |
|-------|----------------------|--------------------|---------------|----------------|-----------------|
| LSI   | 100.00               | 100.00             | 100.00        | 20.00          | 0               |
| SSI   | 20.00                | 20.00              | 20.00         | 26.67          | 0               |
| HH    | 0                    | 0                  | 0             | 80.00          | 80.00           |

The data in Table 5.5 for LSI and SSI units refers to the entitlements of “permanent” workers only. It does not reflect the reality. The reality is that all non-permanent workers are denied these benefits. In other words, these facilities are available only to 11.11 per cent of the total female workforce in the LSI and less than 10 per cent workers in SSI units.

However, two of the five large units have not provided any child care centre as the number of children needing this facility is small. And there are only four cases (out of 10) in the LSI units where women have received full maternity benefits, since the other women employees did not qualify for the benefits, that is, they were not recognized as “permanent” workers. According to the Factories Act, only “permanent workers” are entitled to these benefits.

These facilities are not accorded importance in the case of the SSI and HH units because not all of them are legally bound to provide these facilities and social protection. However, facilities such as part-time work and flexible timings are available to women workers in the SSI and HH units. In fact, one of the reasons for setting up HH units and working out of home is to allow women flexible timings.

### **Understanding the division of work between men and women**

A systematic study was undertaken of how production work is divided between men and women workers in LSI, SSI and HH units.

#### **LSI units**

As seen earlier, the managerial, supervisory, sales and administration-related work is divided in a way that men are in decision-making jobs, while women are in subordinate jobs. Managers and supervisors are mostly men, while women provide them clerical and secretarial support. In sales and administration also, the leading roles are given to men, with women playing supporting roles.

It is observed that in LSI units, women work mostly in the first shift, mainly in winding (an easy task), reeling and in cleaning bobbins. However, the supervisors in winding and reeling are usually men. Women work on cleaning bobbins and in sorting waste, mainly because these are repetitive and low-productivity tasks. Women are not employed in the major production departments such as sizing, spinning and loom sheds as well as in processing, warping etc. Men are also in charge of maintenance and repair of all machines and equipment. They are also predominant as jobbers, that is, heads of different production processes.

In short, the division of production work in LSI units is such that men work in major departments and are in charge of technical work, while women are employed in less technical and more routine jobs.

#### **SSI units**

In the SSI units too, the leadership and major decision-making roles of managers and supervisors are taken up mostly by men. Though in Tirupur four women have entered

the supervisory category, women generally play a subordinate role in almost the entire production process. An analysis of how this happens in SSI units in the different textile and garment centres:

Tirupur garment units mainly manufacture top-end products with high value addition. These products are linked with prestigious global brands and exported mainly to the EU, the US, Canada and Japan. As seen in Chapter 1, the average size of production units in Tirupur is small. Some 15 per cent of the units employ less than 50 workers, and more than half the units employ less than 50 workers (not all are permanent workers and therefore most of them are not covered under the Factories Act and related labour laws). About 15 per cent units employ 200-300 workers, most of them non-permanent contract workers. Production in Tirupur is organized through a large network of small units dependent on each other.

The SSI units selected for the study perform tasks starting from knitting and stitching to ancillary operations and packing. Knitting involves three categories of labour: (1) fashion masters, the most skilled workers, responsible for deciding the initial fixtures for fabrics; (2) machine attendants who carry out the actual knitting; and (3) helpers to machine operators. The first category of work is performed exclusively by men, the second predominantly by men; while the last, which is the least skilled and low paid, is performed mainly by women.

The next operations are cutting, stitching and finishing. Cutting and stitching are highly specialized operations. Cutting is performed by highly skilled pattern masters and cutting masters, who are mainly men. Women are employed in stitching and sometimes in cutting also – but not on a large scale. Jobs that involve high skills are permanent in nature and go mostly to men, while women are employed in low-skilled, non-permanent work (Neetha, 2002).

Stitching is the most labour-intensive job that accounts for more than half of the labour time in the whole production process. It is carried out by two sets of machines: highly sophisticated imported machines and locally manufactured ones. Initially stitching was done by men, and women were helpers. Now women have taken up stitching as well and operate imported as well as local machines. Helpers are an important category of workers in stitching and cutting who move and arrange cloth. Helpers are always women.

Checking, ironing and folding of high-value added garments are specialized operations. With rising exports, these operations have become important – labour-intensive, monotonous as well as requiring dexterity. Women are again predominant in the monotonous, repetitive and boring operations.

Ancillary operations include dyeing and bleaching, drying etc. These operations need a low level of skills and women predominate in these. However, screen printing, another ancillary operation, is carried out by highly mechanized rotary printers (imported technology) or manually. Women are not employed in rotary printing except as helpers,

but manual printing, which is low-skilled and labour-intensive, is performed by women. Computerized embroidery is another sophisticated operation carried out by sophisticated machinery, and done only by men.

In short, women predominate in tasks which require few skills, are time-consuming, monotonous and boring, and non-permanent. In fact, the jobs are frequently treated as less skilled if performed by women. Men and women are employed in a manner that has created a clear hierarchy of work, with men enjoying a superior position.

Garment exporting units in Ahmedabad export relatively low value-added products to African countries, the Middle East and neighbouring Asian countries. Except for the three modern large-scale garment units, namely, Arvind Mills, Ashima Group and Arvee Denims, all the garment units are small. About 100 garment factories are covered under the Factories Act and the remaining 1,500-plus units are small. In addition, about 50,000 home-based workers are engaged in garment manufacturing.

Most of the small units employ 40 to 200 workers, but about 20 per cent have managed to remain outside the purview of the Factories Act. These are either manufacturing units which manage to meet large demands in the global market by linking up with smaller units, or are subcontracting units which produce for exporting companies (which collect products from a large number of production units) or for agents/middlemen helping them with access to global markets. At the lowest level of production, there are a large number of home-based workers or home workers who are out-workers for small and big producers. The division of labour in the garment industry in Ahmedabad is such that women are predominant as home and home-based workers. Their numbers are much smaller in garment factories and in job centres.

The division of the production process between men and women is peculiar in these units. Master cutters are mostly men, who are highly skilled. Their job is to cut the fabric as per the design given to them. Stitching workers, who operate machines, are men and women both, but women perform tasks such as button holding and fixing. The helpers are women. Embroidery is done on special sophisticated machines as well as on ordinary machines. Men work on the special machines while women work on the normal/common machines. Also, specialized hand embroidery and designs are done by women.

Elastic fitting and button fitting (not stitching) are relatively skilled jobs performed mainly by men. Pressing of garments, not a simple task, is usually performed by both men and women. Packing, largely manual, repetitive and boring, is done by women. Screen printing is done by both men and women (women have entered this segment recently), while their helpers are women. Helpers to master cutters also are women.

There is a clear division of labour between men and women in textile SSI units in Bhivandi, a major power loom centre in India. It produces largely cotton textiles. It has emerged as a key weaving centre after the textile mill strike in Mumbai in the early 1980s. Nearly 80 per cent of the owners operate more than 20 looms each. There are 100 sizing units, 20 power process houses and 20 hand process houses in the town at

present. It has 450,000 power looms producing 100 per cent cotton as well as blended and polyester suits, sarees and so on.

The SSI units employ machine operators for sophisticated looms. Usually, all the operators are men. Fitters, in charge of fitting, are also men. Role winding, another important operation done with machines, is also performed by men. However, cloth checking, packing, ironing and folding operations, which are low-productivity and labour-intensive, are carried out by women. Sometimes packing, which is an important operation in these units, is done by men. Once again, the division of work is such that women end up performing low-skilled, repetitive and boring jobs.

Textile units in Coimbatore are fairly diversified, producing khadi, handloom cotton textiles, polyester fabric, art silk and blended textiles. There are about 30,000 small, medium and large units in the city. Of these, about 2,090 are small units.

The SSI units perform various tasks, from machine operation to cutting, folding and packing. The total work is clearly divided on gender lines: Yarn checking, roll checking and machine operation, all of which are relatively technical tasks, are performed by men. Women perform tasks such as checking of cloth (men also participate), folding, ironing, cutting and packing (men also participate). Once again, women perform low-productivity tasks that fetch lower income/wages.

Surat, another major power loom centre in India, has about 500,000 power looms and 400 processing units. Power looms use automatic shuttle looms, semi-automatic Rapier and water jet looms and others. At the top end of production, there are masters, followed by supervisors, operators of ply-twisting machines and winding workers. Men are in charge of these tasks. There are helpers to these workers, and majority of them are women. Bobbin workers are both men and women. At the lower end, there are tasks such as cutting, folding and packing – all of these are usually performed by women. Men are also employed for packing in some units.

### **Household units**

In the case of household units, the division of production work between men and women is not so clear. However, the main decision maker or owner or “manager” is usually a man. The majority of unpaid family workers are women, who work hard at stitching, embroidery and ancillary work. It is also observed that hired men workers are employed for relatively more skilled work, and though hired women workers perform more or less the same tasks, they also work as helpers, cleaners and supporters.

In short, there is clearly a hierarchical division of labour between men and women in the production processes carried out in LSI, SSI as well as HH units. This has been done in an unmistakably systematic manner.

### **Attitude of employees/owners towards women workers**

In order to understand the preference or lack of preference for women workers for different categories of work, employers/managers/owners were asked during the investigations whether they prefer women workers and why.



The LSI units clearly indicated that women have some weaknesses due to which they usually cannot be employed in certain responsible positions: Except for highly qualified women or women with proven abilities, women have (1) weak management capacity, (2) cannot tour – are not mobile and (3) cannot manage workers. They are therefore not preferred for managerial and supervisory positions. However, they are sincere and hardworking, do not mind undertaking repetitive work and are willing to take up unstable (not regular) work at low wages. They are therefore good as production and casual unskilled workers. These units also say that women’s domestic and motherhood responsibilities put a limitation on their continuity of employment on the one hand, and raise costs (for maternity benefits, child care centre etc.) for production units, on the other.

Employing women is seen as an expensive proposition because (1) after employing women, the unit has to spend on a separate toilet and a child care centre, (2) provide for paid maternity leave and maternity benefits and (3) accept frequent leave of mothers from work (Table 5.6). This raises the cost of production, which is not advantageous in a competitive market. Again, being responsible for managing their homes, women are less mobile, cannot work for long hours or overtime, and are not committed to their factory work. The LSI units therefore say that it is not only bias (or discrimination), but also the supply-side constraints and strengths of women that seem to determine the level of employment, employment status and wages and working conditions.

**Table 5.6 Views of LSI units on employing women**

| Unit | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|---|---|---|---|---|---|---|---|---|----|
| 1.   | Y | – | Y | Y | Y | – | – | Y | Y | Y  |
| 2.   | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y  |
| 3.   | Y | Y | Y | Y | Y | – | Y | Y | Y | Y  |
| 4.   | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y  |
| 5.   | – | – | – | Y | Y | – | – | Y | Y | Y  |

*Note: 1=Women are sincere and hardworking; 2=women do not join unions; 3=women accept flexible work; 4=women accept low wages; 5=women are less educated; 6=women have weak management capacity; 7=women cannot manage workers; 8=women are not mobile; 9=women are bogged down by domestic responsibility; 10=employing women is expensive.*

The SSI units have a slightly different approach. They are concerned about the willingness and capacity to work and the wage levels. Investigations show that SSI units do not prefer women as managers because (1) they are weak managers and (2) they are not likely to control workers enough to take work from them. They prefer women mainly for non-managerial work. They prefer women because they are sincere and hardworking, are regular, accept low wages, are perceived as meek and quiet and do not join unions. One major constraint is that they are to be given only day jobs.

The attitude of the household units towards employing women is all positive, in the



**Table 5.7 Views of SSI managers/owners on employing women**

| Type of work               | Preference for women        | Reasons                                               | Remarks                    |
|----------------------------|-----------------------------|-------------------------------------------------------|----------------------------|
| Manager/supervisor         | No                          | Women cannot manage, are not good at handling workers | —                          |
|                            |                             | Women lack the required qualifications                | —                          |
| Sales and administration   | Yes, if qualified           | Low salary, sincere in work                           | —                          |
| Skilled production workers | Yes, if skilled/experienced | Low wages, do not join unions, meek and quiet         | Cannot be given night jobs |
| Unskilled and casual work  | Yes                         | Low wages, hard-working, regular, do not join unions  | —                          |

sense that there is a clear demand for women's involvement in this home-based work. Since the work is performed within the home, or at best near home, with flexible timings, there is always a possibility of involving a large number of women. Women's share in this sector is, therefore, significant.

However, it is interesting to note that men (owners) even in the household units say that women are good as workers but not as owners/managers, because women are not good at business dealings. The predominance of women workers in the units, however, does provide them an opportunity to do business.

### Steps taken for gender equality

The response to a question whether the units have taken any step to promote gender equality in their units was very poor. Nothing much has been done for women. In the case of LSI units; however, three had organized one special training programme each for women in the last year. They intend to do this in the future too. Three units in Tirupur also had arranged training for women workers in the units and given them special promotion and a raise.

About 50 per cent of the units have recommended that (1) women's educational levels should improve to enable them to enter at higher levels of work and (2) special training programmes should be organized by the government to enable women to improve their productivity.

Not all the units agree that this unequal treatment of women is a problem as such. Many

say the fact that women have entered into the labour market is a positive development in itself. They believe this is an achievement for women under the new policy regime. It is also argued that, given the social system, not much can be expected for women. Some others say this entry will improve their labour market status in the long run. It will help them in improving their skills and productivity. Three SSI units (Surat and Tirupur) argued that women workers will gain in times of severe labour shortage. That is, it is mainly the market which will raise the work status of women.

## 2. Inferences and implications for gender equality

### **Feminization of employment in the industry and women's empowerment**

It is frequently argued that liberalization has empowered women because it has increased employment, even if at the lower end of the labour market; that women's own income has given them power within the labour market and within their homes (UNCTAD, 2008; NPC, 2008).

It is important to define women's empowerment in this context. One can say that women do not get empowered just by taking up a job or by participating in the labour market. Women are empowered only when:

- Their control over income increases;
- Their segregation in the labour market is reduced, that is, they enter non-typical sectors (non-stereotyped sectors);
- They achieve upward mobility in the hierarchy of work, that is, women's vertical segregation is reduced and a larger number of women are employed in responsible and decision-making positions;
- The quality of the work they do improves, that is, they are employed in "decent" work;
- The gender gaps in labour market outcomes narrow, including gender wage gap; and
- Their burden of unpaid work is reduced when they take up jobs in the labour market. That is, they do not suffer from time stress after joining the workforce.

The study has shown that women have not gained in any of the above. Though they have been able to participate in the labour market under globalization, it has not empowered them in terms of improved status in the labour market or within their homes.

The question is whether this entry into the labour market will improve their status and empower them in the long run, and whether this entry of women will generate forces that will lead to their empowerment. It appears from the study that this will not happen automatically, primarily because women are trapped in a vicious circle of low wages and high work burden. Overburdening of women workers leads to time stress and

depletion of human capital. These women are trapped in the vicious circle of low productivity/low wages and low prospects in the labour market. In other words, some external interventions are needed.

Before discussing the required outside interventions, it is important to understand why women are discriminated against.

### **Explaining gender gaps in the labour market**

What are the reasons for these clear gender gaps in most labour market outcomes? There are several theoretical presentations that explain gender wage gaps. Under the neo-classical framework, the major explanations are presented in the human capital theory, the tastes and preference theory and in the statistical discrimination theory. The human capital theory, which explains the gap mainly on the basis of supply-side explanations, argues that women possess low human capital compared with men because (a) they invest less in education and skills due to their domestic responsibilities; (b) they are more likely to work as part-time and intermittent workers due to their domestic responsibilities and therefore likely to acquire low human capital; and (c) they are likely to get crowded in low-productivity occupations due to their low mobility and low human capital. Consequently, women are likely to remain in industries and occupations with low productivity and wages.

The tastes and preferences theory or the taste for discrimination theory, which is a demand-side theory, argues that earnings of women who are equally productive are likely to differ because employees and employers have irrational preferences. Employers may prefer men for no apparent rational reason. It has been argued that such an irrational behaviour may not continue in a highly competitive environment as employers may not afford this luxury when competition is very intense.

The statistical discrimination theory argues that gender gaps exist because of market failure. Since market information is not perfect, group stereotypes exist. Using these stereotypes, employers discriminate against women workers.

According to the neo-classical theory, the gender wage gap narrows with time as competition in the market removes the information gap, irrational tastes and preferences. The theory also argues that there is a beneficial impact of trade expansion on workers, as it will increase the demand for abundant low-skilled workers and reduce large disparities among groups of workers. Trade expansion also changes the skill demand (the demand for skills required for exports increases), as a result of which workers specialize in the skills in demand. This again reduces wage inequalities. In reality, however, wage discrimination is feasible even under the neo-classical framework if it is possible to segment the labour market based on some of the characteristics of workers. For example, women workers are flexible (they prefer to work part-time, at home), docile and less likely to unionize as well as peculiar in their supply behaviour. It is possible to treat them differently by providing them temporary, part-time or casual employment at low wages. That is, it is possible to pay low wages to women in spite of competition. In fact, it is possible to employ more women than men to reduce costs to

export in a competitive market. This widens the gender gap in the labour market.

Another related reason that leads to increased gender gaps in the labour market outcomes is that women are unable to enter the segment of high value-added products mostly due to their low education/skill levels, on the one hand, and their domestic responsibilities, on the other.

The neo-classical theory gives only a part-explanation and fails to explain the roots of discrimination, that is, women's unpaid work. The theory assumes that unpaid work is "consumption" or "not important for labour market". It also assumes unlimited capacity of women to undertake unpaid work, and therefore fails to explain why women do not get into higher productivity occupations and why they do not share higher wages with men. To put it differently, the neo-classical approach ignores the real sources of discrimination in hiring, job assignment, promotion etc. – which have a significant impact on gender inequality in the labour market, including wage inequalities.

The approach ignores the fact that inequalities within households and in the labour market perpetuate each other. It also ignores the fact that discrimination cannot be isolated as only a labour market issue, that there are feedback effects between macroeconomic and global economic developments and discrimination in the labour market. In short, the explanations for the gender wage gap lie in alternative non-neo-classical theoretical frameworks.

The discussion on the attitude of employers/managers/owners towards employing women needs to be understood in the context of these explanations. The policy implications of this analysis include not only special efforts to improve human capital of women workers by undertaking special educational and training programmes, but also addressing the unpaid work of women which tends to become their major constraint in the labour market.

### **Possible interventions**

The possible external interventions can come from the following sources:

- An important external intervention or pressure could be a set of laws covering all labour under certain minimum standards. To start with, there is need for a comprehensive set of laws to determine wages and to ensure a minimum set of working conditions for workers. These should include the core labour standards, that is, (1) minimum working conditions/facilities at the work place; (2) minimum social protection; and (3) freedom to form unions for dialogue between workers and employers.
- Based on the recommendations of the National Commission for Enterprises in the Unorganised Sector (NCEUS), the Government of India has already passed an act to provide health insurance to informal workers in India. It is good to note that the NCEUS has drafted two bills to take care of the first two points. One of the bills, in a diluted form, has already become an act. There is an urgent need to expedite

enacting the second bill.

- These enactments need to be accompanied by clauses on the institutions that are necessary to enforce the acts. In fact, the acts will have no meaning if they are not accompanied by an effective and efficient institutional framework for their enforcement. This point will be discussed in depth in Chapter 7.
- The other pressure could come from the organization of workers. Unless workers are organized to demand their rights, even highly positive laws are not likely to yield much benefit. Organizing women separately and ensuring equal participation of women in these unions is essential in this context. This issue too is discussed in depth in the last chapter.
- Enforcement of labour standards in export industries is likely to raise the cost of production in the industry, which in turn is likely to affect the growth of the global market and of the industry adversely. This will happen as long as all the countries trading in the global market do not adhere to labour standards. (This is very difficult, because there is no global power/governance to enforce labour standards in global trade.) This creates a real dilemma for policy makers, because on the one hand trade, and therefore employment, will decline if these standards are enforced; on the other, non-enforcement will imply severe exploitation of labour, including women. This dilemma needs to be addressed squarely. This point also has been taken up in the last chapter.
- A major area of intervention here is promotion of women's enterprises in the industry, particularly in the garment sector. As the study shows, household units are keen to expand into small, healthy enterprises. Efforts should be made to promote these enterprises by improving their access to technology, skill training, credit and other infrastructural facilities to enable them to grow.
- The low educational achievements of women appear to be an important constraint in their entry into higher levels of jobs. There is therefore an urgent need to promote women/girls' education – not only at the primary and secondary levels, but also at the technical and professional levels. This education needs to be promoted through intensive and extensive efforts. In this context, it is also necessary to organize special training programmes, both focused and tailor-made, for women workers who are already employed in the industry.
- Considering that there is a general environment of indifference in the industry with respect to gender equality, special incentives and concessions need to be designed for units that promote employment and training of women.
- It needs to be recognized that women will achieve a level playing field in the labour market only when their burden of unpaid work is reduced. With a higher burden of domestic work and jobs, they will not be able to access a status equal to that of men in the labour market. The last but not the least measure is to address the burden of

unpaid work of women, systematically and effectively. The last chapter addresses this issue as well.

To conclude, there is a clear need to engender the trade policy as well as the industrial and labour policy. These are major macroeconomic issues that deserve the careful attention of policy makers.



## Chapter 6

### The handloom sector

The handloom sector occupies an important place in the textile industry in India. According to the second Census of Handlooms (1995–96), there are 3.47 million handloom weavers in the country, and about 2.52 million households are engaged in this industry. At present, the handloom sector contributes 13 per cent to the total textile production in the country and its share in the total textile employment is more than 30 per cent. The share of handlooms in the total textile exports is 7.3 per cent.

This sector has experienced a decline in recent years, and questions are being raised about the valid place of this sector in the economy. This chapter discusses the multiple dimensions of these questions and makes recommendations to address these. The chapter is based on secondary data and literature as well as discussions with manufacturers and representatives of the sector.

Handlooms have a unique place in the textile sector as well as in the Indian economy for several reasons. To start with, the sector is spread across all the states and in hundreds of thousands of villages in India. It holds the rich and colourful heritage of the country in its cultural diversity. It is a heritage, a tradition that needs to be protected and promoted. Secondly, as noted above, it provides large-scale employment to more than 2.5 million households across the country. Thirdly, it meets a basic demand, for cloth, of millions of households within the country and has good export potential. Lastly, it uses eco-friendly production processes. There is no doubt that this sector needs to be supported for its healthy growth.

Table 6.1 indicates that handloom clusters are spread across all states. The prominent states are Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan, Orissa, Andhra Pradesh and states in the North-East.

The handloom sector has experienced a deceleration in production in the recent years. The compound annual rate of growth of handloom production in the period 1991–2006 is 2.65 per cent against 5.26 per cent for total production in the textile sector. The share of handlooms in total cloth production has declined from 17.94 per cent in 1991–92 to 12.32 per cent in 2005–06. The share of handloom exports in the total textile exports also has shown a decline from 16.72 per cent in 1991–92 to 7.30 per cent in 2005–06. The decline is much more than that in the production of handloom textiles. In other words, the handloom sector has not been able to take much advantage of new opportunities in the global market.

#### Recent policy changes

Historically speaking, government policies towards handlooms have undergone many changes. In the initial years of independence, handlooms were viewed as a highly labour-intensive sector which also preserved the cultural heritage of the

**Table 6.1 Handloom clusters, by states (1995–96) and by no. of looms**

| State            | Up to<br>1,000<br>looms | 1,000–<br>5,000<br>looms | 5,000–<br>10,000<br>looms | 10,000–<br>25,000<br>looms | 25,000–<br>50,000<br>looms | Above<br>50,000<br>looms | Total      |
|------------------|-------------------------|--------------------------|---------------------------|----------------------------|----------------------------|--------------------------|------------|
| Assam            |                         | 0                        | 0                         | 4                          | 5                          | 14                       | 23         |
| Andhra Pradesh   | 4                       | 3                        | 7                         | 8                          | 1                          | 0                        | 23         |
| Bihar            | 40                      | 12                       | 1                         | 0                          | 0                          | 0                        | 53         |
| Delhi            | 0                       | 1                        | 0                         | 0                          | 0                          | 0                        | 1          |
| Gujarat          | 11                      | 7                        | 1                         | 0                          | 0                          | 0                        | 19         |
| Goa              | 1                       | 0                        | 0                         | 0                          | 0                          | 0                        | 1          |
| Haryana          | 16                      | 0                        | 0                         | 1                          | 0                          | 0                        | 17         |
| Himachal Pradesh | 6                       | 4                        | 1                         | 1                          | 0                          | 0                        | 12         |
| Jammu & Kashmir  | 7                       | 7                        | 0                         | 0                          | 0                          | 0                        | 14         |
| Karnataka        | 5                       | 9                        | 5                         | 1                          | 0                          | 0                        | 20         |
| Kerala           | 5                       | 6                        | 1                         | 2                          | 0                          | 0                        | 14         |
| Madhya Pradesh   | 40                      | 5                        | 0                         | 0                          | 0                          | 0                        | 45         |
| Manipur          | 0                       | 0                        | 0                         | 2                          | 5                          | 1                        | 8          |
| Maharashtra      | 25                      | 1                        | 0                         | 2                          | 0                          | 0                        | 28         |
| Nagaland         | 0                       | 0                        | 4                         | 2                          | 1                          | 0                        | 7          |
| Orissa           | 9                       | 15                       | 5                         | 1                          | 0                          | 0                        | 30         |
| Punjab           | 9                       | 3                        | 0                         | 0                          | 0                          | 0                        | 12         |
| Pondicherry      | 0                       | 1                        | 0                         | 0                          | 0                          | 0                        | 1          |
| Rajasthan        | 19                      | 11                       | 1                         | 0                          | 0                          | 0                        | 31         |
| Tripura          | 0                       | 0                        | 0                         | 2                          | 1                          | 1                        | 4          |
| Tamil Nadu       | 3                       | 4                        | 2                         | 6                          | 5                          | 2                        | 22         |
| Uttar Pradesh    | 38                      | 19                       | 8                         | 1                          | 0                          | 1                        | 67         |
| West Bengal      | 2                       | 3                        | 2                         | 7                          | 3                          | 1                        | 18         |
| <b>Total</b>     | <b>240</b>              | <b>111</b>               | <b>38</b>                 | <b>40</b>                  | <b>21</b>                  | <b>20</b>                | <b>470</b> |

Source: Ministry of Textiles, Government of India.

Note: The states not mentioned have a relatively low presence of handlooms.



country. The thrust of the policy towards this sector was, therefore, on protecting it from competition from mills and power looms. This was done by imposing a cess on mills, regulating the weaving capacity of mills, licensing power looms and reservation of certain items for handlooms etc. Later, hank yarn obligation was imposed on mills to ensure adequate supply of yarn to handlooms. Cooperatives were seen as a suitable form of organization for handlooms. Support was provided to handloom cooperatives, the formation of which was also supported by the government. This support was given in the areas of credit and finance (with subsidies), market outlets (with subsidy in sales), renovation of products, welfare schemes and the like.

In short, the policy was based on patronization, subsidies and concessions, and cooperatives were accepted as a suitable organization for promotion of this sector. There was no reference to the efficiency or marketability of handlooms. However, all these policies did not help much in protecting and promoting the sector against competition from power looms. Power looms, particularly, thrived with concessions for the non-factory sector, other incentives/subsidies and non-regulation of labour. With higher productivity and these concessions, power looms had a competitive edge over handlooms as well as over mills.

The New Textile Policy, 1985, saw the beginning of a turnaround in the policy paradigm. This policy, the first step towards liberalization, emphasized productivity and removed all restrictions and curbs on power looms and mills with respect to fibre mix, expansion, renovation and so on. It also transferred the production of controlled cloth (cloth that each mill was mandated to produce for low-income groups) to the handloom sector. Thus the emphasis of the policy shifted to productivity rather than employment, and process-wise compartmentalization of the textile industry replaced the sector-wise view.

An important aspect of the policy towards handlooms was that this sector was treated more or less on a par with power looms. Except for items such as piece-dyed dhotis, lungis and piece or yarn-dyed coloured cotton sarees, which were exclusively for handlooms, the rest of the (eight) items were reserved for both handlooms and small power loom units. With the comparative advantage of the power looms over handlooms, the former thrived at the cost of the latter.

Another initiative to help the handlooms was the Hank Yarn Obligation Order, according to which mills should produce 50 per cent yarn in the form of hank for handlooms. Somehow this requirement was never met by the mills, resulting in shortage of yarn in the handloom sector. Both these factors worked against the handloom sector, with the result that it faced a crisis situation.

In spite of its focus on productivity, the 1985 policy announced some steps “to preserve the distinctive and unique role of handlooms to enable them to realize their full potential and ensure higher earnings of weavers”. It suggested the following: (1) intensifying development of handlooms through cooperatives and corporations;

(2) greater emphasis on modernization and provision of technological inputs for improving productivity, quality and finish; (3) special efforts to ensure availability of yarn through the National Handloom Development Corporation (NHDC); (4) removal of cost handicaps vis-à-vis power looms through fiscal measures; (5) improvement in marketing of handlooms by undertaking suitable steps; and (6) enabling the handloom sector to realize its export potential in the era of globalization.

Following the 1985 policy, several schemes were introduced to achieve these goals as well as to enhance welfare of handloom weavers and workers.

The Government of India has set up several committees and has announced some important policies and schemes in the post-globalization period:

The Abid Husen Committee was set up in 1990 to review the progress of the handloom sector since the 1985 policy was announced. The committee identified three types of weavers in this sector: high-earning, medium-earning and low-earning. It suggested that the productivity of these weavers could be increased by expansion of markets, providing technical support and by ensuring the availability of hank yarn. The committee recognized the export potential of this sector and recommended promotion of innovation, marketing and design. It suggested a highly decentralized form of production successfully linked with a highly centralized market:

- Area-based handloom agencies to provide technical assistance and to buy goods for export (and domestic) markets;
- Search for new organizational forms to meet new needs (including exports);
- Ultimately increase employment and earnings of handloom workers.

In the face of the crisis in this sector, which resulted in suicides by handloom weavers, the government appointed the Meera Seth Committee (1996). The committee suggested strengthening of handlooms through credit and technological upgradation and thereby increasing the earnings of weavers. To face the challenge of globalization, it recommended training of weavers, computer-aided designing (CAD), computer colour matching (CCM) etc. It also suggested an export-oriented strategy for the survival of handlooms, and reduction in the number of items reserved for handlooms from 22 to 11 (GoI, 1996).

The S. Satyam Committee was set up in 1999 to frame a textile policy for the new millennium. It recommended, among others, that 50 per cent of weavers change over to weaving for exports – in the context of expiry of quotas and other new opportunities. The committee also suggested (1) conversion of cone yarn to hank yarn by weavers to meet the requirement of handlooms (removal of hank yarn obligation); (2) promotion of research and development for the sector; (3) promotion of marketing for local and export markets; and (4) welfare schemes for handloom workers.

The National Textile Policy, 2000, was based on these recommendations of the Satyam

Committee. The policy accepted most of its suggestions.

The handloom sector is now in an altogether different policy regime. Instead of protection and concessions/subsidies in different forms, the sector is expected to move towards efficiency and productivity gains. It is expected to stand on its own feet.

### **Government programmes and schemes for handlooms**

The Ministry of Textiles has set up several new organizations and introduced a large number of programmes and schemes for the handloom sector to enable the sector “to access new opportunities”. The Office of the Development Commissioner for Handlooms, the Textile Committee and other organizations under the Ministry of Textiles are in charge of implementing these schemes and programmes. These programmes are mainly in the following areas:

- Modernization of handlooms and technological upgradation;
- Infrastructure support, input support and market support;
- Cluster development programmes;
- Export promotion, and development of exportable products and their international marketing;
- Research and development support;
- Welfare schemes and social protection schemes for handloom weavers and workers.

### **Some important schemes**

**Deen Dayal Hathkargha Protsahan Yojana:** This major programme aims at providing assistance to weavers in an integrated and comprehensive manner. It was launched in April 2000. The programme provides assistance in product development, CAD, CAM (computer-assisted management), inputs, accessories, marketing, modernization of looms etc. An outlay of Rs 2.57 billion was allotted to this programme in the 10th Five-year Plan.

This was the first programme of the ministry that assisted weavers outside cooperatives also. It assisted self-help groups, primary societies, producers’ organizations and others.

**Mill Gate Price Scheme:** This major scheme, aimed at providing all types of yarn to handloom weavers’ organizations, was launched in 1992–93. NHDC is in charge of this scheme, under which yarn is provided to trading houses, star trading houses, NGOs, apparel export houses etc. About 420 million was spent on the scheme between 2002 and 2007.

**Design Development and Training Programme:** This programme was introduced in

2003 for design development, training and production of designs. Exhibition-cum-sales are also organized under this programme.

**Handloom Export Scheme:** This scheme was launched in India's 10th Five-year Plan for export promotion of handloom fabrics. Under this programme, 57 projects were sanctioned in the 10th Plan and Rs 80 million was allotted to support 3,942 weavers. In addition, exhibitions were organized abroad for promotion of handloom fabric exports.

**Handloom Mark:** It was launched in 2006 to provide a certain guarantee to buyers of handloom textiles. This guarantee is for the genuineness as well as quality of the products.

**Integrated Handloom Cluster Development Scheme:** This is another major scheme that aims at promoting handloom clusters systematically for growth and diversification of the sector. The scheme was introduced in 2005–06. Twenty handloom clusters were selected in 2006–07 for development, and 100 more were taken up in the next two years.

The other major schemes are the Integrated Handloom Training Project (2002) for product design and training, the Work Shed-cum-Training Scheme (2005), the Handloom Marketing Support Scheme (it organized 47 national handloom expos in 2005–06), R&D-related schemes and so on.

In addition, several welfare schemes have been taken up recently for weavers and workers. Three important schemes are Mahatma Gandhi Bunkar Bima Yojana, Weavers' Welfare Scheme and Health Insurance Scheme. All these schemes were launched in 2005–06.

### **New organizations to promote handlooms**

In order to implement these programmes and schemes, the Ministry of Textiles has set up several new institutions/organizations. Prominent among them are:

**Handloom Export Promotion Council:** Though this council was set up in 1965, it has been revived recently to enable it to promote handloom exports in the post-ATC period.

**National Centre for Textile Design:** This centre was set up in 2001 to promote designing. It promotes new designs by organizing focused exhibitions and displays. It also supports new eco-friendly designs. Notable among its activities is the Tantavi Series under which special exhibitions were organized on structure fabrics (2001), pattern fabrics (2003), coloured structures and patterns (2005) etc.

**Weaver service centres:** Some 25 weaver service centres have been set up so far.

**Indian Institute of Handloom Technology:** The institute was set up in 2004–05 to provide qualified and trained manpower to the handloom sector and to undertake experimental research.



All India Handloom Fabrics Marketing Cooperative Society: This is a multi-state organization that supports marketing of handloom products within India.

National Handloom and Handicraft Museum: It has been set up to collect and display items of the handloom sector. Its major activities include craft demonstration programmes, village complex, conservation of tradition, library and educational programmes.

Association of Corporations and Apex Societies of Handlooms: It was set up in 2002 as an apex body of the corporations and societies. It has organized many handloom expos and exhibitions, including India Weavers 2005, Handlooms 2006, Shawl Show 2006 and Sarees of India 2007.

IPRs and handlooms: Recently some work has been taken up to protect GIs (geographical indications) of IPRs (intellectual property rights) jointly by the Textile Committee and UNCTAD under the WTO's GI Act, 1999.

The above discussion shows that the government has done a lot in terms of designing programmes and schemes, and in terms of setting up organizations to help enable the handloom to sector survive in the new environment. The new approach is based on productivity and efficiency rather than on reservation, subsidies and concessions. The government has set up new institutions and launched new programmes and schemes to help the sector compete in the market. The question is whether these efforts have been reflected in the performance of the handloom sector. How the sector has fared in recent years is examined below:

### **Performance in recent years**

Between 1991 and 2006, handloom production has grown at a compound annual rate of growth of 2.65 per cent, against 5.26 per cent of all textiles. The share of handlooms in the total production has declined from 24.02 per cent in 1985–86 (when the process of liberalization first started) to 18.41 per cent in 1990–91 and 12.96 per cent in 2003–04. In short, the handloom sector has shrunk in recent years.

Of the three textile sectors, namely, mills, handlooms and power looms, the share of the mill sector in the total textile production has declined while the share of power looms has increased dramatically. The share of power looms has increased from 38.59 per cent in 1980–81 to 57.21 per cent in 1990–91 and to 63.58 per cent in 2004–05, while that of handlooms has declined from 24.98 per cent in 1980–81 to 18.41 per cent in 1990–91 and a mere 13 per cent in 2004–05 (Table 6.2). The table also shows that not only the share but also production of handlooms has declined in recent years. In the past five years, for example, the production has declined from 7,506 million square metres (2000–01) to 5493 million square metres (2003–04), implying a decline of more than 45 per cent.

**Table 6.2 Sector-wise production of cloth**  
(million sq. m)

| Year    | Mill             | Handloom         | Powerloom         | Hosiery          | Khadi,<br>wool, silk | Total             |
|---------|------------------|------------------|-------------------|------------------|----------------------|-------------------|
| 1980–81 | 4 553<br>(36.43) | 3 109<br>(24.98) | 4 802<br>(38.59)  | —                | —                    | 12 464<br>(100.0) |
| 1985–86 | 3 544<br>(20.59) | 4 135<br>(24.02) | 9 534<br>(55.39)  | —                | —                    | 17 213<br>(100.0) |
| 1990–91 | 2 589<br>(11.10) | 4 295<br>(18.41) | 13 348<br>(57.21) | 2 696<br>(11.56) | 402<br>(1.72)        | 23 330<br>(100.0) |
| 2000–01 | 1 670<br>(4.15)  | 7 506<br>(18.66) | 23 803<br>(59.16) | 6 696<br>(16.64) | 558<br>(1.39)        | 40 233<br>(100.0) |
| 2001–02 | 1 546<br>(3.68)  | 7 585<br>(18.04) | 25 192<br>(59.93) | 7 067<br>(16.81) | 644<br>(1.53)        | 42 034<br>(100.0) |
| 2002–03 | 1 496<br>(3.56)  | 5 980<br>(14.25) | 25 954<br>(61.83) | 7 881<br>(18.78) | 662<br>(1.58)        | 41 973<br>(100.0) |
| 2003–04 | 1 434<br>(3.38)  | 5 493<br>(12.96) | 26 947<br>(63.58) | 7 847<br>(18.51) | 662<br>(1.56)        | 42 383<br>(100.0) |

*Source: Compendium of Textile Statistics (various years), Office of the Textiles Commissioner, Mumbai.*

*Note: Figures in brackets represent percentage to total.*

Some changes have also taken place in the fibre-wise composition of textiles in India (Table 6.3). The share of cotton textiles has declined from 76.16 per cent in 1980–81 to 42.56 per cent in 2003–04, though it is still the most important share in the total. The share of non-cotton textiles has increased from 12.29 per cent in 1980–81 to 41.56 per cent in 2003–04. This indicates consumer preference for non-cotton textiles in recent years. This also has perhaps affected the performance of the handloom sector.

**Budgetary allocation:** An important development in this sector is that, in spite of declaring and launching a number of programmes and schemes, the budget allocated to this sector has shown a continuous deceleration. It appears that the sector has not received enough funds to implement the policies and programmes. Table 6.4 presents data on the Central budget allocation for the handloom industry.

The table shows that the share of handloom industry in the Central budget for textiles has continuously declined since 1992–93. Though the share (and the amount) increased

**Table 6.3 Fibre-wise production of cloth**  
(million sq. m)

| Year    | Cotton            | Blended          | 100%<br>non-cotton | Khadi,<br>wool, silk | Total             |
|---------|-------------------|------------------|--------------------|----------------------|-------------------|
| 1980–81 | 8 368<br>(76.16)  | 1 270<br>(11.55) | 1 350<br>(12.29)   | —                    | 10 988<br>(100.0) |
| 1985–86 | 12 467<br>(72.43) | 1 660<br>(9.64)  | 3 086<br>(17.93)   | —                    | 17 213<br>(100.0) |
| 1990–91 | 15 431<br>(66.14) | 2 371<br>(10.16) | 5 126<br>(21.97)   | 402<br>(1.72)        | 23 330<br>(100.0) |
| 1995–96 | 18 900<br>(58.59) | 4 025<br>(12.48) | 8 535<br>(26.46)   | 798<br>(2.47)        | 32258<br>(100)    |
| 2000–01 | 19 718<br>(49.01) | 6 351<br>(15.79) | 13 606<br>(33.81)  | 558<br>(1.39)        | 40 233<br>(100.0) |
| 2001–02 | 19 769<br>(47.03) | 6 287<br>(14.96) | 15 334<br>(36.48)  | 644<br>(1.53)        | 42 034<br>(100.0) |
| 2002–03 | 19 300<br>(45.98) | 5 876<br>(14.00) | 16 135<br>(38.44)  | 662<br>(1.58)        | 41 973<br>(100.0) |
| 2003–04 | 18 040<br>(42.56) | 6 068<br>(14.32) | 17 613<br>(41.56)  | 662<br>(1.56)        | 42 383<br>(100.0) |

*Source: As in Table 6.2.*

*Note: Figures in brackets represent percentage to total.*

from 24.82 per cent in 1990–91 to 30.25 per cent in 1995–96, it has declined continuously thereafter, to 13.60 per cent in 2000–01, 9.70 per cent in 2005–06 and 7.96 per cent in 2006–07, with some fluctuations in the early years of the recent decade. The total amount allotted to the handloom industry also decreased, from Rs 2.25 billion against the total textile budget of Rs 9.06 billion in 1990–91 to Rs 1.95 billion in 2005–06, though the total textile budget increased to Rs 20.08 billion. There is a small increase in the handloom budget in 2006–07, but its proportion in the total textile budget has declined to a mere 7.96 per cent.

The almost stagnant budget and its fast declining share in the total textile budget indicate the low importance given to this sector by the government.

### Condition of handloom workers

As seen above, the handloom industry is fairly widespread in the country. There are

**Table 6.4 Central textile budget and share of handloom sector**  
(Rs million)

| Year    | Handlooms |          |         | Textiles |          |          | Share of handlooms (%) |
|---------|-----------|----------|---------|----------|----------|----------|------------------------|
|         | Plan      | Non-Plan | Total   | Plan     | Non-Plan | Total    |                        |
| 1990–91 | 309.8     | 1 939.8  | 2 249.6 | 1 974.6  | 7 088.8  | 9 063.4  | 24.82                  |
| 1995–96 | 1 045.0   | 1 562.1  | 2 607.1 | 2 730.0  | 5 887.4  | 8 617.4  | 30.25                  |
| 2000–01 | 1 120.0   | 532.9    | 1 652.9 | 4 570.0  | 7 543.0  | 12 113.0 | 13.65                  |
| 2001–02 | 1 160.0   | 405.0    | 1 565.0 | 6 500.0  | 6 600.0  | 13 100.0 | 11.95                  |
| 2002–03 | 1 170.0   | 358.3    | 1 528.3 | 7 150.0  | 8 705.0  | 15 855.0 | 9.64                   |
| 2003–04 | 1 297.7   | 1 259.1  | 2 556.8 | 7 600.0  | 9 478.4  | 17 078.4 | 14.97                  |
| 2004–05 | 1 193.6   | 1 323.7  | 2 517.3 | 8 780.0  | 9 023.1  | 17 803.1 | 14.14                  |
| 2005–06 | 1 310.0   | 638.9    | 1 948.9 | 1 1500.0 | 8 582.5  | 20 082.5 | 9.70                   |
| 2006–07 | 1 500.0   | 912.9    | 2 412.9 | 13495.0  | 16 962.5 | 30 457.5 | 7.92                   |

*Source: Expenditure Budget, Vol.2, Government of India, various years.*

*Note: Figures refer to Revised Budget Estimates.*

about 470 major handloom clusters in the country employing more than 2.5 million households.

It has been estimated that only about half of the total handloom workers are full-time and the rest part-time. In 1995–96, there were 1.65 million full-time workers of the total 3.47 million. Of these, 990,000 (60 per cent) were independent workers, 240,000 were under cooperatives (17.5 per cent) and 290,000 were working under master weavers (20.00 per cent). In addition, 1.73 million were in preparatory work and 540,000 of these were full-time workers. In other words, less than 50 per cent of the total workers in this sector have full-time jobs.

Several studies conducted in states such as Uttar Pradesh, Bihar and Andhra Pradesh provide details of the working and living conditions of handloom workers (Reddy, 2007; Singh, 2007; Dev et al., 2008). Some of the major observations emerging from these studies are discussed below:

The condition of workers, remuneration and wages of handloom workers primarily depend on the institution with which they are associated. For example, on an average, a master weaver or a private businessman usually makes more money than a cooperative society, and the weavers employed as wage earners by master weavers are likely to earn higher incomes if the earnings are passed on to them. Thus the wages earned depend not only on the efficiency and earnings of the master weaver/private owner, but also on how much of the earnings are passed on to the weavers. Usually master weavers do not pass on the full earnings. Under cooperatives, weavers are producers and the wage/remuneration earned is equal to the marginal physical product of weavers.



However, many cooperatives are not doing well, with the result that they are not able to give high earnings to the producers. It is generally observed that independent weavers earn the highest incomes, followed by weavers under master weavers and then those under cooperatives.

There is a need to distinguish between good and bad cooperatives; flourishing cooperatives are observed to be giving good incomes to its members (Dev, Galab et al., 2008). Remuneration of weavers and their conditions of work are better in flourishing cooperatives than in lagging cooperatives. In fact, Dev et al. argue, considering that flourishing cooperatives provide a good sharing of remuneration, the policy should be to promote and strengthen cooperatives in this sector.

The earnings also depend on the products. Studies have shown that the average earnings are high for saree weavers, followed by weavers of finer varieties of cloth (shirting and dress material), and fabrics with brocaded designs. The lowest earnings are for weavers of ordinary cotton cloth. Thus there is a positive relationship between skills, technology used and wages/earnings. There is a strong argument, therefore, in favour of producing high value-added products in this sector. On the whole, the earnings of workers depend on institutions as well as on the efficiency, product mix and technology in the production process.

With the overall decline and crisis in this sector, most studies observe that 30–60 per cent weavers (depending on the specific situations) live below the poverty line. Since most weavers do not get full-time/adequate work, they make little money. In the case of Uttar Pradesh and Bihar, it has been estimated that workers make between Rs 26,000 and Rs 35,000 per year. In the case of Andhra cooperatives, as per a study, independent weavers earn an average of Rs 7,000 per month, followed by master weavers who have an average income of Rs 3,500 and weavers under cooperatives who earn Rs 1,200. More than 60 per cent of the weavers belong to BPL (below poverty line) families.

As regards conditions of work, most weavers work in cramped spaces lacking proper arrangement for light and air. In the case of weavers working at home on low value-added products, it has been observed that thatched roofs are unable to protect the cloth from rainfall etc. As a result, the cloth gets stained in many cases and fetches low wages. Though selected workers/weavers under master weavers and independent workers make good money, the majority suffers from poor working and living conditions. A lot needs to be done to improve this situation.

The government schemes for the welfare of weavers are too small and too scattered to make much impact. The Work Shed-cum-Housing Scheme, the Health Insurance Scheme for Weavers and the Mahatma Gandhi Bima Yojana, all introduced in recent years (2004–05 and 2005–06), are small schemes, with their expenditure running into a few million of rupees.

Women workers are predominant in this sector, employed mainly in preparatory work.

With the gradual mechanization of preparatory work and with men leaving for other jobs, the role of women has increased in this sector. Women are now observed to be sitting at the looms too. Some NGOs have included women in training programmes to help improve their productivity and earnings. However, overall, women continue to be subsidiary part-time workers. Their status is usually invisible and unrecognized.

Major areas of concern

The study shows that the major areas of concern in the handloom sector are (1) rising prices of raw material including yarn, and shortage of raw materials; (2) ailing cooperatives, a major institutional framework for handlooms; (3) indifferent implementation of most schemes and programmes; (4) lack of modernization in terms technological upgradation, product design and professional management; (5) near-absence of healthy institutions and organizations for handloom production; and (6) low productivity, low skills as well as low wages/earnings of most handloom workers.

**Rising prices of raw materials:** A major problem that weavers face at present is the lack of adequate supply of yarn at reasonable costs. This has become serious, particularly after the removal of the hank yarn obligation on mills. Again, after globalization, exports of cotton and yarn have increased without taking into account domestic requirements. This has resulted in a steep rise in yarn prices, making it difficult for weavers to access it at reasonable prices. For example, between 1994 and 2004, the prices of all counts of hank yarn increased by one-and-a half times. Closure of several spinning mills, the only source of yarn (hank yarn), has also affected adversely the availability of yarn. The number of closed spinning mills has increased from six in 1980-81 to 374 in 2003-04. As Table 6.5 shows, the prices of yarn have more than doubled in the past decade and a half. The price of hank yarn has increased the most during this period. The price of raw cotton, the most important raw material for this sector, has increased more than three times during the same period.

Table 6.5 Price movement of raw cotton and cotton yarn (weighted average)

| Year | Raw cotton | Cotton yarn |        |              |
|------|------------|-------------|--------|--------------|
|      |            | Hank        | Cone   | Hosiery cone |
| 1990 | 100.00     | 100.00      | 100.00 | 100.00       |
| 1991 | 147.16     | 104.46      | 98.05  | 102.46       |
| 2001 | 282.37     | 195.22      | 195.53 | 215.52       |
| 2002 | 210.03     | 178.04      | 170.02 | 203.07       |
| 2003 | 296.53     | 206.07      | 181.17 | 200.19       |
| 2004 | 320.11     | 266.69      | 220.09 | 266.09       |

Source: As in Table 6.2.

**Ailing cooperatives:** Production in the handloom sector is run by three types of institutions: cooperatives, master weavers and independent weavers. Historically speaking, the institution of the independent weaver, that is, the household-based artisan, was most common till the advent of the mill sector in India. However, it began to decline thereafter. In its place two institutions, namely, cooperatives and master weavers, emerged on the scene. Though the cooperative movement started in India in the early years of the twentieth century, handloom cooperatives were first started in the 1940s by local leaders. Over the years, cooperatives developed as a major institution in the organizational set-up in the handloom sector in most parts of the country.

However, several studies have shown that cooperatives are not functioning well in this sector. Their failure has been attributed to incomplete cooperativization, formation of non-viable cooperatives, politicization, presence of master weavers in the management of cooperatives and other inefficiencies of cooperatives (Mukund and Syamasundari, 2001). The failure of cooperatives has also been attributed to mismanagement of cooperatives, as well as lack of professionalism in the functioning of cooperatives. In addition, the inability of cooperatives to advance consumption and working loans to weavers, compared with master weavers, is also seen as a limitation. Though the share of cooperatives has declined over the years, it is still significant, and many government schemes are still reserved for cooperatives. Cooperatives pay the lowest wages to workers compared with other institutions, are less innovative and less skilled, and produce low and medium value-added products. They also have little diversification of products and lack innovation in both products and designs. In addition, they do not provide enough work to their members compared with independent and master weavers.

Some officials of the cooperatives say they have to work within several limitations imposed by the Cooperatives Act. Since they have to abide by all its rules and regulations (many of which are rigid), and they do not enjoy the flexibility of non-cooperatives such as master weavers or any other form of organization. In short, many cooperatives find their functioning constrained. The net result is that they have not been able to show much growth, innovation etc. and have not been able to get access to new opportunities. Most of them produce low value-added products and their members earn relatively less.

**Master weavers and independent weavers:** The failure of cooperatives led to the emergence and strengthening of non-cooperative institutions, that is, master weavers and independent weavers. The institution of master weavers started in the early years of the twentieth century. Master weavers combined trade in cloth with subcontracting and production at their own looms. Sometimes they are non-producers who subcontract work from merchants and organize weavers to do it. A master weaver can be defined as a weaver who employs weavers for manufacturing handloom fabrics for commercial operations. Sometimes a master weaver is also a private businessman who employs weavers for the same purpose, but he is not a weaver.

Studies have shown that master weavers are more business-oriented than cooperatives.

They give more continuous work and higher incomes to weavers (Mukund and Syamasundari, 2001) than cooperatives do. Again, master weavers advance loans to weavers without much procedure. When the performance of handlooms is examined by institution, it becomes clear that independent weavers earn the highest amount, they have negligible unemployment and they enjoy a good standard of living. They are followed by master weavers and then by cooperatives. Master weavers produce relatively high value-added products and use more skilled workers. They have also diversified into carpet weaving, and into high-value textiles. It is also observed that master weavers are responding to the changes in market and policy environment through product diversification into high-value products such as silk sarees, branded sarees (Ikkat, Kanchipuram silk) and finer counts cotton and silk fabrics. Master weavers are good in designing, marketing and innovation.

Master weavers, however, work purely for profit. In order to maximize profits, they treat weavers as wage earners and pay them low wages. Master weavers are also not concerned about providing social protection to workers.

**Competition with power looms:** An important area of concern for handlooms is the competition with power looms. However, this is not a new concern, and government policies in the past have helped handlooms by special provisions and concessions to enable them to face competition from power looms. The concern, however, has arisen once more because of the new policies that leave handlooms in the competitive market to fend for themselves more or less.

It is clear that handlooms are not in a position to compete with power looms for a large number of products. However, there are some products where handlooms have a relative advantage over power looms. There is a need to identify such products and promote these through specific measures. An important question here is whether reservation of handloom products under the Handloom Reservation Act and hank yarn obligation for spinning mills are necessary or not. The government has removed the latter in the last textile policy and reduced the number of products in the reservation list to the minimum. It appears that the government needs to rethink on both these issues.

**Implementation of programmes and schemes:** As regards implementation of the schemes for the handloom sector and workers, the overall performance has not been very satisfactory (Seemanthini and Sundari, 2006). Apart from studies by scholars, the various expert committees also have pointed this out.

Some of the schemes appear to have been designed poorly. For example, the “loom to loomless weavers” scheme was introduced in 1993 to provide looms to 327,000 weavers who did not possess a loom. However, many of these weavers had already migrated to major handloom centres, and these looms were not in demand. Again, a majority of schemes are applicable only to weavers under cooperatives or those willing to organize themselves into cooperative societies, or those with access to apex cooperative societies. Since there are many workers/weavers outside cooperatives, they

are frequently left out of the purview of the schemes. There has been some positive development with the introduction of a few schemes aimed at covering all weavers. There is a need to see that all schemes also address weavers under self-help groups (SHGs), producers' organizations, NGOs etc.

Another major problem pointed out by studies is that the schemes are implemented indifferently. For example, the scheme for setting up handloom development centres and quality dyeing units could spend only half of the allotted funds. It is the same in the case of many other schemes, such as workers' welfare and development schemes, technological upgradation schemes etc.

A recent study in Andhra Pradesh, one of the leading states in handlooms in India, is very revealing in this context. Andhra Pradesh has the highest number of looms, more than 52 million, and a high proportion (72 per cent) is in the cooperative sector. The state had 540 working cooperative societies of weavers in 2005. However, it has seen a decline in this sector during the past two decades, that is, 1985–2005. The handloom sector has suffered because of (1) predominance of cooperatives, which are unable to compete in the new environment; (2) poor access to market for most handloom products; (3) poor access of weavers to credit and to technological upgradation; and (4) general lack of ability of the sector to change in order to access new opportunities.

**Organization of production in handlooms:** Organization of production and institutional structures that manage the handloom sector is another area of concern. As seen above, cooperatives of weavers are too rigid and too traditional to take advantage of the new opportunities that have emerged after the introduction of economic reforms, while the institutions of master weavers and independent weavers do not share the gains of growth with other member weavers adequately. They take away the lion's share of the profits/earnings that they earn and deprive others of their due share. What the industry needs urgently is some changes in the institutions that would give common weavers access to new opportunities in the local and global markets and at the same time assure them their due share in the profits.

In this context, it is important to note the entry of some new institutions in the recent decade. Some NGOs have developed a new approach with a new philosophy and new institutions. At the marketing end, they have set up big chains of retail stores with a modern format. Producers located in different regions are linked with production centres, which have professionals to guide them on what to produce (based on market research), how to produce and for whom to produce. These centres as well as the marketing outlets are run by professionals. The market segments addressed by the new approach include top-end urban markets and export markets as well as the low/medium-end market for the masses. The myth that widely scattered handloom producers cannot fit into a professional set-up and cannot meet large export demand is not true any more.

There are not too many success stories so far. However, the few success stories do open

up a new direction for handloom products in the new global environment. The major success stories are Fabindia (“weaving customers’ dreams”), DESI (“story of many threads”), Anokhi (“craft of block printing”), Urmul (“weaving self-reliance”) in Rajasthan, Mangalagiri of Andhra Pradesh, DAMA (Dastkar Andhra Marketing Association), Maheshwari (handloom weavers), Angara (marketing cooperatives) and SEWA (embroidery and garments). All these success stories have some common features:

Firstly, all of them are managed by NGOs whose major concerns are promoting the livelihood of rural artisans, protecting the heritage crafts of the country and a high degree of professionalism. They have been able to combine the traditional crafts of India with high/medium-end local and domestic markets by providing highly professional management. Fabindia, for example, has designed a Proto-type Development Project, under which designers from the National Institute of Design (NID) are employed to produce goods for the high value-added, top-end market in India and abroad. Weavers are provided skill training as well as credit under the project. All these NGOs have large networks and large production bases, a high level of quality control, a brand name and aggressive marketing, along with market research and the flexibility to respond to market changes.

Secondly, as far as wages and employment are concerned, it is claimed that the workers get fair wages, adequate employment and often social protection such as health insurance. Women constitute 70–80 per cent of the workforce. They receive skill training on a continuous basis to meet the market demand. There are no sex-based wage differentials (Seemanthini and Sundari, 2006).

In addition, several large and small organizations of weavers have tried out different approaches to promote upward mobility of handloom weavers. Realizing the constraints of the cooperative model on the one hand and the weaknesses of the working of the cooperatives on the other, they have experimented with other organizational structures. BASIX, Jaipur, has organized artisans to help them take up new products. It has provided them skill training, access to credit and product design, and helped them in marketing – all through sound project design and planning. BASIX has also provided insurance and some social security to workers. Benaras Bunkar Samiti, a federation of weavers’ SHGs formed under the Tana Bana Project, has ensured raw materials, skill training and markets (exhibitions) to member weavers to enable them to access to new markets in India and abroad. The Centre for Handloom Information and Policy Advocacy (CHIP) in Andhra Pradesh has also taken up several projects to help those who are not members of cooperatives and are independent weavers. CHIP has designed projects and organized SHGs and their federations to involve scattered weavers into sound projects to enable them to produce high-value products, get better prices and improve their standards of living.

Unfortunately, no systematic in-depth study has been conducted of these cases. There is an urgent need to study these cases carefully to design an approach that replicates and scales up the success stories.

However, sketchy documentation of these experiments shows that the following inputs are critical:

**Innovative institutions:** Most NGOs and other organizations believe that cooperatives are not a suitable form of organization for promoting this sector. The alternative institutions could be SHGs and federations of SHGs, producers' organizations/ companies, private companies of small producers etc. but all promoted by NGOs and civil society organizations committed to serving weavers at low-income/productivity levels.

**New products:** Another major input provided by these innovative models relates to product identification and product design. The products are selected carefully and designed systematically to meet the demand for such products in the market. Usually these are high value-added products and linked with changing demand patterns in the market.

**Skill training and capacity building:** These are an important component of this strategy. Instead of depending on on-the-job training alone, formal and systematic skill training is provided to workers to enhance their productivity and ensure their absorption into the workforce.

**Benefits to workers:** A major focus under this approach is to provide due benefits to workers in terms of wages, continuous employment and some social insurance.

The available literature on the new approaches is sketchy and insufficient for understanding the processes. As mentioned above, there is a need to study these approaches in depth.

### **Concluding observations**

The efforts made to protect the handloom sector from the 1950s to the early 1980s did not help it much, as policies were not implemented effectively. The recent textile policies and the steps undertaken for the promotion of the textile and garment industry have not really benefited the sector either. Dereservation, removal of hank yarn obligation and treatment of power looms on a par with handlooms have particularly affected this industry.

As a result, the handloom sector has suffered in multiple ways since the introduction of economic reforms in India: The budgetary allocation to this sector has declined both in absolute terms and in terms of its share in the textile industry; yarn prices have increased due to exports and closure of spinning mills; the new policies announced for handlooms have not tried anything new or effective, particularly in the institutional aspect of the sector; power looms now enjoy an edge over handlooms in the market and; the schemes designed for this sector have not been implemented effectively. It needs to be recognized that handlooms have a unique place in the textile sector as well as in the Indian economy for several reasons. This sector undoubtedly needs to be supported for its healthy growth.



Some suggestions in the context of the above discussion are:

The first major need is commitment of the government to this sector, which must reflect in its budgetary allocations too. The recent trend of the declining budget needs to be reversed, and adequate allocations ought to be made in line with the contribution of the sector to total employment.

There is also a need to monitor closely and effectively the large number of organizations set up for promotion of the sector and the large number of schemes for weavers. As seen earlier, several innovative organizations and schemes have been introduced in the last decade. However, unless a suitable mechanism is put in place to ensure that these work effectively, they will not benefit the sector much. Close and systematic monitoring of the schemes and close monitoring of the organizations is strongly recommended.

Experience so far indicates that handlooms have an advantage in (a) high value-added products meant for the top-end domestic market and for exports, and (b) medium value-added products for the local/domestic market. There is good scope for innovative new products, with potential for both the domestic and overseas markets. There is a need to help the handloom sector identify and promote such products.

In this context, it is important to promote suitable institutions in this sector. Though cooperatives do not have a glorious past and a large number of them have become defunct, it is frequently argued that cooperatives should be promoted and strengthened in this sector (Dev et al., 2008). There is nothing wrong in promoting cooperatives; however, experience suggests that alternative ways of organizing production/producers in this sector can also ensure higher productivity and higher production, on the one hand, and higher wages and higher incomes to producers, on the other. NGO-run enterprises, producers' companies, public-private partnership etc. have been tried out successfully so far (for example, Fabindia, Anokhi, DESI, SEWA etc.). Space ought to be created for such new forms, particularly those which ensure good incomes for weavers.

One major area of concern for handlooms is inadequate supply of yarn. It is recommended that supply of yarn should be ensured to this sector. Instead of making hank yarn production obligatory for all spinning mills, spinning mills could be promoted in a decentralized manner. Yarn depots should be set up under the NHDC in all major handloom clusters to ensure supply. If handlooms are able to market their products successfully, the spinning mills will become financially viable and profitable.

There is an urgent need to provide market research support to handloom units. In this context, the official organizations must become more professional than they are today. Using expert services of business consultants may help here. Market research and market information need to be made available to all institutions – cooperatives, master weavers, more innovative institutions etc.

In order to improve productivity of weavers, there is scope in this sector for R&D, technological upgradation and training and extension. Not only official organizations,



but NGOs and other organizations also need to be involved in these tasks.

Some specific advantages of handlooms in the modern global market derive from the eco-friendly production processes and eco-friendly products. Use of organic raw materials will add to the eco-friendly character of this sector. It will be good strategy to focus on such strengths to acquire global and local markets for these products.

Lastly, there is an urgent need to study some innovative models of success in this sector. It will be worthwhile to examine how these models have managed to link scattered local production units/producers of handlooms with high-tech management and how they have been able to tap global markets to give higher incomes/wages to producers.

## Chapter 7

### Global financial crisis, concluding observations and recommendations

An important development, the global financial crisis, has taken place recently (after the field study was over) that has not only had an impact on the textile and garment industry but also has distinct policy implications which strengthen the policy inferences emerging from the study. This crisis started sometime in June–July 2008 and though the peak period is believed to be over, the world economy is still not out of its grip. Before concluding the major observations emerging from the study, therefore, this chapter will discuss in brief the impact of the recent global financial crisis on the textile and garment industry in India and draw lessons emerging from this experience.

#### Global financial crisis and the textile and garment industry

There is now enough evidence (NCEUS, 2009; Mahajan, 2009; Kumar, 2009; Gangopadhyay, 2009; Chhiber and Palanivel, 2009) showing that the global financial crisis has had a significant effect on the Indian economy, as on many other developing countries. The initial assumption that developing countries are “decoupled” from the global crisis is no more accepted as valid, since it is now clear that multiple channels have transmitted the crisis to these countries in general and to the Indian economy in particular. The major channels have been exports, the financial sector and the exchange rate. The 9 per cent decline in world trade during 2008–09, the biggest since the Second World War, has led to a collapse in exports of a range of goods such as textiles and garments, engineering goods, automobile parts, gems and jewellery, agricultural products, handicrafts etc., as well as services such as IT, tourism and so on.

This collapse has resulted in a fall in production and employment in these industries as well as in related industries. In the financial sector, the crash in the equity market from a huge capital outflow has resulted in a severe financial crunch in the Indian economy (Chibber and Palanivel, 2009). The textile and garment industry was severely affected by the credit crunch, with credit to small units almost drying up. The decline in remittances, FDI and overseas development assistance (ODA) added to the crunch. And finally, the pressure on the exchange rate from the capital outflow, declining reserves of foreign exchange and fall in export earnings etc. reduced the value of the Indian rupee. This, in turn, made imports of raw material and intermediary goods expensive. Industries depending on these imports were hit hard. The textile and garment industry has also suffered in the process.

Surveys conducted by the Labour Bureau for the different quarters in 2008–09 as well as the Economic Survey showed a significant decline in employment in the economy, including the major export-oriented industries. The Labour Bureau survey for the first quarter showed that employment declined by half a million during October–December 2008. According to the survey of the next quarter, there was a further decline of 100,000 jobs. Though a marginal improvement was observed during the subsequent

quarters, its sustainability became suspect.

Exports of textiles and garments experienced a significant decline since August 2008 due to the crisis. Textile exports declined from \$9.74 billion in 2007–08 to \$9.09 billion in 2008–09, a decline of 6.6 per cent. The month-wise picture indicates a decline of up to 15 per cent between November 2008 and February 2009, and this had a severe impact on the producers, particularly small producers and workers in the industry. In the case of the garment industry, the decline was 15–20 per cent. However, there was a marginal improvement thereafter (CMIE, October 2009). According to the Apparel Export Promotion Council (AEPC), due to the slowdown in the US – the largest overseas market for India's garment industry – about 500,000 workers had already lost jobs across the garment exporting units of India over the last one year (till 11 February 2009) and another 500,000 would be jobless by March–April 2009. Also, orders received from major importers by February fell 25 per cent from the last fiscal year (*The Economic Times*, 11 February 2009, Mumbai).

A sample survey of 50 apparel clusters in India by the AEPC indicates an 84 per cent reduction in export orders.<sup>1</sup> With the order book position in November 2008–January 2009 standing at 34,64,812 pieces compared with 45,93,582 pieces in the corresponding period of fiscal 2006–07, 13.84 per cent of the labour in these 50 sample garment units has already been laid off. The recent data published by the Ministry of Trade and Commerce shows that the total exports of ready-made garments (cotton and accessories) were Rs 312.89 billion in 2006–07. However, they had decreased to Rs 303.36 billion in 2007–08, a 3.05 per cent drop.

### **Study sponsored by UNDP**

The impact of the global financial crisis is a matter of serious concern because (1) the affected workers and small producers are mostly in informal employment and are unprotected, with almost nothing to fall back on in the crisis; and (2) the indirect impact and perhaps in later crises is likely to be significant and widespread. However, given the informal nature of the work of most affected workers, the impact is not likely to be captured in the quick surveys of the Labour Bureau. Therefore, the UNDP office in India in April 2009 supported a quick survey in the major affected sectors in selected states to get a better understanding of the impact of the global crisis on the country's economy with a focus on small producers and informal workers.<sup>2</sup>

The specific objectives of the study were to (1) examine the impact of the crisis on the workers and small producers working in the selected sectors; (2) draw inferences for interventions to address the adverse effects on the workers and the sectors in the short

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<sup>1</sup> India's main export markets for ready-made garments are the US, the UK, Germany, France, Italy and the UAE.

<sup>2</sup> These sectors included gems and jewellery, engineering, automobile parts, agriculture, textiles (Chikan craft) and home-based garments in Gujarat, Punjab, Uttar Pradesh (UP), Tamil Nadu and Madhya Pradesh (MP). The study was undertaken by a team of researchers at the Centre for Development Alternatives (Indira Hirway), Gujarat Institute of Development Research (Amita Shab), Entrepreneurship Development Institute, India (Santosh Kumar and Jignasu Yagnik) and Self-Employed Women's Association (SEWZA teams in UP, MP and Gujarat). Indira Hirway has coordinated the study.

and medium terms; and (3) examine and recommend social security options to help workers through systemic social protection. The study has also made recommendations for reorganizing labour and small units in the selected sectors, and raised questions about the validity of the neo-liberal policies for promoting inclusive growth. This quick study was undertaken between mid-April and June 2009 (Hirway, 2009).

The study covered six sectors in five major states in India. Two of these were the home-based garment industry and the Chikan craft industry (hand-made textiles). Profiles of the centres selected for the study were prepared based on secondary data and discussions with industry leaders, officials concerned and trade union leaders as well as focused group discussions with workers and producers. Based on the typology of workers and producers, a certain number of sample workers were selected in each sector for understanding the ground-level impact of the crisis.

**Home-based garment industry:** After analysing the impact of the crisis on the garment industry based on the secondary data and the available literature, two major garment centres, namely, Indore (Madhya Pradesh) and Ahmedabad (Gujarat), were selected for an in-depth study. Since the home-based sector is predominant in the garment industry, the study primarily covered this segment. A sample of 200 home-based workers and producers was selected.

**Chikan craft industry:** Chikan craft is an important sector manufacturing hand-made textiles in India.<sup>3</sup> A major centre, Lucknow (Uttar Pradesh), was selected for an in-depth study. Lucknow's Chikan craft employs mainly women, though men also are employed for sale and purchase-related activities. A sample of 100 workers was selected from this sector.

### Major findings of the study

**Profile of workers:** Workers in these sectors are, on the whole, young – in the age group of 15–36 years. More than 80 per cent workers are women. About 30 per cent have no formal education, while most others have had secondary education. Only 5 per cent have studied beyond that. Almost all are informal workers without any social protection. They are all skilled workers, but the skills have been acquired on the job.

**Impact of the crisis on employment:** The sudden decline in the demand for goods has left about 5 per cent of the workers jobless in both the home-based and Chikan craft industries. However, 60 per cent (Chikan craft) to 80 per cent workers (garments) have remained in the same industry, with much lower levels of work and incomes. The rest have shifted to other petty, low-productivity work, which is often drudgery. About 25 per cent “regular” workers in the garment industry have become casual workers.

**Impact on incomes and wage rates:** The average monthly incomes have declined drastically after the crisis, from Rs 4,932 to Rs 2,972 (an almost 40 per cent decline) in

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<sup>3</sup> *It is a fine art in which embroidery is done with white untwisted yarn on fabric which may be silk, voile, cambric, georgette, terry cotton etc. Designs are first printed on the cloth with washable colours and different stitches are then embroidered on them by hand.*

the case of garment workers and from Rs 1,445 to Rs 117 in the case of Chikan craft (a decline of about 90 per cent). It is clear that many workers sank into poverty, while some others already in poverty experienced it more intensely. The average daily wage rate (for eight hours of work) also declined in both sectors, from Rs 66.74 to Rs 39.44 for garment workers, and from Rs 32.61 to Rs 20-70 for Chikan craft workers.

**No significant support received:** The study showed that except for the 5 per cent workers in the Chikan craft and 2 per cent workers in the garment industry who received some cash doles from the government or from employers, no significant support was extended either to meet their consumption needs or to get them alternative work.

**Coping strategies of workers:** The major coping strategies of the workers were (1) dis-saving or pawning/selling assets, (2) incurring debt or/and (3) reducing consumption expenditure on food and on health, education etc. About 32 per cent of garment workers and 46 per cent of Chikan craft workers pawned/sold their assets; and 36 per cent (garments) to 30 per cent (Chikan craft) workers incurred or increased debt, mainly to meet consumption needs. The average amount of debt went up to Rs 45,000 for these households, with the average varying between Rs 50,000 (garment workers) and Rs 9,500 (Chikan craft workers).

Looking to the uncertainty of the future, the households decided to cut down on food consumption drastically. About 34 per cent of the garment workers and 57 per cent of Chikan craft workers reduced their food consumption by (1) reducing their consumption of relatively expensive items such as milk, fruits, vegetables, egg, chicken and meat and (2) not eating out. It is worth noting that 3 per cent of garment industry households and 6 per cent of Chikan craft household started skipping one meal (usually breakfast) after the crisis.

It is a matter of concern that a significant number of households cut down their expenditure on education by (1) withdrawing children – mainly girls – from school; (2) shifting children to cheaper schools; (3) reducing expenditure on books, stationery and so on; and (4) not paying school fees – in the hope that they would get government subsidy sooner or later. The percentage of households that reduced their educational expenditure was 45 for the garment industry and 47 for the Chikan craft industry. About 50 per cent of garment workers households and 64 per cent of Chikan craft workers cut their health expenditure by (1) shifting to public facilities; (2) giving medical treatment at home; and (3) avoiding medical expenses in case of minor illnesses.

**Increased participation of women in the labour market and increased domestic work:** An important finding of the study is that women function as major shock absorbers by taking on more work in the labour market and at home. About 11 per cent non-working women in garment workers' households and 47 per cent non-working women in Chikan craft workers' households took up work in the labour market to tide over the crisis; 10 per cent working women reported increased labour market work for themselves. About 20 per cent (garment households) to 36 per cent (Chikan craft workers) reported increased domestic work for themselves, as (1) men now at home

needed more services from women (food, tea, attention); and (2) cash-poor households brought in many activities within the sphere of domestic work, such as home-based medical care, use of home-made medicines, stitching clothes etc.

**Absence of adequate database:** Most of the small enterprises are unregistered units, as there is no reliable record of these producers as well as workers. This inadequate information became a major constraint during the crisis because it was difficult to reach small units, on the one hand, and identify workers, on the other. It also became difficult to design schemes and to allot adequate funds to help them.

To sum up, the study has drawn attention to the plight of the workers and shown that the highly competitive as well as uncertain global market can cause huge suffering to poorly protected workers as well as poorly supported small producers in the informal economy.

**Inferences and implications:** The crisis has revealed a number of weaknesses in India's domestic policies as well as its policies related to trade and trade-led growth. The major policy inferences emanating from the study relate to both the sets of weaknesses. As far as domestic policies are concerned, the major policy inferences are (1) universalization of social protection for workers who have been thrown into the volatile global market without any safety nets; (2) ensuring employment services to workers to support and facilitate their movement from one (skilled) job to another (skilled) job;<sup>4</sup> (3) ensuring food, health and education to all as their basic right (that is rights-based approach to human development); and (4) addressing problems of small producers/micro enterprises<sup>5</sup> by assuring them credit (through a special fund, skill training, infrastructure support, etc.). Instead of addressing sector-related problems only through bailout packages to medium and large producers, special packages should be designed for small producers to strengthen them.

Looking to the inadequate records of producers and workers in these industries, there is an urgent need to keep complete records of these workers through identity cards (and registration of units) to enable them to access the benefits of relief packages as well as social protection in general. Registration of small units also needs to be made mandatory. This is a long-standing task, and needs to be taken up seriously.

The study has shown that women are the worst sufferers of the crisis, as producers, as wage earners, and as home makers. That is, women have taken upon themselves a

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<sup>4</sup> This requires well-organized employment services which include (1) labour market information service; (2) counselling of workers on the kind of work suitable for them and how to get it; (3) providing training and re-training to workers, if necessary, by linking them with suitable training institutes; and (4) help in moving to new jobs. There is thus a need to scale up employment exchanges. The government can consider private-public partnerships in this area.

<sup>5</sup> The study has shown that small producers, the self-employed or own-account workers are the worst-hit group of producers. This is largely because they have poor access to advanced technology, credit, markets, raw material and infrastructural facilities, on the one hand, and low staying power, on the other. In a crisis, they suffer from declining markets as well as high and fluctuating input prices. They are almost pushed out from the credit market because of the liquidity crisis and the crisis in their sector.

disproportionate burden of the crisis. All the three aspects of women's problems need focused and effective redressal. As producers, women should get access to credit, technology, infrastructure facilities and markets. A special "stimulus package" should be designed for them keeping in mind the specific needs of women producers. The male bread-winner bias must change because women also are bread winners, and the lone bread winners in many families. The study has also shown that women workers are the first to be thrown out in a crisis. When work volumes are down, women are either asked to leave or their work is cut down or they are shifted to the lowest level of work such as casual unskilled work. Special efforts are needed to see that they are not treated as inferior workers.

Some specific recommendations in this context are (1) fixing separate employment targets, including skill training targets, for women so that their employment is not sacrificed under the male bread-winner bias; (2) construction of social infrastructure to reduce women's (increased) burden of unpaid work; (3) expansion of social services to take care of the health, education and well-being of children and adults so that women's domestic work is reduced and proper care is ensured; and (4) universal child care, including full day care for children.

The crisis has also underlined several questions about the trade policy and the trade-led growth strategy in India. The first is about the gains of globalizing at the lowest end of the value chain, where work is labour-intensive, the value added is small, the employment gain is positive but the quality of employment is very poor, and the control or the decision-making power is in the hands of global production networks located in developed countries. The crisis has shown that the highly competitive global market is also unreliable – as seen in increased protectionism in the US and the rest of the developed world during the crisis – through systematic protectionist policies (Stiglitz, 2009). There is indeed a need for a fresh look at the globalization policies.

To start with, this raises a question about the validity of the strategy of depending on exports as the main driver of economic growth and promoting industrialization by producing goods for the global market. The experience of the crisis has shown that the sources of growth must be balanced by linking growth to the domestic market also. There is a need to design a strategy to move in this direction.

One way to move towards the domestic market is through integrating the labour policy with the trade and industrial policies to ensure core labour standards for workers. At present, the textile and commerce ministries work very closely to take maximum advantage of the post-quota regime in textiles and garments, but the labour policy is nowhere in the picture; as a result, the quality of employment is sacrificed. It ought to be mandatory for industries to implement core labour standards if they want to export. These are profit-making industries and there is no reason why they should not adhere to core labour standards.

Enforcement of labour standards such as minimum wages, a minimum social protection package, decent working conditions etc. will raise the purchasing power of



workers significantly and expand domestic markets. Expansion of domestic markets ensures relative stability of growth as it is located within the domestic economy. It also ensures poverty reduction, since domestic demand increases with the increased purchasing power of people, particularly the poor. And finally, it facilitates achievement of the Human Development Goals and sustainability of growth.

Another requirement is to move up in the global value chain and acquire a powerful place among global production networks to acquire some stability – a protection against the volatility of demand in the global market. However, experience has shown that this task is formidable, as it involves changing the global structure of production in favour of developing countries. This, therefore, is not a very strong option.

To sum up, the study on the impact of the global crisis has clear implications for strengthening internal policies (such as social protection to labour, employment services to facilitate movement of workers from one to another sector, strengthening small producers etc.) as well as for policies pertaining to trade and dependence on exports.

### **Concluding observations and recommendations**

The above implications are very much in line with the major findings of the present study on “restructuring industry and restructuring labour under trade liberalization”.

The major observations emerging from this study can be listed as follows:

- The trade liberalization policies, including the expiry of the quotas under the ATC (Agreement on Textile and Clothing), have made it possible for the textile and garment industry in India to enter the global market. The supportive policies of the Ministry of Textiles and the positive interventions from the industry have given a big push to the industry and contributed to its integration with the global market. The textile and garment industry has definitely done well in terms of acquiring global markets for its products, particularly in the EU and the US. Though the industry still suffers from several problems, such as power shortage and infrastructural bottlenecks, it has done well in terms of taking advantage of the new opportunities to expand. In spite of the short-term setback due to the appreciation of the value of the Indian rupee, the industry is poised for expansion and growth.
- However, the global production networks in the industry have created pressures which have pushed the industry to restructure its production and led to restructuring of labour. The labour force, which was already poorly protected, has become much more vulnerable to the volatility of the global market. These processes have affected large as well as small producers.
- The process of integration with the global market is happening at two levels. At the higher level, the units (particularly large and medium) are producing high value-added products and aiming at the top end of the market. Some small units,



particularly in Tirupur, are also keen on top-end integration to earn higher profits with access to top-end markets in the EU, the US and Canada, among others. At the lower level, units that produce low and medium value-added products look to integrate with the global market at the low end. These units want to acquire global markets mainly through low production costs. Some production units are also diversifying the product mix, particularly by producing technical textiles. These textiles are high value-added products that call for modern technology.

- There has been a rapid increase in the employment in both the textile and garment segments of the industry. However, there has been an overall decline in working conditions also. Feminization of labour has taken place in the industry, as women have certain supply-side advantages in the new liberal environment. However, the employment status of women and their terms of employment are much inferior to those of men. In fact, there are wide gender gaps in most labour market outcomes. It appears that the benefits of globalization to the industry have not been passed on to its workers. In fact, workers have been used in an unjust manner by the industry to the gain from global trade.

### Main recommendations

The major recommendations emerging from the main study as well as from the study on the impact of the financial crisis are:

**Enforcement of core labour standards and universal social protection:** Though it is agreed that the WTO has no right to intervene in the domestic labour policy and to make core labour standards a precondition for trade, it is necessary that the national government enforces these standards on trade. This could be a good starting point for universalizing labour standards in the economy.

The two major problems with the present labour laws in this context are (1) the absence of comprehensive legislation to regulate the working conditions of informal labour and (2) informalization of formal employment using the loopholes in the existing laws. At present the country does not have laws that regulate comprehensively the working and living conditions of workers employed in the unorganized informal sector. The few available laws, such as the Payment of Wages Act, 1936; the Minimum Wages Act, 1948; the Workmen's Compensation Act, 1923; the Equal Remuneration Act, 1976; and the Contract Labour (Regulation and Abolition) Act, 1970, have a limited content and coverage. They are also implemented indifferently by equally indifferent machinery, with the result that they have, if at all, made an extremely limited impact. A few social welfare schemes, designed and implemented in a scattered manner, also are unable to provide any significant social security to workers. A set of labour laws is urgently needed to regulate comprehensively the conditions of workers located in the unorganized/informal sector and to ensure a package of minimum social protection for them.

The second major problem with respect to regulation of labour are the loopholes in the present set of laws. The “innovative” ways of employing non-permanent workers right

on the factory premises sometimes reach absurd proportions where only about one-third of the workers are covered under the labour laws or where some SSI units employ a hundred or more workers and yet stay out of the purview of the Factories Act. These loopholes need to be plugged effectively.

**Incorporating development concerns into trade agreements/policy:** One major limitation of present policy making, as mentioned above, is that there are three ministries involved where the textile and garment industry is concerned. However, it is only the Ministry of Labour that worries about employment and labour, almost independently of the trade and industrial situation. There is no systematic coordination to determine common goals and common strategies. As a result, the overall policy towards labour is disjointed and distorted. The basic concerns of labour are neither linked with the trade policy nor with the textile policy. There is a strong need for a coordinated and integrated approach towards trade, industry and labour to avoid clash of interests.

It is therefore strongly recommended that basic developmental concerns, including concerns for labour, must be incorporated in the trade and industry policies: (1) The core labour standards must be applied by the trading units; (2) no special concessions ought to be extended to export zones or special economic zones in labour standards; and (3) the core standards need to be accepted by all the ministries.

**Promoting labour unions and dialogue between labour and employers:** The right to formulate unions is being blatantly violated by production units in the industry. Many prohibit workers from joining/forming unions or threaten to throw them out if they join unions. Since labour unions can be one of the important pressures for improving conditions of workers and for enforcing labour laws, this anti-union environment needs to be changed. Making the presence of labour unions mandatory in each unit could be one of the steps. It is also important for unions to address issues at the industry level with industry associations and chambers of commerce in a formal manner. Labour unions will have to use innovative methods to bargain with the industry rather than limit their activities to petty cases.

**Employment services in a competitive environment:** There is an urgent need for upgrading the present employment exchanges to provide (1) labour market information on jobs available elsewhere; (2) access to training and re-training facilities to acquire the skills demanded in the market; and (3) redeployment facilities. Unemployment insurance schemes to protect incomes of the workers affected are very important here. In the competitive environment following globalization, particularly after the expiry of the quotas, these services are absolutely essential to enable workers to transit from one job to another. In other words, there is need for a quantum jump in the role and efficiency of employment exchanges in the country. A strong element of customer service must be introduced into their working. Introduction of a high level of professionalism and partnership with the private sector could help significantly.

**Promoting enterprises of home-based workers/small producers:** Such a strategy should focus on, to start with, identifying HH units or home-based workers interested in developing healthy enterprises. The strategy should also include setting up common facility centres to provide all important facilities including technology and skill training; entrepreneurship and other training; market information; credit; power and other infrastructure and related facilities. It will be very useful to set up exclusive apparel/textile parks for these upcoming units.

### **Strengthening handlooms**

There is a need to take a clear policy stand on handlooms to decide on its place and role in the textile sector and in the economy. Handlooms have a unique place in the textile sector and in the Indian economy due to several reasons: (1) Handlooms are spread over all the states and in hundreds of thousands of villages in India and provide large-scale employment to more than 2.5 million households across the country. They meet a basic need – clothing – of millions of households within the country; (2) handlooms also have a good potential for exports; (3) they embody the rich and colourful heritage of the country with its cultural diversity, which needs to be preserved; and (4) handlooms produce eco-friendly goods through eco-friendly production processes. The sector definitely needs support for a healthy growth.

- The first major need is the commitment of the government to this sector. The recent trend of the declining budget needs to be reversed, and adequate allocations need to be made in line with the contribution of this sector to total employment.
- It is also necessary to monitor closely and effectively the large number of organizations set up for the promotion of this sector and the large number of schemes designed in favour of weavers in this sector. As seen earlier, several innovative organizations and schemes have been introduced in the last decade. Unless a suitable mechanism is put in place to see that these work effectively, however, there will be little impact on the sector. A close and systematic monitoring of the schemes and of the organizations is strongly recommended.
- The experiences so far indicate that handlooms have an advantage in (1) high value-added products meant for the top-end domestic market and for exports, and (2) medium value-added products for the domestic market. There is also good scope for innovative new products, which could get good domestic and export markets. The sector needs help to identify such products and promote them.
- It is important that suitable institutions in this sector be encouraged. Though cooperatives do not have a glorious past and a large number of them have become defunct, it is frequently argued that cooperatives should be promoted and strengthened in this sector (Dev et al., 2008). There is nothing wrong in promoting cooperatives; however, experience suggests that alternative ways of organizing production/producers also need to be promoted for ensuring higher productivity and production, on the one hand, and higher wages and incomes to producers, on the other. NGO-run enterprises, producers' companies, public-private

partnerships etc. have been tried out successfully so far (for example, Fabindia, Anokhi, DESI and SEWA). New avenues, particularly those that ensure good incomes for weavers, must get their space too.

- One major area of concern for handlooms is inadequate supply of yarn. The sector should be assured of yarn supply. Rather than making hank yarn production obligatory for all spinning mills, the mills could be promoted in a decentralized manner. Yarn depots should be set up under NHDC in all major handloom clusters to ensure supply. If handlooms are able to market their products successfully, this will in turn lead to financially viable and profitable mills.
- There is an urgent need to provide market research support to handloom units. In this context, official organizations must become more professional than they are today. Using expert services of business consultants may help. Market research and market information needs to be made available to all institutions – cooperatives, master weavers, more innovative institutions etc.
- To improve the productivity of weavers, there is good scope in this sector for R&D, technological upgradation, training and extension. Not only official organizations, but also NGOs and others need to be involved in these tasks.
- Some specific advantages of handlooms in the modern global market are their eco-friendly production processes and eco-friendly products. Use of organic raw materials will add to the eco-friendly character of this sector. It will be a good strategy to focus on these strengths to acquire global and local markets for these products.

And, lastly, there is an urgent need to study some innovative models of success in this sector. It will be worthwhile to examine how these models have managed to link scattered local production units/producers of handlooms with high-tech management and how they have been able to get access to global markets to give higher incomes/wages to producers.

### **Towards gender equality**

The study has shown that women have contributed significantly to the rapid growth of the textile and garment industry as well as its integration with the global market. In fact, women's labour has been exploited to achieve integration and expansion of the industry. In the course of globalization of the industry, gender gaps in all the labour market outcomes have increased, which indicates marginalization as well as increased vulnerability of women.

Women's entry into the labour market by itself does not mean their empowerment. It may not even lead to their empowerment in the long run. The study has shown that when women are trapped in the vicious circle of low productivity and low incomes, prospects of upward mobility are poor. There is need for outside interventions to break this vicious circle. Possible external interventions can come from the following sources:

- An important external intervention or pressure could be the formulation of a set of comprehensive laws to determine the wage and ensure a minimum set of working conditions for workers. These minimum conditions of work should include core labour standards, that is, (1) minimum working conditions/facilities at the work place; (2) minimum social protection; and (3) freedom to form unions for dialogue with employers.
- These enactments need to be accompanied by the institutions necessary to enforce the acts. In fact, the laws will have no meaning if they are not accompanied by an effective and efficient institutional framework for their enforcement.
- Another essential pressure could come from organization of workers. Unless workers are organized to demand their rights, even highly positive laws are not likely to yield much benefit. Organizing women separately and ensuring that they participate equally in these unions is essential in this context.
- Another area of intervention is promotion of women's enterprises in the industry, particularly in the garment sector. As the study has shown, household units are keen to expand to emerge as healthy enterprises. Efforts should be made to promote these enterprises by improving their access to technology, skill training, credit and other infrastructural facilities that enable them to grow.
- Women's low educational achievements appear to be an important constraint in their entry into higher levels of jobs. There is, therefore, an urgent need to promote their education not only at the primary and secondary levels, but also at the technical and professional levels. Special training programmes, both focused and tailor-made, for women workers would also be useful.
- It needs to be recognized that women will get a level playing field in the labour market only when their burden of unpaid work is reduced. With a higher burden of domestic and labour market work, they will not be able to access equal status with men in the labour market. The last but not the least measure is to address the burden of unpaid work of women, systematically and effectively.

In the final analysis, the study poses a basic question regarding the validity of the export-led growth model. The study of the textile and garment industry in the post-reform period as well as the impact of the global crisis on the industry clearly indicates that trade per se cannot be the goal of any national economy. There is a need to treat trade as a means of achieving developmental goals, which include poverty reduction, human development, equality and human well-being in general. In other words, India's national policies must balance and integrate the sources of growth and developmental goals. They must not get bogged down by conditions and pressures from vested interests in the global market.

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