



Human Sciences  
Research Council



Development Policy  
Research Unit



Sociology of Work  
Unit

## **RESEARCH CONSORTIUM**

---

# **A SECTORAL ANALYSIS OF SKILLS GAPS AND SHORTAGES IN THE CLOTHING AND TEXTILE INDUSTRY IN SOUTH AFRICA**

**Sector Studies  
Research Project**

**MARCH 2008**

**RESEARCH COMMISSIONED BY  
DEPARTMENT OF LABOUR  
SOUTH AFRICA**

# **A Sectoral Analysis of Skills Gaps and Shortages in the Clothing and Textile Industry in South Africa**

**Report for the Human Sciences Research Council**

**February 2008**

**Mike Morris**

[mike.morris@uct.ac.za](mailto:mike.morris@uct.ac.za)

**and**

**Lyn Reed**

[lynmead@gmail.com](mailto:lynmead@gmail.com)

**Policy Research in International Services and Manufacturing (PRISM),  
School of Economics, University of Cape Town**

We are grateful for the research assistance from Amrish Bissoon and Sheetal Silal  
with the literature review and KwaZulu-Natal firm interviews.

## Table of Contents

Table of Figures .....	5
Table of Tables .....	7
Chapter 1: The Performance and Dynamics Governing the Clothing and Textile Industry in South Africa .....	8
<b>1.1 Introduction</b> .....	8
1.2. A Sectoral Profile .....	9
1.3. The domestic market .....	12
1.4 International trade - Exports .....	13
1.5 International Trade - Imports .....	16
1.6 Capital expenditure .....	18
1.7 Regional analysis of South Africa's clothing and textiles industries .....	20
1.8 Employment and number of firms .....	21
1.9 Labour productivity .....	24
1.10 Wage characteristics .....	25
1.11 Non compliance .....	27
1.12 Nature and quality of jobs .....	28
1.13 Employment equity .....	29
1.14 Skills .....	32
1.15 Firm-level competitiveness .....	34
1.16 Summary .....	36
Chapter 2: Review of Skills Literature in the Clothing and Textiles Sector .....	39
2.1 Regional contribution to the CTFL SETA .....	39
2.2. Demand-Side Skill Shortages .....	40
2.3 Scarce Skills .....	42
2.4 Critical Skills .....	44
2.5 Conclusion regarding skills demand .....	46
2.6 Supply-side skills shortages .....	46
2.6.1 Educational Breakdown of the CTFL workforce .....	46

2.6.2 Supply of Scarce Skills .....	47
2.6.3 Higher Education and Training Supply Infrastructure .....	47
2.6.4 Further Education and Training Supply Infrastructure .....	48
<i>Learnerships</i> .....	48
<i>Apprenticeships</i> .....	49
<i>FET Colleges</i> .....	51
2.7 Conclusion regarding skills supply .....	52
2.8 Current Policy Interventions - National Interventions .....	53
2.9 Sectoral Interventions .....	54
2.10 Evaluation of sectoral Interventions .....	55
2.11 Investment Climate Assessment (ICA) for South Africa .....	56
2.12 Conclusion .....	57
Chapter 3. Synthesising literature and fact: Evidence from the firms .....	59
3.1. Introduction .....	59
3.2 Profile of firms in the sample .....	59
3.2.1 Demographic profile of the workforce in the sample .....	60
Age .....	61
Gender .....	61
Race .....	62
3.2.2 Occupational breakdown of the workforce in the sample .....	63
Occupation by gender .....	63
Occupation by race .....	65
Western Cape .....	65
KwaZulu- Natal .....	66
3.3. Distinguishing between "skills gaps" and "skills shortages" .....	68
3.3.1 Skills gaps .....	68
3.3.2 Skills shortages .....	69
3.4 Vacancy fill times and skills shortages .....	70

3.5 Empirical evidence of skills gaps and shortages in South African clothing and textiles manufacturing firms.....	71
3.5.1 Skills gaps and shortages by occupational category in the clothing sector.....	72
Production .....	72
<i>Machine operators</i> .....	72
<i>Ironers</i> .....	74
<i>Other production staff</i> .....	74
Cutting room .....	74
Design department .....	75
<i>Sample Machinists</i> .....	75
<i>Patternmakers</i> .....	75
<i>Designers</i> .....	75
Craft and related trades (Artisans) .....	75
<i>Mechanics</i> .....	75
<i>Other i.e. folder-makers, fitters and turners, welders, engineers, electricians</i> .....	76
Professionals .....	76
<i>Technologists</i> .....	76
Management.....	76
Administration and IT .....	78
3.5.2 Skills gaps and shortages by occupation in the textiles sector.....	79
Production .....	79
<i>Machine operators</i> .....	79
Craft and related trades (Artisans) .....	79
Professionals .....	79
<i>Technicians</i> .....	79
<i>Technologists</i> .....	80
Management.....	80
3.5.3 Barriers to maintaining a proficient workforce .....	80
3.5.3.1 Labour turnover and absenteeism .....	81

3.5.4 How does this compare with the SETA Sector Skills Plan? .....	81
Chapter 4 Skills shortages and World Class Manufacturing .....	83
4.1 Recruiting from the industry .....	83
4.1.1 Reasons for recruitment difficulties of qualified staff .....	85
4.2 Recruiting unqualified people from outside.....	86
4.2.1 Reasons for recruitment difficulties of unqualified staff .....	88
4.3 Sourcing internally via promotion .....	89
4.4 Recruiting people from outside the industry generic skills.....	90
4.5 Recruiting graduates from technikons .....	91
4.6 Outsourcing to CMTs.....	91
Chapter 5 Training and the SETA.....	93
5.1 Composition of the CTFL SETA .....	93
5.2 Participation by firms on SETA programmes.....	94
5.2.1 ABET Training .....	94
5.2.2 Skills programmes.....	95
5.2.3 Learnerships .....	95
5.2.4 Grants and bursaries.....	98
5.3 General comments on the SETA.....	99
Chapter 6 The Impact of China Quotas on Skills .....	103
6.1 Output .....	103
6.2 Employment.....	105
6.3 Skills .....	106
Chapter 7 Conclusion.....	108
References.....	116
List of Experts consulted .....	118

## Table of Figures

Figure 1: Turnover of clothing and textiles firms .....	12
---	----

Figure 2: Domestic market growth of clothing and textile products.....	12
Figure 3: Domestic sales of local clothing and textile firms.....	13
Figure 4: South African clothing exports by value and kg 1995-2006.....	14
Figure 5: South African clothing and textile exports 1995-2006.....	15
Figure 6: Exchange rate movements – Rand to US\$ (1995-2007) .....	16
Figure 7: Inflation adjusted indexed imports 1995-2006.....	17
Figure 8: Capital Expenditure 1995 -2001.....	19
Figure 9: Capital Utilisation 1995-2003 .....	20
Figure 10: Output per employee 1995-2003 .....	24
Figure 11: Employment status of apparel workers, 2004 .....	28
Figure 12: Employment status of textiles workers.....	29
Figure 13: Gender of Clothing workers, 2006 .....	31
Figure 14: Age of Clothing workers, 2006 .....	31
Figure 15: Domestic retail requirements and Western Cape firm performance .....	35
Figure 16: Comparative wage and employment levels .....	40
Figure 17: Demand Intensity .....	44
Figure 18: Skills supply .....	47
Figure 19: Population breakdown of apprentices qualifying as artisans.....	50
Figure 20: Percentage of Graduates per Trade.....	50
Figure 21: Policy Aims 2007-2010.....	53
Figure 22: Employment by gender.....	61
Figure 23: Employment by race Western Cape firms .....	62
Figure 24: Employment by race KwaZulu-Natal firms .....	63
Figure 25: Occupation by gender – Clothing firms .....	64
Figure 26: Occupation by gender – Textile firms .....	64
Figure 27: Occupational category by race - Western Cape.....	65
Figure 28: Occupational level by race – Western Cape.....	66
Figure 29: Occupational category by race – KwaZulu-Natal .....	67
Figure 30: Occupational level by race – KwaZulu-Natal .....	67

Figure 31: Skills gaps in clothing and textiles firms.....	69
Figure 32: Skills shortages in clothing and textile firms.....	70
Figure 33: Skill gaps and shortages by occupational category - clothing .....	78
Figure 34: Skill gaps and shortages by occupational categories - textiles .....	80

## **Table of Tables**

Table 1: Exports of Clothing and Textile products 1995-2006 (Rm)	14
Table 2: Imports of Clothing and Textile products 1995-2006 (Rm)	16
Table 3: Clothing manufacturing industry employment strength, 1998 – 2007	23
Table 4: Clothing manufacturing industry employment strength, 1998 – 2007	23
Table 5: Metro areas collective wage agreements 2007	26
Table 6: Non-Metro areas wage collective agreements August 2007	26
Table 7: Non-Metro areas wage collective agreements 2005	27
Table 8: Non-compliance by clothing firms 2004-2007 (%)	28
Table 9: Apparel and textiles workers occupation by race and gender, 2004	30
Table 10: Apparel and textiles skill level by race, 2004	33
Table 11: Operational performance of clothing firms (Manufacturers + CMTs)	35
Table 12: Summary of the SA clothing and textiles industries' SWOT analysis	37
Table 13: Occupational Breakdown in the CTFL Sector	42
Table 14: Critical Skills in the CTFL Sector	44
Table 15: Critical Skills relative to Occupational Groups	45
Table 16 : Shortfall between Demand & Supply of Skills	54
Table 17 : Barriers to maintaining a proficient workforce	81



# Chapter 1: The Performance and Dynamics Governing the Clothing and Textile Industry in South Africa

## 1.1 Introduction

The SA clothing and textiles industries have undergone difficult restructuring over the past ten years due to the combined impact of domestic and international factors. The negative impact of this transformation is manifest in the declining contribution of the sector to total manufacturing output, its falling export share and significant contraction in sector employment. This outcome might have been different had this process of restructuring been pre-empted and accompanied by a concerted effort to up-skill remaining workers and promote innovation in the sector. This could have enabled the sector to pursue a skills-led competitiveness strategy and assist a move toward higher-cost, high quality items. Paradoxically, underinvestment in both human and physical capital in the South African clothing and textiles sector has deepened the crisis precipitated by globalisation and currency weakness and the sector has been incapable of dealing with rising import penetration. Government policy designed to address the effects of liberalisation on the sector has largely been regressive and reinforces the perception of global trade as a threat rather than opportunity. Instead of creating a paradigm shift up the value chain, evidence from this and other studies suggests that interventions, like the China quotas, are driving local firms in the opposite direction, that is, down the value chain toward basic, low value-added garments.

In the new global economy, a country's successful participation in the global value chain for clothing is contingent on its ability to flexibly and reliably respond to customers' needs which requires local manufacturers to upgrade their design and marketing skills and demonstrate world class manufacturing capabilities (Barnes et al 2005). Amongst other factors, the US ITC 2004 has identified skilled labour and management as a critical success factor which provides countries with an advantage; consequently, there is a serious need to develop skills in the clothing and textile industry (Morris et al 2007). The global trend has been for less skilled tasks to be moved to low-cost locations whilst higher value-added and higher-skilled tasks remain in developed countries. This is also accompanied by outsourcing to informal economy enterprises. In this context, increasing emphasis is given to the need for developing countries to upgrade their technical and production capabilities so as to compete on quality, design and delivery, rather than simply on price (Roberts and Thoburn 2002).

South Africa's reintegration into the global economy mandated skills biased changes in methods of production which resulted in too few workers with adequate skills, or a mismatch between skills supply and demand (Daniels, 2007: p. 5). South Africa faces numerous general challenges which could potentially protract and deepen the skills crisis. First, the global skills market has become increasingly competitive. Whilst other countries such as Britain and Australia have exploited this to their advantage, South Africa continues to act defensively and view it as a threat rather than an opportunity (Bernstein and Johnson 2007). Second, a legacy of discrimination has resulted in a (disproportionately white) skills base, which is particularly vulnerable to emigration and ageing. Third, transformation policies have had the intended consequence of misdirecting and wasting skills (Bernstein and Johnson 2007).

This report results from a process of consultation with the main organisations and stakeholders in the sector to identify key skills shortage and issues, and a wide ranging analysis of existing material on skills supply and demand, and factors influencing skills trends. The material is brought together into a draft discussion document which is structured as follows. Chapter 1 profiles the CTFL industry's performance as measured by primary indicators such as output, employment, trade performance and investment. Chapter 2 reviews the literature on the skills crisis in the sector, establishing where they are said to exist according to the National Skills Audit. Chapter 3 presents information from the firm interviews on skills needs and the nature of the shortages. Chapter 4 discusses skill shortages in the context of firms adopting World Class Manufacturing. Chapter 5 reviews the SETA and training. Chapter 6 discusses the impact of the China quotas on skills. The report concludes with Chapter 7.

## **1.2. A Sectoral Profile**

The South African clothing and textiles industry is highly diverse and mature. Products produced in both industries range from inexpensive mass produced basics to higher value-added fashion and tailored garments, and specialised textiles. The exchange rate plays a crucial role in the competitiveness and sustainability of the industry, rendering the industry particularly sensitive to currency fluctuations. High interest rates also negatively affect the industry because of the high cost of borrowing. Interest rates of 10% in South Africa far exceed the interest rates of 1-2% in Asia and 5-6% in developed economies, making South Africa's cost of borrowing comparatively high and placing SA in a disadvantageous position.

Similar to the international environment, South Africa's clothing industry is dominated by a small number of large retailers, most with head offices in Cape Town, wielding considerable value chain power. The top five retailers account for over 70% of formal clothing sales in South Africa. These retailers have the power to set prices, as well as make demands on quality and delivery. The regional location of the Western Cape manufacturers enabled them to meet delivery requirements, speed up purchasing processes, and ease of dealing with problems, and hence historically advantaged them. However, retailers now source from across the country with price and the quality of service playing a pivotal role.

The price pressures from trade liberalisation, currency strengthening, and the exercise of local retailers' power within domestic value chains has resulted in clothing firms following a number of different survival strategies. In line with global trends, there has been a restructuring of the industry and recomposition of labour with a move towards sub-contracting and informalisation as retailers and many larger firms have outsourced parts of their production to Cut-Make-and-Trim (CMT) enterprises providing production services at lower costs due to lower overhead structures. In addition, formal factory downsizing and closures has resulted in the establishment of micro-enterprises, home industries and unregistered firms causing an increase in the number of people employed in the informal sector of the clothing industry and making it difficult to accurately calculate employment figures (Edwards and Morris 2007).

A second important trend, mainly by firms that are well integrated into local retailer value chains, has been a process of sharp learning through the adoption of World Class Manufacturing techniques. This focus on upgrading operational performance has concentrated on internal processes to speed up delivery and lead times, cut inventory levels, reduce defect rates, introduce new work practices, and create value chain alignment between retailers and suppliers. The Cape and KZN Clothing and Textile Clusters have played an increasingly pivotal in this drive to greater competitiveness and upgrading process. The result has been a change in the types of skills demanded and utilised on the factory floor.

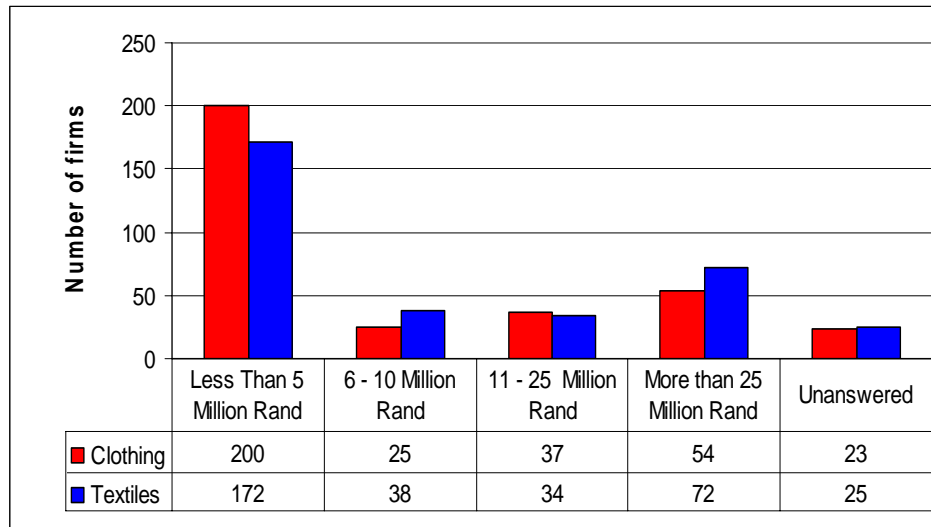
Thirdly, primarily in KwaZulu-Natal, firms have been relocating from urban to rural areas where wages are lower, a more flexible labour regime operates, and lower rates of unionisation are evident. Some firms have gone as far as relocating across borders to

neighbouring countries such as Lesotho and Swaziland where the wage and regulatory environment is even less onerous.

In the textiles industry firms have also been increasingly confronted with cheap imports from trade liberalisation, rising costs and pressures in terms of lower prices and more stringent quality demands. However, the strategies followed by textiles companies to cope with these pressures have been different to clothing firms. Textiles firms have moved to focusing on core products, closing non-core functions and following vertical disintegration strategies. Many textiles firms have chosen to focus on niche markets and therefore restructuring has resulted in greater specialisation and longer production runs. The survival strategy adopted by textiles firms has been criticised by the clothing industry because it has resulted in them moving away from the production of apparel textiles towards technical, industrial, and household textiles which is more secure, and has higher margins.

In 2004, the Clothing, Textiles, Leather and Footwear (CTFL) SETA undertook a skills audit to which a sample of 338 clothing companies and 341 textiles firms responded which provides interesting insights into the profile of the textiles and clothing sectors. However, it is important to note that the majority of the informal enterprises, predominantly in the clothing sector, are unlikely to be represented in this survey. Of the companies that participated in the survey only a small proportion are public companies: 3% in the clothing industry and 5% in the textiles industry. Half of the clothing industry firms are registered as close corporations (51%), with 43% of textile firms classified as such. In the clothing industry 30% are private companies, 10% are sole proprietors and 3% are partnerships. In the textiles industry 41% are private companies, 7% are sole proprietors and 2% are partnerships. The remaining firms were recorded under the category 'other'. According to the CTFL SETA audit, 59% of clothing firms reported an annual turnover of less than five million Rand, followed by 16% of firms who reported a turnover of more than R25 million, 11% who reported a turnover of between R11 and R25 million and 7% who reported a turnover of R6 million to R10 million. 7% of firms did not answer the question. Of the textiles respondents, half of the firms reported an annual turnover of less than R5 million, 11% reported a turnover of between R6 and R10 million, 10% reported a turnover of between R11 and R25 million, 21% reported a turnover of more than R25 million and 7% did not answer the question.

**Figure 1: Turnover of clothing and textiles firms**



Source: CTFL SETA skills audit, 2004

### 1.3. The domestic market

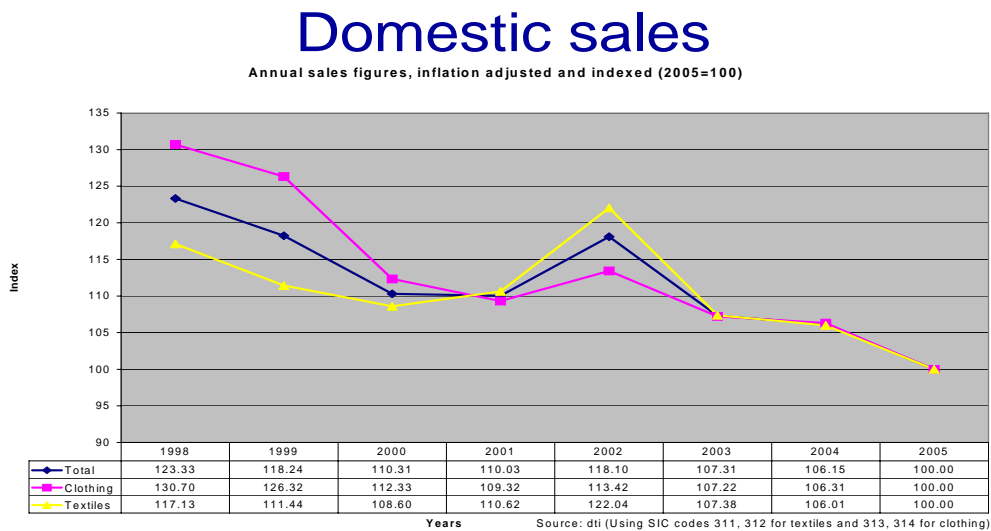
The domestic market for clothing and textiles products has grown substantially as is clear from the data in Figure 2. In 2005 the South African market for clothing and textile products combined was R45,634 million, up 34,5% from R29,887 million in 2001. Of this, textiles constituted 59% and clothing 42%, both showing substantial growth over the period. The value of clothing sales jumped from R12,427 million in 2001 to R18,834 million in 2005, whilst textiles grew from R17,460 million to R28,800 million in 2005.

**Figure 2: Domestic market growth of clothing and textile products**



The fundamental issue from the perspective of the local clothing and textile industry is whether this growth in domestic demand was satisfied by local production? The answer is that sales of clothing and textiles products into the domestic market have run in the opposite direction. In the indexed data presented in Figure 3 domestic sales from local producers have declined from 2002 until 2005. Total local sales declined by 18.1%, clothing sales by 13.4%, and textiles sales by 22% over the period. The increased domestic demand has clearly been taken up by an increasing reliance on imported clothing and fabric.

**Figure 3: Domestic sales of local clothing and textile firms**



## 1.4 International trade - Exports

South Africa's exports have been primarily into the lower end or mass market (Gibbon 2002). The export performance of South African clothing and textiles has generally been modest, focusing mainly on exporting to the EU (particularly the UK) for many years. Exports into the US market were unfamiliar to most clothing firms until 1999/2000. Then (Table 1, Fig 4) it fundamentally changed due to the deteriorating exchange rate and AGOA. Clothing exports jumped phenomenally in 2000 from R995m to R2,590m in 2002, and then, when the exchange rate stabilised and the Rand strengthened, plummeted to R1,005m by 2006.

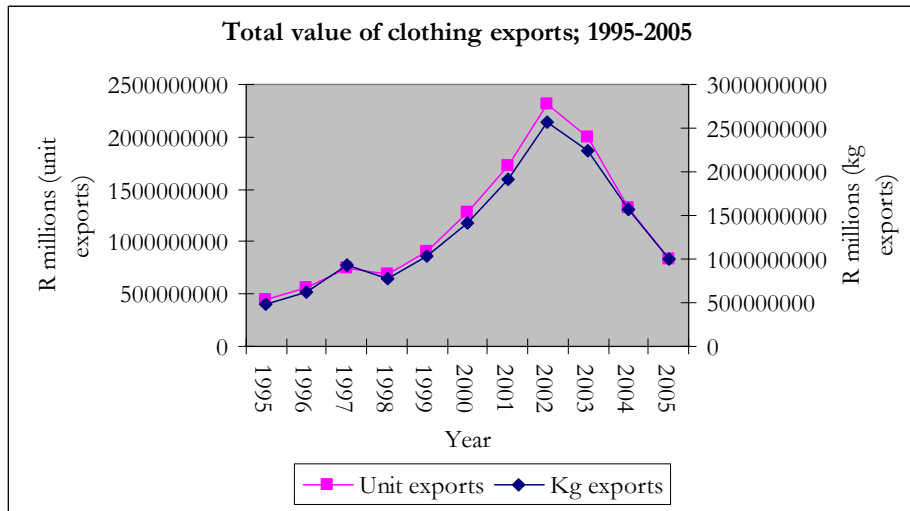
**Table 1: Exports of Clothing and Textile products 1995-2006 (Rm)**

Year	Clothing Rm	Textiles Rm
1995	470,871,446	1,674,985,181
1996	637,080,925	1,895,616,806
1997*	830,981,078	2,380,210,832
1998	789,851,800	2,284,327,384
1999	995,146,483	2,430,160,950
2000	1,328,408,288	2,520,290,608
2001	1,901,111,877	3,208,192,835
2002	2,590,273,843	4,511,364,969
2003	2,260,872,007	3,809,361,016
2004	1,568,806,278	3,255,511,738
2005	1,005,424,262	3,237,620,283
2006	836,499,482	3,463,546,488

Source: Quantec

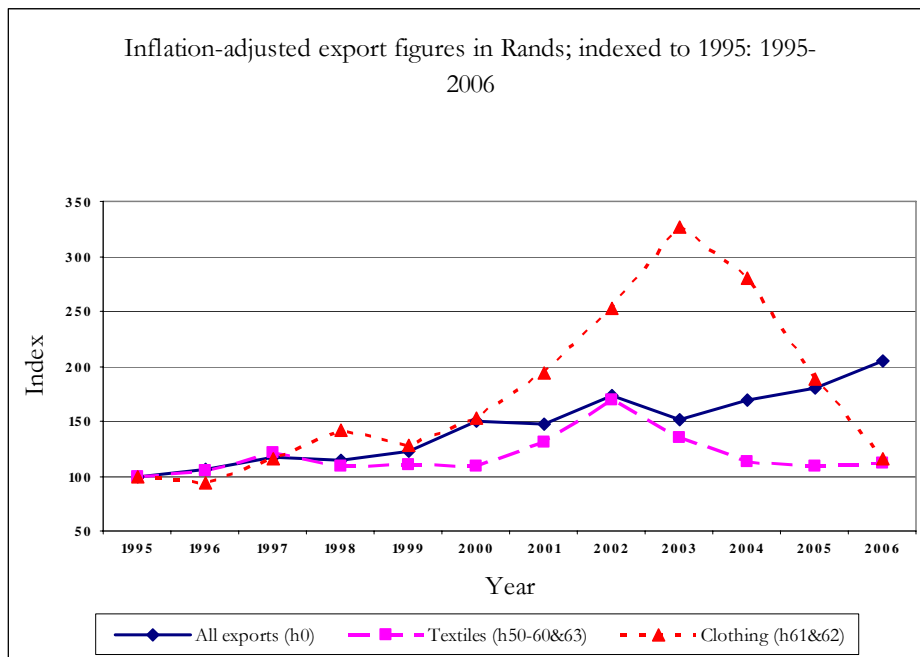
Note \*: The surge in 1997 is accounted for by a large fraudulent declaration in exports.

**Figure 4: South African clothing exports by value and kg 1995-2006**



Source: Clothing export council data

**Figure 5: South African clothing and textile exports 1995-2006**



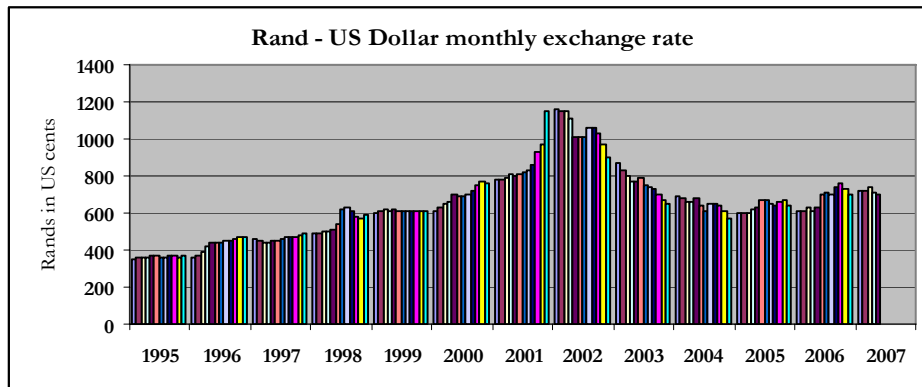
Source: Quantec

In Rand terms, inflation-adjusted (Fig 5) textiles exports grew by 60% between 2000 and 2002, and then fell back to the late 1990s levels by 2004. The net result is that exports of clothing and textiles are no longer a substantial part of the clothing and textile industries. The deteriorating exchange rate at the turn of the millennium assisted clothing exports which jumped dramatically by over 300% between 1995-2002. However, thereafter exports of clothing have fallen catastrophically, declining to below 1998 real levels in 2006. In terms of sub sector textile exports, the majority of exports fall under chapter 51 which comprises wool fibres, rather than more beneficiated yarn or fabric. Historically, Italy was the most important country for Chapter 51 exports. However, this picture has changed notably by 2006 as China has caught up as the major export country for Chapter 51 textiles. Synthetic fibres was the second most important sub sector export, with India (13%) the primary destination by 2006.

A major factor impacting on the decline in real export levels since 2002 is the Rand/US\$ exchange rate. As highlighted in Figure 6, the Rand has appreciated substantially against the US\$ since 2002. In January 2002 the exchange rate was R11.61 to the US\$. By November 2004, the Rand/US\$ exchange rate had appreciated by 50.62% to R5.73. This appreciation of the exchange rate has a significant impact on the price of South African goods in international markets; raising prices and thereby largely accounting for the decline in exports during 2003.



**Figure 6: Exchange rate movements – Rand to US\$ (1995-2007)**



Source: South African Reserve Bank

### 1.5 International Trade - Imports

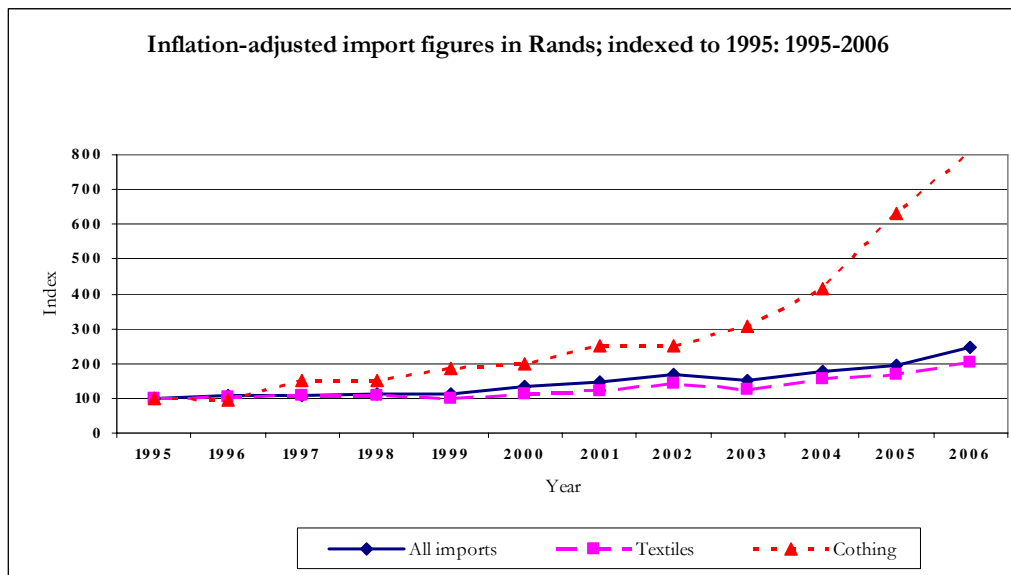
Real manufacturing imports to South Africa, in Rand terms, have been steadily growing since 1995. However the major acceleration in imports has come about from 2002 for textiles and 2003 for clothing. Inflation-adjusted textiles imports (Figure 7) have tracked general manufacturing imports, albeit at a slightly higher level. However clothing imports accelerated dramatically from 2002. Imports of textiles products (overwhelmingly fabric feeding into clothing production) (Table 2) more than doubled from R6,645m in 2001 to R14,370m in 2006. The surge in imports has however been most stark with respect to clothing, for imports of garments jumped four times from R1,673m in 2002 to R6,898m by 2006. These clothing and fabric imports have primarily emanated from China (Einhorn 2006, Morris 2007) and is in line with global developments in many other countries in the world.

**Table 2: Imports of Clothing and Textile products 1995-2006 (Rm)**

Year	Total Clothing	Total Textiles
1995	322,258,319	3,811,285,800
1996	561,446,516	4,286,710,372
1997	614,628,291	4,761,833,415
1998	778,031,694	5,227,348,479
1999	889,103,381	5,068,759,473
2000	1,184,356,676	5,999,875,344
2001	1,293,006,318	6,644,515,524
2002	1,673,261,653	8,793,698,603
2003	2,291,917,000	8,192,799,689
2004	3,609,007,000	10,100,895,261
2005	4,787,695,000	11,225,877,976
2006	6,897,718,000	14,369,965,209

Source: Clothing export council data base

**Figure 7: Inflation adjusted indexed imports 1995-2006**



Source: Clothing export council data base

The dynamics governing this dramatic rise of imports is tied to the large and sophisticated domestic market and a reaction by the retailers that dominate this market to the brief flourish of exports at the turn of the millennium. The initial spur to domestic retailers importing Chinese clothing came at a most unpropitious moment for them – surprisingly when the Rand suffered a major devaluation in 2000/2001 and had plummeted dramatically from 1\$US = R6.10 in 1999 to around R12.11 in Dec 2001. Local clothing manufacturers saw the opportunity to export to the US on the back of this deteriorating exchange rate. They signed up numerous export orders, primarily to US retailers, which at the prevailing exchange rate promised larger profits than by supplying the domestic market. Total exports of clothing at nominal prices jumped dramatically from R471m in 1995 to R1901m in 2001 and R2590 in 2002, but then collapsed to R1005.5 by 2005 (TIPS data base).

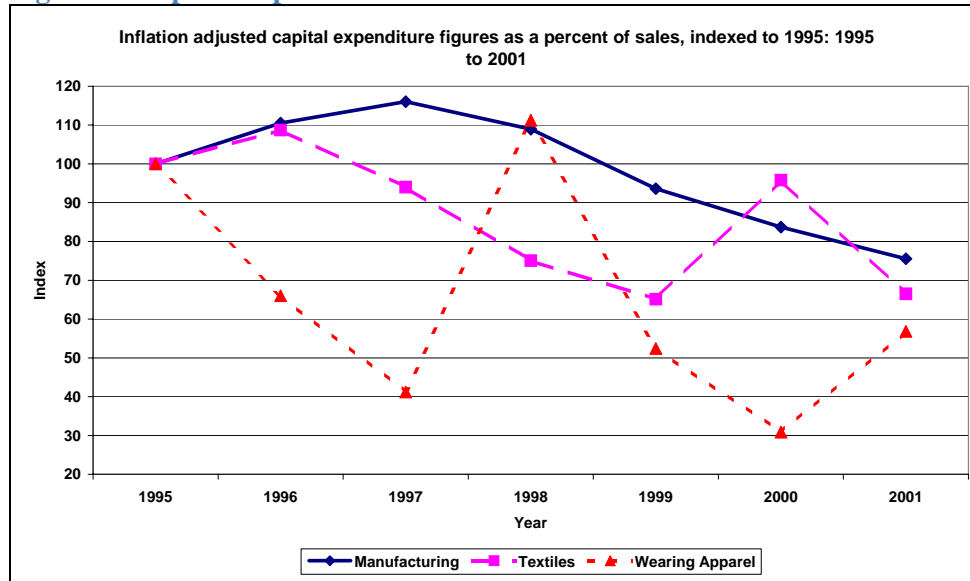
However the local manufacturers did not have sufficient capacity to supply both the export and the domestic markets. Many local firms consequently cancelled their orders to the local retail chains in favour of the more lucrative export market. This left the domestic retailers scrambling to find stock, and consequently they went offshore seeking imports. Coinciding with China's export rise, they discovered China as an alternative clothing source. Since in the 1990s the South African government had radically simplified and reduced clothing tariffs - by 2002 they were down to 40% (Cassim et al 2004) - imports flooded into the local market.

The subsequent strengthening of the rand post 2003 (hovering between 1\$ = R6 – R7) turned the entire scenario around, creating both easier access to the domestic market as well as hampering export opportunities into the global market. The appreciating exchange rate and the economic boom afforded retailers greater buying power in international markets. It also coincided with the indirect impact of global Chinese clothing exports (and competition from falling unit prices). Given the constraints South African clothing exporters faced with the AGOA rules of origin, and the South African government's unwillingness to extend the Duty Credit Certificate scheme subsidising clothing exports, this radically limited the capacity of domestic manufacturers to export. Exports dropped dramatically, with manufacturers reneging on their export orders. They sought vainly to return to their previous customers, the domestic retail chains, but the restructuring of the domestic value chain had taken a radical turn. Large scale imports of clothing from China had become the order of the day. Clothing imports from China moved from 16.5% of total rand value clothing imports in 1995 to 74.2% in 2005, an increase of 450%. If we add clothing exported from Hong Kong, the combined China clothing imports jumped to 78.8% of total clothing imports in 2005 (Morris 2007). Furthermore, as Einhorn 2006 and Morris 2007 have shown, this dramatic increase in imports has had a deflationary impact on clothing prices and gone hand in hand with consistently falling unit prices of garments.

## 1.6 Capital expenditure

Data on capital expenditure is no longer captured by Statistics South Africa (having been discontinued in 2001), making a comprehensive analysis of the sectors' recent capital upgrading position difficult. As is apparent from Figure 8, textiles capital expenditure steadily declined between 1996 and 2001. Capital expenditure for clothing has been extremely erratic. In summary, total capital expenditure for textiles and clothing has performed erratically and 2001 levels were well below 1995 figures.

**Figure 8: Capital Expenditure 1995 -2001**



Source: Statistics South Africa

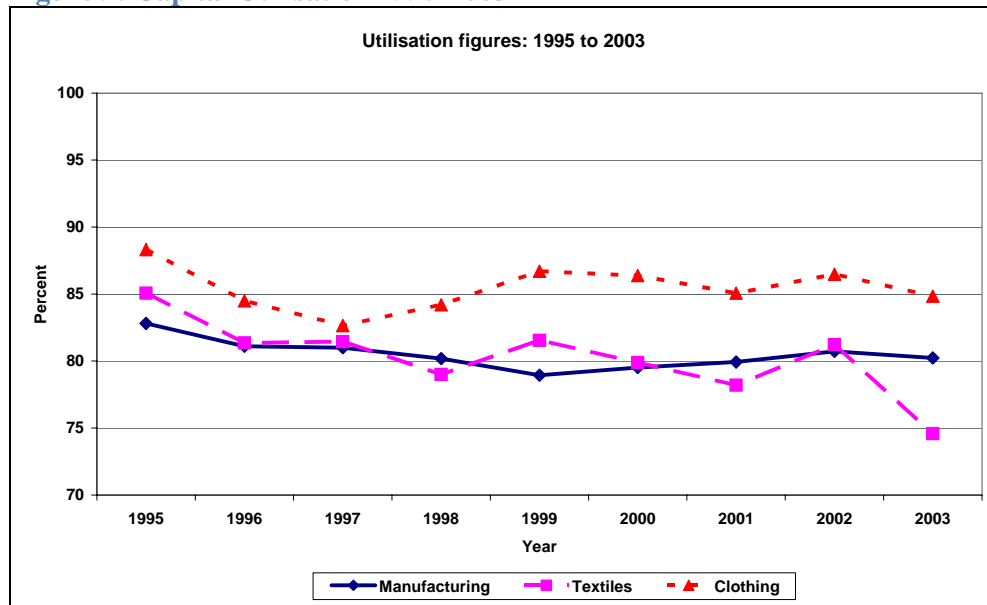
Although 41% of both apparel and textiles firms surveyed for the CTFL SETA 2004 skills audit reported that they had invested in capital over the previous 12 months, when compared to manufacturing as a whole, both clothing and textiles sectors spend only a small proportion of their sales on new capital goods. Based on Benchmarking & Manufacturing Analysts firm level data from the Western Cape, capital spent remained low through 2003-2004. Average expenditure on new capital equipment by clothing firms declined fractionally from 2.8% in 2003 to 2.7% in 2004. In the textiles industry, average expenditure on new capital equipment declined from 7.7% of sales in 2001 to only 4% of sales in 2003. The result of this is the dominance of aging equipment within both sectors. Once again, based on firm-level benchmarking data, the average age of ‘spinning’ equipment amongst the surveyed textiles firms is 17.3 years, followed by ‘weaving’, ‘knitting’ and ‘finishing’ equipment, which have average ages of 13 years, 12.8 years and 11.4 years respectively. In the clothing industry 41% of firms have capital equipment with an average age of more than 10 years.

Roberts and Thoburn (2002) argued that South African firms that have responded to liberalisation by upgrading their capabilities and fostering product differentiation have achieved more success. They argue that South African firms should compete on quality, design and delivery rather than simply on price. And yet this is clearly not possible without investment in capital, technology, innovation and skills. Most capital goods are imported and the exchange rate plays an important role, but investment in capital equipment is nevertheless

vital, not only to replace capital goods, but also to upgrade capabilities. However, interviews with industry representatives did indicate that the threats facing the industry (e.g. China, illegal imports and dumping, and the government failure to support the clothing and textiles industries) resulted in a lack of confidence in the future of South African clothing and textiles manufacture, which has contributed to the lack of investment.

Figure 9 shows the percent utilisation of production capacity for manufacturing, textiles and clothing from 1995 to 2003. Here the utilisation of capacity in the clothing industry compares favourably to both textiles and manufacturing. Although following a similar and somewhat volatile trend over time, the clothing industry has higher capacity utilisation than manufacturing as a whole. The clothing industry has been able to consistently operate at above 82% of its capacity, while manufacturing has only been able to achieve an utilisation level above 82% once between 1995 and 2003, with this occurring in 1995. The utilisation of capacity for the textiles industry has been volatile and in 2003 dropped to 75%. The textiles industry uses 79% of its capacity on average, while clothing performs better with an average utilisation rate of 85%.

**Figure 9: Capital Utilisation 1995-2003**



Source: Statistics South Africa

## 1.7 Regional analysis of South Africa's clothing and textiles industries

Detailed up to date information at a provincial level in South Africa is not readily available. Both the clothing and textiles industries are based primarily in two provinces – KwaZulu-

Natal (KZN) and the Western Cape. Although very limited regional differences exist between textiles firms in these regions, the greatest portion in value terms is located in KZN. In contrast, there are regional differences between clothing industries. In the Western Cape, concentrated in metro Cape Town, there are a greater proportion of medium and large size firms producing for the middle or upper end of the domestic market. Cape Town is recognised as the design centre of South Africa due to its fashion orientation, and although capable of producing all types of apparel, the strength of the firms lies in producing higher quality garments. The larger, formal, firms do outsource to smaller, often informal, CMT firms in order to reduce costs, and therefore the industry is supported by a large number of small, flexible and productive CMTs that contribute significantly to overall output.

In KZN the clothing industry is more widely spread over the province with large concentrations of firms located in decentralised areas in order to take advantage of lower wage rates and lower labour costs. Many foreign-owned firms (mostly Chinese, Taiwanese,) are also located in these outlying areas. With nearly 80% of the KZN clothing industry reportedly CMT firms, firm size in this province is smaller. Furthermore, production is concentrated towards the lower and mass end of the market.

However, although these general characteristics do apply to the two provinces overall, there are of course always major exceptions. Some mass production targeted towards the lower end of the market does occur in the Western Cape, whilst some larger firms in KZN are fairly specialised and pursue niche markets. Moreover, the labour-intensive nature of clothing production means that it is a major employer in both provinces. This, coupled with the low barriers to entry, makes it a strategic industry for development purposes in both provinces.

## 1.8 Employment and number of firms

Most studies of employment in the clothing and textile industry cite the official Stats SA data. For example, Kriel 2006, uses this data to argue that employment dropped from 206 947 in January 2003 to 142 203 in June 2006 (a loss of 64 744 jobs). However, as Edwards and Morris 2007 have demonstrated, there are major problems in using this data source as an indicator of employment trends for the clothing and textile sector. Firstly, the Statistics South Africa employment figures cover *clothing, textile, leather and footwear products* (SIC 31) and not just the clothing and textile sectors. Furthermore the Statistics SA data are characterized by sampling breaks using different employment surveys which render time

comparisons very problematic. Finally the official statistics on the number of firms and employment in the clothing industry do not reflect the large number of informal and small firms that are not captured and/or miscalculated. Unregistered companies only employ a small number of people, but because there are so many of them, they account for a significant proportion of overall capacity. As such, employment estimates may not adequately capture the recomposition of employment and restructuring of the industry with the significant rise of Cut-Make-and-Trim operations, micro-enterprises, home industries and unregistered firms.

Statistics South Africa conducts a bi-annual Labour Force Survey (LFS) which capture national household data on approximately 30,000 households. Given the small sample size, sub sectoral or geographical levels breakdowns are statistically problematic. However the data does provide cautious indication of the clothing industry informal economy size not available from the industrial data. The LFS 8 data reveal that approximately 30% of clothing workers are employed by informal enterprises.

The most reliable data source is from the Clothing Bargaining Council and the Textile Bargaining Council. The national clothing bargaining council employment figures, presented in Table 3 below, illustrates the real decline in employment in the clothing industry. This data are arguably the most reliable data available. However it does not include those firms who avoid detection from the compliance officers, nor those small CMT operations with less than five or six workers. This is illustrated if the number of firms in Table 3 is compared with the data on compliant and non-compliant firms. There is a substantial discrepancy reflecting a large number of firms hiding below the radar screen of the national bargaining council.

It should be noted that in the middle of 2003 the compliance unit of the NBC went on a drive to track down all known employers of labour in the formal clothing sector so as to force compliance, as well as including non-metro area firms, making the data incomparable. The number of firms and employees hence jumps dramatically from June 2003 to December 2003 with a more moderate increase in 2004. We therefore only compare the data from December 2003 to avoid changes in the sample of firms. Table 3 indicates that the number of clothing workers employed in the formal sector and registered with the bargaining council has declined by 26% (25,162) between December 2004 and August 2007, although the number of firms has only declined by 14% in the same period.

**Table 3: Clothing manufacturing industry employment strength, 1998 – 2007**

As at	Firms	Workers
31.12.1998	834	80,635
31.12.1999	784	78,711
31.12.2000	702	69,954
01.01.2002*	651	62,712
31.12.2002	672	65,585
31.12.2003**	1,090	95,187
31.12.2004	1,169	97,958
31.12.2005	1,138	83,081
31.12.2006	1,048	74,456
31.08.2007	1,008	72,796

Source: National Bargaining Council

\* Figures for 31/12/2001 are not available so the next best 31/1/2002 was used.

\*\* From 25/07/2003 a Collective Agreement was published for the Non-Metro areas.

The figures reflected before this date, therefore, are only in respect of "Metro" areas.

Table 4 demonstrates the importance of the KZN and Western Cape to the industry, although there is still a substantial number of clothing employees located in the Northern Areas. In August 2007, KZN and Western Cape bargaining council employment was roughly evenly split with 28,682 and 28,101 workers, representing 39.4% and 38.6% respectively of total bargaining council employment.

**Table 4: Clothing manufacturing industry employment strength, 1998 – 2007**

	WESTERN CAPE		EASTERN CAPE		KWAZULU--NATAL		NORTHERN AREAS		NATIONAL TOTAL	
As at	Firms	Workers	Firms	Workers	Firms	Workers	Firms	Workers	Firms	Workers
	340	37,122	29	1,346	222	22,123	243	10,501	834	80,635
31.12.1998	40.77%	46.04%	3.48%	1.67%	26.62%	27.44%	29.14%	13.02%	100%	100%
	342	37,639	20	1,459	190	20,171	232	10,191	784	78,711
31.12.1999	43.62%	47.82%	2.55%	1.85%	24.23%	25.63%	29.59%	12.95%	100%	100%
	320	35,283	15	1,457	157	15,994	210	9,022	702	69,954
31.12.2000	45.58%	50.44%	2.14%	2.08%	22.36%	22.86%	29.91%	12.90%	100%	100%
	305	33,552	14	1,081	136	14,172	196	7,334	651	62,712
01.01.2002	46.85%	53.50%	2.15%	1.72%	20.89%	22.60%	30.11%	11.69%	100%	100%
	293	34,355	31	1,082	145	15,507	203	7,688	672	65,585
31.12.2002	43.60%	52.38%	4.61%	1.65%	21.58%	23.64%	30.21%	11.72%	100%	100%
	337	34,535	48	4,750	349	36,101	356	19,801	1,090	95,187
31.12.2003	30.92%	36.28%	4.40%	4.99%	32.02%	37.93%	32.66%	20.80%	100%	100%
	353	33,508	45	2,715	417	39,715	354	22,020	1,169	97,958
31.12.2004	30.20%	34.21%	3.85%	2.77%	35.67%	40.54%	30.28%	22.48%	100%	100%
	346	29,547	43	1,384	396	34,204	353	17,946	1,138	83,081
31.12.2005	30.40%	35.56%	3.78%	1.67%	34.80%	41.17%	31.02%	21.60%	100%	100%
	321	28,451	46	1,903	358	30,147	323	13,955	1,048	74,456
31.12.2006	30.63%	38.21%	4.39%	2.56%	34.16%	40.49%	30.82%	18.74%	100%	100%
	308	28,101	49	2,243	341	28,682	310	13,770	1,008	72,796
31.08.2007	30.56%	38.60%	4.86%	3.08%	33.83%	39.40%	30.75%	18.92%	100%	100%

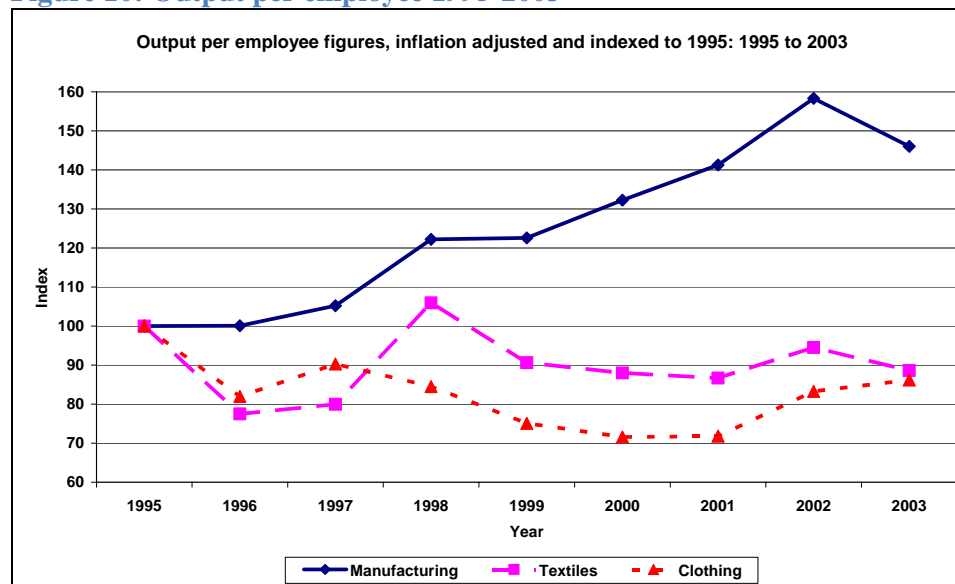
Source: National Bargaining Council



## 1.9 Labour productivity

The indexed output per employee data calculated using inflation-adjusted sales figures divided by the number of employees (official estimate) is represented in Figure 10 below. Nominal output per employee for total manufacturing increased from R218 thousand in 1995 to R571 thousand in 2003, with this representing an improvement of 46.0% in real terms, although 2003 output levels did decline in nominal terms for the first time since 1995 by 7.8%. After initially declining by 22.5% in 1996, inflation-adjusted output per employee levels for textiles improved year-on-year in 1997 and 1998 by 3.1% and 32.5% respectively. Since 1998, textiles' output per employee levels have displayed a general decline with the 2003 inflation-adjusted figure 11.4% worse than the 1995 level and 19.6% lower than the comparative 1998 figure. The 2003 nominal output per employee figure for the textile sector in 2003 was R231 thousand. Similar to textiles, the clothing sector also experienced a sharp decline in output levels during 1996. Whilst a brief improvement of 10.1% did occur during 1997, clothing has experienced several years of unimpressive output per employee levels, with 2001 real figures 28.2% down on 1995 levels. Although improvements occurred for clothing in 2002 and 2003 of 16.0% and 3.5% respectively, 2003 levels, at R115 thousand per employee in nominal terms, still remain 13.8% below 1995 levels.

**Figure 10: Output per employee 1995-2003**



Source: Statistics South Africa

Output per employee figures for both textiles and clothing have declined significantly in comparison to manufacturing figures. In 1995, textiles and clothing were 66.8% and 34.0%

of the total manufacturing output per employee figures, with this declining by 39.3% and 41.0% respectively over the period ending 2003.

According to South African industry representatives, comparatively high wage rates and total labour costs, relatively few hours worked per week and inefficient workers leads to high unit labour costs and low levels of productivity. High rates of absenteeism in the apparel industry also have a significant effect on productivity. The clothing industry is predominantly a female workforce with family responsibilities and social problems that lead to higher rates of absenteeism than manufacturing as a whole. Furthermore, the workforce ensures that it takes the full quota of sick leave available as they are of the mindset that this 'leave' is entitled to them. High rates of absenteeism impact on production time foregone and can reduce quality resulting in higher unit costs and therefore lower productivity.

In the capital-intensive textiles sector, wage rates are not viewed as being as much of a hindrance to competitiveness as in the clothing industry. Rather, the flexibility of the workforce is more critical. Flexibility refers to the ability to work 24 hours a day, seven days a week. Textiles firms incur huge costs each time a machine needs to be started at the beginning of a new shift. Public holidays are a further problem for these firms. As highlighted by Salinger et al 1999: 13, greater labour market flexibility would enable textiles firms to move to full capacity operating 24 hours a day, seven days a week, with a 360 day work year like in Asia, making South Africa more competitive.

It is, however, highly unlikely that wage rates will decline or that the labour market will become more flexible. Consequently, it is essential that firms find alternative ways of increasing labour productivity. For instance, investment in more sophisticated machinery in the textiles industry will reduce unit labour costs and thereby raise productivity. And retooling of the clothing industry will similarly result in more efficient production. Investment in human resource development in order to improve the skills levels of workers, thereby increasing efficiency levels, and thus productivity, are also important.

### **1.10 Wage characteristics**

Wages in the clothing industry are governed by national collective agreements negotiated between employers and employees. In terms of this agreement a wage differential exists between firms located in metro areas and firms located in non-metro areas, with firms in non-

metro areas subject to lower wage rates. However, a wage differential also exists between metro area firms by province where metro area wage rates in the Western Cape exceed those in KZN. However the bargaining council agreement is so designed to equalise the ultimate cost to the employer between different provincial regions. The wage rates currently applicable to metro and non-metro areas are presented in Table 5 and 6 below.

**Table 5: Metro areas collective wage agreements 2007**

Category	Head	Sewing	Mechanic	Clerk	Foreperson	Pattern Grader
Industry wage	R1, 134.30	R701.45	R1,134.30	R772.59	R643.94	R915.35

Source: National Bargaining Council

**Note:** Wage rate applicable for 1 Sept 2007 to 30 August 2008; Wage rates reflect a year-on-year increase of 5% across the board. KwaZulu-Natal = Grade 1 employees. Western Cape = Grade B employees

**Table 6: Non-Metro areas wage collective agreements August 2007**

Descriptions	Area 1		Area 2	
	New	Established	New	Established
Category A	R348.50	R387.50	R287.00	R316.00
Category B	R352.00 - R407.00	R443.50	R289.50 - R329.00	R354.00
Category C	R387.50- R525.50	R571.50	R315.50-R414.50	R449.50
Category D	R387.50 - R490.00	R561.00	R315.50-R387.00	R441.50
Category E	R411.00- R587.50	R653.50	R331.50-R462.00	R512.00
Band Knife Cutter	R370.00 - R474.00	R529.50	R303.00-375.50	R417.50
Clerical	R381.00 - R459.50	R538.50	R311.00-R365.50	R424.00
Assistant Head Cutter		R632.00		R496.00
Head Cutter		R778.50	R560.00	R608.00
Foreperson		R690.50	R426.15	R560.00
Driver (1-4)		R 432.00- R640.00		R346.50 - R502.00

Source: National Bargaining Council

**Notes:** Wage rate applicable for the period 1 September 2007 to 30 August 2008. Area 1 consists of the magisterial districts of Camperdown, Umzinto, Paarl, Stellenbosch, Uitenhage, Area 2 consists of the rest of the non-metro areas.  
New = employer of 24 months or less, Established = employer of more than 24 months

The wage differential that exists between the Western Cape and KZN provides firms in KZN with a competitive advantage over firms in the Western Cape, as the labour-intensive nature of clothing production means that wages make up a significant proportion of the total cost of producing a garment. The Western Cape's disadvantage is exacerbated by the comparatively large proportion of KZN firms located in non-metro areas. This is simply due to the large number of non-metro areas in KZN compared to the Western Cape.

The trend of the Western Cape industry towards servicing the upper-end of the domestic market is partly the result of the domestic retail focus of the Western Cape firms, and partly the result of the higher cost structure in the Western Cape. Firms in the Western Cape struggle to compete with firms in KZN in terms of price and have therefore moved into areas

of production where price is less important. Interviews with large retail chains<sup>1</sup> indicated that retailers who supply to the lower-end of the market tend to source locally from KZN, while firms who supply the upper-end of the market tend to source primarily from the Western Cape. However, these retailers also indicated that although they do try to source locally, most firms in both provinces are unable to compete cost-effectively with international competition, especially in light of the current strength of the Rand.

### 1.11 Non compliance

Table 7 shows the massive level of non-compliance in the industry in respect of bargaining council regulations. KZN is by far the most non compliant with 86% of known firms non-compliant, followed by the Western Cape with 32%. Nor is this a transient phenomenon as levels of non compliance between 2004 and 2007 have remained consistently high as demonstrated in Table 8. Nearly all instances of non-compliance are due to non payment of bargaining council wage rates rather than non-payment of levies. The vast majority are small firms and CMTs. It should be noted that the real level of non compliance to the bargaining agreement is much higher, since this data is based on ‘known firms’ and does not reflect the smaller enterprises operating in the informal economy who have managed to keep their heads below the bargaining council radar. Non-compliance has become a major bone of contention between firms and governing bodies with the former alleging that they are being penalised in terms of training to solve non-compliance problems in the industry.

**Table 7: Non-Metro areas wage collective agreements 2005**

Chamber		Registered employers	Known unregistered employers	TOTAL employers	No. non-compliant	% non-compliant
<b>W Cape</b>	<b>Sub-total</b>	<b>307</b>	<b>13</b>	<b>320</b>	<b>102</b>	<b>32%</b>
	Metro	295	13	308	99	32%
	Non-Metro	12	0	12	3	25%
<b>KZN</b>	<b>Sub-total</b>	<b>345</b>	<b>123</b>	<b>468</b>	<b>402</b>	<b>86%</b>
	Metro	206	107	313	301	96%
	Non-metro	139	16	155	101	65%
<b>Northern</b>	<b>Sub-total</b>	<b>310</b>	<b>85</b>	<b>395</b>	<b>193</b>	<b>49%</b>
	Metro	224	24	248	76	31%
	Non metro	86	61	155	101	65%
<b>E Cape</b>	<b>Sub-total</b>	<b>48</b>	<b>1</b>	<b>49</b>	<b>8</b>	<b>16%</b>
	Metro	41	1	42	5	43%
	Non metro	7	0	0	3	16.33%
<b>TOTALS</b>		<b>1010</b>	<b>222</b>	<b>1232</b>	<b>705</b>	<b>57%</b>

Source: National Bargaining Council

<sup>1</sup> These interviews were completed in August 2004, as part of the Cape Clothing Cluster pilot project.

**Table 8: Non-compliance by clothing firms 2004-2007 (%)**

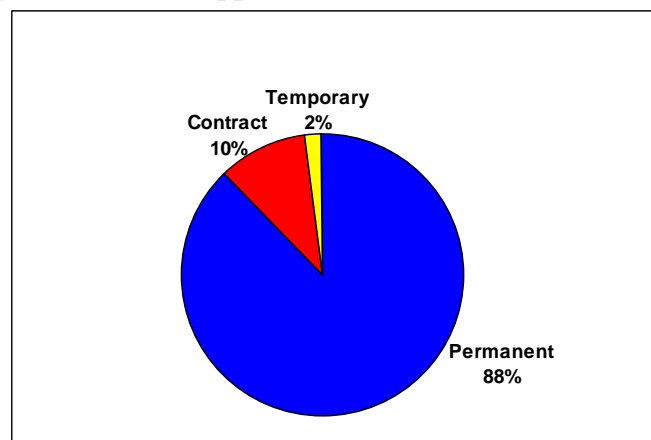
Chamber	Percentage non-compliant firms		
	2004 Sep	2006 May	2007 Aug
W Cape	28%	34%	32%
KZN	84%	92%	86%
Northern	57%	60%	49%
E Cape	24%	25%	16%
<b>TOTALS</b>	<b>55%</b>	<b>66%</b>	<b>57%</b>

Source: National Bargaining Council

### 1.12 Nature and quality of jobs

The impact of restructuring and the associated loss of employment obviously have a devastating effect on workers who lose stable and secure sources of income. However, the change in the nature of work for many employees, such as a move from permanent formal employment to atypical forms of work such as informal employment, temporary and contract work, is also not ideal as these forms of work are associated with lower wages, insecure employment and worse conditions of work. On the other hand our interviews in the clothing sector suggest that workers in the informal CMT sector may however, in the short term, increase their disposable income as high transport costs, union dues, UIF payments, and industrial council (sick and pension) deductions, are eliminated. Workers in the clothing sector are more likely to suffer from a change in the nature of work, while workers in the textiles sector are more likely to have experienced job losses.

**Figure 11: Employment status of apparel workers, 2004**

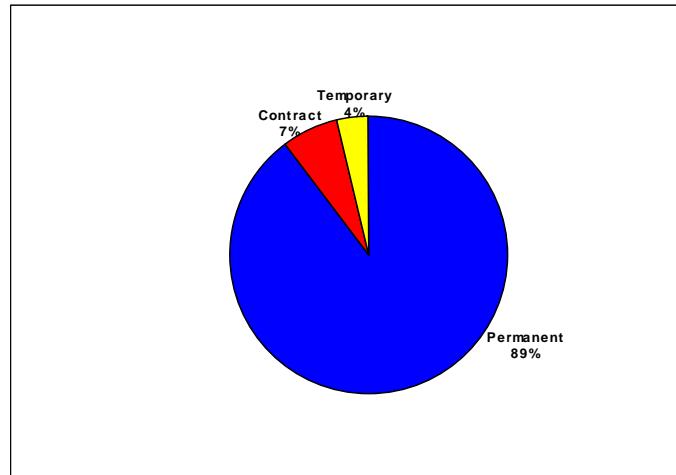


Source: CTFL SETA Skills Audit

Of the 679 apparel and textiles firms that participated in the 2004 CTFL SETA skills audit, nearly 90% of both clothing and textiles workers are permanent employees( Figures 11, 12).

In the apparel industry 10% of the respondents' workforce is contract employees and 2% are temporary employees, compared to 7% and 4% in the textiles industry.

**Figure 12: Employment status of textiles workers**



Source: CTFL SETA Skills Audit

### 1.13 Employment equity

The labour absorptive capacity of the clothing and textiles industry is part of the reason for these sectors' identification as priority industries by government. However, the racial and gender breakdown of the industry should lend further substantial support to this status. The CTFL SETA's Skills Audit breaks down the responses received by race, gender and occupation (Table 9). In the clothing industry, 35.7% of males are Indian, 35.2% are African, 19.0% are Coloured and 9.4% are White. However, the majority of females are African (48.2%), followed by Coloureds (29.3%), Indians (20.1%) and Whites (2.4%). Indians appear to occupy the majority of the male positions in the clothing industry. Indians and Whites take up the top senior and professional male positions: 42.9% of senior officials are White, 42.2% are Indian; 43.2% of professional positions are Indian, and 36.6% are White. Africans only fill 3.9% of senior official male positions and 7.1% of professional male positions. Indians dominate in terms of technical as well as clerical and administration positions (51.7% and 59.5% respectively), followed by Coloureds (17.9% and 19.3%). The greatest proportion of service positions occupied by males is African (41.8%), followed by Indian (35.1%), while 37.4% of artisans are Indian and 30.1% are Africans. Africans mostly fill the lower paying positions of operators and labours: 48.2% of machine operators and 60.1% of labourers. However, 35.7% of apprentices are Indian, 35.2% are African and 19.0% are Coloured.

**Table 9: Apparel and textiles workers occupation by race and gender, 2004**

Occupation Category	Male					Total	Female					Sub Total
	A	C	I	W	O		A	C	I	W	O	
Clothing Industry												
Senior officials, managers & owner managers (e.g. CEO, General Managers)	3.9%	10.6%	42.2%	42.9%	0.5%	100.0%	8.9%	23.4%	24.2%	43.1%	0.4%	100.0%
Professionals (e.g. engineers, accountants)	7.1%	11.5%	43.2%	36.6%	1.6%	100.0%	7.8%	46.8%	11.3%	33.8%	0.4%	100.0%
Technicians (e.g. technologists, quality inspectors)	16.2%	17.9%	51.7%	13.6%	0.7%	100.0%	18.4%	32.4%	38.5%	10.5%	0.3%	100.0%
Clerical & admin workers (e.g. bookkeepers, secretaries, typists)	14.8%	19.3%	59.5%	6.4%	0.1%	100.0%	13.9%	33.1%	41.0%	11.7%	0.3%	100.0%
Service workers, marketing & shop staff (e.g. security officers, sales people)	41.8%	11.5%	35.1%	9.8%	1.7%	100.0%	33.8%	21.7%	31.7%	12.8%	0.0%	100.0%
Artisans or skilled trade workers (e.g. mechanics)	30.1%	23.3%	37.4%	6.6%	2.6%	100.0%	25.6%	48.0%	23.1%	3.4%	0.0%	100.0%
Plant & machine operators & assemblers (e.g. machinists)	48.2%	23.5%	28.0%	0.2%	0.0%	100.0%	50.0%	31.3%	18.6%	0.0%	0.0%	100.0%
Labourers (e.g. cleaners)	60.1%	21.1%	17.1%	1.1%	0.6%	100.0%	68.7%	18.3%	12.8%	0.2%	0.0%	100.0%
Apprentices and Section 18 learners	56.1%	31.7%	11.0%	1.2%	0.0%	100.0%	61.9%	31.7%	6.4%	0.0%	0.0%	100.0%
Total	35.2%	19.0%	35.7%	9.4%	0.7%	100.0%	48.2%	29.3%	20.1%	2.4%	0.0%	100.0%
Textiles industry												
Senior officials, managers & owner managers (e.g. CEO, General Managers)	5.7%	12.4%	13.5%	66.2%	2.2%	100.0%	10.5%	17.9%	10.9%	57.8%	2.9%	100.0%
Professionals (e.g. engineers, accountants)	6.4%	14.8%	16.2%	62.1%	0.5%	100.0%	5.7%	17.0%	8.5%	68.1%	0.7%	100.0%
Technicians (e.g. technologists, quality inspectors)	21.8%	26.7%	22.2%	27.3%	2.0%	100.0%	38.3%	24.3%	14.2%	22.7%	0.6%	100.0%
Clerical & admin workers (e.g. bookkeepers, secretaries, typists)	23.7%	32.3%	32.8%	10.9%	0.3%	100.0%	15.1%	36.8%	17.1%	30.8%	0.2%	100.0%
Service workers, marketing & shop staff (e.g. security officers, sales people)	43.7%	14.6%	15.6%	25.8%	0.4%	100.0%	25.6%	25.4%	12.7%	35.4%	0.8%	100.0%
Artisans or skilled trade workers (e.g. mechanics)	27.9%	32.6%	16.5%	22.9%	0.1%	100.0%	37.4%	47.8%	8.2%	6.6%	0.0%	100.0%
Plant & machine operators & assemblers (e.g. machinists)	55.3%	35.8%	7.9%	1.0%	0.0%	100.0%	64.8%	31.4%	3.3%	0.4%	0.0%	100.0%
Labourers (e.g. cleaners)	62.7%	32.0%	4.2%	1.1%	0.0%	100.0%	72.7%	23.4%	3.6%	0.2%	0.0%	100.0%
Apprentices and Section 18 learners	78.2%	7.7%	11.5%	2.6%	0.0%	100.0%	63.6%	28.5%	6.9%	1.0%	0.0%	100.0%
Total	45.8%	31.2%	11.4%	11.3%	0.3%	100.0%	58.0%	30.0%	5.5%	6.3%	0.1%	100.0%

Source: CTFL SETA Skills Audit

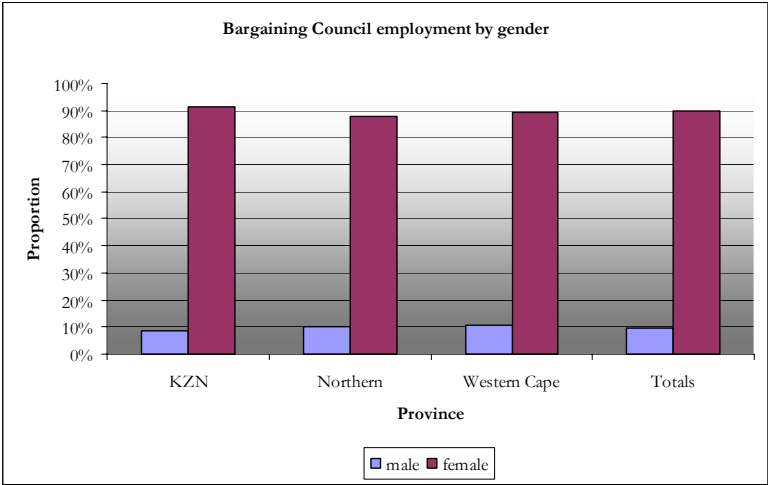
With regards to female clothing employees, Whites occupy a significant proportion of the senior official and professional categories, with Indians and Coloureds also well represented. In total, Whites occupy 43.1% of senior official positions, Indians 24.2% and Coloured 23.4%. In professional positions, Coloureds are 46.8%, Whites 33.8% and Indians 11.3%. Female technical and clerical positions are mainly Indian employees (38.5% and 41.0%),

while female service positions are distributed amongst African (33.8%), Indians (31.7%) and Coloureds (21.7%). Africans dominate the lower paying positions of operators and labourers (50.0% and 68.7%), as well as apprenticeships (61.9%).

The employment breakdown by race and gender in the textiles sector follows a similar trend to the clothing sector. In both the male and female positions Whites occupy the greatest percentage of senior official and professional positions. Whites occupy 66.2% of the male senior official category as well as 62.1% of professional positions, followed by Indians with 13.5% and 16.2% respectively. Whites occupy 57.8% and 68.1% of female senior official and professional positions respectively, followed by Coloureds with 17.9% and 17.0%. Africans fill the majority of the lower paying positions (operators and labourers) for males and females. Africans make up 55.3% of the male operators and 62.7% of the male labourers, whilst also comprising 64.8% of female operators and 72.7% of female labourers.

In 2006, the Clothing Bargaining Council undertook a once off gender/age survey (Figures 13, 14). Women dominate the clothing industry (90%). With respect to the age profile of the clothing industry, most workers fall are clustered around the ages of 36-50, although in KwaZulu-Natal there a significant grouping of younger workers between the ages of 26-35.

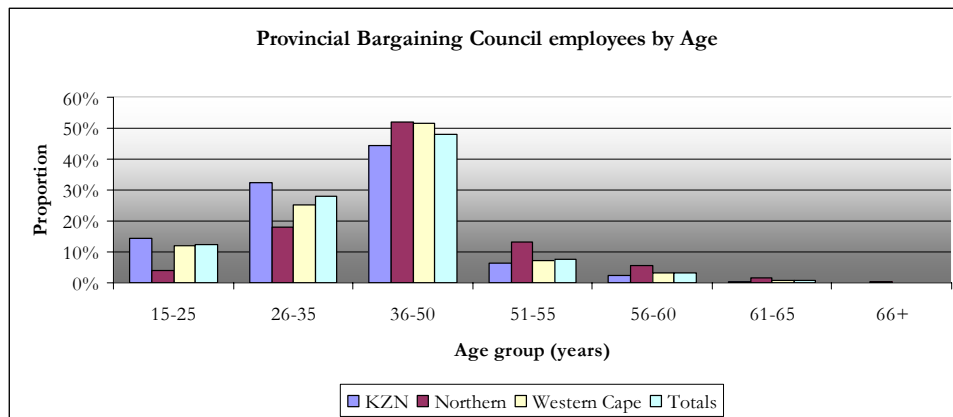
**Figure 13: Gender of Clothing workers, 2006**



Source: Clothing National Bargaining Council

**Figure 14: Age of Clothing workers, 2006**





Source: Clothing National Bargaining Council

### 1.14 Skills

There is a serious need to develop skills in the industries with very few new skilled people replacing those who leave. Formal tertiary education support for the clothing and textiles industries has however been very limited in South Africa. Five institutions stand out and have industry support. The SETA supports three Centres of Excellence – Durban University of Technology, Cape Peninsula University of Technology, and University of Johannesburg. These offer a range of courses in technology and clothing management leading to a B.Tech. How strong the standards of these degrees are is unknown, although in qualitative interviews the anecdotal evidence from the industry suggests a mixed reception with some degree of scepticism regarding the standards of the graduates entering the industry. The Nelson Mandela Metropolitan University has entered into a partnership with the CSIR which has provided very sophisticated textile technology equipment, creating a post graduate qualification up to PhD in fibre technology. In addition the University of Stellenbosch has a M.Sc. in fibres – both natural and synthetics.

However the glaring gap in higher education lies in not meeting the industry's most pressing need if it is to raise its operational standards to become more internationally competitive. Although some progress has been in recent years to attempt to address the specialist technology areas, the production side of the competitiveness issue is surprisingly ignored. There exist no specialised clothing/textile industrial engineering programmes, nor any undergraduate or post graduate degrees in clothing and textile management focussing on operational performance and production organisation. When existing management need to upgrade their skills in these areas the principal manner of doing so are the various uncertified short courses run through the Cape and KZN Clothing and Textiles Clusters.

The CTFL SETA aims to develop and enlarge the skills base of all employed in the clothing, textiles, footwear and leather economic sector. Whilst the mission statement of the CTFL SETA is to promote and implement effective learning programmes and skills planning that will advance workplace security and productivity (Wesgro 2002), its effectiveness thus far has been highly uneven. Work undertaken through the Textiles Industry Development Council in early 2004, and corroborated by our own interviews, suggested that the SETA lacks credibility amongst manufacturers and hence the support of the industry. As a result many programmes run through the SETA are not supported and hence rendered ineffective. This view of the SETA is confirmed by Robbins et al 2004: ii, who note that firms and related institutions such as the SETA show little evidence of interaction and social cohesion, thus undermining the potential for collective action amongst key role players. Underpinning this negative cycle is the perception of clothing and textiles as ‘sunset’ industries and thus one to be avoided by bright youngsters and recent graduates. Longer term prospects are required to attract the kind of skills that are needed for the industry’s development.

According to the CTFL SETA skills audit (Table 10), the majority of clothing employees whose firms responded to the survey (36.1%) have a Grade 10, followed by 28.9% who have below a Grade 7, while 24.4% have a Grade 12 or Matric education. Only 5.6% of employees have an undergraduate diploma or certificate and 1.6% have a degree, diploma or post-graduate degree. In the textiles industry 34.0% of employees have a Grade 10, followed by 33.4% with a Grade 12/Matric and 22.2% have below a Grade 7. A slightly larger percentage of employees in the textiles industry have an undergraduate diploma/certificate, or a degree or post-graduate degree (5.4% and 2.9% respectively).

**Table 10: Apparel and textiles skill level by race, 2004**

Band	NQF Level	Old System	A	C	I	W	O	Total
<b>Apparel</b>								
General Education and training (GET)	1	No Schooling	6.2%	0.6%	1.3%	0.0%	0.0%	<b>3.1%</b>
	1	Below Grade 7 or Std 5/6 or ABET 3	37.2%	27.9%	19.6%	0.5%	0.0%	<b>28.9%</b>
Further education and training (FET)	2-4	Grade 10 or Std 7/8 or Form 3 or N1	36.0%	47.9%	26.1%	4.9%	2.2%	<b>36.1%</b>
	2-4	Grade 12 or Std 9/10 or Form 5 or N3	18.7%	20.0%	36.6%	49.5%	52.2%	<b>24.4%</b>
Higher education and training (HET)	5	Undergraduate Diploma or Certificate	1.8%	3.0%	13.8%	25.7%	32.6%	<b>5.9%</b>

	6-8	First Degrees or Diplomas and Post Graduate Degrees	0.2%	0.6%	2.7%	19.4%	13.0%	<b>1.6%</b>
<b>Totals</b>			<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Textiles</b>								
General Education and training (GET)	1	No Schooling	3.0%	1.8%	0.2%	0.0%	0.0%	<b>2.2%</b>
	1	Below Grade 7 or Std 5/6 or ABET 3	31.5%	16.4%	6.0%	0.6%	2.9%	<b>22.2%</b>
Further education and training (FET)	2-4	Grade 10 or Std 7/8 or Form 3 or N1	34.9%	42.1%	26.8%	10.0%	2.9%	<b>34.0%</b>
	2-4	Grade 12 or Std 9/10 or Form 5 or N3	28.8%	34.2%	48.3%	44.2%	43.5%	<b>33.4%</b>
Higher education and training (HET)	5	Undergraduate Diploma or Certificate	1.5%	4.6%	12.5%	24.3%	40.6%	<b>5.4%</b>
	6-8	First Degrees or Diplomas and Post Graduate Degrees	0.4%	0.9%	6.2%	20.9%	10.1%	<b>2.9%</b>
<b>Totals</b>			<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

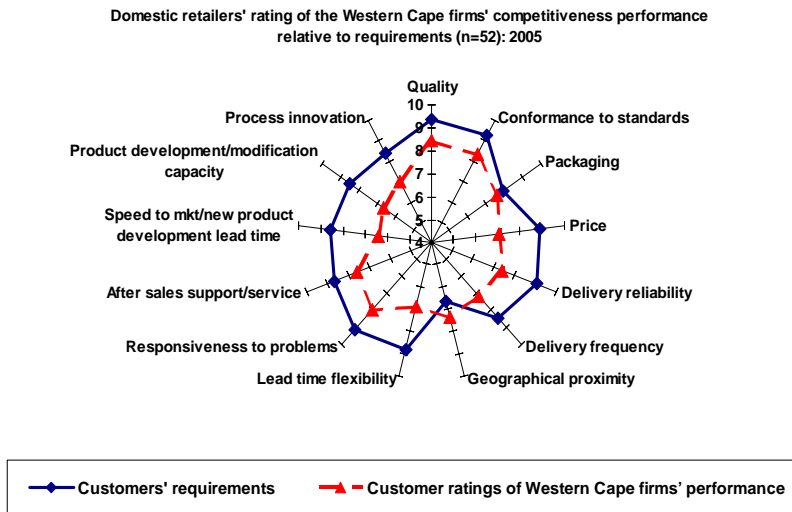
Source: CTFL SETA Skills Audit

### 1.15 Firm-level competitiveness

The various sets of data presented in the preceding sub-sections have highlighted the comparatively weak performance of the South African clothing and textiles industries in terms of output performance and investments in capital and people. The results of this are also clear – in terms of deteriorating domestic market share and declining employment levels. Critically, how much of this can be attributed to the firm-level competitiveness (or rather lack thereof) of firms?

Preliminary benchmarking studies of a small number of firms in the South African industry (Barnes 2004, Barnes and Johnson 2005), indicated that local firms have somehow to go towards international operational competitiveness. A recent study for the Cape and KZN Clothing Clusters used a much bigger sample of firms and assessed how local clothing firms in the Western Cape matched up to domestic retailer requirements. The results (Figure 15) show that in five key areas local firms (and bear in mind that the firms in clusters are often ahead of the pack) fall seriously behind competitive requirements. These key performance indicators are price, delivery reliability, lead time flexibility, speed to market/new product lead time, and product development/modification capacity.

**Figure 15: Domestic retail requirements and Western Cape firm performance**



Source: Benchmarking and Manufacturing Analysts

However recent data from the Cape and KZN Clothing and Textile Clusters indicate that significant progress (especially in the Western Cape) is being made in upgrading the operational performance of firms (Table 11) in respect of some key performance indicators – principally inventory holding, internal reject rates, lead times, and absenteeism. The most significant improvement from the perspective of skills lies in the increased investment in training in the Western Cape firms and off line training in KZN firms.

**Table 11: Operational performance of clothing firms (Manufacturers + CMTs)**

Market Driver Key Performance Indicators		KwaZulu-Natal				Western Cape			
		n	2004	2006	% Change	n	2004	2006	% Change
<b>Cost Control</b>	Raw Material (Days)	15	16.5	15.2	8.0	16	21.7	18.4	14.8
	Work in Progress (Days)	15	7.6	6.9	8.9	16	10.4	9.4	9.3
	Finished Goods (Days)	15	13.7	16.0	-16.7	16	13.5	13.3	1.1
	Total Inventory (Days)	15	37.8	38.0	-0.8	16	45.5	41.2	9.5
<b>Quality</b>	Customer Return Rate (%)	15	1.1	0.7	-36.6	16	0.4	0.2	-42.4
	Internal Reject Rate (%)	16	4.5	4.7	-4.8	16	2.5	2.1	15.6
<b>Flexibility</b>	Lead time ex prod (Domestic - Days)	6	44.7	23.8	46.6	8	64.3	24.4	62.1
	Lead time ex prod (Global - Days)	5	69.0	64.7	6.2	6	79.4	63.3	20.3
<b>Capacity to change</b>	Training spend as a % of total remuneration	15	3.30	2.8	-15.8	14	2.6	3.3	26.8
	Absenteeism (%)	16	7.9	7.4	7.9	17	7.0	6.9	1.2
	Off line training (Days)	10	0.7	1.2	63.4	13	1.9	1.4	-26.3

Source: Benchmarking and Manufacturing Analysts

### 1.16 Summary

This Chapter has profiled the clothing and textiles sectors, as well as their comparatively poor performance over the last few years. This is evident in respect of all the major trends explored. The trade performance of the two sectors has been disappointing with exports collapsing and Chinese imports growing at a prodigious rate. No part of the South African clothing and textiles sectors has escaped the pressures. The problem of lack of skills is a major issue and given the changing demands placed on the industry by international competitiveness this problem will clearly not be solved simply through employment of unemployed workers as the industry contracts. The generally low level of firm-level operational competitiveness evident in the two industries has exacerbated pressures, with the failure of the two sectors to more extensively adopt world class manufacturing (WCM) standards a major comparative weakness.

A summary of the strengths, weaknesses, opportunities and threats outlined in this section is provided in the table 12 below. It is clear that the major competitiveness gaps in the South African clothing and textiles industries pertain to its global 'betwixt and between' position. It is neither a high value added, fashion oriented, adroit first-world player that competes on the basis of its up to date technologies and capital, as well as highly skilled personnel and specialised market knowledge; nor is it a low cost, mass-based, third world player that competes on the back of scale economies, up to date technology, low cost labour and aggressive government policies tied to supporting their clothing and textiles industries as socio-economic priorities. Identifying where South Africa needs to move in respect of this challenge is not particularly difficult. The South African clothing and textiles industries need to move in the same direction as the overall domestic manufacturing sector, thus highlighting the importance of the two industries following the higher value-added route.

In order for the clothing and textiles sectors to survive in the post-quota, more open global economy, it is essential that firms confront the challenges and opportunities that lie ahead, and that government reinforces these efforts by providing its full support to the sectors. What is clear, however, is that the clothing and textiles sectors are too important to lose to the South African economy. The socio-economic impact of their complete decline in an economy with already high unemployment levels could be devastating, and yet this is precisely what the evidence suggests is likely to happen unless the present trajectory can be reversed.

**Table 12: Summary of the SA clothing and textiles industries' SWOT analysis**

<b>Strengths</b>	
<ul style="list-style-type: none"> <li>• <b>Firms:</b> <ul style="list-style-type: none"> <li>▪ Flexible relative to scale intensive competitors</li> <li>▪ Good and consistent quality</li> <li>▪ Well-established with proven longevity</li> <li>▪ Capabilities that exist within the industry</li> <li>▪ Development capabilities (industrial/technical niches, wool &amp; mohair, advanced finishes)</li> <li>▪ Technical back-up services for textiles industry</li> <li>▪ Design capabilities in comparison to Asian competitors</li> </ul> </li> <li>• <b>Environment</b> <ul style="list-style-type: none"> <li>▪ Stable macroeconomic environment</li> <li>▪ Dual economy, established infrastructure/finance system</li> <li>▪ Access to ports</li> <li>▪ Geographical clustering of firms</li> <li>▪ Local apparel industry and access to local textiles</li> <li>▪ Access to semi-skilled labour</li> </ul> </li> <li>• <b>Domestic market</b> <ul style="list-style-type: none"> <li>▪ Shorter lead times</li> <li>▪ Growing industrial markets for technical textiles e.g. automotive, construction</li> <li>▪ Strong domestic retailer linkages</li> <li>▪ Recourse possible</li> <li>▪ Growing domestic market</li> </ul> </li> <li>• <b>International market</b> <ul style="list-style-type: none"> <li>▪ Proximity to EU/US market vs. Asian competitors</li> <li>▪ English language proficiency and dominant Western culture</li> <li>▪ Well-established linkages and compliance with social/labour standards</li> <li>▪ DCCS</li> </ul> </li> </ul>	
<b>Weaknesses</b>	
<ul style="list-style-type: none"> <li>• <b>Firms</b> <ul style="list-style-type: none"> <li>▪ Insufficient application of World Class Manufacturing standards</li> <li>▪ Low levels of capital spent and aging equipment employed</li> <li>▪ Capability of management at all levels, but especially younger people</li> <li>▪ Limited R&amp;D</li> <li>▪ Limited independent fashion</li> <li>▪ Limited/silo knowledge of unfamiliar export markets</li> <li>▪ Quality and delivery reliability issues within textiles industry</li> <li>▪ Accessibility to and high cost of local raw materials</li> </ul> </li> <li>• <b>Environment</b> <ul style="list-style-type: none"> <li>▪ Labour costs and labour market flexibility</li> <li>▪ Insufficient government support for larger clothing and textiles firms</li> <li>▪ No strategic public/private sector partnerships driving the industry</li> <li>▪ Rand strength and volatility</li> <li>▪ Inefficient ports and expensive shipping costs</li> <li>▪ Lack of cooperation between clothing and textiles firms at a sectoral level</li> <li>▪ Access to technical, higher order management skills</li> </ul> </li> <li>• <b>Domestic market</b> <ul style="list-style-type: none"> <li>▪ Ineffective customs controls due to working within an inappropriate set of rules</li> <li>▪ Concentration of domestic retailers and their propensity to import</li> <li>▪ Support by DCCS, very low real tariff levels protecting the local market</li> </ul> </li> <li>• <b>International market</b> <ul style="list-style-type: none"> <li>▪ Uneven playing field in respect of foreign competition</li> <li>▪ Lack of strategic partnerships between government, clothing and textiles</li> <li>▪ Distance and lead times</li> <li>▪ Capacity in clothing industry to supply required volumes</li> </ul> </li> </ul>	

<b>Opportunities</b>	
<ul style="list-style-type: none"> <li>• <b>Firms</b> <ul style="list-style-type: none"> <li>▪ Greater application of World Class Manufacturing standards</li> <li>▪ Investment in new capital</li> <li>▪ Clustering between firms to reduce factor costs and improve efficiencies</li> <li>▪ Investment in lower and higher order skills</li> <li>▪ Exploitation of industrial/technical niches</li> <li>▪ Accessing raw materials at international prices</li> </ul> </li> <li>• <b>Environment</b> <ul style="list-style-type: none"> <li>▪ Negotiation of greater labour market flexibility with labour</li> <li>▪ Further reduction in the cost of capital – may also weaken the Rand</li> <li>▪ Forging better relations and partnerships with governments, textiles, clothing and retailers</li> <li>▪ Investment in ports and road/rail infrastructure to reduce transport costs</li> </ul> </li> <li>• <b>Domestic market</b> <ul style="list-style-type: none"> <li>▪ Change in legal framework to enable customs to keep out illegal/under-invoiced products</li> <li>▪ Improved relations with retailers (underpinned by firm changes)</li> <li>▪ Continued domestic market growth with regards to retailers and industrial sectors</li> </ul> </li> <li>• <b>International market</b> <ul style="list-style-type: none"> <li>▪ AGOA and middle income economy opportunities not fully explored</li> <li>▪ Man-made fibres, woollen targeting, niche African designs, growing of organic cotton etc.</li> <li>▪ Preferential trade agreements</li> </ul> </li> </ul>	
<b>Threats</b>	
<ul style="list-style-type: none"> <li>• <b>Firms</b> <ul style="list-style-type: none"> <li>▪ Insufficient investment in new capital equipment and processes</li> <li>▪ Inadequate response to operational weaknesses leads to growing competitiveness gaps in non-price areas</li> <li>▪ Management capabilities and industry's technical base contracts as young professionals gravitate elsewhere</li> <li>▪ Development capabilities in textiles reduce to point where firms unable to meet customers' product development requirements – in apparel, household and technical/industrial textiles</li> <li>▪ In clothing, design capabilities reduces to point where firms are unable to meet customers' product development requirements</li> <li>▪ HIV/AIDS devastates sector</li> </ul> </li> <li>• <b>Environment – conducive characteristic continue to erode as:</b> <ul style="list-style-type: none"> <li>▪ Labour market becomes more inflexible</li> <li>▪ Cost of capital remains too high to justify investments</li> <li>▪ Rand strength and/or Rand volatility continues</li> <li>▪ Technical support infrastructure collapses as industry contracts (e.g. CSIR, SETA, TEIs)</li> <li>▪ Domestic raw material base contracts as textiles and clothing sectors unable to provide sufficient volumes</li> <li>▪ Government abandons industry if clothing and textiles do not present united front</li> </ul> </li> <li>• <b>Domestic market:</b> <ul style="list-style-type: none"> <li>▪ SA customs is unable to keep out illegal/under invoiced imports</li> <li>▪ China and other competing economies target SA with continued cheap imports</li> <li>▪ Relations with retailers deteriorate resulting in increasing import levels</li> <li>▪ Clothing firms import made-up garments; textiles firms import greige fabric and finish</li> <li>▪ Tariffs reduce further, easing importers access to SA market</li> <li>▪ Domestic market contracts as negative economic cycle begins and HIV/AIDS impacts on consumers</li> </ul> </li> <li>• <b>International market</b> <ul style="list-style-type: none"> <li>▪ Competition from China/competing economies increases</li> <li>▪ Uneven playing field within SADC</li> <li>▪ Under-investment in people and equipment will lead to a failure to meet delivery, speed and quality requirements</li> <li>▪ Failure to penetrate niches in established export markets and new middle income economies</li> <li>▪ Preferential trade agreements not secured, or same benefits given to major competitors</li> <li>▪ SA industry contracts – international buyers no longer visit country</li> <li>▪ DCCS benefits not replaced by another equally valuable exporting enabler</li> </ul> </li> </ul>	

Source: Morris et al 2004

## Chapter 2: Review of Skills Literature in Clothing and Textiles Sector

This section has several aims: First, it provides a comprehensive overview of the relevant primary and secondary literature, including policy texts with respect demand-side skills shortages, supply-side skills shortages and policy interventions regarding the Clothing and Textile Sector. Second, it presents a current profile of skills dispersion and skills requirements by firms as determined by the CTFL Skills Audit (2004). In so doing it analyses the SETA's argument that, even though there has been a decrease in the number of individuals employed in the Clothing and Textile Sector, this decrease has occurred only in semi and unskilled positions with the implication that there is great potential to create employment in medium to high-skilled occupations. Third, it defines and identifies scarce and critical skills relevant to the sector. Fourth, it presents an analysis of the supply and demand for skills so as to isolate the specific areas in which skills shortages are most prolific.

### 2.1 Regional contribution to the CTFL SETA

Regionally, 34% of employers of the CTFL sector are situated in KZN, 27% in the Western Cape and 25% in Gauteng. The Western Cape contributes 36% in skills levies to the SETA, KZN 34.4% in skills levies, and Gauteng contributes 17.9% in skills levies. In the SETA, 66% of firms are small (having less than 50 employees), 20% are medium (between 50 and 150 employees) and 14% of firms are large (more than 150 employees). The large firms however contribute 64% of the skills levies while the small firms contribute only 17% of skills levies to the SETA (CTFL SETA 2006).

There are 801 textile and 675 clothing firms, comprising 45% and 38% of the sector's firms. The textile firms contribute 43% of skills levies while clothing firms contribute 39%. The difference is derived from leather and footwear. The SETA received Workplace Skills Plans from 51% of clothing firms and 31% of textile firms.

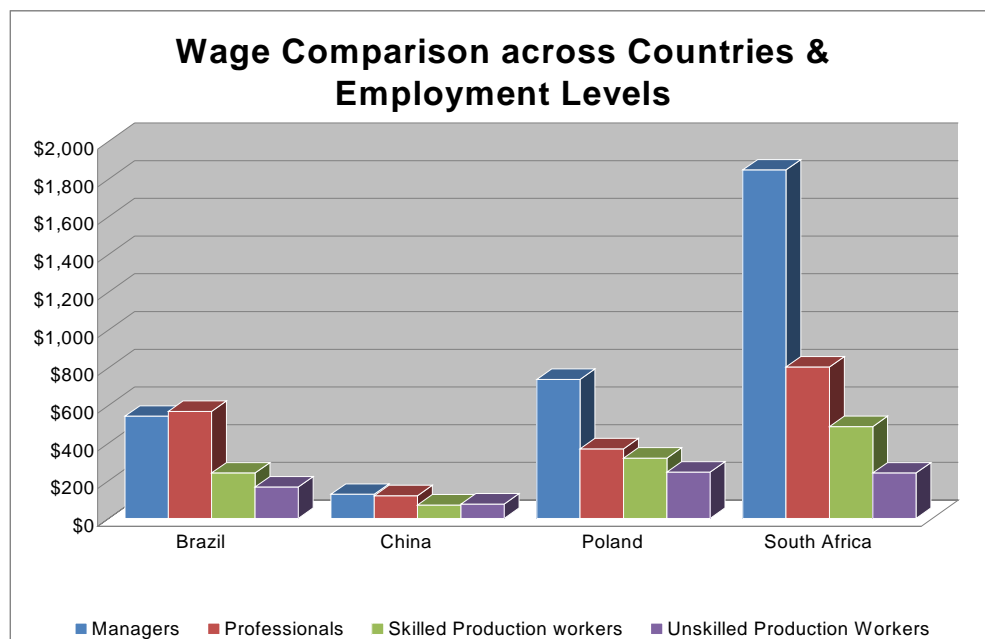
The sector employs approximately 150 000 people and represents 15% of total formal employment but accounts for less than 6% of total output of the manufacturing sector. The regional breakdown of employees is 40% from KZN, 32% from the Western Cape, 7% from the Eastern Cape and 15% from Gauteng. The remaining provinces comprise the residual 6%.



## 2.2. Demand-Side Skill Shortages

This section looks at some comparative international trends of remuneration in the Clothing and Textile Sector (Kaplan 2007). Thereafter it focuses on the Sector Skills Plan 2005-2010 for the CTFL SETA. The aim of this is two-fold: First, to assess whether the remuneration gap argument is congruent with developments in the Clothing and Textiles Sector, and second, given that this gap exists, to indicate exactly which levels of labour are affected (scarce skills) and whether there are critical skills shortages at the indicated level, using analyses from the Sector Skills Plan.

**Figure 16: Comparative wage and employment levels**



Source: ICA World Bank (2004)

Figure 16 shows that the skill premium in South Africa is considerably higher than in comparator countries, evidenced by a much higher remuneration gap between unskilled and skilled, professional and managerial labour (Kaplan 2007). This wage structure applies to wages in general, not specifically clothing and textiles. Kaplan 2007 posits that the large differential between the wage of skilled and unskilled workers in South Africa is symptomatic of a serious shortage of skilled labour. Furthermore, compared with comparator countries, the number of unskilled South African workers with no schooling was significantly large. It follows that the large wage premium for those with an education is indicative of the shortage of higher skilled staff (Bernstein and Johnson 2007: p2).

Kaplan 2007 notes that “[M]anagers in South Africa earn a median monthly wage that is 2.5 and 3 times as large as in Poland and Brazil and more than 10 times that of China. As one moves up the skill hierarchy, the remuneration gap between South Africa and the comparator countries increases very significantly. Or, expressed in another way, there is a much higher remuneration gap between unskilled and skilled, professional and managerial labour in South Africa as compared to other countries.”

He suggests that this anomaly can be explained in one of two ways: a) either South African labour is more productive than international rivals, such that it can demand higher wages; or b) the labour market in South Africa is far more integrated with international markets than comparator countries, which raises local wages. Of these two scenarios, Kaplan (2007) speculates that the latter is more probably the case for the South African economy.

The next section decomposes employment within the CTFL sector by occupation as per the Sector Skills Plan which enabled the SETA to identify and classify scarce and critical skills to the industry. Scarce skills refer to occupations in demand due to a scarcity of qualified and experienced people ( <http://www.safcec.org.za> ). Critical skills refer to specific skills within an occupation (a.k.a. “top-up” skills) and can be classified as i) generic skills, including problem solving, literacy, linguistics or numeracy or ii) particular skills required for performance within that occupation. However, Daniels 2007 observes that there are pertinent differences in the references made by government, the Department of Labour, and the SETA. In the realm of government, skills are understood to refer to both qualifications and experience, whilst in the parlance of the SETA, scarce skills refers to occupations where there is a currently (or anticipated in the future) scarcity of qualified and experienced people. This is either (a) because such skilled people are not available, for example in a new or emerging occupation (absolute scarcity) or (b) because they are available but do not meet employment criteria, for example, they do not meet equity employment criteria (relative scarcity). Skills are understood to refer to both qualifications and experience. Scarce skills refers to occupations where there is a scarcity of qualified and experienced people, currently or anticipated in the future. This has led to numerous disputes between government departments over the precise numbers of occupational skills shortages. Importantly too, Daniels 2007 draws attention to the fact that in neither case is the economic relationship between skills and productivity taken into account.

## 2.3 Scarce Skills

Table 13 below presents the occupational breakdown within the CTFL Sector. The Sector Skills Plan 2005-2010 identified 4 main occupational areas where scarce skills existed:

- Senior Officials, Managers and Owner Managers (SMO)
- Professionals (PRO)
- Technicians (TECH)
- Artisans or Skilled Trade Workers (ART)

Analysing these occupational areas more thoroughly the Sector Skills Plan was able to pin point the following job types as scarce skills within each occupational area:

- Technical Training Manager (SMO)
- Production Manager (SMO)
- Performance Improvement Technologist (PRO)
- Work Study Officer (TECH)
- CTFL Technologist (PRO)
- Machine Mechanic (ART)
- CAD Technician (TECH)

**Table 13: Occupational Breakdown in the CTFL Sector**

NO	OCCUPATIONAL CATEGORY	OCCUPATIONS	%
1	Senior officials, managers and owner managers	Training Manager; Factory Manager; Production Manager; Quality Assurance Manager; Health, Safety and Environmental Manager; Logistics Manager; Supply Chain Manager; Operations Manager; Business Manager	3.30
2	Professionals	Curriculum Developer, Skills Development Facilitator; Textile, Clothing, Footwear & Leather Technologists; Product Developer; Clothing, Textile, Footwear and Leather Designers; Industrial Designer; Product Development Researcher and Scientist; IT Specialist; Industrial Relations Officer; Human Resource Officer; Merchandiser; Costing Clerk	0.96
3	Technicians	Work Study Officer; CAD Marker Making; CAD Pattern Maker; CAD/CAM Technician; CAD Grader, Supervisor; Textile Printer; Textile Dyer; Textile Finisher; Laboratory Assistant; Health, Safety and Environmental Officer; Quality Controller; Mechanical, Electronic, Mechatronic Technicians	4.90
4	Clerical & admin. workers		7.12
5	Service workers, marketing & shop staff		3.84
6	Artisans or skilled trade workers	Machine Mechanics; Technical Trainer; Training Officer	5.85
7	Plant & machine operators & assemblers	Sample Machinist; Leather Cutter	52.83
8	Labourers		18.83
9	Apprentices & Section		2.38

18 Learners		
-------------	--	--

Using the outline of the Sector Skills Plan, what follows is a brief analysis of the above mentioned job types and a discussion around the critical skills shortage in each occupational group outlined in Table 13.

**Technical Training Managers:** Technical Training Managers are in charge of training and developing all production personnel. Their duties also entail developing business strategy, maximising workforce output as well as aligning training policies with the new education and training environment.

**Production Managers:** Production managers oversee the production process in all manufacturing operations. Their responsibilities include production planning, production budgeting, quality control etc.

**Performance Improvement Technologists (PIT's):** As outlined by the Skills Plan, PIT's are "a cross between an industrial engineer, work study officer, quality assurance specialist and a training and development expert." (CTFL SETA, 2007) Their main task is to ensure that through technological improvement, performance in all areas of the business is improved.

**Work Study Officers:** Work Study Officers are primarily concerned with the increasing production efficiency in the business. Their role is thus similar to the PIT's except that they do not focus on the whole business but only on production.

**Technologists:** Technologists are primarily concerned with research and product development using new technology. As shown by Bester 2004, these individuals will be vital in ensuring the survival and sustainability of the industry as they are key in implementing new technologies and manufacturing systems.

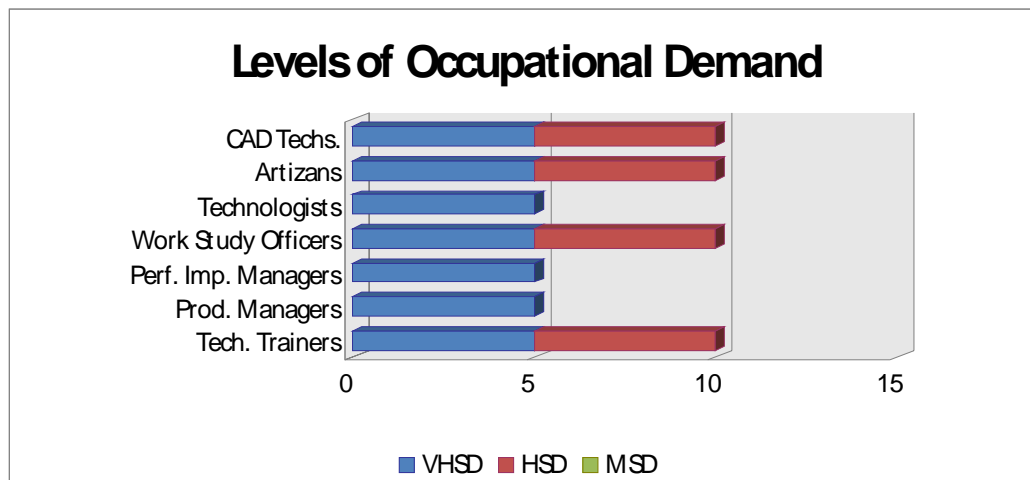
**Machine Mechanics:** Machine Mechanics ensure the smooth running of all plant and machinery. With the implementation of new technologies the skills that these individuals require is beginning to change rapidly thus up-skilling of these individuals is highly essential.

**CAD and CAM Specialists:** Computer-aided Design (CAD) and Computer-aided Manufacturing (CAM) Specialists are instrumental in ensuring that all computerised production systems run efficiently. As more of these systems are implemented in an effort to

ensure that firms can compete globally, the roles of CAD and CAM Specialists are becoming more and more important.

The SETA identified the intensity of the shortage within each occupational group. Analysing figure 17, there is a “Very High Skills Demand (VHSD)” for Artisans, Performance Improvement Technologists and Production Managers, while a “High Skills Demand (HSD)” exists for the other categories. Figure 17 demonstrates that demand shortages occurred primarily in those occupational areas which are associated with a high skills requirement. The SETA claims are verified against the firm survey evidence in Chapter 3.

**Figure 17: Demand Intensity**



Source: CTFL Sector Skills Plan (2006)

## 2.4 Critical Skills

The SETA identified technical training, production, HR management, multiskilling and quality control as the five most critical skills to the industry (Table 14).

**Table 14: Critical Skills in the CTFL Sector**

NO	CRITICAL SKILLS	DESCRIPTION
1	Technical Training	Matching skills to work process, Determining training needs of individuals, Analysing a work process, Training people, Assessing Performance, Dealing with poor performance, Improving people Performance
2	Production	Defining Production process, Designing, planning and controlling production management system, Improving production system, Managing productivity
3	HR Management	Managing the HR function, Conducting recruitment and selection, Understanding HR legislation, Improving productivity in people and teams, Managing performance, Managing industrial relations, Analysing training needs
4	Multi-skilling	Undertaking a range of work processes, Working effectively and efficiently
5	Quality	Understanding Quality, Operating a quality system, Improving Quality
6	General	Applying basic business principles in terms of :

	Management	<ul style="list-style-type: none"> <li>▪ Financial management</li> <li>▪ HR management</li> <li>▪ Marketing and Sales</li> <li>▪ Communication</li> <li>▪ Training</li> <li>▪ Personal development</li> </ul>
7	Supervisory	Managing people/teams, Dealing with conflicts, Improving performance of people, Managing workplace differences, Measuring the effectiveness of people, Leading Teams
8	Communications	Using oral and written communication effectively, Interacting internally and externally, Communicating strategies in a changing environment, Communicating channels in a business, Communicating effectively with people
9	Cost Analysis	Undertaking a cost analysis of a product or process
10	Marketing/Sales	Understanding the market concept, Making price, product, distribution and promotion decisions, Segmenting and targeting markets, Drawing up a marketing plan

Source: CTFL Sector Skills Plan (2006)

The majority of critical skills are technical and production-related, although the SETA also identifies a need to improve labour relations in the workplace. This is demonstrated in Table 15 which maps critical skills to the relevant occupational groups.

**Table 15: Critical Skills relative to Occupational Groups**

NO	OCCUPATIONAL CATEGORIES	CRITICAL SKILLS
1	Senior officials, managers and owner managers	Production, human resource management/labour relations, general management, cost analysing, marketing/sales, communication
2	Professionals	Technical training related to production, quality control or improvement, cost analysing, communication
3	Technicians	Technical training related to production, quality control or improvement, cost analysing, machine maintenance, multi-skilling, supervision
4	Clerical & admin. workers	Communication, cost analysing
5	Service workers, marketing & shop staff	Communication, cost analysing, marketing/sales, human resource management/labour relations
6	Artisans or skilled trade workers	Technical training related to production, multi-skilling related to production, quality control or improvement, machine maintenance, supervisory, communication, cost analysing, supervision
7	Plant & machine operators & assemblers	Technical training related to production, production, multi-skilling related to production, quality control or improvement, machine maintenance, communication
8	Labourers	Communication
9	Apprentices & Section 18 Learners	Technical training related to production, production, multi-skilling related to production, quality control or improvement, machine maintenance, communication

Source: CTFL Sector Skills Plan (2006)

The SETA predicts that technological change, and in particular automation in the textiles sector, is likely to exacerbate job loss in the lower continuum of the occupational sphere as machines replace workers. The greatest casualties of change will be the unskilled. According

to the SETA, this is consistent with patterns of job loss and vacancies in the sector where high-end, skilled occupations are in demand despite growing unemployment in the sector.

## **2.5 Conclusion regarding skills demand**

The main conclusions of the SETA in respect of skills demand are that:

- The occupations where shortages exist are in occupations in which fall into the upper strata of the occupational structure, and, in particular, in categories for senior managers, professionals and technicians.
- At the intermediate level, there is a shortage of artisans and skilled trade workers, such as machine mechanics
- There are no skills shortages in the lower strata of the occupational sphere

In recognition of the need to widen the skills base, the DTI undertook a Customised Sector Programme (CSP) for the Clothing and Textiles industries. In conjunction with the DTI, and industry, the SETA aims to raise the skills level in the sector and improve the quality of locally manufactured goods through i) increasing the number of employees on learnership programmes in the next 5 years, ii) training middle managers in work-planning and process management, and iii) boosting the number of technologists employed in the sector. The firm survey in Chapter 3 provides an assessment of its effectiveness.

## **2.6 Supply-side skills shortages**

This section on issues of supply of skills to the Clothing and Textile Industries, learnership and apprenticeship graduate rates, and the role of further and higher education training institutions in supplying these skills.

### **2.6.1 Educational Breakdown of the CTFL workforce**

The formal educational breakdown of employees in the CTFL sector is 27% GET (General Education and Training), 65% FET (Further Education and Training) and 8% HET (Higher Education and Training) (CTFL SETA 2006). The large proportion of employees in the GET band presents an opportunity to upgrade the education levels of these employees. There are also opportunities to train those in the FET band into the HET band.

### 2.6.2 Supply of Scarce Skills

The 2004 Skills Audit set out to provide a measurement of the skills supply for scarce skills in the CTFL Sector. The following results apply to the whole SETA and not just the Clothing and Textiles Industries. Given that the latter industries occupy a significant proportion of the SETA, the results of the audit are still applicable. There is no national database of employees by occupational type for this sector.

**Figure 18: Skills supply**

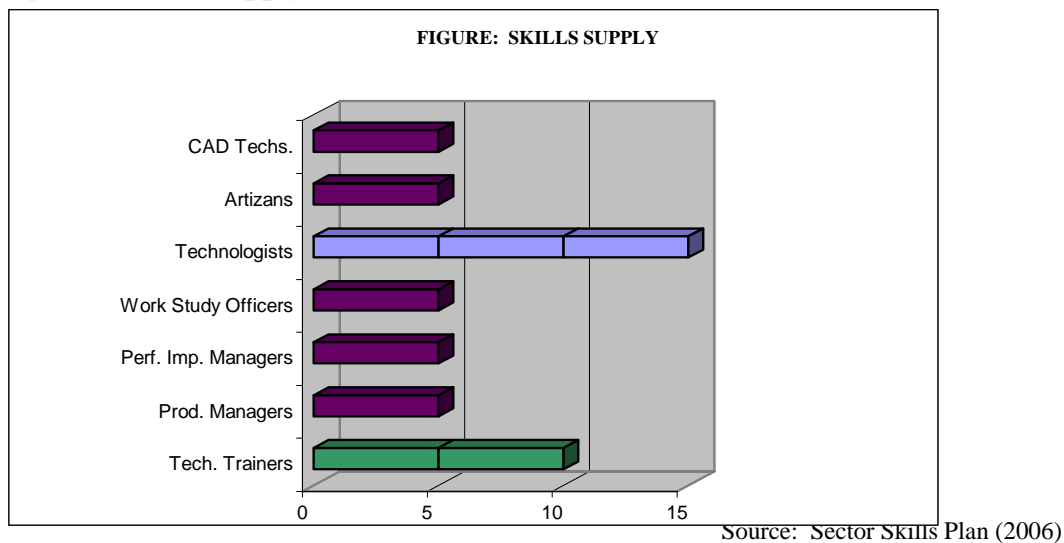


Figure 18 shows that there is a very low skills supply (VSS) of CAD technicians (pattern-makers, graders and markers), Artisans, Work Study Officers, Performance Improvement Managers and Production Managers, a low skills supply (LSS) of technical trainers and a medium skills supply (MSS) of technologists. The supply of scarce skills is inadequate to meet the demand for skills. This skills gap shall be investigated in terms of the supply-side dynamics including the capacity of institutions and training programmes by firms.

### 2.6.3 Higher Education and Training Supply Infrastructure

National Diplomas in Clothing Management and Textiles Technology can be obtained from the Cape Peninsula University of Technology (CPU) and the Durban University of Technology (DUT) and the University of Johannesburg (UJ). The SETA supports these diplomas. Between 2000 and 2005, 216 graduates completed the Diploma in Clothing Management and a further 6 completed a Bachelor of Technology Degree in Clothing Management. This translates into an average of 37 graduates over the 6 year period. In order to meet sector demand, these institutions should be supplying at least 67 graduates per annum; this is a



serious supply deficit. The Customised Sector Programme (CSP) has set a target of 200 clothing technologists over a 3 year cycle.

In the same six year period, 77 graduates completed the Diploma in Textiles Technology translating into an average of 13 students per annum. In order to meet targets set by the CSP, these institutions need to produce at least 67 textile graduates a year. The University of Stellenbosch offers a Bachelors Degree in Textiles Science which is expected to generate around 20 graduates in the next three years. Yet even this inflow of enrolled learners is unlikely to decrease the severe shortage of skills supply in the Clothing and Textiles industries.

On an international front, South Africa appears to be lagging behind its competitors in generating graduates. For example, the Hong Kong Polytechnic University has approximately 2000 students in its Clothing and Textiles Department with 100 PhD and 100 MSc students per annum. This is in stark contrast to South Africa's figures presented above. This supply-side skills shortage may leave South Africa in an increasingly difficult position when it comes to competing in global markets.

The Sector Skills Plan highlights a number of reasons why the up-take of technologist programmes is poor. The clothing and textiles sector has a poor image and is largely regarded as a sunset industry, making it unattractive to students. Full-time programmes are unsuitable for the already employed, as well as those employed workers who lack a strong schooling background, rendering them unsuitable candidates for education at a tertiary level. Bernstein and Johnson 2007 raise additional problems with institutional skills supply, most particularly, the mismatch between graduate skills supply though the output of the educational sector and the type of skills that firms need - particularly evident in design skills - and the mismatch between “the piece of paper and the quality of the qualification”. This emphasises that there is a skill *quality*, as well as quantity deficit (Business Report, 2007).

#### 2.6.4 Further Education and Training Supply Infrastructure

##### *Learnerships*

There are 204 training providers that are endorsed by the CTFL SETA to offer learnerships for the NQF level 2 qualification National Certificate in CTFL Manufacturing Processes. Of these training providers, 116 are in the clothing industry and 72 in textiles. These 204 training

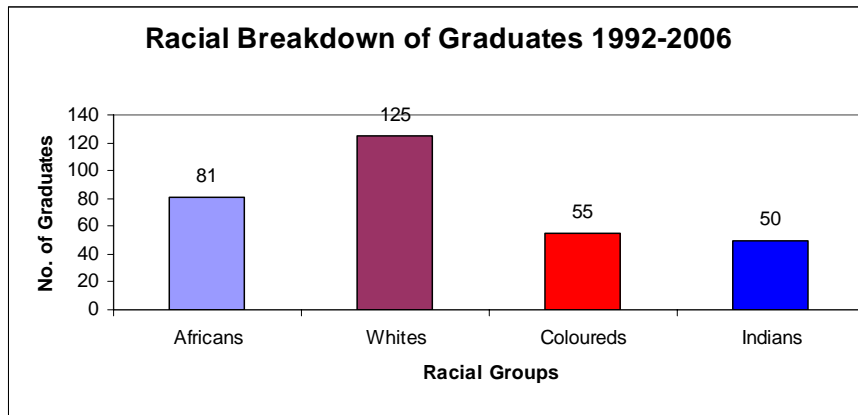
providers cover a base of approximately 67000 workers who have access to these learnerships. Geographically, 86 of these training providers are based in the Western Cape, 80 in KwaZulu Natal and 25 in Gauteng. Given that 86% of employers in the CTFL SETA are situated in these provinces, the placement of training providers is advantageous.

The DOL (2005a) shows that by 2004, the total of learnerships initiated in the CTFL sector was 1,914, which exceeded GDS learnership projections for the sector by 834 learners (DOL, 2005a). However, between 2003 and 2006, the clothing sector has generated 1801 learnership graduates - 973 of whom are employed and the remaining 828 unemployed. The textile sector has generated 502 employed learnership graduates and 800 unemployed graduates. These figures are very much below the Customised Sector Programme's targets of 30 000 learnership graduates a year. As can be expected, the majority of graduates were situated in the Western Cape, KwaZulu Natal and Gauteng provinces. The learnerships that showed the highest level of participation were Machinist/Garment Constructor Level 2, Continuous Dyeing Level 2, Melt Extrusion, Weaving and Closing. Another FET programme is the Machine mechanic programmes that are offered at FET Colleges. These are offered by a limited number of accredited trainers and are available through the learnership and apprenticeship plans. The low figures of learnership graduates further emphasise the skills supply shortage that is being experienced by the Clothing and Textile Industries.

### *Apprenticeships*

The SETA has been given the responsibility for apprenticeship training. A Section 13 Apprenticeship should be completed within 2½ and 3½ years. The SETA also provides discretionary funding of R15 000 per apprenticeship to firms. In the textiles industry, 311 apprentices graduated as artisans between 1992 and 2006 in 24 textiles trades; an average of 22 apprentices per annum over the 15 year period. The apprenticeship rates were on the rise from 1996 up until 1999, when they dropped sharply with only 6 graduates since then. A key reason for this sharp fall has been the introduction of learnerships in the sector since 2000.

**Figure 19: Population breakdown of apprentices qualifying as artisans.**



Source: Sector Skills Plan (2006)

Given the target of 85% for Blacks (Africans, Coloureds and Indians) set by the National Skills Development Strategy 2005-2010, substantial work is required to increase the number of these apprentices. The gender distribution of graduates also falls very short of targets set by the National Skills Development Strategy. Between 1992 and 2006, there were 308 male graduates and only 3 female graduates; a figure well short of the target of 54% females earmarked for training.

**Figure 20: Percentage of Graduates per Trade**

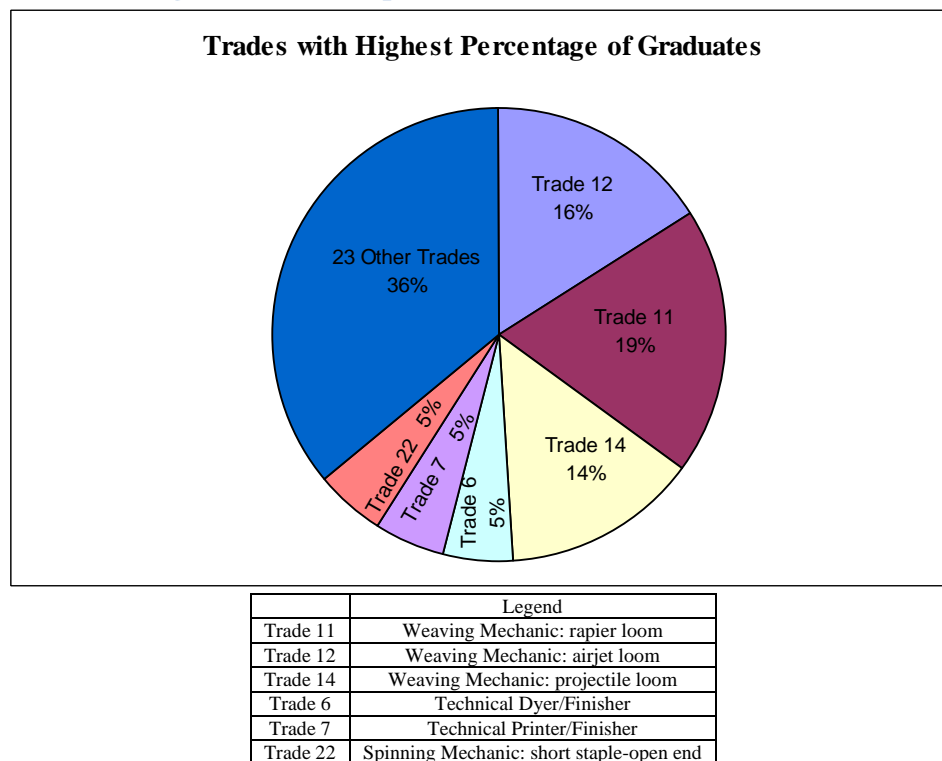


Figure 20 illustrates the trades with the highest percentage of graduates. There were also 5 trades for which there were no graduates.

Of the total 311 graduates, 79% were generated by 10 textile firms and a further 18 firms produced the residual 21%. Given that the CTFL SETA database contains details of 530 textile firms, these 28 firms comprise only 5%. This highlights the limited opportunities for apprenticeship in this industry but also illustrates the potential for firms to be involved in apprenticeship provision. Of the top 10 producers of apprenticeships, 2 firms have since closed down and virtually all firms have scaled down substantially. Aside from fewer apprenticeships being offered, these larger firms also served as a 'feeder scheme for artisans to the sector' as smaller firms often head-hunt artisans to be employed in middle-management positions (CTFL SETA 2006: p. 8). Within the industry, there has been a move of some artisans to middle-management positions within textile firms which further increases the need for artisans working in technical positions. A further issue is that there appears to be insufficient artisans to mentor and train apprentices and the move of artisans to management only serves to exacerbate this problem. This problem will escalate as the multitude of school-leavers and college graduates with the necessary qualifications to enter into apprenticeships increases. Apprenticeships are an important tool to improve the skills shortage in the clothing and textiles industries and the lack of structures like the Apprentice Committee may lead to apprenticeship training receiving inadequate attention from the SETA.

The low apprenticeship graduate rates contribute to the skills shortage being experienced by the Clothing and Textiles industries. Given these rates, the sector is unlikely to be supported at the artisan level and may experience difficulty in improving competitiveness and productivity growth owing to a weaker technical base. One can expect the demand for artisans to increase in the future as fewer new graduates come through the system. The demand for artisans industry-wide also sees the shift of artisans to higher-paying sectors in the economy. A continuation of this trend may lead to the need to import artisans in the future; a strategy which is often characterised by high costs. These issues will need to be addressed before apprenticeship training in the Clothing and Textiles industries improves.

### *FET Colleges*

A large number of FET Colleges offer programmes in basic garment-making but the techniques learnt in these programmes tend to be incongruent with those used in industry. FET Colleges also offer Machine mechanic programmes. These are offered by a limited number of accredited trainers and are available through the learnership and apprenticeship

plans. No programmes relating to textiles are offered. FET Colleges being geographically distributed throughout South Africa, are in excellent position to collaborate with Clothing and Textiles firms to provide programmes that are affordable to and relevant to industry in order to aid the current supply side skills shortage.

## 2.7 Conclusion regarding skills supply

The consensus on education and apprenticeship training is that, at current graduation levels, the skills base cannot be maintained, let alone broadened. This in itself justifies efforts to encourage participation in formal programmes.

The education profile of employees presents an opportunity to up-skill those in the FET education band to the HET education band. The Skills Audit has shown that the supply does not satisfy the demand for skills both in terms of the number of workers and the category of worker demanded. The HET infrastructure, despite capacity to train more students, has had very low graduate rates since 2000. These figures need to be increased in order to maintain competition in a global sphere. The FET infrastructure through learnerships and apprenticeships is not generating enough graduates to decrease the skills shortage significantly; but there is enough capacity to increase enrolment rates noticeably.

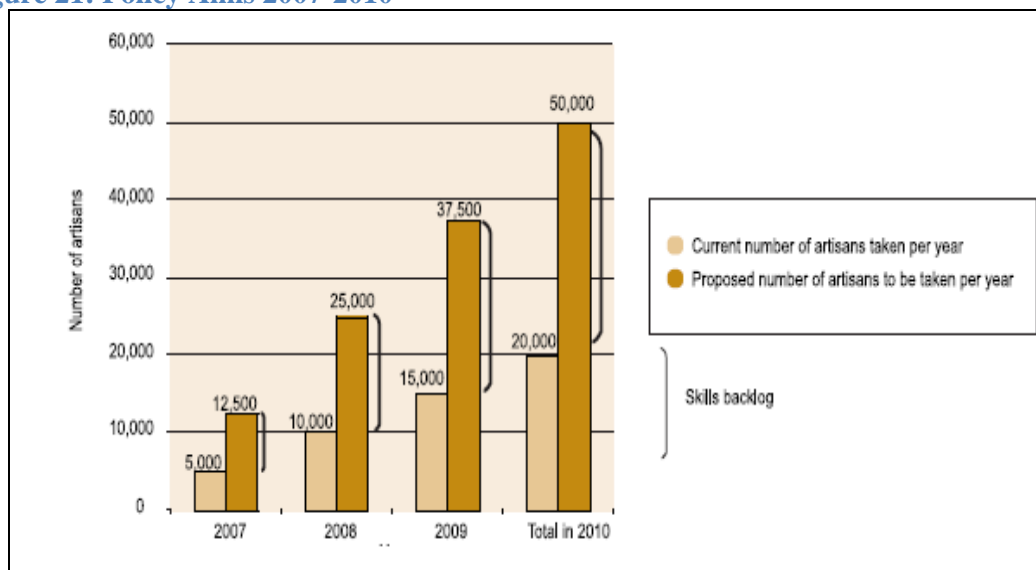
However, several other relevant points emerge from the literature. Firstly, due to the poor enrolment rate at graduate level, firms need to use their own labour resources more efficiently and conduct in-house training of low-skilled workers. Secondly, whilst education is the long-run solution, short term solutions are demanded to save the industry. Kaplan 2006 and Bernstein and Johnson 2007 contend that importing skills from abroad and pursuing aggressive recruitment policies targeting skilled immigrants may be the obvious way to immediately address the skills shortage. In order to maintain the skills base at 2003 levels, an estimated 9000 skilled immigrants were required. 194 were actually registered of which a mere 12 were recruited into the CTFL sector (Skills Audit 2004). Finally, there is a need, not only to establish that skills are in short supply, but also to isolate which specific skills are lacking in each category of firm. For example, the Ralis Report 2004 found that full package manufacturers face very different skills needs and deficiencies than Cut-Make-and-Trim firms. Drawing on the work of Kraak 2005, Daniels 2007 suggests that “skills shortages are not only about scarce and critical skills” which place inherent bias on advancing high skill qualifications, but should encompass advanced qualifications and elementary qualifications

alike. In this context, “skills development” is interpreted as something that may be needed for different people at different stages of their life cycle, or over the business cycle, or both.” (p.2)

## 2.8 Current Policy Interventions - National Interventions

This section aims to review current policy interventions undertaken by government on both a national and a sectoral level in order to determine whether policymakers concur with the view that skills are in short supply in the CTFL sector, as presented in the literature.

**Figure 21: Policy Aims 2007-2010**



Source: JIPSA Annual report (2006)

Through its Accelerated and shared Growth Initiative for South Africa (AsgiSA) and Joint Initiative on Priority Skills Acquisition (Jipsa), the South African government aims to increase the projected number of artisans entering the South African labour market as a whole by 50% per year by 2010 (Figure 21). Furthermore, Jipsa identified two key occupational groups of artisans, namely patternmakers and light and heavy electricians, which are specific to Clothing and Textiles (Jipsa 2006).

One of the main ways which National Government aims to meet these targets is through the SETA's that have been established within the various sectors. Thus the review turns its attention to the programs that the CTFL SETA has put in place as well as any other Industry-specific interventions that are in place.

## 2.9 Sectoral Interventions

Table 16 illustrates the shortfall between the supply and demand for skills in particular occupational groups as revealed by the Sector Skills Audit.

**Table 16 : Shortfall between Demand & Supply of Skills**

Source: CTFL Sector Skills Plan (2006)

VHSD - Very High Skills Demand, HSD - High Skills Demand, MSD - Moderate Skills Demand, LSD - Low Skills Demand, VLSD - Very Low Skills Demand, VHSS - Very High Skills Supply, HSS - High Skills Supply, MSS - Moderate Skills Supply, LSS - Low Skills Supply, VLSS - Very Low Skills Supply

Demand for skills						Supply of skills					
	VHSD	HSD	MSD	LSD	VLSD	VHSS	HSS	MSS	LSS	VLSS	
Tech trainers											Tech trainers
Prod. managers											Prod. managers
Imp managers											Imp managers
Work study officers											Work study officers
Technologists											Technologists
Artisans											Artisans
CAD Technologists											CAD Technologists

To address this problem, the following strategies described in the CTFL SETA Sector Skills Plan 2005-2010 (CTFL SETA 2006) have been introduced:

- The CTFL SETA has identified the training of technicians and artisans as critical to the future success of the sector.
- The CTFL SETA supports production management training for managers through the disbursement of mandatory grant funding to member companies. In addition, management skills grants of R7000 per programme were offered to member companies who place employees on a range of management programmes, including production management. The SETA has set a target of at least 400 production managers over the next 5 years.
- Over the last 5 years the SETA has run 8 SMME training clusters aimed at up-skilling owner-managers and workers in small firms. On average, each cluster accommodated 400 owner-managers/workers from small business and had a training budget of approximately R350 000.
- The SETA has established strategic partnerships with the Cape Peninsula University of Technology as well as the Durban Institute of Technology and the University of Johannesburg.

- Within the realm of FET and HET, many private colleges and public institutions are running short courses ranging in duration from a few hours to a few days.

## 2.10 Evaluation of sectoral Interventions

The Skills Development Levies Act (1999) taxes enterprises at 1% of payroll expenditure. Whilst some have argued that this levy can be regarded as crowding out enterprises own training, the inherent logic is that the public provision of these services is necessary to correct the market failures associated with historically poor levels of investment by enterprises in training. The performance of government skills-oriented institutions and their contribution to skills upgrading has been closely scrutinised in the literature. The DOL's National Skills Development Strategy reiterated the importance of learnerships as a complement to apprenticeships and is seen as a key method to improve skills development for high, intermediate and low skill levels (Daniels 2007).

In addition, the DOL and DOE sought to further target all three levels of skills development by focusing on linking general education provision, supply side dimensions of human resource development, including the provision of further and higher education, demand-side dimensions i.e. demand for skills by public and private firms and national systems of research and innovation. This implied that efforts to upgrade skills have to be linked with the National Qualifications framework (NQF), and that the learnerships had to target various NQF levels. This in turn, requires co-ordination between the training providers, the SETA and the DOE.

Daniels 2007 observes that whilst this system of accreditation is better in theory than in practise and “[i]s a key institutional bottleneck that has a decisive outcome on the entire skills development process as currently envisaged (p.7).” Rasool 2006 outlines numerous difficulties experienced with apprenticeship training, in terms of the process itself, as well as those encountered by SETA in administering the programmes. These include poor support from Technisa/Department of Education in examination administration, lack of monitoring of apprenticeships by the SETA, SETA staff possessing insufficient knowledge about apprenticeship schemes, the neglect of apprenticeships in favour of learnerships and onerous marking of assignments by firms training multiple apprentices, as well as non-compliance by firms with stipulated procedures.



Whilst the mission statement of the CTFL SETA is to promote and implement effective learning programmes and skills planning that will advance workplace security and productivity, its effectiveness thus far is questionable (Wesgro 2002). Daniels 2007 findings indicate that the majority of firms do not see value in SETA's role and capacity. The DOL survey conducted in 2005 revealed that the majority of respondents thought that the SETA was not doing a good job (Daniels 2007: p.11).

According to sector analysts, indications are that SETA lacks credibility in the industry and is therefore not supported, rendering programmes run through SETA ineffective (Barnes et al 2005). In addition, firms claim insufficient financial support from the SETA as the stipulated R15 000 discretionary funding per apprenticeship is to cover between 2 ½ and 3 ½ years. The ceiling on funding imposed by the SETA further exacerbates this claim. Downsizing of companies and cut-backs in staff have also affected the ability to provide apprenticeship training and firms are reluctant to engage in apprenticeship training for the fear that the programme may be scrapped (Barnes et al 2005).

### **2.11 Investment Climate Assessment (ICA) for South Africa**

An important source of additional information on skills shortages is the World Bank's Investment Climate Survey (ICA). The ICA was a survey conducted in 2002 on 800 manufacturing firms, of which 26 were textile firms and is a useful source of insight into managerial perceptions of investment, training and skill constraints. The novelty of the survey lies in the comparison across countries of similar economic, political and socioeconomic profile, which allows the impact of changes in individual variables to be measured and evaluated relative to other indicators and the impact of changes in the variables in other countries. For instance, not all of the countries in the sample which face skills shortage may perceive it as a binding constraint to growth. Although the 26 firms are by no means representative of the textile industry as a whole or the CTFL industry in general, the difficulties faced by firms in the industry are homogenous, such that managerial perceptions about skills and training expressed by members in one area are likely representative of all industry players. The breakdown of firms appears in Appendix 1.

On the whole, the ICA provides collaborative support for the skills analysis in previous sections. The following is a synopsis of the primary outcomes from the survey:-

- 35% of firms perceive skills shortages as a major obstacle to growth; and almost all firms that did not list skilled labour shortage as their greatest obstacle, listed it as their second greatest. These ratings were decidedly more negative than those for other investment climate indicators which reveal that worker skills are of pressing concern for South African textile firms. This outcome substantiates claims of skills shortages in the sector in previous sections.
- There is a low level of competency at all skill levels. South African workers achieve very low levels of education relative to comparator countries with many unskilled workers not having completed school.
- There is a large wage premium for those with an education, which is indicative of the shortage of skilled labour. This premium is analogous to the “remuneration gap” hypothesised by Kaplan 2007 in Section 2.
- Compared with comparator countries, South Africa has the lowest level of training provided by firms (ICA; p.10). Although 65% of sampled firms claimed to offer formal training to their employees, the percentage of skilled employees offered training was notably higher than that of unskilled employees. This is confirmed by the Skills Audit which shows that out of 800 companies only 26% offered in-house training (p.52). Finally, most firms who declined to train their staff \did not believe that it led to productivity gains (p.10).
- Cost is an issue for firms and is a major bottle-neck in the supply of firm-level training; 33% cited high cost as a reason for not providing training; 11% cited the lack of government incentives; 22% the lack of competent trainers. No firms cited a lack of institutions as a source of supply shortages.

## 2.12 Conclusion

A primary outcome of the analysis is that there is a high level of demand for skilled labour in the South African CTFL industry relative to the supply of scarce and critical skills. This has led to the supposition that the jobs that have been lost are primarily in the semi and un-skilled occupational groups. Supply-side skills shortages are likely to present major problems in terms of global competition and productivity growth if not dealt with in the near future.

Government have both recognised and responded to this problem. The DTI, in consultation with stakeholders, including the SETA, has launched a Customised Sector Programme for the

Clothing and Textiles industries aimed specifically at increasing the skills level in the sector; for instance by setting target skill levels for certain occupational groups within the industry.

There is an opportunity to up-skill those in the FET education band to the HET education band. The Skills Audit has shown that the supply does not satisfy the demand for skills both in terms of the number of workers and the category of worker demanded. The HET infrastructure, though with the capacity to train more students has had very low graduate rates since 2000. The FET infrastructure through learnerships and apprenticeships is also not generating enough graduates to decrease the skills shortage significantly; but there is enough capacity to increase enrolment rates noticeably.

Nevertheless, there is a consensus that the shortage of skills in the South African economy, in general, and the CTFL industry, in particular, is not being adequately addressed by formal learning programmes run by the governing bodies such as the CTFL SETA. Furthermore, training within South African firms remains at a very low level and insufficient skills development is taking place in firms (Barnes et al 2005). The ICA reveals that cost is a major factor in the provision of firm-level training which the SETA is not adequately addressing. The lack of uptake by firms of incentives to implement training programmes implies a failure on behalf of SETA to engage private enterprise in the up-skilling process.

However, the literature suggests that even if graduation rates are significantly increased, the South African skills base is vulnerable to skills emigration, particularly to Anglophone developed countries and will be difficult to maintain from exclusively indigenous skills resources. Consequently some have argued that the most obvious way to immediately address the skills shortage is to import skills from abroad by introducing aggressive recruitment policies (Kaplan 2007 and Bernstein and Johnson 2007).

## Chapter 3. Synthesising literature and fact: Evidence from the firms

### 3.1. Introduction

The consensus view of the SETA is that scarce skills demands are for highly skilled technical people in occupations which fall into the upper strata of the occupational sphere; furthermore, there are no skills shortages in the lower strata of the occupational sphere. According to the SETA, this is congruent with the massive loss of jobs in semi-skilled and unskilled occupations. This section contains a dialogue from key clothing and textiles manufacturers and other industry officials on skills. The intermediate aim of this section is to compare evidence on skills demand in firms with that presented in the SETA Sector Skills Plan with the ultimate aim to elicit an explanation for the SETA's ineffectiveness in addressing the skills crisis. By all accounts, the skills base in the SA clothing and textiles sector is haemorrhaging.

Between July and September 2007, interviews were conducted at 15 clothing and 5 textiles manufacturing firms in the Western Cape and KZN. The purpose of this fieldwork was to:

- establish a current profile of the skills distribution in firms,
- distinguish between and identify skills gaps and skills shortages in the industry,
- gather information about the strategies undertaken by firms to address these skills gaps/shortages,
- establish and evaluate the role of government and the effectiveness of interventions in alleviating skills shortages/gaps in the sectors,
- assess future skills needs, and
- evaluate the impact of the China quotas on the performance of firms in terms of output and employment.

### 3.2 Profile of firms in the sample

The sample of firms was carefully selected to cover the entire spectrum of firm sizes and types; it comprised as follows:

- Five large full package manufacturers with 1500+ employees
- Four medium full package manufacturers with between 500 and 1000
- One small full package manufacturer with approx. 150 employees.
- Two large CMT firms with 350+ employees
- Three small CMT firms with between 100 and 150 employees

- One large textile manufacturing firm with 1500+
- Two medium textile manufacturing firm with 350+ employees
- One small textile manufacturing firm with less than 100 employees
- One large trimmings manufacturer with 450+ employees

All firms are 100% local manufacturers oriented toward supplying mainly the domestic market with the exception of two textiles manufacturers who export between 5% and 25% of their output. Three clothing manufacturers did export in the past but abandoned their export strategy when the Rand strengthened in 2005. No firms have any plans to export unless the Rand rises above R8 to the US\$, citing lack of competitiveness as the primary reason. One FPM and one larger CMT are importers of fully assembled garments; the former to supplement their product range with high minute-rate, complex garments that cannot be made at a competitive price locally and the latter to sell in combination with their local lines as a unit. The large and medium FPMs in the sample are 100% suppliers to large retail chains with the small FPMs servicing small chains and independents. The CMT firms in the sample cut, make, and trim primarily, but not exclusively, to large design houses for South Africa's 5 major retailers.

The clothing firms in the sample collectively cover a range of clothing from underwear to sleepwear; casual to corporate wear and fashion; from basic to complex garments. The textiles firms in the sample manufacture fabric with the exception of the large firm that manufactures the entire range of textiles. However, when profiling skills demand, this classification of firms is subsumed by their different strategic visions for the future. This criterion distinguishes two types of firms:

- those who explicitly differentiate between skills shortages and skills gaps and are addressing these problems holistically by internal recruitment and training or external recruitment of potential staff within this new mould;
- those who remain trapped in old management and production processes and continue to recruit from the industry with diminishing success.

### 3.2.1 Demographic profile of the workforce in the sample

Where no significant differences in the workforce exist between sectors (i.e. textiles and clothing) and regions (i.e. Western Cape and KwaZulu-Natal) the workforce is analysed as a

whole. Analogously, sectors and regions are distinguished when workforce profiles differ materially.

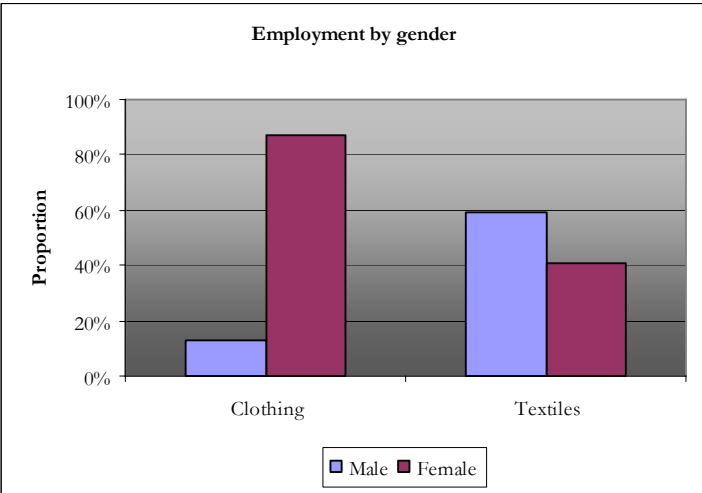
Age

Both textile and clothing firms in the sample have an aging workforce, particularly where skilled people are concerned. Amongst clothing firms, the core of older long-serving staff - 50 years and over - comprises between 40 and 60% of the total labour force, with as little as 20% of the staff component under 30 years of age. Similarly, the skilled people in the textile industry tend to be 50 years of age or older, with the average age increasing with skill and experience. One of the primary concerns of firms is that skills and knowledge will be irretrievably lost to the industry once these older people retire since little effort is being made to retain this knowledge by encouraging these elders to pass on their knowledge to new recruits. As a result, firms believe that the skills base in the clothing and textiles sector is haemorrhaging due to the loss of these older skilled people. In addition to this, the entry of new graduates and recruits into the sector is falling; due in part to the negative image that the sector has amongst younger age groups, which implies that the rate of attrition of the skills base is increasing faster than it is being replenished.

Gender

The sample of clothing firms as a whole has a high proportion of female employees with a gender split of 90%:10% between females and males (Figure 22). In contrast, the gender split between females and males in textiles of 40%:60% shows a higher proportion of males in the workforce in general.

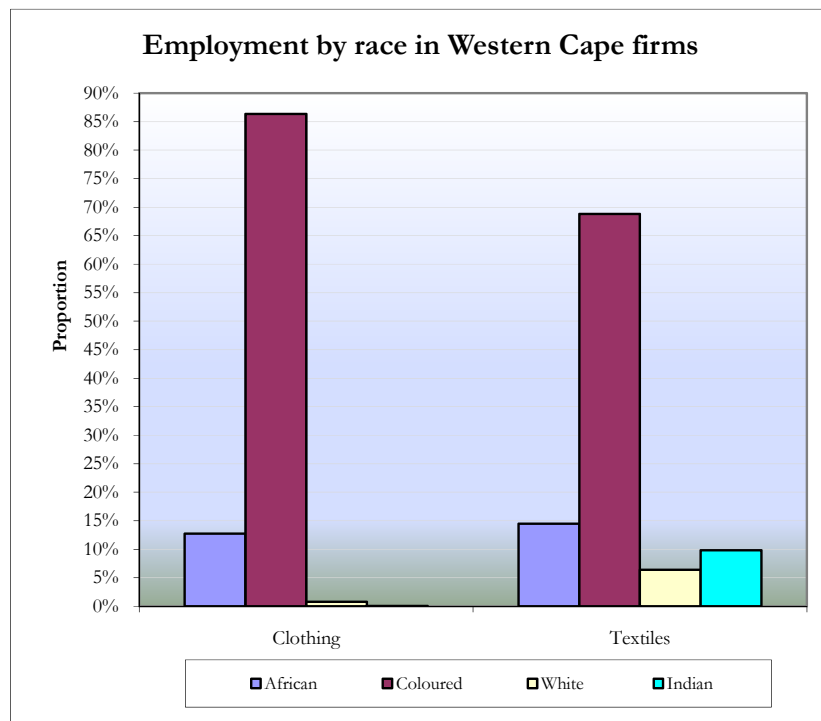
Figure 22: Employment by gender



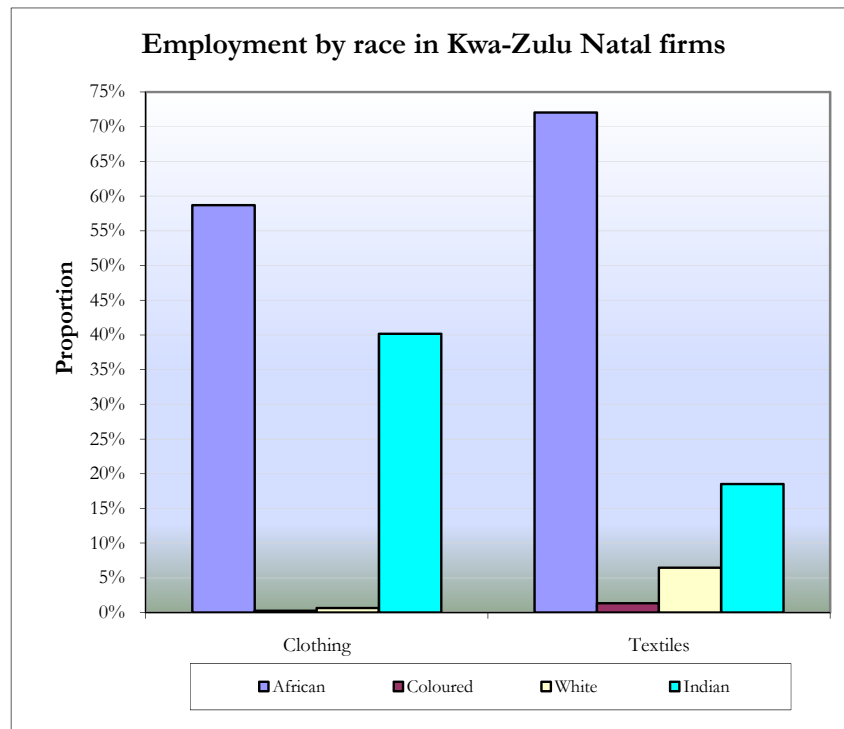
## Race

Due to expected large differences in racial demographics between provinces, racial profiling of the workforce was done according to province as well as sector. The racial split between workers currently employed by sampled clothing firms in the Western Cape (Figure 23) is 85.5% Coloured, 13.5% African, 0.95% White, and 0.08% Indian. The Coloured dominance is mirrored in textiles employment in the Western Cape (Figure 22) with a racial split of 69% Coloured, 15% African, 6% White and 9% Indian. The only major difference between the sectors is the higher Indian and white component in the textiles sector. The difference between regions is obvious - Indians dominating in both clothing and textiles sectors in the KZN with almost no Coloured participation. Demographics for KZN clothing and textiles are 59% and 72% African, 0.26% and 1.37%. Coloured, 40.17% and 18.53% Indian and 0.66% and 6.47% White respectively (Figure 24). Whites have equal participation across provinces, but have greater participation in textiles which accords with historical domination of the textiles sector by, mainly foreign, whites.

**Figure 23: Employment by race Western Cape firms**



**Figure 24: Employment by race KwaZulu-Natal firms**



### 3.2.2 Occupational breakdown of the workforce in the sample

Each firm interviewed was asked to supply their workforce profile which breaks down their workforce by occupational category and occupational level as well as by gender and race. A summary of the data compiled from these profiles appears below. Once again, due to material racial differences between provinces, racial profiling for the Western Cape and KZN was done separately, but due to homogeneity within regions across race, clothing and textiles were profiled together. For gender profiling, distinction is made between sectors, not regions.

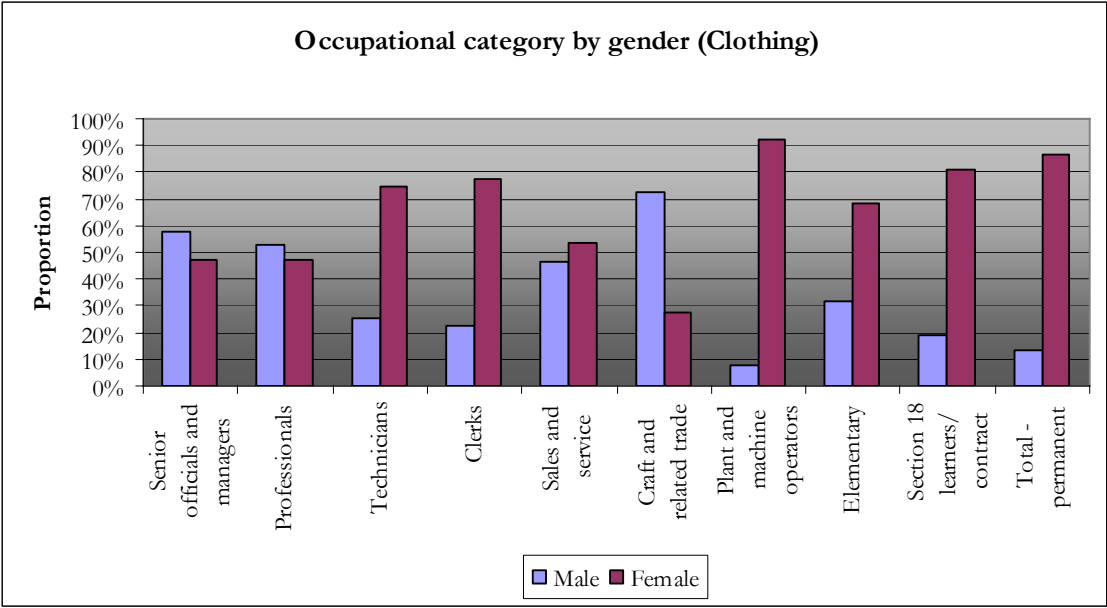
#### Occupation by gender

In clothing (Figure 25) females are dominant on all occupational levels except top management which tends to coincide with ownership; only one clothing firm in the sample has a woman in a top management position who is not the owner. Two other small CMTs in the sample are owner-managed by women. Employee roles for males tend to be in managerial and technical occupations (including cutting), although there is a more equal gender distribution in design roles which were historically exclusively female. Firms expect this trend to escalate with the shift towards mechanisation of the design and cutting functions. In textiles, although a higher level of male participation in the labour force is indicated overall it is largely confined to production-related activities, whilst females make up a large proportion

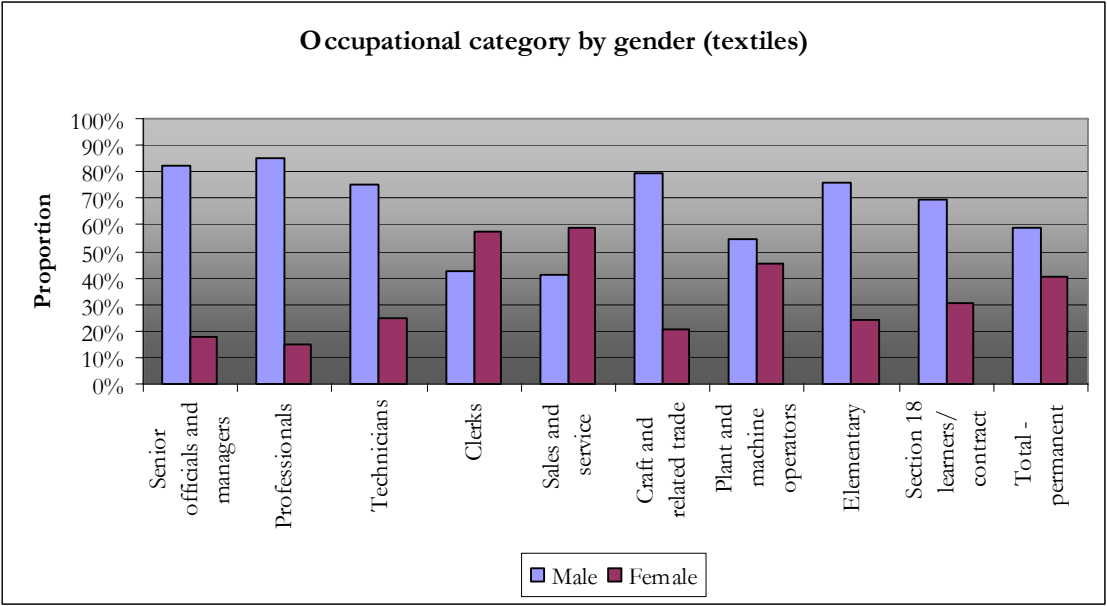


of the non-production staff component. In textiles, although a higher level of male participation in the labour force is indicated overall, it is largely confined to production-related activities, whilst females make up a large proportion of the non-production staff component.

**Figure 25: Occupation by gender – Clothing firms**



**Figure 26: Occupation by gender – Textile firms**

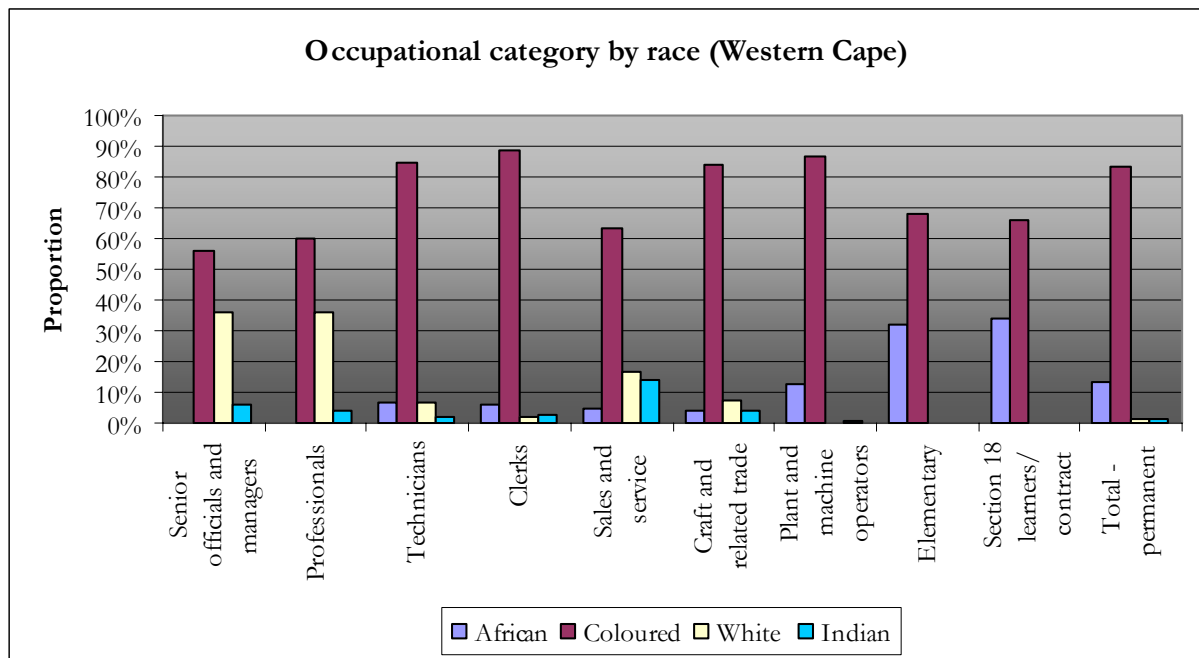


## Occupation by race

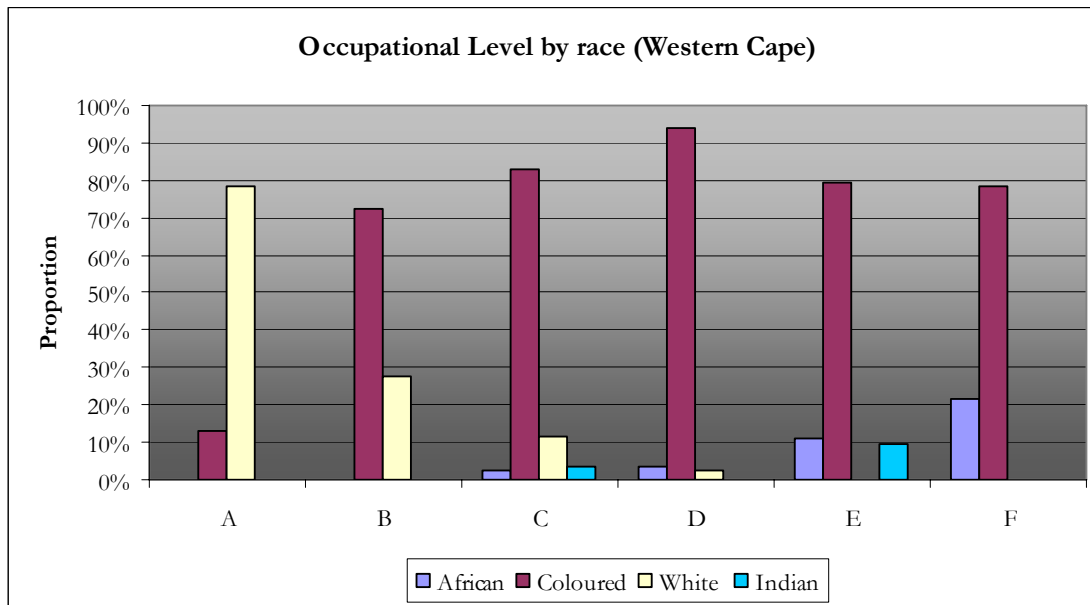
### Western Cape

In Western Cape, Coloureds dominate in all occupational categories, whilst white participation is confined to high-level occupational categories (Figure 27). The data also confirms that participation by Blacks is minimal and largely confined to occupational categories with low skills requirements. Nevertheless, all firms in the sample reported a rising intake of Africans. Whilst most attribute these changing demographics to employment equity, at least one firm suggested its African component had increased simply because these were the people coming forward. Although Coloured numbers are dropping, they are still an important part of the workforce as the data shows. Analysing occupation by levels (Figure 28) accentuates the White dominance at the high-end continuum of the labour force, although once again, management may double up with ownership. Encouragingly, Coloured participation in senior management is impressive.

**Figure 27: Occupational category by race - Western Cape**



**Figure 28: Occupational level by race – Western Cape**

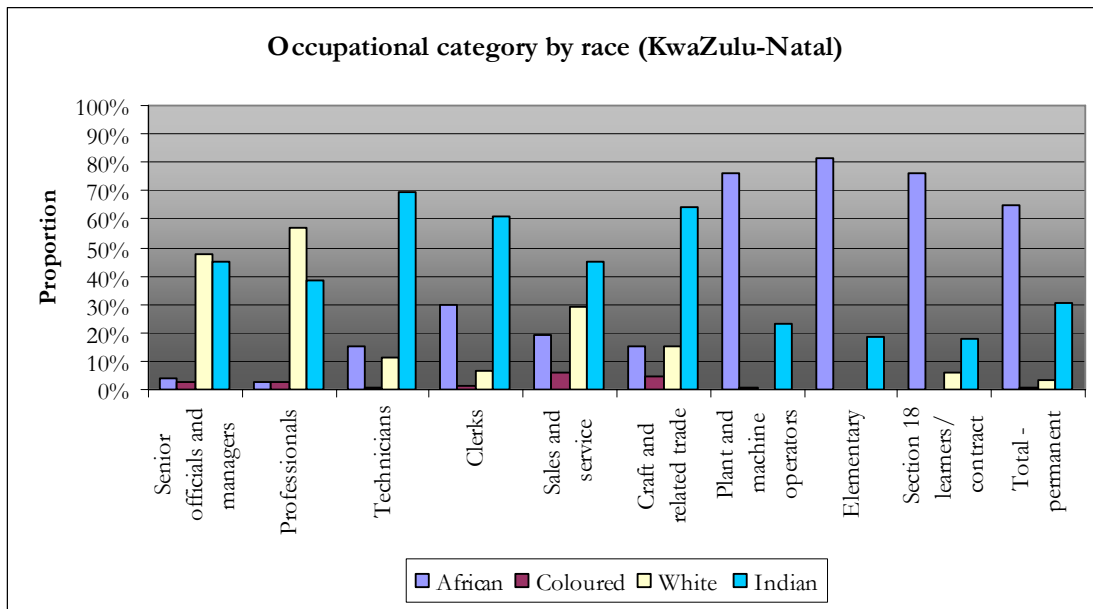


A – Top management; B – Senior management; C – Professionally qualified and experienced specialists and mid-management; D – Skilled technical and academically qualified workers, supervisors, foremen, mid-management; E – semi-skilled and discretionary decision-making; Unskilled and defined decision-making

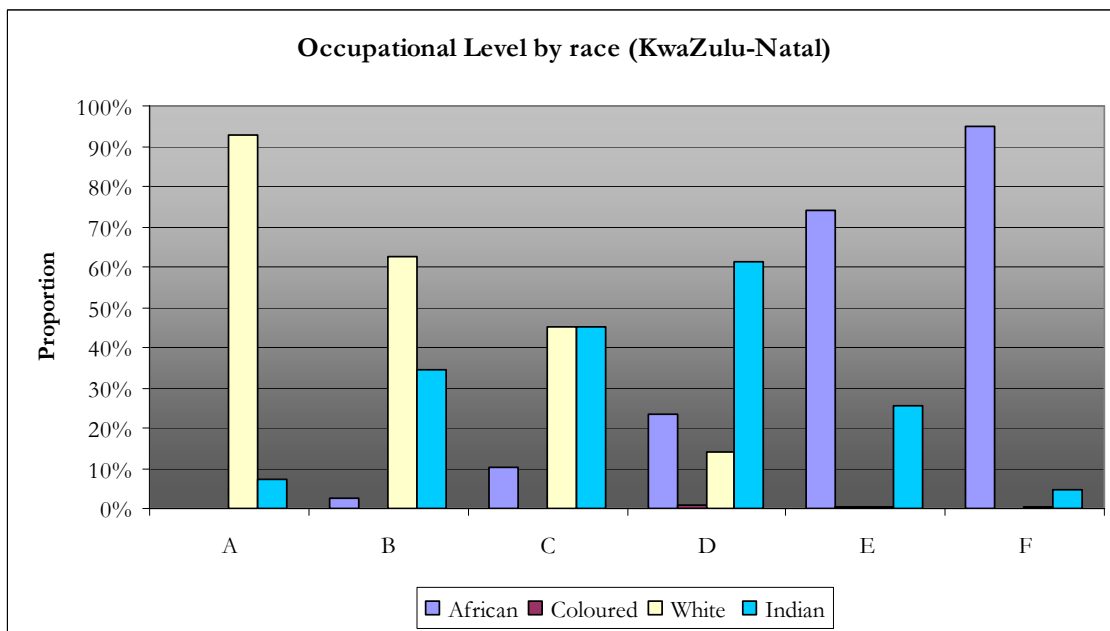
### KwaZulu- Natal

In KZN, although closely rivalled by Indians, senior management and professional occupations are dominated by Whites. Indians dominate in high skilled technical production areas whilst Africans are again confined to low-skilled occupational categories, particularly operator and elementary positions. Non-production positions are mainly occupied by Indians (Figure 29). Predictably, Coloureds are a minor part of the KZN workforce, although they participate in all occupational categories. Similar to the Western Cape, new recruits (Section 18 learners) are predominantly African and for similar reasons i.e. employment equity. Analysing occupation by levels (Figure 30) once again accentuates the White dominance at the high-end continuum of the labour force. What is more, there is greater penetration of Whites across all top, senior management and professional levels than in the Cape, with rival representation by Indians only from mid-management level. Africans are relegated to lower occupational levels with minimal decision-making capacity.

**Figure 29: Occupational category by race – KwaZulu-Natal**



**Figure 30: Occupational level by race – KwaZulu-Natal**



A – Top management; B – Senior management; C – Professionally qualified and experienced specialists and mid-management; D – Skilled technical and academically qualified workers, supervisors, foremen, mid-management; E – semi-skilled and discretionary decision-making; F - Unskilled and defined decision-making

### 3.3. Distinguishing between “skills gaps” and “skills shortages”

This part of the report is representative of the clothing and textiles industry as a whole - i.e. distinctions are made between regions or sectors only where materially different views or observations between groups were encountered.

Before proceeding further with the discussion, it is important to clearly define and distinguish between skills *gaps* and skills *shortages*. This distinction was found to be a key since it provides a strong linkage between two primary issues, namely World Class Manufacturing and skills supply and demand in firms. The reason for this is that the particular ideology driving a firm’s production methods to a large extent dictates that particular firm’s skills requirements and thereby also its ability to meet its skills needs. This relationship is elaborated in the following sections and illustrated by actual case studies. The discussion proceeds with defining and developing a profile of skills gaps and shortages in the industry in broad occupational categories and levels.

#### 3.3.1 Skills gaps

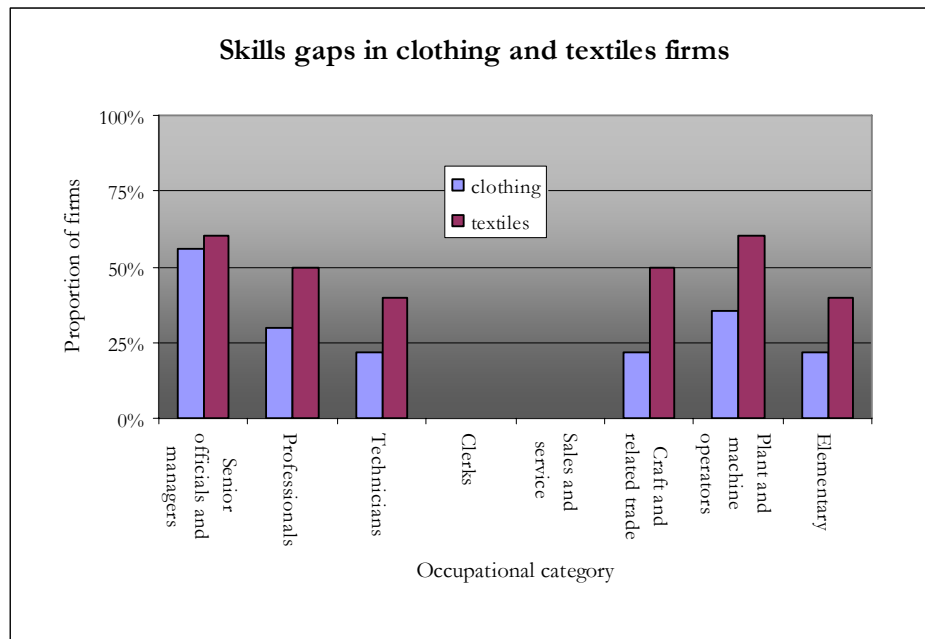
Skills gaps are said to exist when employers recognise that their existing workforce has a lower level of skills than is necessary to meet business objectives (UK Skills Dialogue 2004). Skills gaps therefore refer to a lack of proficiency of existing staff or ability to perform their roles to the optimum level. Skills gaps are analogous to critical skills as defined by the SETA. Skills gaps are an important indicator as they can signal a lack of business efficiency or inappropriate recruitment strategies. They may also be symptomatic of skills shortages if inappropriate or unqualified recruits are employed in the absence of qualified people.

Both clothing and textile firms are experiencing wide skills gaps. For clothing, the main causes for concern appear to be at two almost diametrically opposed ends of the occupational spectrum - namely in management and operative areas (Figure 31). Technical skills gaps occur mainly at production operative level. Without exception, firms identified the shortage of machinists as their greatest problem with other production-related occupational positions also becoming increasingly difficult to fill. In terms of management skills, skills gaps are identified overwhelmingly at mid-management level and mainly relate to problem solving and team leading. For textiles, technical skills gaps are manifest in insufficient numbers of machine operators, particularly knitters and creels. Similar to clothing, there is a chronic

shortage of upper management skills although gaps are being encountered on very rung of the management ladder.

Fifty six percent of firms identified skills gaps at mid- and upper-management levels – i.e. they believe that their management staff requires additional skills. Furthermore, thirty six percent of firms perceive this to be where their greatest skills gap lies. Twenty percent of firms highlight operatives as having gaps in their skills portfolio.

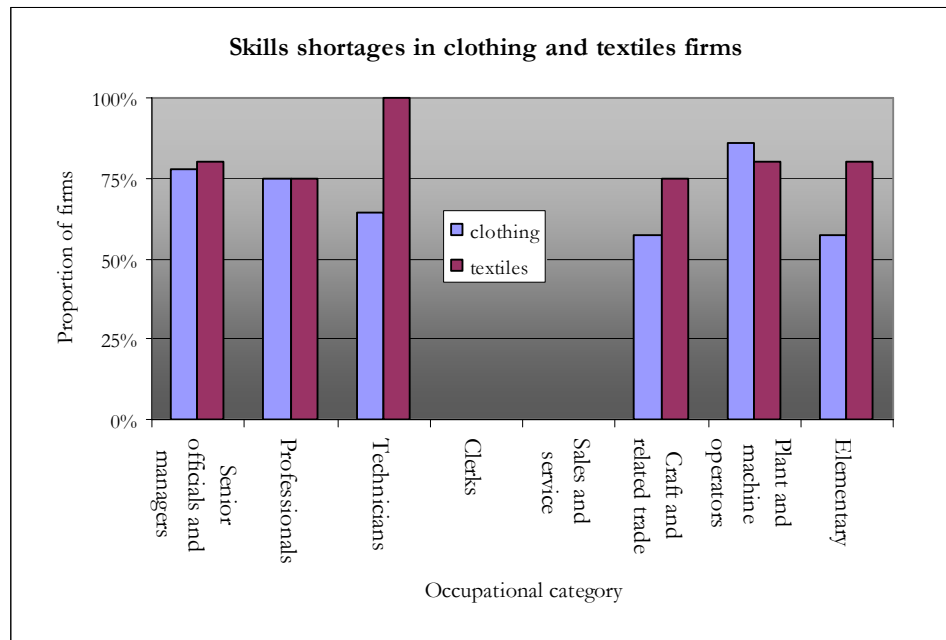
**Figure 31: Skills gaps in clothing and textiles firms**



### 3.3.2 Skills shortages

Skills shortages are said to exist where there is a lack of adequately skilled and/or qualified individuals in the accessible labour market (UK Skills Dialogue 2004: p.13). Analogously, a skills shortage exists when an employer finds it difficult to find people with the skills required. Skills shortages are analogous to scarce skills as defined by the SETA. Recruitment difficulties can be symptomatic of skills shortages but they may also reflect uncompetitive labour conditions or policies which discourage work. The dialogue from firms suggests that skills shortages occur overwhelmingly at the operative and technical occupational levels, although in some cases, firms report difficulties with recruiting professionals such as engineers (Figure 32).

**Figure 32: Skills shortages in clothing and textile firms**



Whilst the demand for skills varies across occupations and size of business, this study determined that skills demand is fundamentally defined by the firm's particular strategic vision of the future. That is, *skills gaps are more evident in those firms – irrespective of size or market orientation - who have actively engaged the transition to World Class Manufacturing (WCM) and explicitly recruit labour within this new mould*. Skills shortages are less important to these firms. The creation of new skills gaps is explained by the fact that WCM methodology completely redefines production activities supplementing them with new, and often greater, skills requirements. Furthermore, skills gaps may indicate future skills shortages if firms do not immediately address skills gaps as they are exposed. Contrarily, skills gaps are less likely and shortages more likely to be reported by firms who remain locked in the traditional mode of thinking.

### 3.4 Vacancy fill times and skills shortages

An indicator of the state of the labour market in which these industries operate is the number of vacancies that employers have at any one point in time. When asked to quantify the number of vacancies within their organisations, the responses varied across sectors and occupations. In general, the number of vacancies was relatively low with the exception of one or two occupational groups. The highest numbers of vacancies in the clothing industry were in the field of production and process operatives, particularly machinists, but also

cutters and even layers-up. This was also the most significant occupational area for vacancies in the textile industry, with management a close second. Although, as with clothing, firms indicated that skills shortages are becoming evident all the way down the production line.

Of particular importance are those vacancies labeled “hard-to-fill”. Vacancies can be hard to fill for a number of reasons including low pay, location issues or unsocial working hours. The majority of hard-to-fill vacancies encountered are due to a lack of available skilled people in the labour pool. Skills shortage vacancies are those “hard-to-fill” vacancies which are skill-related - i.e. due to a lack of people with relevant skills or experience in the external labour market (Skills Dialogue 2004). Half of the hard-to-fill vacancies are “skills-related” and in general, only those positions falling under occupational categories “Craft and related trade” or “Plant and machine operatives” are regarded hard-to-fill. Alternatively put, recruitment problems in these areas are solely due to a lack of skilled workers in the available pool.

The next section unpacks skills shortages and gaps in specific occupational positions. Mapping skills requirements to the respective occupational positions firmly establishes the link between World Class Manufacturing and skills supply and demand in firms.

### **3.5 Empirical evidence of skills gaps and shortages in South African clothing and textiles manufacturing firms**

This section introduces evidence gathered from firm level interviews. The analysis unpacks the skills gaps and shortages by occupation that sampled firms are currently experiencing using individual case studies for illustration (Figure 32). Skills issues in the respective clothing and textiles sectors are analysed separately.

This section has several aims. First, it builds empirical support for the argument introduced in previous sections that World Class Manufacturing has redefined many of the traditional occupations and thereby also the skills profiles of those occupations. The main implication is that progressive firms, i.e. those who aspire to WCM practices, face growing skills gaps in their existing workforce. At the same time, these firms face growing skills shortages since recruitment of “old-style” staff from the industry with the old skills arsenal is increasingly infeasible. The dialogue from firms suggests that i) the skills profile of an occupational position is defined by the firm’s particular manufacturing model, more particularly, by the



extent to which the firm practices World Class Manufacturing and ii) this particular skills profile shapes the firm's perception about whether there is a skills gap or a skills shortage in that occupational area.

Second, this section makes some attempt to identify wherever possible whether perceived skills shortages relate to i) quantity, with the implication that there are simply insufficient numbers of qualified people to meet demand, or ii) quality, with the alternative implication that qualified people are available but simply do not meet the standard demanded by firms, or iii) both. This includes a brief synopsis of the perceived major barriers to maintaining a proficient workforce.

Third, a primary aim of the firm interviews to identify skills gaps and skills shortages in the industry from the perception of firms and to compare this information with the outcomes of the National Skills Audit which formed the basis of many of the interventions formulated and implemented in terms of the National Skills Plan. This concludes the empirical research component of the report.

### 3.5.1 Skills gaps/shortages by occupational category in the clothing sector

#### Production

##### *Machine operators*

Twenty percent of firms highlight operatives as having gaps in their skills portfolio. Since machinists are regarded as the “engine room” of the business, shortages in this domain impact negatively on efficiency, productivity and profitability and are of overwhelming and immediate concern. The number of current reported shortages of machinists by firms ranged from 5 to 50. Most firms, irrespective of size or orientation, reported that the shortage of skilled machine staff represented the *single binding constraint* on their ability to grow their business. Only 7% of sampled firms disagreed that there is a shortage of machinists in the industry. The following statements are representative of interviewees:

“In the past 4 months, we have opened up 4 new lines with 84 machinists. In the next few months, we are planning to open another 3 lines for which we will need another 100 machinists and we are struggling to find qualified machinists from the industry.”

“I have been approached with a lucrative offer to expand my business but I had to turn it down because I cannot find machining staff...”

One medium CMT reported that its machining staff component had shrunk consistently by 10% per year since 2004, and that it had not been able to replace those lost. Even those who expressed a view that the shortage of machinists has been slowly developing over a number of years stress that the shortage has drastically increased in the last two years.

“Ten years ago there were 110,000 machinists operating in the industry, now there are between 20 and 35,000...”

“It has become much more difficult to recruit (qualified machinists) over the past two or three years...Actually, we don’t know what to do...”

“We have been short 15 machinists since July. For every one that come in, we lose 2...We can lose up to 15 machinists a month.”

“When Singer closed down 18 months ago, they retrenched 130 machinists. I went and offered them all jobs. Only two pitched...”

The shortage of machinists increases with the skills requirement. Most firms report commercial “extinction” of highly skilled operators who can conduct specialist multi-skilling operations. Firm responses provide a measure of the shortage of such specialized machining skills:

“If 30 skilled machinists walked through the door and they were all pocket machinists and collar setters, I would take them all!”

“The type of work at this factory is specialist since most of the garments that we produce are elasticated so it’s more cover seam work. We just cannot get anyone any more.”

For the majority of firms, the shortage of skills in this occupational sphere translates directly into an insufficient *number* of machinists available to the industry.<sup>2</sup> They simply cannot find machinists. However, 27% of firms contradict this view. They suggest that there are a lot of machinists available for employment which have the capability to do the work, but are of the wrong mindset and attitude. This implies that the shortage also relates to quality of skill, personal attributes and experience.

This occupational level is particularly susceptible to change during the restructuring of the industry and is most impacted on in terms of skills advancement as the old mould is broken and new processes such as “can bans” and EFTA are introduced. Already, progressive firms in the sample are identifying new skills gaps at operator level. Current identifiable skills gaps at the operator level in clothing relate primarily to multi-skilling capabilities whilst textiles firms reported skills gaps at the technical level, which is an important requirement in the

---

<sup>2</sup> Firms who disagreed that there is a shortage in the *number* of people at operator level are all located in KwaZulu-Natal.

existing workforce. This problem is exacerbated by the high proportion of learners and newly qualified operators in the industry at present. In addition, firms expressed concern with team-building and communication skills arising mainly from low levels of literacy and numeracy. This is more pronounced in textiles than clothing, possibly due to the greater dependence on technology and the technically advanced nature of the textiles production process.

### *Ironers*

In addition to machinists, 61% of firms reported problems filling positions for ironers. There are several explanations for the shortage of qualified people in these positions: First, similar to machinists, the older, qualified ironers are not coming forward for employment. Second, these positions are generally being filled by Black matriculants, largely for firms to be employment equity compliant. These people are often seeking temporary employment whilst “scouting” for other jobs or do not possess the skills and do not last long enough to become proficient.

### *Other production staff*

Ten percent of firms reported shortages of other production staff such as markers, although the high labour turnover rate appeared to be the overriding problem. This was rooted in similar issues as those discussed above in relation to ironers.

### *Cutting room*

Eighty percent of firms reported current shortages in their cutting room. Anecdotal evidence suggests that firms are beginning to experience similar problems securing cutting room staff as they are for machinists, although this is one area in which innovation could adequately address skills shortages. Two firms have already reduced their cutting room requirements by mechanising their cutting facility. The view that cutters are in short supply in the industry is not unanimous. One perception is that in a shrinking industry, there is no shortage of cutters since there are few alternative employment opportunities available to them:

“A cutter only has one career choice after being a cutter, and that’s to be a cutter. They don’t have other skills that add value...”

Fifty five percent of firms reported difficulties recruiting layers-up, sorters and fusers, all part of the cutting department, however not on the scale of cutters and machinists.

## Design department

### *Sample Machinists*

All firms reported that there is a severe shortage of suitably qualified sample machinists in the industry. A sample machinist constructs a garment “prototype” without the aid of a pattern. This occupation lies at the high end of the skills requirement requiring a high level of proficiency, experience and multi-skilling capabilities. Sample machinists are older, 50 years of age and over, since it takes at least 10 years to become proficient. The average minimum reported fill time reported for a sample machinist is 8 weeks.

### *Patternmakers*

This occupation demands a high level of proficiency and skill and is at the upper end of the skills requirement. Similar to sample machinists, these positions tend to be filled by older staff with a minimum of 10 years experience. All firms, without exception, reported that there is a “huge” shortage of patternmakers in the industry. One firm reported that there appeared to be a lot of “churning” between firms amongst those sample machinists and patternmakers who are available for these positions:

“There is no evidence of new younger people coming up through the system. You tend to see the same faces in the labour pool...”

### *Designers*

Eighty three percent of firms reported no procurement problems with designers. Of those who did report procurement problems, these related more to the fact that they were trying to source a firm-specific rather than a generic design skill - i.e. a designer with their own “handwriting”. The latter case may better describe a skills gap than a skills shortage.

## Craft and related trades (Artisans)

### *Mechanics*

Fifty percent of firms reported a shortage of machine mechanics in the industry with this shortage ranging from moderate to “chronic”. One firm expressed a view that the shortage was as severe as that for machinists.

### *Other i.e. folder-makers, fitters and turners, welders, engineers, electricians*

One firm reported a complete lack of folder makers in the industry. A folder maker understands the capability of a machine - i.e. what a machine can and cannot do and who can customize it to make it more efficient.

“The Chinese have come up with a folder that can bring about the demise of factory-owned folder makers. We should have a folder-maker making folders continuously; someone who understands machinery and has the correct lays and tools. I need a folder-maker. I can’t find one...”

27% of firms reported extreme difficulties with recruiting welders and electricians.

This reflects a general problem in the country of a lack of artisans.

## **Professionals**

### *Technologists*

Fifty percent of firms reported a shortage of technologists in the industry; most reported that they were available, but at a prohibitive price. The low response rate is explained by the fact that only the larger companies require technologists. The skills shortage related not to the quantity of qualified people available, but more to the quality and type of skills available in the industry relative to firms’ requirements. Firms describe a skills requirement which overreaches that of quality advisors who currently masquerade as technologists. The latter however require skills which include capabilities such as garment construction, as well as understanding the entire value chain.

“I have a supply chain. I need someone who understands all aspects of making a garment, someone who understands which components are compatible. I need a technologist who understands what tool to use in order to avoid a flaw and because the quality of the fabric is not consistent, who can identify when the quality has changed...”

“There are a lot of technologists available but they tend to be quality advisors. Technologists, in the true sense, are very rare and if available at all, very expensive.”

This skills shortage is a good example of a skills gap which has evolved into a shortage for progressive firms.

## **Management**

Larger firms encountered a greater degree of problems in this area since most small firms have consolidated their management level or are not recruiting. One small CMT reported that it had not experienced significant gains in productivity from employing a production manager and had expanded its ownership base as an alternative to employing managers. However, the

gap in managerial skill is not exclusively a large company issue but relates to most firms who aspire to WCM standards, have made the transition from individual to team-based performance and are driving efficiency through the production chain from the top down. As a result, the profile of the management function has changed and the quality of management required has been upgraded. In effect, the skills needs of firms' have changed and there is a mismatch between the quality and type of skills available to them and those which they require to make the transition to WCM. As one interviewee put it:

“The problem is that you get a lot of soldiers. We need people who can think and innovate. These people are in short supply...”

A large part of the problem may be the recruitment of graduates into management positions; graduates are seen by some employers as lacking required knowledge and experience. Or, at the other end of the spectrum, by promoting technical experts into higher-level roles because of their knowledge, without the requisite support and training to enable an successful and effective transition to the management role. This problem arises particularly when a shortage of skilled people in the labour pool compels firms to fill these positions by internal promotion rather than recruitment from the industry.

#### **CASE STUDY 1: RECRUITING LINE MANAGERS INTERNALLY**

Due to the lack of formally qualified candidates in the industry, one textile firm has been obliged to fill its vacancies for line managers by promoting “ordinary” people from the factory floor. These positions should ideally be filled by formally qualified people who are theoretically and practically grounded. Quality issues aside, this process is accompanied by a host of additional problems arising from the cultural and social structure of the workforce. In the words of one senior firm official:

“When a man goes from one day being an equal to his team members to being their superior overnight purely on the basis of promotion, he cannot just draw a line between himself and them. So, there is a problem because he cannot enforce discipline.”

Less than 30% of firms reported skill-related vacancies across managerial occupations, suggesting that skills in this domain relate more to existing managers rather than to the recruitment of new managers into the sector. This said, most firms expressed a view that there is increasingly less quality management material available to the sector relative to the past, and that the number of new graduates into the sector is also declining.

“There are not enough people in the technikons and even of those who do graduate, many move out of the clothing sector and out of the industry...”

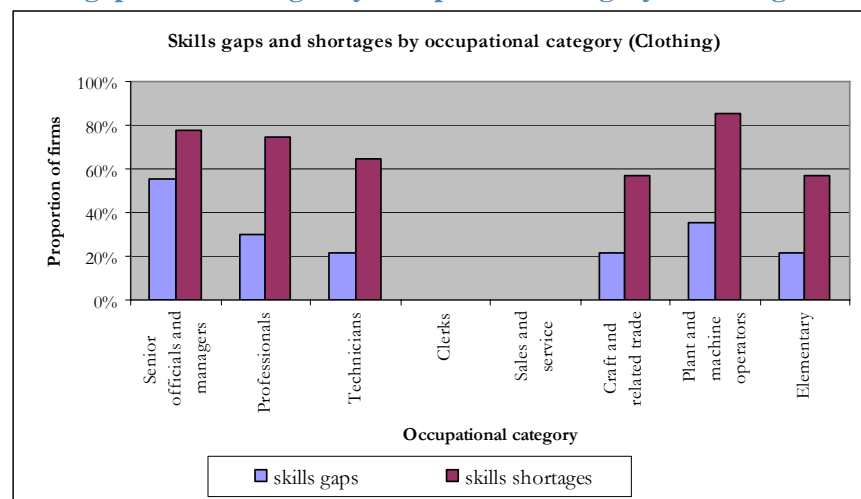
This could be a direct result of the generally negative image of the industry, as graduates opt for employment in the more glamorous, lucrative and thriving clothing retail or design sectors. On the other hand, given that most of the firms sampled are SME’s, which are undergoing a process of consolidation due to the contraction of the industry, it is also conceivable that demand for new managers is low. In addition to a lack of entry by new graduates into the sector, firms report mounting competition from other economic sectors for managerial skills given the relatively lower wages and limited career opportunities in the clothing manufacturing industry. Furthermore, possibilities for replenishing losses by poaching management skills from other sectors of the economy have become limited. Given that managerial skills are generic, this skills pool is particularly vulnerable to attrition due to skills migration making future shortages likely.

“Another question is how we offer a person who has reached the upper bound of his responsibility a career path which compares with what competition can offer to take him further up the ladder...”

## Administration and IT

No firms reported a shortage of administrative staff. What is more, when asked if they considered themselves to be overstaffed, of all occupational areas, this was the area most indicated. One large FPM with an advanced IT department reported a shortage of IT skills although the lack of reported shortages in this domain may be explained by the fact that most large companies outsource IT skills.

**Figure 33: Skill gaps and shortages by occupational category - clothing**



### 3.5.2 Skills gaps and shortages by occupation in the textiles sector

All textile firms in the sample reported their greatest skills shortages in technical areas as well as mid- and -upper management. Furthermore, firms report a large amount of “churning” in the labour pool for technical staff, since being industry but not firm-specific, these skills are transferable between firms. In other areas, such as HR, where skills are generic, firms suspect that there has been significant movement of skills out of the industry altogether.

#### Production

##### *Machine operators*

This category includes operators and assistants; knitters and assistants, and creels. Two of the firms interviewed reported a severe shortage of qualified machine operators in the industry, and particularly knitters. The one firm that did not regard the shortage as too severe did however concede that procurement of staff for these positions entailed a degree of head-hunting and wage negotiation. The reported minimum fill time for these positions varied from 2 to 8 weeks. Current shortages in firms range from 5 to 10 operators. The shortage of knitters may be explained by the fact that knitting skills are firm-specific, rather than generic, and are not directly transferable. In addition to falling numbers of operators available, firms complain about the quality of people coming forward.

“Even with head-hunting, we are having great difficulty finding knitters. The first problem lies with getting people to respond to our adverts for vacancies. And those who are responding are not compatible with our knitting style.”

#### Craft and related trades (Artisans)

All firms reported a shortage of plant mechanics. However, the shortage of high level technical skills in the textiles industry is pervasive with larger textile firms reporting massive shortages of all artisans, from electricians to welders. The shortage of artisan skills implies that wages for these people are “going through the roof”.

#### Professionals

##### *Technicians*

Technicians fall at the high end of the skills requirement although this skill is generic rather than industry specific. Despite being a generalized skill, firms reported shortages of skilled people in this area. They also recorded large discrepancies between the “qualification” and the “ability to do the job”.



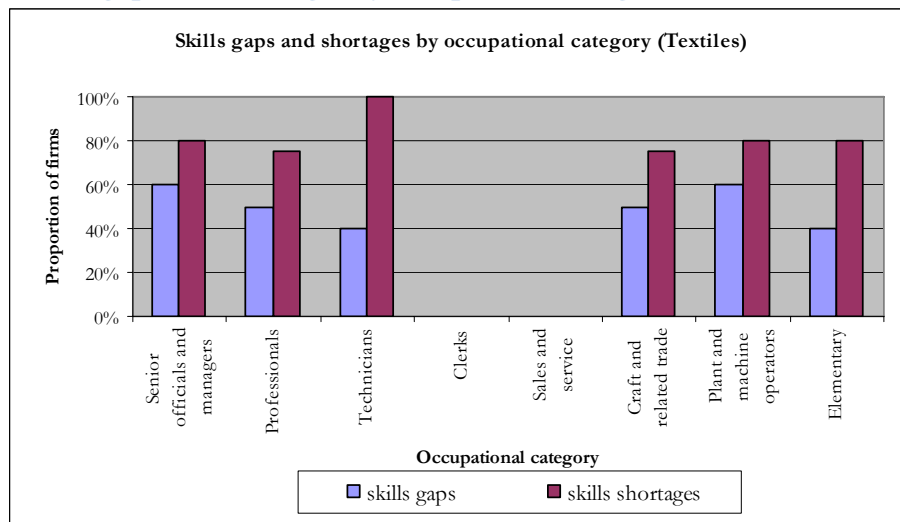
### Technologists

All firms reported a shortage of skilled textile technologists in the industry as well as skills gaps arising from a mismatch between skills required by firms and those available to them.

### Management

The shortage of management skills, particularly production managers, was the greatest area of concern for all textile firms interviewed. According to one senior firm representative, the industry took a view ten years ago to cease technical training. As a result, no new people are coming up through the system and those who currently occupy these positions are older, upwards of fifty five. Since there is a significantly large under supply of these skills, the market price for production managers is very high, which places them outside the budget of smaller enterprises.

**Figure 34: Skill gaps and shortages by occupational categories - textiles**



### 3.5.3 Barriers to maintaining a proficient workforce

When asked to identify the perceived barriers to maintaining a fully proficient workforce, a number of factors are mentioned. These include: lack of time for training, lack of cover for those who go off on training, unwillingness of staff to enroll on training programs, lack of proximity to courses, red tape, lack of suitable courses, recruitment difficulties and lack of training. The response from the firms is summarized below. Overwhelmingly, smaller firms with less than 150 employees cite lack of funding as the largest barrier. For larger firms it is a lack of time arising from the urgency with which shortages need to be addressed. In the textiles industry, the problem is exacerbated by a large older and illiterate staff component

and a low staff turnover rate. This makes it difficult to upgrade since older staff resist training. Within the sub-section of recruitment, all firms believe that the UIF and pension fund are major disincentives to work. Employment equity requirements fall under the final category of “government red tape” - half of the sampled firms find that new equity laws compromise their ability to maintain a skilled workforce.

**Table 17 : Barriers to maintaining a proficient workforce**

	Clothing (%)	Textiles (%)
Lack of funding	40	0
Lack of relevant suitable courses	80	100
Lack of suitable courses in the locality	60	100
Unwillingness of staff	0	67
High labour turnover	40	0
Lack of time for training	90	100
Lack of cover for training	10	67
Recruitment difficulties	90	100
Government red tape	50	33

### 3.5.3.1 Labour turnover and absenteeism

Labour turnover tends to be skewed upwards due to high rates of turnover amongst younger staff members. However, in two large long-established clothing firms, the HR representatives indicated a high number of older staff members leaving:

‘We have women of 45 giving a minute’s notice. This has never happened before...’

Firms reported labour turnover figures ranging between 20% and 40%. Absenteeism and late coming is also a problem in all firms, with the average reported absenteeism rate in excess of 6%. Some firms have addressed this problem by offering incentives for attendance and there is an industry-wide drive to curb it.

### 3.5.4 How does this compare with the SETA Sector Skills Plan?

- The majority of job movement is occurring at operator level and in skilled and unskilled positions but this is not due to natural attrition or rationalisation at the bottom end of the occupational sphere. Instead it appears to be caused by a massive flight of operators out of the formal and into the informal industry. Not one firm in the sample indicated that the loss of machining and operator staff is voluntary.
- The rise in the proportion of staff in the management occupational level is consistent in many cases with consolidation of the management structure in response to deteriorating market conditions.

- It is important to distinguish between skills gaps in the existing workforce which compromise the ability of people to perform to the level required by the firm and skills shortages which arise from insufficient numbers of recruits in the industry labour pool. This study has shown that the former may be come of increasing importance to firms who make the transition to WCM. If left unaddressed, these skills gaps may become skills shortages in the future.
- Skills shortages are arising not solely due to insufficient numbers of people available for work, but also relate to the quality of people available. This is due principally because there is a mismatch between their qualification and “ability to do the job”. This is particularly in respect of designers, patternmakers and technologists.
- Skills gaps rather than shortages are more of a problem at management level which has huge implications for up-skilling. Most firms believe that institutions are ineffective at aligning management training with their needs.

## Chapter 4: Skills shortages and World Class Manufacturing

Literary and empirical evidence presented in previous Chapters of this report implied that skills demand by firms is fundamentally determined by the extent to which World Class Manufacturing principles are engaged. Based on the firm's strategic vision of the future, the distinction is made between "new style" and "old style" or progressive firms. This section shows that this same differentiation between progressive and "old style" static firms can be made on another basis. In addition to shaping a firm's skills needs, its vision of the future also ultimately defines which strategy it pursues to address skills shortages and gaps. Progressive firms are more likely to recognise skills factors, such as the absence of strong management capabilities, to be a key constraint in attaining WCM and choose fundamentally different strategies to maintain or augment the skills base of their workforce in order to attain WCM than those firms who remain locked in the old mode of thinking.

In order to overcome skills gaps, firms were faced with several strategic options:-

- 1) recruit qualified people from the industry
- 2) recruit new unqualified (and mainly unemployed) people from outside
- 3) source people internally and promote them
- 4) recruit people from outside the industry with generic skills
- 5) recruit graduates from technikons and other formal institutions
- 6) outsource production to CMTs

Progressive, forward-looking firms have all but ceased to recruit people from the industry, opting instead to recruit unqualified people and train them in the new mould or to fill positions via internal recruitment and training. In effect, the fill-time for vacancies in most firms now gets translated into training time. The other traditional firms continue to recruit from the industry albeit with diminishing success.

### 4.1 Recruiting from the industry

Firms reported a low success rate from efforts to procure qualified people from the industry, especially for semi- and low- to medium-skilled staff. Numerous methods of recruitment were tried, including approaching the bargaining council and unions, advertising in the newspapers as well as community papers, and putting up posters in public areas. Some firms reported going to "extraordinary lengths" such as making announcements in church. All of

these strategies met with a low success rate. One desperate owner drives home the futility of advertising strategies:

“We advertise in the Argus and in community papers. We even went on radio at huge expense. *Not one single applicant!*”

Word of mouth has proved most successful for attracting qualified people, however even then the number falls far short of firms’ requirements. An important pattern which emerged from the interviews was the negligible role that the bargaining council plays in the recruitment of critical production staff by firms and the complete lack of assistance from the SETA.

#### **CASE STUDY 2: RECRUITING MACHINISTS FROM THE INDUSTRY**

In January, the firm needed to fill 10 machinist positions. They took the following steps:

- Contacted the bargaining council which sent a list of 30 machinists who had registered to claim benefits and were thereby supposedly unemployed and available for work.
- On contacting these people, many replied were not interested. They reported to either be waiting for their provident fund or to be leaving the industry.
- One person from Somerset West presented for an interview and was found to be unsuitable.

*This process of securing one unqualified person took approx three days.*

- The firm re-initiated its search efforts by placing an advert in the Argus. Two people responded to the advert and both were placed.

*The process of sourcing two new machinists from the industry took another 10 days,*

- The firm then resorted to recruiting by word of mouth and 8 machinists were eventually placed.

*The process of sourcing 8 machinists via word of mouth took a further 8 weeks.*

***It took nearly 3 months to fill 10 machinist positions with suitably qualified staff.***

#### **CASE STUDY 3: RECRUITING CUTTERS FROM THE INDUSTRY**

One large FPM reported that they were experiencing an increasing shortage of qualified cutters. The firm has been trying to fill positions for three cutters since July. They approached the bargaining council and received a list of 15 people. Of those 15 people, most were unavailable: “their cell phones were either off or they weren’t interested.” Of the three people who did express an interest in the position, none presented for the interview. At the time of this report, the firm was starting the recruitment process over again by placing an advert in the Argus. In total, it took almost four months for the firm to recruit one qualified cutter.

#### 4.1.1 Reasons for recruitment difficulties of qualified staff

In certain occupational areas, and in particular with regard to machinists, the labour pool is diminishing at an alarming rate - according to one firm, at 10% per year. When asked to speculate on why they are encountering such difficulties in recruiting machinists and more recently, other production staff, firms offered several explanations. In the clothing industry, it is widely thought that these people are:-

- i) Collecting their substantial provident fund payments to pay off debts, drawing UIF and living off the proceeds, and are thus unavailable for employment.
- ii) Leaving the industry to seek work in other sectors, given lower wages in the relative to other areas of the economy. Consequently, the low and declining level of interest in the sector is manifest in the low number of applicants:

“Inflation in the clothing industry is low compared with the rest of the economy, so that whilst a machinist may be well paid in industry terms, a shelf packer in the retail industry earns more in a job which has both a lower skill and effort requirement and which implies less work pressure since a machinist is generally set targets ...”

- iii) Using their substantial accumulated provident payment to set up their own informal CMT operation or simply working for an informal CMT in the neighbourhood. In the words of company representatives:

“At the end of the day, all people care about is take-home pay. So if they can work from home where they can take care of their kids and not have to expend money for travel, avoid deductions for UIF, union dues, industrial council contributions etc., they probably earn more by working on the informal sector than they do working in the formal sector.”

“Of all the thousands and thousands (of machinists) that have lost jobs, none want to come back into the formal industry. Bottom line is they get more money working for backyard CMTs than they would get working for a formal enterprise...”

“What people want is flexibility. When they join a CMT, they can work four days a week if they want to. There is very high absenteeism in CMTs for precisely this reason...”

This argument, (workers are using the substantial provident fund payments and access to UIF and hence not rejoining the labour pool, either by seeking voluntary dismissal, or following retrenchment or taking early retirement) was generally expressed in most interviews.

“Our older Coloured staff is all slowly leaving. In their exit interviews they say that they are not going to work for anyone else; they say they are just tired and they are going to get their provident fund and stay at home.”

“We think that the social structure also plays a role in that the family pools its income. So when someone gets retrenched, they see that they have done their bit and now it is someone else’s turn to work.”

#### **CASE STUDY 4: VOLUNTARY UNEMPLOYMENT OF MACHINISTS**

In 2000, one CMT retrenched 60 workers on the LIFO principle following restructuring of the workforce. It secured jobs for every employee retrenched. Of the 30 machinists retrenched, only 3 reported for work at their new place of work. They reported that they had sufficient money to live off for the foreseeable future.

Similarly, there is available evidence to support the hypothesis that people are leaving the industry completely. This has been gathered largely through exit interviews, although this information may not always be completely reliable.

The last hypothesis is the most intriguing and also the most difficult to formally test and validate. For obvious reasons, such as avoiding bargaining council detection, people do not willingly admit to informal activities. However, the important implication of the last hypothesis is that skills are not being lost the industry as a whole but merely to firms in the formal sector. Instead we are witnessing a recomposition of labour and a restructuring of the industry. This suggests that the shortage of skills in this particular occupational sphere is a formal industry and labour union problem.

#### **4.2 Recruiting unqualified people from outside**

This method of recruitment applies exclusively to unskilled and low-skilled occupational areas. All firms reported that they were supplementing their skills requirements in low-skilled positions, and importantly those for machinists and knitters, by sourcing unqualified - and often unemployed - people from outside and training them. Vacancies for ironers and other low skilled production line positions are similarly filled, given the low response rate from suitably qualified people in the industry. However, the recruitment strategies pursued by firms as well as the motivation behind the strategy differ. Twenty seven percent of firms explain the decision to recruit from outside as a voluntary move motivated by a conscious decision to move away from employing people in the old mould and instead recruit and train new people within WCM practices. For the majority of firms (64%), however, this strategy was largely pre-empted by the shortage of recruits in the industry. For 11% of firms, it is a mixture of both - these firms have introduced some WCM practices into their factory,

primarily triggered by participation in the KZN and Cape Clothing and Textile Cluster but continue to employ old-style machinists rather than go short.

Larger clothing firms have created a “feeder pool” for machining staff consisting of their lowest skilled staff, including ironers, line feeders, cleaners and layers-up. Junior machinists and cutters are sourced internally from this pool, usually against some internal assessment criteria. Recruitment for new machinists on this basis was evident in 30% of firms. Positions on the next occupational level on the shop floor – i.e. senior and multi-skilled machinists - in turn, are filled by promoting junior machinists. Case studies illustrate the different scenarios.

#### **CASE STUDY 5: MACHINISTS FROM THE “BROKEN INDUSTRY”**

One large CMT traditionally employed machinists from the industry but found that the expected increases in productivity from the level of skills was negated by low morale and that the attrition rate from these types of people is very high; 7 out of 10. Consequently, it employs them only in exceptional circumstances.

“When machinists are released into the industry, they come from what we consider the “broken industry”; they have been taught something for a year and then applied it for 17 years. They are not motivated, they are demoralised and they have a bad relationship with their boss and they don’t enjoy their work... [We] would like to recruit from outside, but there is a huge shortage of people with the right quality and mindset.”

Of central importance to this strategy is the idea of a clean slate; i.e. the lack of preconceived barriers which a new recruit brings to the job compared with someone who has become set in their ways:

“When we employ a person who has been doing 40 collars an hour for 15 years and we tell her she must do 60 collars an hour, she wants to leave. When we take a person off the street and say that we need 60 collars an hour but we will give her time to reach her target, she sees everyone else doing it and gradually she gets to 40, then 50 and then 60. That becomes the standard since she doesn’t know any different...”



### **CASE STUDY 6: RECRUITING FROM SCHOOLS**

One large FPM has the lowest entry age levels of new recruits in the industry and is making schools the primary target of its future recruitment strategy.

“I am not interested in people who have come from somebody else...I want to be involved with all the schools. Part of our recruitment plan is to get all the matriculants and school leavers in. We are already involved with the technikons, design schools and some private companies to do presentations so that we can pick potential winners.”

This strategy enables the firm to identify future “champions” but also aims to address the negative perception of the industry amongst people by presenting employment in the industry in a positive light.

Whilst exercising a preference for matriculants, new entrants are admitted into the factory as line-feeders (the lowest skills level) on the basis of scoring an A in the custom-designed dexterity test and achieving a minimum of 40% for the aptitude test. Recruitment for machinists is therefore generally an internal process. On this basis, the firm has been taking in machinists at a rate of 25 every six weeks and aims to attract at least 30 new people every day. Last year, 130 machinists were employed, a growth rate of 25%.

#### **4.2.1 Reasons for recruitment difficulties of unqualified staff**

The dominant strategy of firms to address skill shortages, especially for machinists, is to train young people up as quickly as possible. However, there are important questions around the immediacy with which skills shortages can be addressed in this manner. In general, a new machinist does not add value until she starts producing, and even as a qualified worker, takes between six and twelve months before she starts to add value. This impacts negatively on efficiency and profitability in the short term. Nevertheless, firms report a high success rate from this strategy and report that machinists coming off their training programs are better quality than those recruited from the industry. Similarly, internal promotion is currently the most immediate option open to firms to overcome skills shortages at supervisory and management level given the critical shortage of suitable qualified candidates in the labour pool. As discussed above, this may not always lead to optimal solution outcomes, especially when the position should be occupied by a formally qualified or experienced person.

Firms suggest that, despite the fabled large reserve pool of labour, the task of finding new recruits to train is not straightforward. Not least, they cite difficulties with drawing from a

labour pool of people with low levels of motivation and interest and very little work experience.

“We struggle to find new people for a number of reasons; low levels of literacy and numeracy, unwillingness to enter the industry and work in a factory, socio-economic issues such as drug abuse but also a complete lack of ambition or passion...”

For 14% of firms in the sample, all textile firms, whose remote location precludes recruitment from the industry, these issues are particularly pertinent since they increase the training time from the door to the floor.

### 4.3 Sourcing internally via promotion

Firms are filling shortages in junior and senior line, and other higher-skilled, positions through internal sourcing and promotion. Once again, the way in which firms have addressed skills shortages and gaps on this occupational level distinguishes between the progressive and regressive firm. The former - who are notably also active participants in the Cape Clothing and Textile Cluster and fully engage WCM principles - believe that they could recruit experienced staff from the outside but choose not to since these people are set in their own ways and resist change, which is the antithesis of WCM ideology. In other words, these firms believe that internal recruitment is a way to avoid future skills gaps. Under the new methodology, firms ascribe a completely new role to the “team leader” - traditionally “supervisor”

“To achieve fundamental quality-at-source, there is a fundamental need for line supervisors (aka team managers) to possess the combined skills that traditionally are associated with quality engineers and technologists. That is, they should not only be able to recognise faults but identify why the flaws occur; for instance, when the wrong thread is used. In other words, they examine the entire supply chain not just the quality of work. We need to incentivise this person by empowering them with responsibility for the entire value chain.”

In addition, talent-spotting, an integral part of firm ideology requires that the potential and aspirations of existing staff members is fully exploited by identifying suitable candidates and providing them with formal training in the required area. More evolved firms actually regard outside recruitment as a failure on behalf of the company.

“Our system is such that when we recruit from outside, it is seen as a failure of management because there is no seeding. A cleaner needs to believe that she can become a cutter...”

“From a skilled machinist, you become a supervisor. The idea is to start talent spotting right from the start to identify who will become a supervisor...”

Shortages in the design department for occupations with very high skills requirements such as sample machinists, patternmakers and in one firm, even designers, are being addressed internally by transferring the best multi-tasked senior machining staff from the line rather than by recruiting from the industry.

The other group of firms, not championing WCM strategies, has been compelled to source internally because of the shortage of industry recruits. Internal promotion is the most immediate way to overcome skills shortages at supervisory and management level given the critical shortage of suitable qualified candidates in the labour pool. Although much of the reason for taking this route appears to lie with the high market price for formally qualified staff, particularly for patternmakers and designers. Furthermore, promotion is not always accompanied by additional training or formal skills development to effect the transition.

Only one firm in the sample, a textile firm, indicated a preference for external sourcing, especially where scarce skills are concerned. In this particular firm, internal applicants are considered but a greater premium is placed on external applicants.

“If we have a new type of demand from the market, say due to new product development, we try to recruit from within the firm but we take into account more mitigating factors from internal applicants than external ones. So, we give internal applicants first preference and try to determine whether they can acquire the skill in a reasonable time.”

#### **4.4 Recruiting people from outside the industry generic skills**

This type of recruitment is generally done through an agency but was not evident on a large scale. Only two firms, one textile and one large FPM, reported that they were considering people from outside the industry with transferable skills to fill vacancies - in the former case, for site technicians and in the latter, for a senior production manager. Neither firm reported difficulties with obtaining people for the job but said that the difficulty lay with training them in a specific way. On the whole, firms took the view that someone with generic skills would require firm- or industry-specific training, where resources would be better directed toward training existing staff members who are already familiar with the business.

#### 4.5 Recruiting graduates from technikons

Sixty seven percent of firms satisfy their requirement for formally qualified staff – essentially designers - by recruiting from technikons, usually through agencies. This is in preference to enrolling members of their existing workforce on higher education programmes. Twenty five percent of firms in this group are progressive and choose this method of recruitment simply because they believe that they can source adequately qualified staff in this way. The majority of the remaining firms, however, exhibit an old fashioned management style and do not have a further education policy for fear that that people will leave once they are qualified. These firms report insufficient numbers of graduates in the technikons and suggest that even those who do graduate move out of the clothing industry.

The larger firms in the sample (37%) recruit BSc. and BCom. university graduates for junior management positions, although they reveal a growing preference for the former.

#### 4.6 Outsourcing to CMTs

Sixty percent of FPMs reported that they were side-stepping shortages of machining staff by out sourcing an increasing portion of their production to CMTs. The proportion of production outsourced ranges between 20% and 90%. This strategy involves hiving off non-complex, cost-based garments to the CMTs whilst maintaining the complex garments in-house. It is regarded by all who pursue it as key to their future survival in a shrinking market, since it permits expansion and contraction of the workforce in tandem with seasons.

“The rise of CMTs is very important given that the clothing business is so seasonal. Businesses try to hang onto their core staff like sample machinists and patternmakers and let the others go because labour is a fixed cost. The only way to survive is either by having a brilliant production manager, at exorbitant cost, or to retrench and CMT. We took the latter option. We now have the same amount of people employed as before but as owner-managers.”

Furthermore, indications are that this trend is escalating and is unlikely to reverse even if shortages are addressed since it also provides firms facing production capacity constraints with an expansion path.

“We could run 60% of production through CMTs. In the last 6 months, increased turnover by 15% with a 25% growth in the proportion outsourced to CMTs. We had 4 jacket lines, now we have 7; 3 we’ve given out to CMT. In other words, the growth has been accommodated entirely through the CMT industry.”

Although outsourcing is an important future strategy for some firms, it does have limitations where firms are supplying large chains due to problems with reliability and quality which are generally associated with CMT operations.

## Chapter 5: Training and the SETA

Firm level interviews reveal that the outcome of the combined effects of skills shortages in the industry and the transition to WCM practices is an increased level of training in firms. In 26% of firms, who are also the larger firms with greater financial resources, this increase has been significant, involving a massive up-scaling of training facilities. However, even in smaller firms, there is evidence that firms are addressing skills shortages and skills gaps holistically through internal recruitment and training. One important purpose of this study is to evaluate the usefulness and effectiveness of the SETA in addressing skills shortages in firms in terms of the training assistance and support which the SETA provides to firms. A prevalent view is that SACTWU's modus vivendi on the body undermines the credibility of the SETA as a training and skills development initiative, illegitimately channels needed sector skills training funds for union training purposes, and exposes it as a political tool which is being used to solve compliance issues. This view is reinforced by the fact that the SETA is marshalling its resources around low-end skills development (such as ABET), despite explicit requests by firms for high-level technical skills training which was clearly communicated through the Customised Sector Programme.

### 5.1 Composition of the CTFL SETA

The Clothing, Textiles and Footwear SETA has three stakeholders, the respective sectors, who each hold 16.6%. The remaining 50% is held by the union body, SACTWU. Strategic collaboration with any other sector gains SACTWU a controlling share. All firms pay the SETA a skills development levy (SDL) equal to 1% of their wage bill. Fifty percent of this forms the Mandatory Grant which refunds training expense and is claimable on submission of the Workplace Skills Plan (WSP) and Annual Training Report (ATR). Five percent of the funds collected are paid to SARS, 10% is paid toward administration and 15% is paid toward the National Skills Fund for national skills development projects. SACTWU claims a flat amount of R2 million from each sector for training of its shop stewards. The remaining funds are distributed between the sectors in proportion to their contribution. This forms the discretionary fund which is used to fund projects to address "scarce skills" as identified by the SETA; these projects include i) skills programs (short courses), ii) learnerships (allocated to companies) and iii) bursaries (allocated to individuals). All funding is dependent on Skills Development Participation which prescribes that firms allocate 3% of turnover to training and maintain a complement of learners equal to 3% of the total workforce.

## 5.2 Participation by firms on SETA programmes

### 5.2.1 ABET Training

Firm interviews reveal that the SETA is directing a large bulk of its resources toward the provision of Adult Basic Education Training (ABET), including assistance with HIV and life skills. This is largely in response to the chronically low levels of literacy and numeracy among low-skilled factory workers. ABET is funded out of the discretionary fund.

The response to the ABET program was mixed. Twenty seven percent of firms expressed approval for SETA-funded provision of ABET whilst the majority of firms regard ABET as a waste of SETA's limited resources. Seventy four percent of those firms who support the SETA's provision of ABET in principle experience practical difficulties in terms of motivating staff enrolment for ABET and accessibility of courses.

“We initiated ABET training this year after establishing a high level of illiteracy among our staff, mainly among our elementary and machine workers. We notice large observable differences in capabilities between those who have ABET and those who don't. But we experienced difficulty in getting people to respond since we have an older workforce; 17 people are on the course where all 134 should be on it.”

“We conduct a quarterly ABET audit to assess literacy and when we have a new influx of staff we try to do an assessment to determine who has ABET; but this is not voluntary because people feel uncomfortable with this type of thing.”

“We get ABET training through the SETA but there are problems with the fact that the courses have to be done during working hours due to domestic and travelling issues and it is difficult to take people off the floor during the day.”

In 36% of firms, the need for ABET provision by the SETA has been made redundant by internal screening mechanisms and admittance procedures which result in new applicants having Grade 10 or above in the first place. However, there is also sentiment that, whilst ABET is important, it has run its course. The industry needs to refocus and adopt a new strategy to deal with literacy and numeracy issues. Recruiting matriculants is an answer adopted by some firms but others have found this problematic since they leave due to negative perceptions of the industry's future. Thirty six percent of firms vocalise the need for greater assistance with technical training than ABET. This applies particularly to small firms in the sample who find the quota on learnerships restrictive.

“The limitation on learnerships is a big constraint. We can do ABET training through the SETA but I want technical training.”

### 5.2.2 Skills programmes

Skills programs are short courses which provide basic training in the required field. Fifty seven percent of firms currently have staff enrolled on skills programmes, mainly to train as mechanics. Reimbursement is claimed in terms of their WSP since the small cost involved (R2000) does not warrant applying for a specific grant.

### 5.2.3 Learnerships

The SETA offers technical training to the industry through learnerships for machine operators. There are two categories of learners; 18.1 learners, who are already employed by the firm and 18.2 learners, who are not permanently employed by the company. There are two levels of technical training, basic and advanced multiskilling. Both courses are conducted by SETA-accredited service providers. The 18.2 course lasts 12 weeks and equips learners with basic theoretical and practical knowledge with the primary aim to address skills shortages. The advanced course has a small theoretical component but mostly involves on-the-job training for six months and aims to address skills gaps in the workforce. The firm may claim reimbursement for the training facilitators; however it is restricted in the amount of funding that it may claim for the learners. As a general rule, a quota of 20% of the permanent workforce applies and the level of funding received is determined by the past number of learnership grants. A firm gets R15,000 per 18.1 learner up to 10% of its workforce and R7,500 per learner thereafter, up to a maximum of 20% of its workforce. The important point which emerges from the dialogue in this regard is that this quota is a one-off, “forever” amount. The quota on 18.2 learners is not defined and grants for this category of learner appear to be made at the SETA’s discretion.

Twenty seven percent of firms, and exclusively those employing in excess of 1000 workers, conduct a greater proportion of their technical training through in-house programs, which are SETA-accredited but not SETA funded, than through learnerships or other SETA grants. The proportion of training through the SETA amongst these firms ranges from 65% to none at all. One large FPM currently conducts all of its training outside of the SETA structure. These firms have expanded their training capacity significantly over the past two years, particularly amongst machining staff and spend a minimum of 4% of their payroll on training.

“We tried to recruit from the industry. After two months without success, we reverted to plan B, to train ourselves. We increased our training capacity in our two skills



centres which we usually use for multi-skilling and decided to use the centres as basic training schools to get people for our new lines.”

“When our HR department was overhauled a year ago, we did an internal skills survey and found skills shortages in all areas. There are no skilled people available in the industry, so the strategy to overcome this shortage is to train people ourselves.”

Large firms do not find the restriction of 20% problematic. Of greater concern to these firms is the limitation on the number of learners that may be trained at any one time due to space and availability, and the length of time that it takes for new recruits to qualify on a SETA course. Consequently, the immediacy with which firms require skills is not being adequately addressed through SETA programmes.

“The SETA has a learnership program for machinists; we get R7,500 per learner as well as R200,000 for a service-provider. But it took 16 weeks to train these learners where we are doing the same amount of training in a month.”

“Only some of our line-feeders go on the full SETA course. 20-25 people who are line-feeders enter our training centre but not on learnerships. Another 20-25 people go on the SETA learnerships courses but we cannot afford in terms of time to do all our training through learnerships.

For smaller firms, the quota of 20% is a binding constraint to training. On a workforce of 100, SETA entitles a firm to train 20 machinists through 18.1 learnerships although it may apply for discretionary funding for 18.2 learners. All of the smaller firms in the sample - with 150 people or less - conduct all of the formal training of their workforce through the SETA and train their machinists exclusively through SETA learnerships. Eighty percent of these firms exhausted their 10% quota, some as early as 2002. Principally due to financial constraints, no formal training has taken place since this time, although some on-the-job training has occurred. Having been granted additional quota this year, these firms are resuming their learnerships but face similar problems in the future, predicting that they will have used up their 20% quota as early as next year.

“The problem with the SETA is the quota on funding. We get our staff all motivated, they see people coming back from the learnerships feeling empowered and then the SETA says that there is no more funding.”

The upshot of the foregoing discussion is that most firms regard the SETA as a thinly disguised business tax.

In addition to the restriction, there are numerous other problems with the current mechanism. First, although the idea behind the 18.2 learnerships is job creation since firms are supposed

to place all of their 18.2 learners upon qualification, firms report that employment is not guaranteed. Only 36% of firms apply for learnerships in parallel with actual placement opportunities within their organisation whereby the learnership guarantees a job. In 27% of firms, there is evidence of exploitation of the learnership system and of learners who command a minimal wage during their apprenticeship. The percentage of learners actually placed within firms ranges between 5% to 80%. However, there is one caveat; even those firms who place people on learnerships with genuine intentions of providing employment have no alternative but to send them back home if the vacancy is filled. There is no industry system which disseminates information about qualified learners who require placement. Every firm that does learnerships should be obliged to circulate a list of learners available for uptake; otherwise the resources may be lost to the industry as a whole.

“The problem lies in the fact that we train learners with specific skills, in our case narrow fabric weaving, and then utilize them in another capacity, for instance, as a packer, so they don’t stick around. The fact that the learnership does not guarantee them a job is a big problem.”

Second, the average attrition rate amongst 18.2 learners is 40%. One possible explanation for this is that firms are enrolling people on learnerships in order to become equity compliant, whilst these types of people may not be the most suitable candidates.

“The problem with the learnerships is that because they are free and people are not paying for them out of their own pocket, they are not committed. We have learners that have completed 75% of the course and then drop out because they get pregnant or decide that it is not what they want to do.”

Third, 37% of firms question the quality and content of the 18.1 program which claims to achieve multi-skilling capabilities on 3 machines in 5 operations. According to one official, proper training on one operation takes six months, but more than this, the theoretical foundation cannot be laid in four weeks;

“...[c]ertain things must be embedded...You could maybe achieve three operations, but five is not possible...We are looking to set up our own internal training program which is better aligned with skills shortages.”

Finally, whereas payment for learnerships was previously made in two equal payments, one up front and the second on completion of the course, it is now made in dribs, coming as a 20/40/40 split. This increases the financial burden of training on the firm, at least in the near term, which many smaller firms can ill-afford. Firms also report that recently the SETA has been slow to make reimbursements in terms of their WSPs and discretionary grants which is aggravating already disenchanted senior officials.

#### 5.2.4 Grants and bursaries

Toward higher skills development, the SETA pays grants for specific further education and training diplomas which carry national certification by the Department of Education. The purpose is to promote people from the FET to the HET band and to fund skills development where skills supply shortages exist as identified by the National Skills Audit. These include training for patternmaking and design (multi-skilling), technology (quality control), general management (management), human resource relations (resource and labour relations), marketing (marketing and sales), clerical skills (administration), bookkeeping and accounting (financial), education and training (ETD) and IT (IT). The parentheses indicate the specific categories in terms of which grants are awarded. Forty percent of firms receive grants of R15,000 per learner for training in one or more of these categories. Where the grant is a bursary, educational institutions are directly reimbursed. Twenty six percent of firms receive funding for BTech students at CPUT, although they report that the SETA was reluctant to fund this, possibly due to the higher rate of reimbursement for these learners (R40,000).

“We had to do a lot of fighting to get this. They (the SETA) said that they didn’t fund BTech students but they were talking about a new type of technologist so we pushed it from that side by saying that we believed that a person on that level has to have a BTech qualification.”

There are, however, a number of issues surrounding the quality and content of courses run by technikons and consequently the quality of graduates that are being produced. Whilst 90% of firms are satisfied that skills shortages for designers are being adequately addressed by formal institutions, this is not the case for patternmakers. As a result, skills shortages in these areas persist and translate into excessively high asking wage rates.

“The technikons are generating such ineffective patternmakers that they are driving the price up to R19,000.00 per month. You need a world class accreditation to justify this salary. Supply and demand has driven the price far in excess of what is being delivered in terms of skill quality. Technikons are producing basic garden variety patternmakers, so good ones are scarce.”

There are similar mis-alignments between the quality of technologist graduates and those sought by firms. As discussed above, the new methodology envisages a technologist function that surpasses one of mere quality assurance and encompasses an understanding of the entire value chain. The industry view is that technikons are basing their curriculum on the old methodology, not on WCM principles, which creates a mismatch between the skills required by firms and those acquired through formal learning. In essence, the “piece of paper” does

not accurately reflect an “ability to do the job”, which is causing firms to place increasingly less weight on formally acquired qualifications and increasingly more on experience and practical know-how. This problem is possibly due to institutions not having a strong relationship with all industry players i.e. lecturers seldom enter the industry environment and thus are unaware of new methods, products etc. In an effort to marry the theoretical and practical elements of graduate training and to equip graduates with on-the-job experience, textile firms have invited the technikons to allow graduates to do technical training on their factory floor and expressed overwhelming support for a distance-based learning initiative that would allow individuals to learn on the job while also completing a tertiary degree.

One solution volunteered by a large CMT is to cut away from the SETA and deal with the skills shortage independently.

“I would like to open a separate academy just for patternmakers. We should be taking all the old patternmakers and pay them to pass on their knowledge to students for a few hours a day so that it isn’t lost to the industry. We should also have a process whereby patternmakers are graded, so that a grade A patternmaker can earn R20,000 and a grade D can earn R10,000.”

### 5.3 General comments on the SETA

When asked to comment generally on the SETA’s usefulness, the response was decidedly negative. Among the smaller firms, the greatest problem area is the restriction on the number of learnerships. This is further complicated by SETA’s employment equity agenda embedded in the learnerships. Smaller firms tend to have a high proportion of Coloured machining staff for which they urgently require funding whilst Africans are mainly in unskilled positions. The greatest issue for larger firms is the waste of resources - the SETA is giving them money to do what they would do anyway, i.e. invest in training for their workforce. A major source of dispute is the allocation of the discretionary fund – i.e. allocating SACTWU a substantial sum for shop steward training from SETA funds which are meant for up-skilling workers to make the industry more competitive. Firms legitimately feel that such utilisation of SETA funds for shop steward training does not upgrade the industry’s competitiveness. However the SETA’s consensus based governance structure makes firms feel they have no choice – if they do not support this project they fear being blocked on other firm based training projects.

The division of funding between the respective sectors for training in Further Education (FET) and Higher Education (HET) bands is also a prickly issue. Clothing firms feel their sector receives a disproportionately small share of funding relative to the textiles industry

“The way in which the system operates at present is not to attack the skills problem since the funding gets diverted along the way. It’s like a bucket with holes in it, by the time you get to funding skills development, there is nothing left.”

Accordingly, complaints against the SETA were lodged overwhelmingly by clothing firms. Textiles, it would appear, have few problems with the SETA.

A major complaint is the lack of provision in the current SETA funding structure for high-level technical skills training. This places the onus of up-skilling the bulk of their workforce is squarely upon firms. The following case study crystallises the idea that the main thrust of the SETA is toward the provision of basic education, rather than higher skills development.

#### **CASE STUDY 7: ADVANCED SKILLS DEVELOPMENT**

One large FPM, and notably one which has extensively incorporated total quality management and WCM practices into its operation, has recognised the need for a leadership development programme which facilitates the identification of champions. This is largely to mitigate the negative effects of predicted skills gaps and shortages which a full transition to WCM implies. The process of earmarking potential candidates for senior management and leadership positions commenced at the beginning of this year with the launch of an advanced business Math course and is currently in the process of recruiting its second wave of learners. Although only 40% of the first intake successfully advanced to the second round, all participants have benefited from exposure to higher Math principles and see value in the course. Most of those who were unsuccessful the first time have re-enrolled on the second course.

Since there is no specific grant for this type of training in terms of the SETA grant structure, the firm has received no reimbursement from the discretionary fund for this training; and neither has reimbursement been forthcoming as a non-specific grant from the NSF since these skills are not identified by the SETA as scarce skills. The firm may claim for this training in terms of its WSP as “training which has been done” in terms of which some reimbursement may be expected.

“We run a special advanced business Maths course. Out of the 40 people on the Maths course, no one got funding because there is no specificity grant that this belongs to or any other grant that this falls under.”

From an industry perspective, the SETA is not adequately addressing skills shortages in firms. Interviews with individual firms suggest that the SETA is providing insufficient technical training assistance, choosing instead, to marshal its resources around low-skills training. This is a direct contradiction to the stated objectives of the National Skills Plan, which is to provide resource assistance to firms to overcome critical and scarce skills shortages in the industry. Some senior firm officials argue that the SETA and its funding programmes is little more than a weapon to wield against non-compliant firms. However, it is argued that this is done with little regard for the ability of small firms to comply given the rising cost of labour that came off the back of the extension of NBC agreements to non party firms in the industry. Firms report that a large part of the clothing manufacturing industry is unable to adjust to the ever increasing regulation and costs associated to it.

“ In present industry support structures SMMEs are starved by Big Business and SACTWU of resources and training desperately needed to improve their efficiencies as a consequence of their non-compliance. These efficiencies are sorely needed by them to become sustainable before they can afford the cost of the regulation imposed on them. It's a catch 22 situation. The purpose is to ensure that through staving them of resources, the compliance managers of the bargaining council and the threat of jail, they will eventually be forced to comply. The fact is as much as they want to... they have no means too...”

## Chapter 6: The Impact of China Quotas on Skills

The China Restraint Agreement was supposed to:

- increase local production,
- increase employment, and
- move local firms up the value chain and lead to greater innovation.

This section summarises feedback from firms regarding the effectiveness of quotas in achieving these objectives. The key questions to be addressed are whether, as result of quotas, i) firms have increased their skills demand which would translate as increased employment and indicate a growing supply base, and ii) firms have changed their skills requirements, which would be the case if they have changed place in the value chain.

### 6.1 Output

On the whole, the impact from quotas on clothing manufacturing firms has been negative in terms of output. Twenty six percent of firms report a contraction of between 20- 40% of output (in units). Forty eight percent report unchanged volumes. This is attributed to a complete over-stocking in the retail chain as a result of forward-buying in anticipation of quotas, which was widely predicted.

“We were just starting to grow nicely when our whole ability to expand was curtailed. In six months, we have shrunk by 30%; not only did we not increase orders, but we lost our existing supply base because we couldn’t fill orders. ”

“If not for quotas, we would have had two full production lines with 20 people per line. Instead we have seen a 20% drop in output because our design house cannot source the fabric.”

The countervailing view among manufacturers who are hardest hit by quotas is that there is no garment that can be made locally that is not available everywhere else in the world. This simple fact increases retailers’ bargaining power to the extent that pricing has become a unilateral process. Furthermore, 26% of firms believe that retailers are not committed to supporting the local industry and will follow the best price. They argue that the only benefit to sourcing locally is that retailers have the option of stopping production midstream to restyle. However, for this convenience, retailers offer no premium, which leaves local firms to compete on the basis of labour alone. This is impossible given current constraints imposed by unions on wages and working hours.



“We sell labour with the constraints and costs of producing a brand. We design a garment, source the fabric and carry all the costs of getting it to market, but at the end of the day all that we sell is labour...If we weren’t unionized, we would survive. And, if we had a piecework system, our productivity would go through the roof, but the bargaining council would shut us down.”

“All we hear now from the retailers is: “We can import this garment at x cost. Can you meet it?” They only favour local suppliers for speed to market and because they have control over the product which allows them to make changes early in the process but all the whiles they are squeezing companies down the value chain out of business.”

Twenty percent of firms have historically been supported by local retailers and expect this to continue in the future once restraints have been lifted. These firms generally produce in those categories that are not under quota. Of those clothing manufacturers who have experienced a drop in turnover, this was not exclusively due to fabric shortages brought about by quota on fabric, but in two cases, due also to quota on fully assembled garments. This reveals a failure of the DTI to acknowledge that some manufacturers are also importers who would be negatively impacted by quotas. Furthermore, 60% of those firms who are unaffected by fabric shortages have experienced a drop in the quality of fabric available from both local and foreign suppliers as well as increasingly poor delivery times. This points to mounting problems in the supply chain which cannot be directly addressed by quotas.

Textile firms, who should be the primary beneficiaries of fabric quotas and expected increases of at least 5% due to quotas, report no significant increase in their order base for the first six months of the year. Although, there is some evidence that the restraints are starting to have some effect now with projections for the second half of the year showing between 10 and 40% growth on last year.

There are some exceptions – three firms indicate that local orders have increased in the past six months; however, even these cases require qualification. Of the three firms concerned, one reported that, although orders had increased, they were very low priced and that the substantial talk around orders has generally not translated into actual orders. In the second case, the growth is a continuation of a trend that preceded the quotas. In the final case, the firm regained a lot of orders lost to Chinese competition but regards this as a temporary success and has attributed it to the low profitability associated with producing the garment. Furthermore, most of this growth was accommodated through outsourcing to CMTs.

A key finding is that all firms, without exception, regard *skills* to be their *greatest* constraint to growth, not the availability of fabric or the potential to secure orders. Perceptively, skills shortages have prevented local manufacturers from exploiting the improved bargaining position afforded to them by quotas. Even the most severely affected firms believe that a skilled workforce could have mitigated the negative impact of quotas. Quotas simply make a bad situation worse.

## 6.2 Employment

With regard to employment, 13% of firms have expanded their workforce, 40% reported no changes to its workforce at all, and 47% of firms reported that in the last six months, either a reduction in the workforce or put workers on short time, or both. With regard to the last group, it is important to note that most of the downsizing was not wholly or directly the result of quotas which occurred exclusively in non-core production areas. For one firm, it was part of a strategic move to shrink its merchandise design band. In the remaining firms, it was largely driven by a consolidation of the management function in response to a general downturn of the industry. However, the real impact of quotas on employment is better measured by the “opportunity cost” to employment – i.e. by estimates of much employment firms believe they could have created had quotas not been imposed. By these counts, the cost is significant.

“We were growing nicely before quotas and we could have employed more people, but the quota on fabric has cut all possibility of increases.”

Even in the two exceptional cases, where the firm has actually expanded its workforce, this growth is either not attributed to quotas,

“Our growth is entirely due to our adoption of WCM practices; it is a classic product of proper value chain alignment and forging collaborative relationships with other stakeholders.”

or is expected to reverse once quotas have disappeared.

“The quotas have helped us with our political battle to grow employment, but since it has occurred exclusively in an area which competition from Chinese imports is most fierce, we cannot guarantee that it will continue once quotas go.”

### 6.3 Skills

It is not always possible to isolate changes in skills needs at the firm level but two clear patterns do emerge: Firstly, the prophecy that quotas would assist in driving firms up the value chain has been largely unfulfilled - there is no significant evidence that firms have upgraded to more complex garments. Manufacturing firms who were importing high minute-rate garments from China to supplement their local range have simply switched to alternative sources, mainly Bangladesh, Malaysia and India. As have the retailers. Similar to clothing, there is no evidence that the constraints have encouraged innovation or investment in textiles. This is an expected outcome given that the amortization period on this type of investment is twenty years whilst the quotas have a two year window. None of the textile firms in the sample have increased their capital investment in the past six months and neither do any have any plans to do so. Whilst all of the textile firms have increased their prices in the past six months, this has been attributed to rising import costs of chemicals and dyes.

There are only two cases where firms have changed their output mix as a direct result of the restrictions. In neither case has the shift been toward more complex, higher-end garments or is the trend expected to last beyond quotas. Both firms concur that they been forced into niche markets in which they will not be competitive in an open economy. Both cases demonstrate the unintended consequences of quotas for local clothing manufacturers and illustrate how the quota allocation mechanism inherently favours firms who historically have been least supportive of the local market.

#### **CASE STUDY 8: FAULTY QUOTA MECHANISMS**

Seven years ago, one large CMT identified a gap in the market for an underwire bra, a garment which requires specific competency. It developed a product line with two bra lines, underwire and T-shirt to sell in combination with two of their established underwear lines, the g-leg and panty. The firm subsequently landed a contract to supply a large retailer contingent on its ability to supply a combination pack which included a padded bra. This latter component incorporates seam-free technology which is available exclusively from China. The firm began to import padded bras in February 2006. When quotas were introduced in January 2007, since they were a new entrant with a historically low import volume of this category, the firm was awarded zero quota for padded bras. The quota was awarded mainly to one large established company who had previously imported large volumes of padded bras. However, since there was a large amount of unallocated quota for panties, the firm was awarded substantial quota for this category which it did not need. The firm lost its contract with the retailer and had to retrench 15% of its intimate wear workforce, the equivalent of 8% of its total workforce. This was the first retrenchment that the firm had witnessed in 18 years of operation. For the first six months of this year, solely because of quotas, the firm's average monthly turnover has fallen by 52%.

#### **CASE STUDY 9: TRANSITORY IMPACTS OF QUOTA**

One large FAPM has significantly expanded its schoolwear division as a direct result of quota on "woven shirts" which was sufficient only to cover its customer's requirements for outerwear. In addition to this, the firm has opened a new factory to manufacture male underwear; a product which it previously imported and did not make locally. This was a strategic decision pre-empted by uncertainty surrounding the amount of quota that the firm would be granted as an importer of this product. The project has cost billions of Rands and has created 200 new jobs. However, in neither case are the gains expected to be sustained once the constraints are lifted. In the latter case, in particular, the project is expected to generate a net financial loss to the company and the firm anticipates that the employment gains will also be reversed.

## Chapter 7: Conclusion

The clothing and textile industry in South Africa developed and prospered in the insulated environment of import substituting industrialisation. However, this has changed fundamentally over the past decade as South Africa re-entered the world economy. Unfortunately it did so at a most unpropitious time, since the new patterns of globalisation, rise of global value chains, and Asian dominance have resulted in a wholesale restructuring of the international clothing and textile industry. Hence the domestic industry has been exposed to the icy winds of major trade liberalization and rapid reduction in tariff protection. Consequently the clothing and textile sectors have been heavily affected by globalization and undergone major restructuring.

Apart from a brief period at the turn of century, the industry has not used this to create an export oriented platform, and except for a few niche market sub sectors, it has struggled to compete internationally with the rise of Asian global dominance. A combination of factors – the rapid appreciation of the Rand, AGOA's unfavourable rules of origin specifications for South Africa, the inability of the domestic fabric manufacturers to adequately supply local exporters, paralysis of government industrial policy to support the industry, the comparative cost of labour, skill shortages, and the inability to rapidly enough move onto a world class manufacturing (WCM) production platform – has resulted in a substantial drop in exports and the marginalization of the export sector, especially in respect of clothing.

As a consequence, since 2003, the industry as a whole, but most particularly the clothing sector, has become very dependant on the domestic market. However this has not been a safe haven either as import penetration of garments and fabric from China and South-East Asia has rapidly accelerated over the past few years. Many of the same factors, apart from the AGOA issue, that have constrained exports apply to the industry's ability to compete with imports. Important amongst these is the issue of skills gaps and shortages.

Globalisation has increased pressure on manufacturers to compete not only on price but also on the basis of productivity, quality, delivery and design. This transition implies significant changes to firms' skills mix. The South African clothing and textile industries lag behind their international counterparts in respect of conversion efficiencies and other key indicators of WCM. Employers and managers identify skills shortages as the most significant constraint to growth. In short the clothing and textile industry is in something of a crisis.

A lack of confidence in the future of the clothing and textile industry permeates South African society as well as many segments of the industry, affecting investment, training and recruitment of skilled personnel. However, this lack of confidence is not wholesale, as some firms are using the threat of crisis to also take advantage of new opportunities. They are restructuring to learn about and institute WCM operational practices, as well as up-skilling and upgrading their skills profile.

This report investigates why skills continue to be a major stumbling block in firms' transition to WCM. It focuses on the issue of skills shortages, assessing where the problems lie, and evaluating the institutional efforts by government (through the SETA) and industry (at firm and value chain level) to address these.

The CTFL SETA identified scarce skills at high occupational levels, and in particular, in high-end technical and management areas. At intermediate levels, it asserted that there is a shortage of artisans and skilled workers, in particular, machine mechanics. No scarce skills shortages were detected in the lower strata of the occupational sphere. In summary, the contention of the SETA is that only high-end skilled occupations are in demand in a sector which otherwise faces growing unemployment, although passing reference is made to the need to multi-skill operators in the Sector Skills Plan. This is seen as consistent with patterns of job vacancies which are concentrated in low and semi-skilled positions.

The five most critical skills identified by the SETA were technical training, production, HR management, multi-skilling and quality control. Seven out of ten critical skills are technical and production related. In particular, the SETA postulated a very high skills demand for technologists, performance improvement technologists and production managers and a high skills demand for assessors and trainers. This transposes on the supply side into medium skills supply for technologists, low skills supply for technical trainers and very low skills supply for production managers, performance improvement managers, work study officers and artisans. This postulates a supply of scarce skills inadequate to meet demand.

The Sector Skills Plan of the CTFL SETA developed a strategic response to skills shortages in the industry representing a series of interventions to support the industry over the medium and long term. A strategic aim was to foster a world class workforce which drives efficiency

from management to sweeper. Intensified training of workers and the eradication of unsustainable employment practices such as non-compliance and non payment of bargaining council levies being instrumental to achieving this goal.

The first priority identified is to increase the number of learnerships to allow 20% of the workforce retrained annually to fully upgrade it by 2010. The second priority intervention is the up-skilling of middle management and increasing the number of technologists in SETA Centres of Excellence, as well as re-aligning curriculums with industry needs. From a supply perspective, the SETA emphasises the need to focus on upgrading the educational level of the workforce through the provision of ABET to improve the access of the current masses in the FET band to workplace qualifications in the HET band. This accords with the aims of the CSP to move the sector into the production of high quality, high value-added products with high knowledge content for sustainable future growth.

The analysis of the industry dynamics and the results of interviews with a sample of twenty clothing and textiles manufacturers, however, provided a different slant on the skills problem in the industry. Firms are distinguishing between *skills gaps* and *skills shortages*, which refer to fundamentally different skills problems. The former indicates a shortage of potential or available candidates in either number or quality, or both. The latter refers to the skills base of the existing workforce falling short of firm's needs.

Firms are differentiated by their strategic approaches to address skills shortages and gaps based on their response to the restructuring of the industry rather than by firm size or market orientation. In particular, forward-looking firms who fully embrace WCM principles in their operational performance platforms recruit new staff using criteria based on the new methodology. These firms have all but abandoned recruiting from the industry and either source internally or recruit new people from the outside with the potential to fit into the new mould. Skills gaps are of more immediate concern than skills shortages. Furthermore, future skills gaps are avoided by accompanying recruitment and promotion with appropriate and timeous training.

On the other hand, firms trapped in the old methodology and trying to reproduce an historically obsolete operational platform continue to try and recruit machinists and production staff from the industry, albeit with diminishing success. They are compelled to fill

vacancies in higher occupational categories by promoting existing staff into more senior positions. In this scenario, in contrast to that above, internal recruitment *creates* skills gaps since people are promoted without the requisite attributes or capabilities to become effective managers. Skills shortages are therefore an immediate concern for these firms and translate into skills gaps when addressed internally.

Scarce skills are defined as occupations in which supply is insufficient to meet demand. So defined, scarce skills ignore the possibility that shortages are arising, not from the fact that there are insufficient numbers of qualified people available, but instead because the people available do not fit the new mould. Alternatively, progressive firms are redefining the skills profile of these occupations and skills shortages are arising in relation to the fact that people in the labour pool conform to the old profile with old skills requirements.

The data derived from the firm interviews also throws up new insights into the scale and scope of the skills issues. The CTFL SETA identified the major skills problem in the clothing sector to be in the professional, managerial and high-end occupations, postulating that lower end activities occupations such as machinists would be easily sourced from the growing pool of unemployed. The interviews reveal that whilst there are significant skills gaps in the former occupations, there is a major skills shortage in respect of machinists. The CTFL SETA's argument that there are no scarce skills at operator level is hence contentious. Clothing firms overwhelmingly report difficulties with recruiting qualified machinists and plant operators from the industry such that demand far outstrips supply.

Employment and vacancy patterns in the South African clothing and textiles industries are also not completely reconcilable with worldwide trends in labour rationalization and retrenchment. Evidence from firm interviews suggests that (particularly in the clothing sector) some unemployment in lower occupational spheres, and a large part at operator level, is voluntary - motivated by debt and the ability to access accumulated provident funds, accessing the UIF system, and the growth of the informal economy in the clothing sector providing the ability to maintain a certain level of disposable income. Hence, whilst many firms have been forced to close and retrench workers, there has been a concomitant (but not equal) rise in demand by surviving firms for semi-skilled workers, particularly machinists, which is not able to be met through recruitment in the labour market.



Although quantitative data is not available, there appears to be a significant movement of workers at the operator/machinist level into the clothing informal economy due to more proximate job opportunities closer to their homes, and access to immediately available disposable income. This implies that the employment problem at this level is fundamentally a *formal* sector problem. And in fact, a large part of the issue is that this is actually a SACTWU union problem that has been superimposed on the industry, where the loss of union membership presents itself as a loss of clothing sector employment. It would seem that net involuntary job loss in the sector is significantly less than the official numbers imply. Instead what is being witnessed is the twin processes of the restructuring of the industry and a recomposition of labour in the sector.

Whilst the policy implications of the WCM tendencies are somewhat clearer, this is not to say that this recomposition of labour does not present the industry with a serious policy issue. There is an urgent need to understand the dynamics of the rise of the informal economy, its scope and limits, as well as the nature of the linkages to the manufacturing and retail firms in the formal economy. However in order to undertake the necessary research and present appropriate policy proposals, it is necessary to break with the historically dominant perspective in the sector and not treat these processes as historical aberrations or deviances from a 'fordist' path. These processes represent new trajectories, which are sometimes in consort with each other, other times running in isolationist parallels, and often based simply on cost cutting, price based production at loggerheads with the requirements of WCM conversion efficiencies.

With regard to meeting the skills problem in technical, professional and management occupations, apart from low number of new enrolments at universities and technikons in courses related to clothing and textiles manufacturing which keeps graduate levels low, firms report that recruiting "new blood" is also frustrated by the poor quality of graduates who do enter the industry. In particular, there appears to be a mismatch between qualification and the "ability to perform". This is blamed largely on misalignment of the curriculum with the practical needs of firms. Most firms used the KZN and Cape Clothing and Textile Clusters as a source of training for their medium to high-skilled staff. They cite the clusters as a primary motivation to introduce WCM principles into their firms.

There is a significant degree of unhappiness in the clothing sector, but not necessarily echoed in the textile sector, with regard to the operating activities of the CTFL SETA. These firms argue that the allocation of funds through the SETA is inconsistent with the rhetoric contained in the Sector Skills Plan. The latter gives recognition to the urgency of up-skilling and multi-skilling the workforce, whilst the former privileges the provision of basic skills and education. Furthermore, with regard to critical skills, firms claim that whilst the SETA recognises the shortage of high-end critical skills in production, it gives insufficient emphasis to the need for low-end skills embedded at operator level.

The CTFL SETA's focus on ABET and learnerships as the dominant intervention in respect of lower end training does not receive support. A disproportionate amount of funding is allocated towards the provision of ABET, which has played a role in the past but now seems to have run its course, and it is no longer clear that it should form a current priority. Instead the available funding should focus on the scope to improve productivity through competitiveness training.

Furthermore the learnership program is not fulfilling their aims - in quantity trained, quality of training, availability of funding, and in learnership graduates being taken into the sector into sustainable long term formal sector employment. To date, learnership graduate rates fall far short of the target of 30, 000 learners per annum. Clothing firms were very critical of the restrictions on the amount of funding available (pegged at a one off 10% of one's workforce). Most firms have exhausted this funding, and the introduction of a new set of criteria which allow for an additional 10% but at only half the funding, only act to further starve smaller firms of vital training resources.

The shortage of artisans has been identified by all and sundry as a critical and scarce skills shortage. However there is a major problem with the industry training new artisans. It is not being adequately dealt with and the current functioning of the SETA program (as in most industries) is simply not addressing this problem. The slow apprentice graduate rates are a major contributor to the chronic shortage of technical skills in the industry.

A majority of firms expressed deep dissatisfaction with the manner in which the SETA has dealt with the prioritisation of training of shop floor workers. When resources are scarce interventions need to be prioritised. In the context of the massive problem of skills facing the

industry, the critical importance of raising the skill levels in production, and the scarce available resources to undertake this task, the allocation of SETA funds for shop steward training (albeit to sensitise them to the importance of skills) seems highly problematic indeed. There seems to be little rationale for prioritising the allocation of much needed funds to the union rather than firms themselves to undertake competitiveness training of their workers.

In the eyes of many of the clothing firms, the role of the CTFL SETA in this process is further brought into question by its decision to deny access to SETA training funds to firms who are non-compliant in respect of their Bargaining Council obligations. It is generally highly problematic and inappropriate, and runs counter to any sound industrial policy, to use one separate and independent institution to solve problems encountered in another. If the clothing National Bargaining Council has a massive problem of non-compliance (as is clearly reflected in the data), then it should solve that problem on its own and within its own parameters. It is simply illegitimate to attempt to use the constitutional and operating provisions of the CTFL SETA to do so, and it is unacceptable that the government and industry partners have chosen to acquiesce to, or agree with, union demands in this respect. This is all the more so given the critical and crying need for training in the industry, especially when the firms being penalised are the smaller enterprises struggling to remain afloat in the face of international competition.

In conclusion, it is clear that there is, and has been for some time, a skills crisis in the industry. There is a crying need for a large scale government funded training program to fundamentally raise and upgrade skills levels. Moreover, firms require different skills interventions and a 'one size fits all' programme is doomed to failure. Finally the current institutional structure sucks up resources and does not provide adequately for the diverse and concrete needs of the industry. Whilst textile firms and the union may be content with the current structure, the SETA in its current form, constitution and role is not addressing the diverse needs of the clothing sector. This is not a situation unique to this sector, and many commentators have pointed out problems in addressing the skill needs of industry.

A recent intervention in the Financial Mail by Kaplan (2007) raises some pertinent issues which are highly relevant and worth consideration. After noting that SETAs are nothing more than government bureaucracies which tie up much needed managerial resources, divert much needed financial resources, and impose an unnecessary bureaucratic layer (with onerous

and time consuming administrative requirements) between firms and training providers/activities, Kaplan proposes a flexible way of ratcheting up training provision:

‘An alternative system would allow firms to determine their training needs without intercession of any state bureaucracy. Firms could approach any licensed training institution, public or private, and determine their training programme. Firms would pay the training provider for their services. Training expenditures would be specified in the firm’s tax return. The firm would receive a tax deduction – at a rate determined by the government subsidy. Subsidies might vary - smaller firms, for example, might attract more subsidy. Government would be a postbox – payments made by firms to licensed training providers would automatically attract subsidy. Government would not scrutinize training programmes. Its substantive role would be confined to licensing training institutions, with considerable saving of scarce management resources.’

In the final analysis the future of the clothing and textile industry will depend on two processes: Firstly, its ability to radically and rapidly increase production capabilities so that individual firms become internationally competitive, and secondly, create successful value chain alignment so as to achieve systemic competitiveness. Amongst other things this will require a radical rethinking of how to address the skills gaps and skills shortages currently manifesting themselves. Without this the clothing and textile industries will not be able to take the upward step along the ladder to international competitiveness.

## References

1. AsgiSA Annual Report 2006
2. Barnes, J, and Esselaar, J. (2005) "Customised Sector Programme: Clothing and Textiles Draft Research Report," BM Analysts, Report prepared for the DTI.,
3. Barnes, J. (2004), "An aggregate and sub-sectoral analysis of the South African textiles industries' value chain competitiveness", B&M Analysts Research Report, for the Textiles Federation of South Africa, 18/10/2004.
4. Barnes, J & Johnson, J. (2005), "Laggards or leaders? A comparative analysis of the Western Cape clothing industry's value chain competitiveness", B&M Analysts Research Report, for the Cape Clothing Cluster and the Western Cape Provincial Government, 17/01/2005.
5. Bernstein, A and Johnson, S (2007) "Skill needed to face up to real needs." *Business Day*, March 1, 2007.
6. Bernstein, A and Johnson, S (2007) "False beliefs that cloud the skills debate." *Business Day*, March 1, 2007.
7. Bernstein, A and Johnson, S (2007) "Welcome to a clear skills strategy." *Business Day*, March 5, 2007
8. Bester, M. (2004) "An outcomes-based training model for textile technologists." MTech: Education Thesis. Unpublished. Cape Technikon
9. Business Alliance, (2005) "Sector Development Strategy for the South African Clothing and Textile Sectors," 2nd December, *Submission to the DTI*.
10. Cassim, R, Onyango, D. and Van Seventer, D. E., (2004) "*The state of trade policy in South Africa*". Johannesburg: Trade and Industrial Policy Strategies.
11. Clo-Trade, HS Code Import Data Base 2007.
12. COMTRADE (2006) United Nations Commodity Trade Database. Access to COMTRADE was provided through TIPS: <http://www.tips.org.za>. Accessed 20 September 2007.
13. CTFL SETA Sector Skills Plan 2005 – 2010 (5<sup>th</sup> Ed), November 2006
14. CTFL SETA (2004), "An assessment of skills needs in the clothing, textiles, footwear and leather sectors", CTFL SETA Skills Audit.
15. Daniels, R (2007) "Skills Shortages in South Africa." DPRU Working Paper 07/21, DPRU.
16. Einhorn, G (2007)" The South African Consumer Impact of Finished Clothing Imports: Current Trends and a Sub-Sector Analysis. Honours thesis, Department of Economics, University of Cape Town.
17. Gibbon, P. (2002) 'South Africa and the Global Commodity Chain for Clothing: Export Performance and Constraints', CDR Working Paper No 0.27; CDR: Mimeo.

18. Investment Climate Assessment, South Africa. World Bank, 2002.
19. Jipsa Annual Report 2006
20. Kaplan, D (2007) “ Determining the extent of the Skill Shortage” BUSINESS REPORT, May 2007
21. Kriel, A. (2006) Morris’ job data not authoritative. Business Report, 10 October.
22. Definitions of Critical and Scarce Skills [online], Available from <http://www.safcec.org.za>
23. Morris, M., Barnes, J. and Esselaar, J.,(2007) “Globalisation, the Changed Global Dynamics of the Clothing and Textiles Value Chains and the Impact on Sub-Saharan Africa” UNIDO, Vienna
24. Morris, M., Barnes, J. and Esselaar, J., (2004) “An identification of strategic interventions at the Provincial Government level to secure the growth and development of the Western Cape Clothing and Textiles Industries”, Report compiled for the WCPG Department of Economic Development & Tourism, Benchmarking and Manufacturing Analysts, Durban.
25. Morris, M. and Edwards, L. (2006). “Undressing the numbers: The employment effect of import quotas on clothing and textiles.” Journal of Development Perspectives.
26. Morris, M. (2007) *'The rapid increase of Chinese imports: how do we assess the industrial, labour and socio-economic implications?'* Paper at the 20<sup>th</sup> Annual labour Law Conference, Sandton Convention Centre, 4<sup>th</sup> July 2007.
27. Quantec SA International Trade Data Base 2007. Access provided through <http://www.quantec.co.za>
28. Ralis (2004), “Observation and Results from the Rapid appraisal of Local Innovation Systems (RALIS) exercise conducted in the Clothing and Textile Sectors of the Western Cape, South Africa”, Mesopartner: Local Economic Delivery.
29. Rasool, H (2006) “Re-positioning Textiles Apprenticeship Training in South Africa: policies, practices and future directions for the CTFL SETA” September 2006 Unpublished. Durban.
30. Roberts, S. and Thoburn, J. (2002), “Globalisation and the South African textiles industry”, Globalisation and Poverty, Discussion Paper 9.
31. Robbins, G., Todes, A. and Velia, M. (2004), “Firms at the crossroads: The Newcastle-Madadeni clothing sector and recommendations on policy responses”, An initiative of the KZN DEDT and Newcastle Municipality.
32. Salinger, B. Lynn et al (1999) ‘Promoting the Competitiveness of Textiles and Clothing Manufacture in South Africa’ African Economic Policy Discussion Paper 32.
33. U.S. International Trade Commission (2004), “Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market”, Volume I, Investigation No. 332-448.
34. “An assessment of skills needs in the clothing, textiles, footwear and leather and furniture, furnishings and interior industries.” Chapter 12 in the UK Skills Dialogue (2004)

35. Wesgro (2002), “Background Report on the Clothing Industry in the Western Cape Province of South Africa”, produced for Wesgro by Eckart Naumann.

### **List of Experts consulted**

1. Jack Kipling, Clothing Export Council
2. Hassim Randeree, CloTrade
3. Johann Baard, Cape Clothing Association
4. Dr Justin Barnes, Benchmarking and Manufacturing Analysts
5. Prof David Kaplan, Graduate School of Business, University of Cape Town
6. Participating clothing and textiles manufacturers