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# SECTOR-WIDE ASSESSMENT STUDY TO DEVELOP A "BLUE PRINT" FOR THE IMPROVEMENT OF THE TEXTILE AND CLOTHING INDUSTRY IN NIGERIA

**Final Report** 





November 2003

CONTENT	PAGE
Foreword	
1. Objectives of the study	12
2. Executive summary and conclusions	18
3. The global environment of the textile and garment industry	20
4. The raw material supply in Nigeria	75
5. The Nigerian spinning, weaving and processing industry	79
6. The Nigerian garment sub-sector	123
7. The revival of the Nigerian textile Industry	171
8. Blue Print / Action Plan	199
9. Next Steps	238

CONTENT	PAGE
Foreword (History, previous reports, glossary and acronyms, tables and figures)	11
1. Objectives of the study	13
1.1 The textile value chain	16
1.2 Value addition in textiles, made-ups and garments in the Nigerian context	16
1.3 Some basic definitions frequently used in the study	17
2. Executive summary (see separate Report)	18
3. The global environment of the textile and garment industry	20
3.1 Global international trade	23
3.2 Global trade in textiles and garments	24
3.2.1 Global trade in textiles	24
3.2.2 Global trade in garments	26
3.3 The driving forces of global trade in textiles and garments	28
3.3.1 FGN policies – The example of India	28
3.3.2 Demand, technology and international communications	29
3.4 Impact of international strategies pursued by retailers	31
3.4.1 The retail revolution	31
3.4.2 Non-store retailing	32
3.4.3 Supply chain strategies	34
3.5 Impact of international strategies pursued by textile equipment suppliers	41
3.6 Impact of international strategies pursued by dyes and chemicals suppliers	42
3.7 Trends in final consumption	43
3.7.1 Evolution of the World population growth	43
3.7.2 World GDP by regions	44
3.7.3 Evolution of the fibre demand	45
3.7.3.1 Natural fibres versus MMF	47
3.7.3.2 The evolution of MMF	49
3.8 The importance of trade pacts in the international trade flow of textiles and garments	51
3.8.1 General overview	51
3.8.2 The MFA and the ATC	53
3.8.3 Trade pacts in Sub-Saharan Africa	54
3.8.4 Trade pacts in which Nigeria participates	55
3.9 The global spinning and weaving industry	57
3.9.1 Flow of investments	57
3.9.2 Installed world capacities - short-staple spinning and weaving	58
3.9.2.1 Installed capacities - ring spinning short-staple	58
3.9.2.2 Installed capacities - rotor spinning	60
3.9.2.3 Installed capacities - shuttle less looms	60
3.10 The future outlook	63
3.10.1 Mill fibre consumption and final demand	63
3.10.2 Demand and location of textile industry	65

3.10.3 The development of technical textiles	66
3.10.4 Impact of the ATC phase-out	69
3.10.5 Impact of China's entry to the WTO	72
3.10.6 Global financing markets	73
3.10.7 The emerging competitive scenario	73
511017 THE Unitelling Competitive Section 1	
4. The raw material supply in Nigeria	75
4.1 Cotton production	76
4.2 Exports	77
4.3 Imports	77
4.4 System of cotton farming	77
4.5 Staple length	77
4.6 Grading of cotton	78
4.7 Inputs	78
•	
5. The Nigerian spinning, weaving and processing industry	79
5.1 Textile capacities installed in Africa	82
5.1.1 Spinning	82
5.1.2 Weaving	82
5.2 Importance of the Nigerian textile industry	84
5.3 Capacities installed in Nigeria	85
5.3.1 Short-staple spinning sub-sector	85
5.3.2 Weaving sub-sector	85
5.3.3 Processing sub-sector	87
5.4 Category-wise production imports and exports	89
5.4.1 Production focus	89
5.4.2 The Nigerian fabric production in the West African and global context	90
5.4.2.1 The Nigerian fabric production within West Africa	90
5.4.2.2 The world printing production	90
5.4.2.2.1 Global printing production	90
5.4.2.2.2 Printed fabrics by application - Worldwide	91
5.4.2.2.3 Top countries in printed fabrics	91
5.4.2.2.4 Printing production in Africa	92
5.4.2.2.5 Printing production in Asia	92
5.4.2.2.6 Printing production in Middle-East	93
5.4.2.2.7 Printing production in South America	93
5.4.2.2.8 Printing production in Western Europe	94
5.4.2.2.9 Printing Production in Eastern Europe	94
5.4.2.2.10 Printing production in the USA	95
5.4.2.2.11 Subdivision of textile printing production based on substrates	96
5.5 Location and structure of the Nigerian textile industry	96
5.5.1 Location	96
5.5.2 Total number of important mills	97
5.5.3 Degree of integration	98
5.5.4 Trend analysis of the fabric production, exports and imports in Nigeria – 1998-2002	98
5.5.4.1 Local production of textiles	98
5.5.4.2 Import of textiles	99

5.5.4.3 Export of textiles	99
5.5.4.4 Mill fibre consumption	100
5.5.4.5 Mill wise fabric production	100
5.5.4.6 Wax prints	100
5.5.4.7 African prints	101
5.5.5 Summary of the Nigerian textile industry	102
5.5.5.1 The Nigerian textile industry in a nutshell	102
5.5.5.2 Analysis of the textile industry along the value chain	102
5.5.6 Installed capacities, capacity utilisation and replacement value of textile industry	
5.5.7 Quality Standards	104
5.5.7.1 Yarn and Fabrics	105
5.5.7.2 Cotton	105
5.5.7.3 Recommendations	105
5.5.8 Human Resources	105
5.5.8.1 Recommendations	105
5.5.9 Textile Education	106
5.5.9.1 YABA College of Technology-Department of Polymer and Textile Technology	106
5.5.9.2 YABA College of Technology-Department of Industrial Design in the School of Art, Design	106
5.6 Benchmarking Nigerian cost factors with a panel of countries	108
5.6.1 Cost of power	109
5.6.2 Cost of raw water	109
5.6.3 Cost of steam	
5.6.4 Labour costs	110
5.6.5 Interest / depreciation / inflation	111
5.6.6 Corporate tax	111
5.6.7 Import duties 5.6.8 Local duties and taxes	112
5.6.9 Foreign investment policy	112
5.6.10 Export financing	113
5.6.10.1 Export Credits	114
5.6.10.2 Export Credit, Global Trends	114
5.6.11 Age structure of the machinery installed in the Nigerian textile industry	115
5.6.11.1 Ring spinning – Short staple	115
5.6.11.2 Open end spinning	116
5.6.11.3 Shuttle less looms	117
5.6.11.4 Shuttle looms	118
5.6.11.5 Summary comparison between Nigeria and the reference countries	118
5.6.12 Mill working hours / year	
5.6.13 Cost drivers in spinning, weaving and processing	119
5.6.14 Positioning of the Nigerian textile industry	120
,	122
6. The Nigerian garment industry	123
Preface	123
6.1 The Nigerian garment sub-sector	125
6.1.1 Introduction	125
6.1.2 The garment industry sub-sector	126
6.1.2.1 Number of companies	126
6.1.2.2 Products	127
6.1.2.3 Raw materials overview	128
6.1.2.4 Strengths and Weaknesses of the Ready-Made Garment sub-sector	129
6.1.3 Distribution	129
6.1.3.1 Fabric and Garments: materials flow through the sub-sector and to the Domestic Market	/
6.1.3.2 Supply of garments to the consumer market	130
6.1.3.3 T-shirts: Market supply and demand	131

6.1.3.4 Socks: Market Supply and Demand	132
6.1.3.5 Artisan Textile Companies: e.g. ABA	133
6.1.3.6 Home Textiles/Made-Ups	134
6.1.4 A ready-made garment industry in Nigeria	135
6.1.4.1 Advantages and Disadvantages of a RMG Industry in Nigeria serving the	135
Domestic Market	
6.1.4.1.1 Advantages	135
6.1.4.1.2 Disadvantages	135
6.1.4.2 Advantages and Disadvantages of a RMG Industry in Nigeria serving the	136
Export Markets	130
6.1.4.2.1 Advantages	136
6.1.4.2.2 Disadvantages	136
6.1.5 Export trade zones – Calabar Free Trade Zone (CFTZ)	138
6.1.6 The global markets for garments	139
6.1.6.1 Imports and Exports – Foreign Trade	139
6.1.6.2 Textile and Garment exports (= textile and garment imports)	141
6.1.6.3 Changing Global Location of the Garment sub-sector and the value of	142
Foreign Direct Investment (FDI)	172
6.1.6.4 Effect of ending MFA Quotas and the start of the New WTO Market	143
Environment	143
6.1.6.5 AGOA: The African Growth Opportunities Act (2000)	144
6.1.6.6 Examples of 3 garment exporting countries in a nutshell	146
6.1.6.6.1 Lesotho – an "infant example of the 5 years"	146
6.1.6.6.2 Madagascar – a "recently established example of the last 10 years	146
6.1.6.6.3 Bangladesh – a ,,mature garment exporting country, dating	
from the 1970s'	147
6.2 The way forward : An export-oriented, ready-made garment industry for Nigeria	150
6.2.1 Introduction	150
6.2.1.1 Why garments form Nigeria	150
6.2.2 Inherent ingredients for an RMG Industry	150
6.2.2.1 Key Ingredients	150
6.2.2.2 Fibres	151
6.2.2.3 Primary Textiles Sector	151
6.2.2.4 RMG production for export	152
6.2.2.5 Regional Trade Pacts (RTPs) and Free Trade Agreements (FTAs)	152
6.2.2.6 Local Support Strengths for a Nigerian RMG Industry	152
6.2.2.7 Conclusion	153
6.2.3 Scenario options	154
6.2.3.1 Issues	154
6.2.3.2 Option 0 – Address the issue of illegal imports before the textile and	154
garment industry is killed off - To be undertaken in any event	

6.2.3.3 Option 1 – Local RMG Investments for the Local Market – Clusters	155
6.2.3.4 Option 2 – Local / Foreign Investment in Polyester Production	155
6.2.3.5 Option 3 – Foreign Investments – Export-Oriented Companies	155
6.2.3.5.1 Why foreign, private entrepreneurs should invest in an RMG	156
business in Nigeria	
6.2.3.5.2 Knitted Garment Company – based on imported knitting yarns	156
· · · · · · · · · · · · · · · · · · ·	158
6.2.3.5.3 Socks Company – based on imported, fine count cotton yarns	156
a variety of other yarns	150
6.2.3.5.4 Woven Garments Company – based on imported finished	158
woven fabrics	
6.2.3.5.5 Conclusions	159
6.2.4 Strategic Recommendations	161
6.2.4.1 Ten Strategic Recommendations for FGN	161
6.2.4.2 Attracting Foreign Investors	163
6.2.4.3 Further Consultancy Projects to assist in fine-tuning and implementing the Strategic	164
Recommendations, under new contracts	
6.2.4.3.1 Task Force	164
6.2.4.3.2 Attracting Foreign Investors	164
6.2.4.3.3 Other Projects	164
7. The Revival of the Nigerian Textile Industry	171
7.1 Overview of the operational environment	172
7.2 Overview of the key issues	173
7.2.1 Issues relating to the local market environment	173
<del>-</del>	173
7.2.1.1 Widespread smuggling	
7.2.1.2 Import of 2 <sup>nd</sup> hand cloth	176
7.2.1.3 Firm price ceiling for African prints	176
7.2.1.4 Duties and tariffs	177
7.2.1.5 Corruption	177
7.2.1.6 Neighbouring markets	178
7.2.1.7 Issues relating to the FGN policy framework	178
7.2.1.8 Issues raised by the Technical Committee	178
7.2.2 Issues relating to the Nigerian infrastructure	179
7.2.2.1 Electrical power supply	179
7.2.2.2 Power supply disruption	179
7.2.2.3 Voltage fluctuations	179
7.2.2.4 Fuel oil supply	180
7.2.2.5 Diesel oil supply	180
7.2.2.6 Heavy fuel oil supply	180
7.2.2.7 Water supply	180 180
7.2.2.8 Road transport	181
7.2.2.9 Communications 7.2.3 Issues relating to the financing of the textile industry of Nigeria	181
7.2.3 issues relating to the inflationing of the textile industry of Nigeria 7.2.3.1 Working capital cycle	181
7.2.3.2 Cost of finance	182
7.2.3.3 Long terms loans	182
7.2.3.4 Banking sector lending aversion	182
7.2.3.5 Bank of Industry	183
7.2.3.6 Financial situation of the industry	183

7.2.3.7 Profitability	183
7.2.3.8 Investment plans	184
7.2.3.9 Exchange rates	184
7.2.3.10 Inflation rates	185
7.2.4 Issues relating to the rising costs	185
7.2.4.1 Cost of cotton	185
7.2.4.2 Cost of electricity	185
7.2.4.3 Cost of water & effluent	186
7.2.4.4 Cost of fuel oils/steam	186
7.2.4.5 Labour costs	186
7.2.4.6 Cost of interest	186
7.2.5 Issues relating to the cotton base	187
7.2.5.1 Cotton contamination	187
7.2.5.1 Cotton contamination 7.2.5.2 Evolution of the Nigerian cotton price	187
7.2.5.3 Ginning	188
7.2.5.4 Pending policy issues	188
7.2.5.5 Swiss Consultants report – Summary and conclusions	189
7.2.5.6 NACOTAN	190
7.2.5.7 Cotton improvement programme	193
7.2.5.8 NTMA representatives recommendations	193
7.2.5.9 Conclusion	194
7.2.6 Polyester production	195
7.2.7 Issues relating to the export of Nigerian textiles	196
7.2.8 The view of the Nigerian textile industry stakeholders	196
7.2.9 Conclusion on the operational environment	197
8. Blue Print / Action Plan	199
8.1 Focus areas	200
8.1.1 Local market environment / FGN policies	201
8.1.2 Infrastructure issues	206
8.1.3 Raw material base	208
8.1.4 Exports	209
8.1.5 Rising costs	210
8.1.6 Financing issues	212
8.1.7 Garments (see chapter 6)	216
8.2 The way forward	217
8.2.1 The market size for fabrics in Nigeria	217
8.2.2 Exports / Imports in Nigeria	218
8.2.3 World exports in cotton textiles	219
8.2.3.1 Yarns	219
8.2.3.2 Grey cotton fabrics	221
8.2.3.3 Processed fabrics	222
8.2.3.4 Home textiles	223
8.2.3.5 Cotton textiles target markets	223
8.2.4 The role Nigeria could play in World textile exports	224
8.2.4.1 Cotton yarn	224
8.2.4.2 Grey cotton fabrics	225
our our city containing	

8.2.4.3 Processed cotton fabrics	226
8.2.4.4 Cotton home textiles	226
8.2.5 Export targets	227
8.2.6 Basic strategic building blocks for textile sector strategy	228
8.3 Conclusion	235
8.4 Implementation of Blue Print for the Nigerian Textile and Garment Industry	237
9 Next Steps	238
9.1 Identification of the Training needs of the Nigerian Garment Industry	240
9.2 Guided Study Tour	279
9.3 Investors Forum	281

### Glossary and acronyms

**lm** linear meter

**bn** billion

**mn** million

MMF man-made fibre

**CAGR** compounded annual growth rate

mt metric ton

**FGN** Federal Government of Nigeria

MFA Multi-Fibre Arrangement

**Pcs** Pieces

**CMT** Cut Make Trim

**Euromed** Eastern Europe, North Africa, Turkey

**APS** African prints

**US**\$ US Dollar

N Nigerian Naira

#### Forword

This Report presents the major findings and recommendations of the Gherzi/Unido Study on the Nigerian Textile and Garment Industries. The Executive Summary of this report is presented in a seperate volume.

The numerical data presented in this document are based on a wide variety of sources including WTO, UNCTAD etc, past Gherzi studies, Gherzi interviews in Nigeria with industrial companies as well as institutions and banks. Companies interviewed were chosen in close co-operation with the industry association, NTMA.

With 350 consultants, offices in Zürich, Milano, London, Istanbul, Bombay, and activities in more than 120 countries around the world, Gherzi Textil Organisation Zürich is since 1929 a leading consultancy in textiles and clothing. The firm employs a multinational specialist disciplines. The firm has acquired across the years a unique expertise in the preparation of sector studies for many countries, on behalf of national FGN, industry associations, the World Bank, etc. Recent sector studies include Tunisia and Brasil. Gherzi has also acquired a considerable experience in Africa with assignments in Egypt, South Africa, Ghana, Tunisia, Maroc and last, but not least in Nigeria.

1

# OBJECTIVES OF THE STUDY

#### 1. Objectives of the study

As stipulated in the Terms of Reference, the main objective of this project is to critically assess the textile and garment industry in Nigeria.

The outcome of the study will be a strategic **Blue Print** to enhance the competitiveness of the textile sector in all its subsectors such as:

- The cotton subsector
- The textile subsector
- The garment subsector

Special emphasis is given to the following tasks:

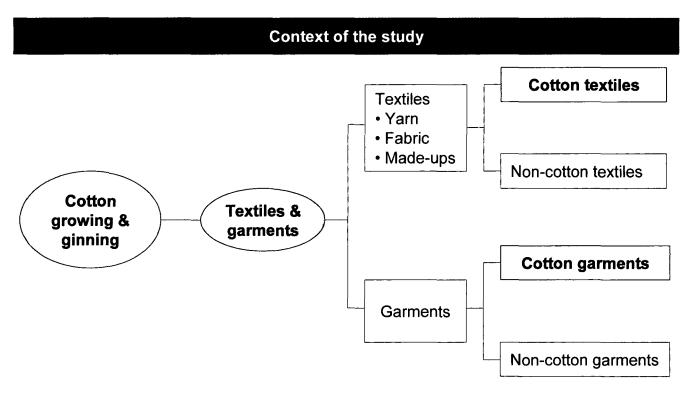
- To assess the reasons of the downward trend in the textile industry and the impact of smuggling on the sector performance
- To benchmark the Nigerian Textile Industry with competing countries
- To make concrete proposals on remedial measures for improving the short and medium term performance of the textile and garment industry
- To identify the strategic options available to achieve exports of US\$ 1 bn
- To indicate which interventions by the FGN are required to eliminate distortions in the policy framework and in implementing the recommendations of this study
- To assess the potential Nigeria has for the creation of a garment industry
- To prepare a Strategic Blue Print for the revival of the industry and to enhance its competitiveness within the world textile einvironment
- The Blue Print should also outline the FGN goal to increase exports to restrain the textile and garments trade deficit and increase significantly the sectors employment.
- Nigeria has many of the prerequistes needed for developing an successful textile and garment industry: a huge growing domestic demand, availability of well priced raw materials, abundance of a young and relatively cheap labour force and a well established tradition in textiles. The evidence of this is provided by the existence, in every textile subsector, of companies that meet the highest world standards. Unfortunately these companies are constrained by a number of factors.
- It is, we believe, the first time that FGN, the industry and all the other main stakeholders have agreed to find a common policy platform through the UNIDO/Gherzi study.
- Although several points remain controversial, there is, we believe a substantial consensus on the broad objectives and strategies proposed. This is therefore an opportunity that cannot be missed. The positive energies of the whole country, entrepreneurs, workers, FGN need to be channelled and converted into action in the next few years to ensure the future viability of the textile industry.
- The "Revival Programme", if implemented, will allow to achieve significant improvements in industry's performance by the year 2005 as follows:

- 1. Objectives of the study (cont'd)
  - 57'000 jobs protected
  - Secured captive market of 250'000 tons of raw cotton for growers
  - 20% increase in industry output means additional:
    - 100mn metres
    - 60'000 tons of raw cotton
    - 100'000 jobs created in cotton farming and in the textile industry\*

    - \$30 mn exports
      - N200-mn revenue for FGN
  - The Creation of a garment sector in 5 years could result in:
    - 75'000 jobs
    - \$ 500 mn of exports p.a. (year 5)
    - \$ 250 mn of FDI
  - \* There are at present 250'000 cotton farmers in Nigeria employing 500'000 labourers.

The context of the study is primarily towards opportunities and challenges in cotton growing, the textile and garment production and exports from Nigeria.

Therefore, it addresses the following areas:



The wider context of the study has to assess:

#### The wider context of the study

The issue of illegal imports which leads to unfair competition along the textile value chain in Nigeria

WTO regulatory changes with their impact on the Nigerian industry

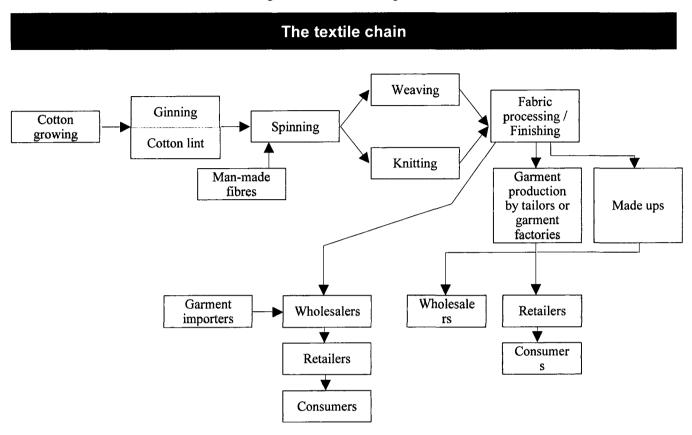
The export opportunities through AGOA which have to be exploited

New incentives given by FGN which should boost exports and help to revive the sector



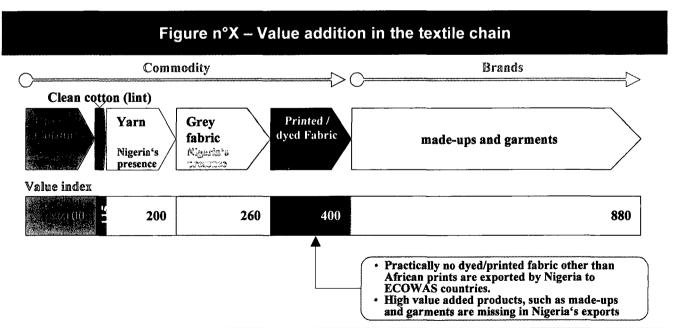
#### 1.1 The textile value chain

The textile value chain has the following value addition stages:



#### 1.2 Value addition in textiles, made-ups and garments in the Nigerian context

The following table is meant to illustrate the actual value addition along the textile chain in Nigeria and Nigeria's participation.



#### 1.3 Some basic definitions frequently used in this study

The process by which cotton or man-made staple **Spinning** fibres are transformed into yarn The process by which the yarn is transformed into Weaving fabrics The process by which the fabric is: bleached **Processing** dyed printed... and finished The process through which the yarn is interlaced into a Knitted knitted fabric and then sewn into T-shirts, underwear, products sportswear, etc... The process by which fabrics are made into home Made-ups textiles (bedsheets, table linen, terry towels, etc...) The process by which woven or knitted fabrics are Garmenting made into trousers, shirts, blouses, dresses, etc...

2

# EXECUTIVE SUMMARY AND CONCLUSIONS

								·		
2.	Executiv	e summar	y							
A	separate	Executive	Summary	Report	has	been	prepared	(see	separate	Report)

3

The global environment of the textile and garment industry

#### 3. The global environment of the textile and garment industry

In this chapter we review the present international situation and future trends as a backdrop to understand the market's driving forces that shape the evolution of the global textile- and garment industry.

The textile industry is evolving world-wide in three directions:

First movement : Consolidation of the industry

#### **Consolidation**:

A strong consolidation process is under way at all stages of the textile chain, from fibre production to retail. With the exception of the US situation (where consolidation has already taken place) the textile sector is still very fragmented in almost all countries. Economies of scale, traditionally related to investments in production technology, have become a determining factor in many corporate activities like sourcing, marketing, management processes, finance.

Second movement: Integration of industry and distribution players

#### Integration :

Integration between different stages of the textile chain may provide great advantages in terms of speed of response to market demands and suppression of non-value-added (or duplicated) activities along the chain. These may impact on such items as product development, sampling, sales organisation, marketing and promotion, administration, quality control, productivity, sales volumes, leftovers of finished products and raw materials. A successful integration strategy, that is usually labelled as Efficient Consumer Response, may involve cost advantages up to 25% of total cost. Integration may take place both in the form of strategic alliances between companies at different stages of the textile chain, and through mergers and acquisitions. The number of textile companies across the world which are investing in clothing and retail is in fact rapidly increasing. Parallel to that, Efficient Consumer Response is becoming a common strategy among companies of high wage countries as a way to counteract low cost competition.

Third movement : Globalisation of trade and exchange

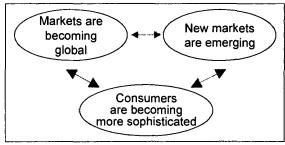
#### Globalisation :

The two components of this macro-trend are the globalisation of markets and the regionalisation of sourcing. While textile consumption in industrialised countries (USA, Europe, Japan) is generally stable or declining, new markets are emerging in Asia, South America, Eastern Europe and the Middle East, characterised by the growing demand for quality goods. The globalisation of major brands as well as retail outlets is clearly visible from Shanghai to Berlin, from Dubai to Buenos Aires. This phenomenon has been further fuelled by the regionalisation of sourcing, where the low local wages of developing countries are often coupled to the availability of raw materials, the abundance of labour and the existence of a long established tradition in textiles. For example Indonesia has labour costs of US\$ 0.35/hour against 0.76 in Nigeria: Some countries have power costs and interest rates substantially lower, combined with higher labour productivity than others. These differences in factor costs, which vary greatly among producing countries, have enormous consequences on corporate decisions today and in future.

The following figure illustrates the various issues in product, technology and market which are responsible for the global trends.

#### Industry and market global trends

**Product Issues Technology Issues** Life cycles **Product** Resources Technology are proliferation complexity required are shortening is increasing is increasing expanding Technology Prices are Product life cycles are performance is increasing eroding shortening faster **Market Issues** 





#### Life cycles are shortening

- Product upgrades are more frequent (incremental development)
- Product families are introduced simultaneously, on a global basis

#### Product proliferation is increasing

- Numbers of variants/options are increasing
- Different market segments are served by differentiated products
- Consumers are demanding more specific features

#### Product performance is increasing

- Consumers are becoming progressively more sophisticated
- Technologies allow for reaching higher performance level at equal or lower costs
- Products are used in more complex environment

#### Prices are eroding faster

- Product proliferation accelerates price erosion on recently introduced products
- Larger volumes allow for managing experience curves faster
- Consumers are becoming more price-sensitive



### Technology complexity is increasing

- Technologies are becoming more sophisticated
- Technologies have a stronger impact on manufacturing processes

# Resources required to master a new technology are expanding

- Technology developments require more multidisciplinary skills
- New technologies require more systematic investments in manufacturing processes

# Technology life cycles are shortening

- Substitution technologies appear more frequently
- Intervention between technologies create new opportunities more frequently



#### Markets are becoming global

- Competition is becoming more global
- Markets are progressively served by multi-national companies capitalizing on larger scale opportunities
- Norms and standards tend to be harmonized
- Countries are collectively creating market communities (EU, NAFTA, ASEAN, etc.)

#### New markets are emerging

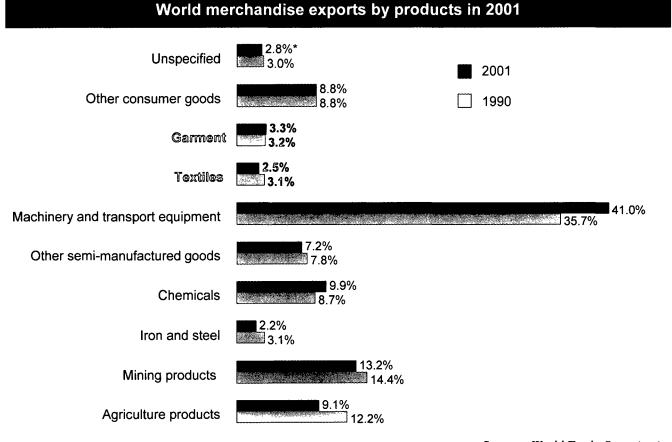
- Eastern Europe, Asia Pacific, South America markets are becoming very attractive and accessible
- New market needs are triggered by 1990s social issues (evolution of age pyramid, population growth, etc.)

## Local consumers are becoming more sophisticated

- Local requirements are expressed more strongly by consumers
- Consumers are more aware of new - competitive - opportunities

#### 3.1 Global international trade

Globally, textiles and garment play an important role in the economy and in international trade of manufactured goods as shown in figure n°2.



Source: World Trade Organisation

It is estimated that the textile and garment industries have a share of about 15% in world employment.

#### 3.2 Global trade in textiles and garments

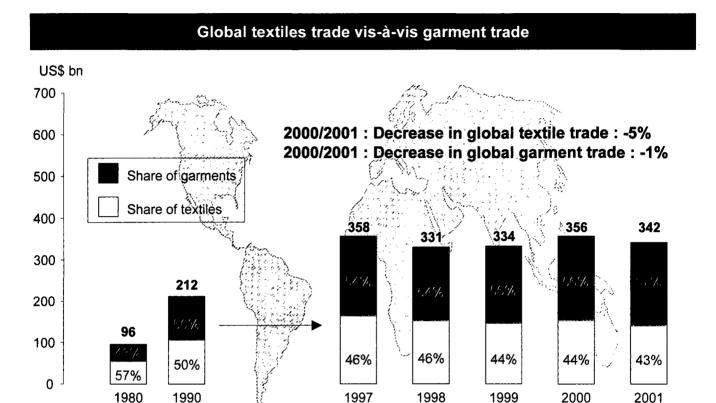
Global trade in textiles and clothing which was only US\$ 96 bn in 1980 jumped to about US\$ 358 bn in 1997 and recorded, after the Asian recession, a significant increase to US\$ 356 bn in 2000 but declined to US\$ 342 bn in 2001.

Strong growth in clothing trade compared with textile trade

The other remarkable phenomenon to notice is the impressive growth of clothing trade compared to textile trade. In 1990, global international trade was equally distributed between both categories whilst in 2001, clothing represented 57% of the total trade showing the growing importance of finished product exchange.

#### 3.2 Global trade in textiles and garments

The following figure illustrates this trend consisting of an irreversible in textile trade vis-à-vis clothing trade.



3.2.1 Global trade in textiles

Source: WTO

Strong change in the direction of exports

The change in the direction of exports becomes evident if we look at Germany as an example. In the year 1980 Germany had an export in textiles of US\$ 6.3 bn, China of US\$ 2.5 bn. 20 years later, China had an export of US\$ 16.3 bn and Germany's exports declined since 1995 and reached US\$ 11.0 bn in the year 2000. Even Italy's exports stagnate since 1999. The USA maintained its exports at about US\$ 10 bn. At the level of imports the following picture emerges:

- Germany showed its highest import in 1995 with US\$ 12.5 bn
- The USA increased its imports from US\$ 2.5 bn in the year 1980 to US\$ 15.7 bn in the year 2000
- The imports of China increased from US\$ 1.1 bn in 1980 to US\$ 12.8 bn in the year 2000

#### China leaps forward

The following tables, n°19 and 20 show some interesting relationships in the world trade of textiles. Many of the leading textile exporting countries are also important importers of textiles.

Strong exporting nations are also strong importers

This shows on the one side the importance of the countries in the world trade, on the other hand it reflects on the level of specialisation which exists in the country.

Leading textile exporting countries						
(US\$ bn)	1980	1995	1999	2000		
Germany	6.3	14.4	11.9	11.0		
China	2.5	13.9	13.0	16.1		
Italy	4.2	12.7	11.8	11.9		
South Korea	2.2	12.3	11.6	12.7		
Taiwan	1.8	11.9	11.0	11.6		
Belgium/Lux	3.6	7.9	7.0	6.4		
France	3.4	7.5	7.0	6.7		
USA	3.8	7.4	9.5	10.9		
Japan	5.1	7.2	6.6	7.0		
UK	3.1	5.2	4.5	4.2		
Pakistan	0.9	4.3	4.5	4.5		
India	1.1	4.4	4.5	5.0		
Netherlands	2.3	3.5	3.9	2.6		
Turkey	-	2.5	3.5	3.6		

Source: WTO

Germany imports as an example considerable volumes of textiles which are dyed / bleached / printed and finished in the country.

China imports
fabrics. It still cannot
produce locally
satisfactorily
China delinks the
textile and garment
industries

China on the other hand imports considerable volumes of fully processed fabric, which the local processing sector cannot, or not yet supply to the Chinese garment industry.

As said earlier China imports fabrics to the tune of US\$ 12.8 bn in the year 2000. This is quite an exceptional development for a developing economy. However this stragegic move by the Chinese planning authorities to delink the development of the textile industry from the development of the garment industry, is one of the major success factors for the dramatic development of the Chinese garment industry.

In other words the Chinese garment industry did not have to wait until all the fabrics needed by a world class garment industry are made available by the local Chinese supplies.

Exports in textiles by the industrialised countries are still considerable. Exports from Italy, Germany, Benelux, France, Great Britain and the USA reached US\$ 54 bn in the year 2000 which represents 34% of the world trade in that year.

Exports on the other hand from countries like China, India, South Korea, Taiwan, Pakistan and Turkey reached only about US\$ 53 bn.

Leading textile importing countries						
(US\$ bn)	1980	1995	1999	2000		
Germany	6.9	12.5	9.9	9.3		
China	1.1	10.9	11.1	12.8		
USA	2.5	10.4	14.3	15.7		
UK	3.6	7.7	7.4	6.9		
France	4.1	7.5	6.9	6.7		
Italy	2.6	6.3	5.8	6.1		
Japan	1.7	6.0	4.5	4.9		
Belgium/Lux	2.3	4.1	3.9	3.6		
Netherlands	2.3	3.5	2.6	2.6		
Canada	1.3	3.2	4.0	4.1		
Spain	0.4	2.7	3.3	3.3		
Poland	-	2.2	2.5	2.4		
Mexico	0.7	1.8	4.8	6.0		
Turkey	-	1.6	1.9	2.1		

Source: WTO

#### 3.2.2 Global trade in garments

In the world exports of garments the following picture emerges:

• In 1980 Germany exported garments valued at US\$ 2.9 bn which was almost double the export of China (US\$ 1.6 bn) and only Italy (US\$ 4.6 bn) and Hong Kong (US\$ 4.7 bn) had higher exports than Germany

China increased exports by a factor of 35

- Whereas the exports of Germany in the year 2000 with US\$ 6.8 bn increased only about 2 fold compared with 1980, China increased its exports in garments during the same period from US\$ 1.6 bn to US\$ 36 bn, an increase by a factor of 35
- Just in the period 1999 / 2000 China increased its exports by US\$ 6 bn. This was more than the yearly export of India in the year 2000, estimated to be about US\$ 6 bn

China, the leading exporter

- China together with Hong Kong exported garments valued at about US\$ 46 bn or 23% of the worldtrade in garments
- Italy was the 2<sup>nd</sup> strongest world exporter with about US\$ 13.2 bn or 6.6% of the world garment export
- Also the export of garments of the EU-states reached US\$ 36.6 bn in the year 2000 which represents about 18% of the worldtrade in garments

Leading garment exporting countries					
(US\$ bn)	1980	1995	1999	2000	
China	1.6	24.0	30.0	36.0	
Italy	4.6	14.0	13.0	13.2	
Hong Kong	4.7	9.5	9.6	9.9	
USA	1.3	6.7	8.3	8.6	
Mexico	0.1	2.7	7.8	8.6	
Germany	2.9	7.4	7.4	6.8	
Turkey	0.1	6.1	6.5	6.5	
France	2.3	5.6	5.7	5.4	
South Korea	2.9	5.0	4.9	5.0	
India	0.6	4.1	4.8	6.0	
UK	1.9	4.6	4.5	4.1	
Thailand	0.3	4.6	3.4	3.9	
Indonesia	0.1	3.4	3.9	4.7	
Portugal	0.6	3.6	3.2	2.6	
Taiwan	2.4	3.3	2.0	2.9	

Imports of garments showed some dramatic developments:

• In Germany imports increased from US\$ 8.3 bn in 1980 to US\$ 19.3 bn in the year 2000

The USA: The biggest importer of garments - 33% of World trade

• However the biggest surge in imports can be seen in the USA. Here the imports increased from US\$ 6.9 bn in the year 1980 to US\$ 66.3 bn in the year 2000. The USA imported about 33% of the world garment exports in 2000

Leading garment importing countries				
(US\$ bn)	1980	1995	1999	2000
USA	6.9	41.4	58.8	66.3
Germany	8.3	24.2	21.4	19.3
Japan	1.5	18.8	16.4	19.7
UK	2.9	8.3	12.5	12.9
France	2.6	10.3	11.6	11.4
Italy	0.8	4.6	5.8	6.0
Netherlands	2.9	5.0	5.1	4.8
Belgium/Lux	1.8	4.3	5.1	4.8
Mexico	0.1	1.9	3.6	3.4
Spain	0.2	2.6	3.5	3.7
Switzerland	1.5	3.8	3.4	3.2
Canada	0.7	2.7	3.3	3.6
Austria	0.9	2.7	2.8	2.4
Sweden	1.3	2.1	2.2	2.0
Hong Kong	0.4	0.9	2.0	1.7
				Source: WTO

#### 3.3 The driving forces in global trade in textiles and garments

The evolution of the textile and clothing industries has been a combination of parameters that have shaped the global business environment and the competitive environment. These parameters include:

A combination of parameters redraws the world map for textiles and garments

- The emergence of international trade agreements (MFA, ATC)
- The economic and sectorial strategies of national FGNs and international institutions such as the World Bank
- Demand and technology
- The development of international communications
- The revolution of the retail industry mainly in developed countries
- The strategies chosen by machine manufacturers and chemical companies

A brief overview of each of these important factors is a pre-requisite in order to better understand the dynamics of global change in the textile and apparel industry.

#### 3.3.1 FGN policies - The example of India

Clear textile industry visions lead to success FGN policies have an immediate impact on the development of the textile and garment industries. All the successful exporting countries in textiles and clothing have formulated clear textile policies for their countries which is confirmed by the textile vision in India which we present below as an example:

Faced with new challenges and opportunities in a changing global trade environment, the FGN of India (GOI) unveiled its National Textile Policy 2000 (National Textile Policy 2000) on November 2, 2000. The NTP 2000 aims to improve the competitiveness of the Indian textile industry in order to attain US\$ 50 bn per year in textile and apparel exports by 2010. The NTP 2000 opens the country's apparel sector to large firms and allows up to 100 percent FDI in the sector develop state-of-the-art apparel manufacturing facilities and reach economies of scale to withstand competition from low-cost countries and increase apparel exports to US\$ 25 bn by 2010. The GOI is reviewing a proposal to deregulate the knitting mills from the small scale industry sector.

As a part of its economic reforms, the GOI has liberalized its investment policies for the textile industry. The Reserve Bank of India now grants automatic approval within a period of 2 weeks to all proposals involving foreign equity up to 51 percent in the manufacture of textile products in the composite mills and in the manufacture of waterproof textile fabrics. The Reserve Bank of India also gives automatic approval to these mills for technology collaboration agreements as long as (1) lump sum payments for technology transfer do not exceed US\$ 2 mn, (2) royalty payments that can be repatriated are limited to 5 percent for domestic sales and 8 percent for exports, and (3) royalty payments do not exceed beyond 7 years from the date of commercial production or 10 years from the date of the agreement whichever is earlier.

FDI has been low compared with China, Indonesia, Thailand and Malaysia FDI in India's textiles industry has been low largely because the GOI first allowed FDI rather late in the mid-1990s, when most funds were being invested in other Asian countries such as China, Indonesia, Thailand, Laos, Vietnam and Cambodia. Between 1994 and June 1998, India approved 402 textile projects totalling US\$ 650 mn in FDI. Of these projects, 63 involved technical assistance and 339 involved financial assistance, Actual FDI inflow totalled an estimated US\$ 143 mn, or only 22 percent of the amount approved. This can be attributed to the infrastructure deficiencies of India and its rather late effort in attractive FDI.

In formulating the NTP 2000, the GOI acknowledge that over-regulation and targeted tax benefits to The Small Scale Industry and decentralized sector units were harmful to the growth of the country's textile industry. The NTP 2000 therefore liberalizes FGN controls and regulations so that different sectors within the textile and apparel industry can function in a more competitive environment.

#### 3.3.2 Demand, technology and international communications

Internationally, industrialized countries have attracted a vast majority of the global demand. Among these countries, several trends have recorded the similar trends:

- Markets have become increasingly segmented and difficult to understand
- Fashion trends have become highly sophisticated and difficult to predict
- Quality, service and value for money have become business mottos
- Markets in developing countries have remained difficult to reach
- Lifestyles tend to converge towards an industrialized, urban, consumer and casual lifestyle model

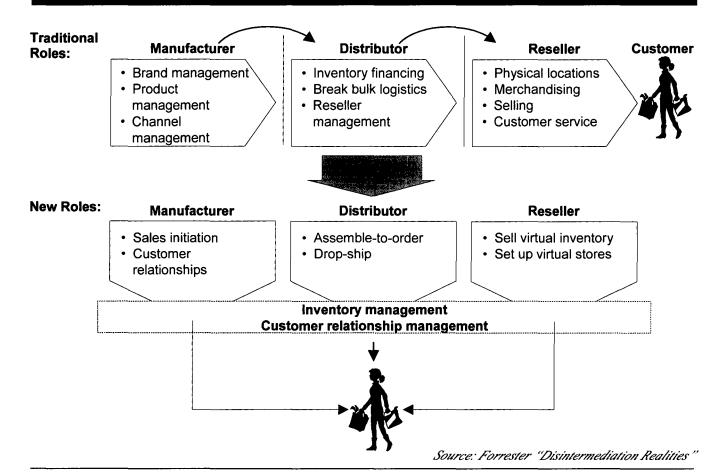
The sources of these movements have been trade liberalization and improved international communications. Multi-national media (especially films, television and internet), low travel and communications costs are accelerating the diffusion of new ideas and tastes between nations.

The result is the emergence of international market segments. The ability to identify and exploit new trends internationally have been behind the global success of global brands such as Ralph Lauren, Calvin Klein or the GAP, and of global products, such as jeans, suits, and several sportswear items.

On the supply side, new information technologies (IT) and management systems such as ISO 9000 have enabled improved long-distance supply capabilities. Just as important, through standardization, they have provided a more open and transparent marketplace by creating new benchmarks that suppliers and customers can adopt to garantee performance.

Leading textile and apparel retailers have quickly understood the significance of IT and international standards. They are already establishing virtual exchange base to set Internet communication standards for textile and apparel products in a move to cut third party providers. In other words Internet development enables to reconsider the role of each stakeholder of the textile chain as suggested in the following figure.

#### Projections of worldwide e-commerce transaction value (B-B and B-C)



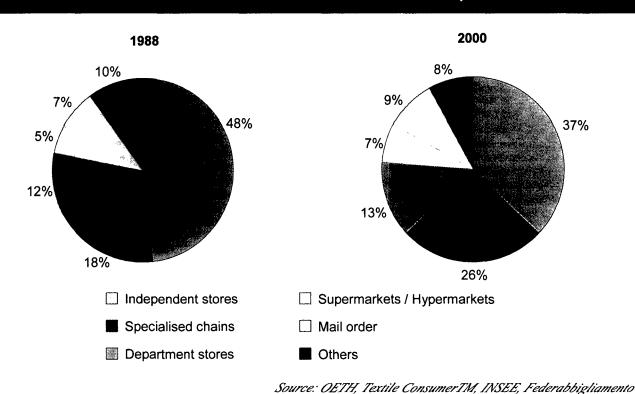
#### 3.4 Impact of international strategies pursued by retailers

#### 3.4.1 The retail revolution

The growing internationalisation of retailing evident in recent years will accelerate as global economic integration proceeds and as domestic market saturation stimulates more retailers to seek growth opportunities outside their own borders. Combination of retailers of different nationalities will become common, though national champions will precede international integration. The diversity of consumer lifestyles will continue to support different formats and channels to market.

However and despite the progression of virtual shppoing, bricks and mortar retailing will maintain a leading position due to its role as a leisure activity and improved services. Retail competition will continue to intensify as consumer choice expands. Intense competitive pressures, shifting and ever more complex consumer requirements and market and channel diversity will press retailers to put more emphasis on managing brands and channels as they develop multiple channels (stores, catalogues, merchant websites) for private label merchandise.

#### Concentration of the distribution in Europe



#### 3.4.2 Non-store retailing

A significant shift to non-store retailing

Over the next 10-15 years, there will be a significant shift to non-store retailing of all types, from the traditional phone-order (but this time on a wireless personnal communicator, with interactive video screeens, anytime, anywhere) to interactive, in-home shopping — or anywhere, shopping.

In the mid 90s, non-store retailing accounted for 15% of total general merchandise, apparel and furniture sales. In 2010, non-store sales should account for approx. a third of total sales -30%.

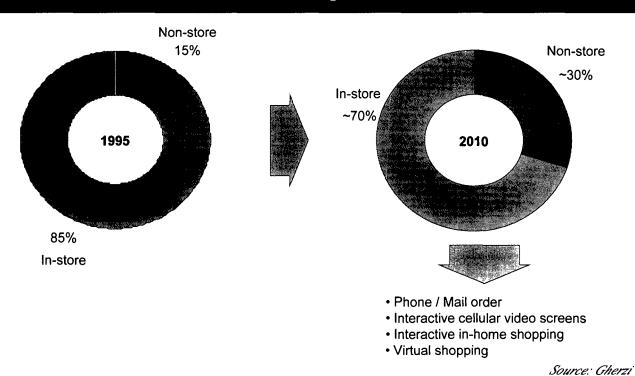
What will cause this shift from in-store to non-store retailing? The consumer, aided by technology.

Consumers impose their views in terms of speed, efficiency, choices and customization

The consumer is the driver. The consumer wants speed, efficiency, access, choices, customization and instant service. Technology is the enabler, sometimes the innovator, for this new world of retailing. It will also give consumers access to amounts of information and options. Technology will also give consumers control to activate demand when and where they choose.

For retailers, how this mass of information will be edited for the consumer will become another new differentiator among competitors.

#### Non-store retailing in the USA

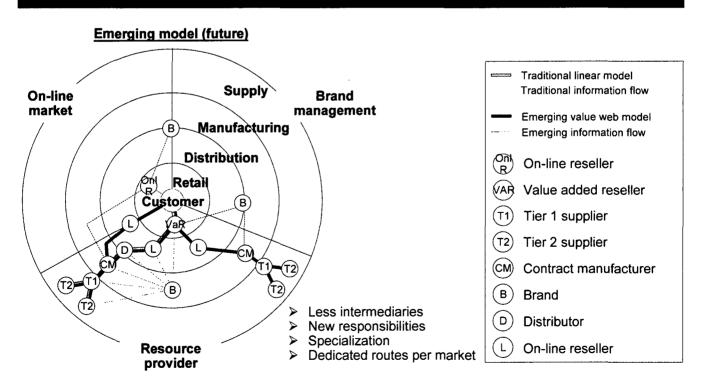


Home shopping should become an important selling vector An important development in non-store retailing is « home » shopping. Home shopping will be interactive, on demand, with « infinite » channels and choices. Wireless personal communicators will allow consumers to shop anywhere, anytime – customers will even be shopping in « virtual » stores where they will be able to try on various colors and sizes, etc... In this world, all retailers will:

- Have value embedded in their lexicon
- Be connected to the consumer electronically for customized service and marketing feedback
- Be connected to their suppliers electronically for product planning, sales forecasting and automatic replenishment
- Collaborate with designers, developers and distributors, forming virtual entities and eliminating non-value adding, redundant functions

There will be no definitive lines between channels as they exist today. Although some retailers will succeed and some will fail, make no mistake – electronic shopping signals a strong change for retailing in the future.

#### **Emerging model in textile**



Source: Gherzi, MC

#### 3.4.3 Supply chain strategies

Three distinct categories of garment sourcing: Long-, mid- and short-term delivery

In order to optimise their margins, garment contractors in developed countries are refining their supply chain management: not only do they select sourcing zones and their co-sourcing manufacturing partners more carefully, but they also try to master the difficult technique of combining three disctinct delivery schedules, i.e. (i) long-term, (ii) mid-term and (iii) short-term.

Long term collections are mostly conceived one year in advance, mid-term collections are mini-collections worked out some six months in advance, while the short-term collections are designed in response to the first results of the season.

Prime contractors put a great pressure on weavers and garmenters The general trend among prime contractors is towards delayed engagements, fractioned orders and smaller quantities. It is of course in their advantage to place orders as late as possible so that they can get the best possible information on new market developments. However, this behaviour puts an heavy burden on garment manufacturers and fabric suppliers.

Anyway the long term remains the basis of a vast majority of delivery schedules especially in European countries. In the future it will also provide a structure to the collections and to the marketing efforts of the brands.

The short term will develop further hitting the ceiling. Requirements for ultra-fast response along the lines can only be met by a limited number of suppliers.

Developments of the mid-term segment in Europe The mini-collections, however, which are already strongly developed in northern Europe, will become generalised across Europe. These mini-collections are designed in mid-term, continuously supplied on few products in the stores, giving the impression that there is always something new on offer.

#### > Criteria influencing European contractors

Demands of the textile industry are nowadays extremely important and diversified. Partnership frameworks are more and more complex and the identification of « who has the decision power » throughout the textile chain remains highly difficult.

#### > Distributors and brands secure their sourcing

Price is still a key sourcing parameter

What is their kompass? This is still the price. Price pressure, particularly important for the low-end, tends to decrease with the medium- and highend. This pressure orients sourcing localization with a research of competitive price in far countries (essentially Asia) and a research of creativity and reactivity in neighbouring regions (In Europe, Maghreb, Eastern Europe and Turkey).

Regional approaches ,, divide "Europe in two zones Is there a common thinking regarding sourcing in Europe? No, each countries has its own. Regional cultures dictate specific approaches regarding partnerships and sourcing frameworks.

Taking into consideration both this price kompass and these different cultures, a clear difference appears between Northern Europe and Southern Europe.

#### > The Northern Europe zone

Dominance of designer / prime contractors in northern Europe

Prime contractors in Northern Europe (Germany, UK, Belgium, Netherlands, Denmark, Sweden) tend to focus more on what they consider to be their core business: designing and marketing garments. They believe that they have a better chance to improve their margings and to escape crippling price competition when they act more act more as designers / prime contractors and less as production drivers:

- They look for competitive prices, essentially in Asia, or in neighbouring countries for Germany
- They have developed strong partnerships
- They mainly work with co-sourcers (they delegate fabric purchase to their subcontractors) or in a pure trading framework (purchase of finished products)
- Short-term for them means complete new collections within a given season to refresh their stores' product offer or to "stick" to versatile fashion trends. As said earlier, these mini-collections are generally designed and prepared 6 months earlier.

#### > The Southern Europe zone

Production pilots in southern Europe

In Southern Europe (France, Italy, Spain, Portugal), a great emphasis is given to product realization and production management.

Prime contractors are purchaser / production pilot :

- In order to manage the production process, proximity is a pre-requisite. The majority of their sourcing solutions still come from neighbouring regions like Maghreb, Turkey and Eastern Europe.
- Co-sourcing and outsourcing are both used depending on the financial strength of their garmenters
- Information sharing is not particularly promoted vis-à-vis real efficient partnerships except in Italy with the historical use of manufacturing clusters
- Short-term concerns essentially the manufacturing process: On-going adjustments within a given season on quantities coming from Italy or replenishment / actualization designed on a a very short-term in France and Spain
- Prime contractors are currently very cautious « pilots » which decide about the whole production process. Their options remain indeed quite limited in a context of expensive stocks
- Sourcing zones are globally stabilized: Potential new competitive countries concerning low labour costs are unlikely to rapidly emerge
- The balance between far and near sourcing is also dictated by the price difference influenced by the US\$ exchange rate

Potential gains in margin level do not concern low labour costs which are already optimized but a real fine-tuning of the supply chain process including the costs of non-quality.

## A strong phenomenon for secured purchasing :

- Rationalization of the number of suppliers, reinforment of partnerships with the most efficient and reliable players,
- Development of the co-contracting in order to avoid the "fabric" risk,
- Purchase sequencing and development of mini-collections

The specialization "designer-purchaser" tend to progressively dominate in Europe. Distributors and brands tend indeed to:

• Integrate the design with internal resources,

• Outsource the production and the management of the production process

In a context of limited visibility regarding textile and clothing sourcing evolutions, fabric suppliers are going through a profound revamping of their positioning throughout the textile chain.

Despite initiating the movement, anticipating their customers' requests, many fabric suppliers are only guided by more and more demanding purchasers without much pro-activity.

Prime contractors are indeeed willing to work through strong partnerships with strong "upstream market weavers or knitters" capable of offering creativity, competitive price, flexibility and security.

## > European fabric suppliers tend to offer specific solutions with:

- a creative touch in Italy,
- a security / quality approach in Germany,
- strong partneship in the UK
- "quality" benefits in Portugal and "service" benefits in Spain
- various answers in France for a very competitive fabric offering price explained by the dominant situation of prime contractors and the difficulty to link marketing approaches and industrial approaches.

## > The fabric suppliers' market can be segmented into two zones:

- The proximity market including Europe and the pan-Euromed region which concern primararly European purchasers. A strong competition from Turkey and Asia also emerges progressively
- The long-distance export (USA, Japan) is usually well exploited by Italian, German and British weavers and insufficiently used by the French

Co-sourcing is increasing everywhere. Through that framework, the direct customer of the weaver is not the decision maker of the collection design. And if the co-sourcer has a prescription power regarding the fabric, the decision chain is even more difficult to identify for the weaver.

## > Weavers will have to establish commercial relationships both with co-sourcers and prime contractors:

- For a British contractor, its co-sourcer is usually a fabric specifier
- In Italy, Spain and Portugal, co-sourcers can be asked by their purchasers to be their fabric specifiers,

In all cases, a given co-sourcer which is in charge of the fabric selection, garmenting and production and delivery lead times will tend to establish relationships with the most reliable weavers. This "new" distribution of responsibilities revamps the usual definition of the current players taking part of the textile and clothing value added chain:

- Prime contractors focus their activities on the design functions : they are the key decision makers
- Co-sourcers are in charge of all production processes. They symbolise the link between contractors and weavers in these production processes. They are the "connecting players".
- Weavers sophisticate their offers by including more services. They tend to orient the collection creation by bringing new marketing and product development ideas

The following figure illustrates the differences between sourcing modes:

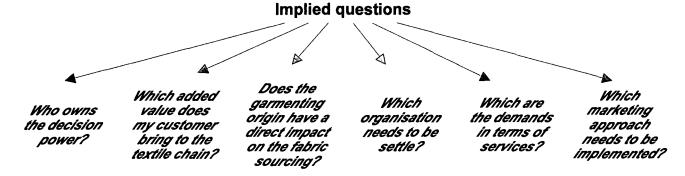
## Level n°4: Trade The model is that of the manufacturer, even if the style is reworked by the prime contractor Sourcing mode defines Level n°3: Co-sourcing the split of Implication client final The subcontractor buys the fabric responsibiand sells a finished product; the lities along the model is that of the prime contractor textile chain. Decision 0 Level n°2: Outsourcing or CMT power is Manufacturing minutes are bought easier to from subcontractors identify for any given actor of the chain Level n°1: Own production The garments are assembled in factories owned by the prime contractors Source: Gherzi

Sourcing modes in the garment industry

The following figure illustrates the difficulty of the textile chain by segmenting the issues arising when describing the sourcing of garments or textile products.

## **Textile chain complexity**

### The partners Supply cahin **Distributor Supply mode** Garmenting Final origin consumer mode category Wholesaler • Own market Price-driven Europe • Pronto production chains Converter (EU+EFTA) moda Domestic market Local sub- Fashion • Finisher Eastern contracting Actualization chain stores Europe Export Weaver · Foreign submarket · Repleni- Modern China contracting shement distribution Knitter Asia Department · Co- Medium Garmenter stores contracting term Turkey Purchasing Independent Trade · Long term corporation Maghreb / stores Africa Others · Design studio · USA / Mexico South America



Source: Gherzi

## Pros and cons of Asian textile and clothing sourcing

## **Price**

Fabrics and garments are imported to Europe with a 50% price difference from what can be sourced locally. Asian suppliers are nowadays nearly a mandatory sources regarding the final customer's price pressure

## Quality

The gap in rapidly shrinking regarding the fabric and garment quality between Asia and Europe. The establishment of strong purchasing offices managed by large American brands has contributed to the general improvement of Asian manufacturers

## **Commercial relationships**

Listening capacity, flexibility, openess and commercial aggressivness are the key characteristics used by customers to describe Asian players

## Local textile industry dynamism

Asia benefits from the capacity to integrate in the same locations raw materials, fabrics manufacturers and garmenting units. This combination is present several countries including China and India where quality standards have recently improved

## Quotas and administrative back-office

Sourcing from Asia requires to secure the administrative process (Letter of credit, taxes, quotas...). The quotas volume especially on trousers are sometimes extremely tight

## **Distance**

Transport with boat increases the lead time by >one month. Planes increase the cost by >10%. However, air is more and more utilized and could be sometimes cheaper than a local replenishment

## **Payment conditions**

Many small chains are reluctant to switch their sourcing to Asia due to the volatility of the transactions in US Dollar.

## Minimum quantity

Asian manufacturers impose large minimum quantities in order to rationalize the distance with Europe. It is one of the main obstacle for European customers who cannot really manage replenishment and actualization from Asia



## 3.5 Impact of international strategies pursued by textile equipment suppliers

Equipment suppliers have played an important role in intensifying international competition in the textile and apparel sectors. In pursuit of global positions, these international companies have ensured that new products and technologies have been diffused rapidly.

## Major technological changes in textile

## Spinning

- Significant changes in technology have resulted in productivity increases for superior quality
- Latest Air Jet spinning technology provides higher productivity for specific products
- · Technological development will continue
- · Ongoing modernisation required

## Weaving/ Knitting

- Significant improvements
  - Machine efficiencies
  - Machine changes
  - Design changes
  - Speeds
  - Quality

## Garmenting

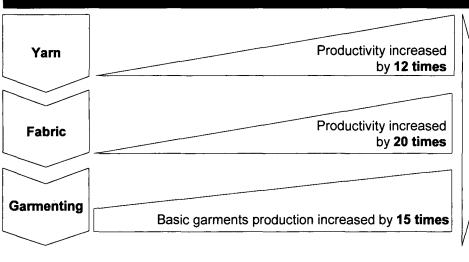
- Garmenting will remain labour intensive despite automation of certain elements and work station engineering
- · Automation in:
  - Design (CAD)
  - Fabric laying / cutting (CAM)

## **Processing / Finishing**

- Significant changes in technologies have resulted in increased productivity and enhanced quality
- Concerns on environmental issues have spearheaded technological changes
- Increased use of microprocessor based technology for colour matching and reduced dyeing cycle times

Source : Gherzi

## Figure n°XX – development of production in textile 1960-2000



- Spinning and weaving production significantly transformed to capital intensive industries
- Garmenting continues being highly labour intensive

Source: Gherzi

## 3.6 Impact of international strategies pursued by dyes and chemicals suppliers

Environmental regulation is spurring considerable product reformulation and increased interest in recovery and reuse operations. Chemical suppliers are moving away from the use of objectionable solvents, heavy metals, salt and other chemicals that release formaldehyde, volatile organic compounds or other regulated materials.

While constraining volume gains in chemical demand, this trend offers opportunities for companies which develop products which reduce the environmental impact of textile production. These chemicals include high fixation dyes, auxiliaries which increase the efficiency and performance of dye and finish operations, low-formaldehyde finishes, water-based polymers, non-chlorine bleaches, and enzymes. While minimal at present, increased dyebath reuse could lower consumption of dye auxiliaries and possibly even dyes, although this is unlikely through the end of the century.

The outlook for textile end use markets plays a key role in both volume and mix of textile chemical consumption. Through the year 2000, best prospects are expected in medical products, especially value-added nonwovens, high-performance industrial textiles, such as coated fabrics, and carpets and rugs.

Import penetration into these markets has been minimal as US textile producers maintain production advantages based on the use of automation and other advanced machinery. Many of these products are also less labor intensive. In contrast, apparel markets will experience below-average gains due to the high import presence in the market and the depressed outlook for dye consumption.

However, the apparel market, due to its fashion focus and fast-changing requirements, will continue to demand new, high performance, high-value chemical treatments. There are numerous companies involved in the supply of chemicals to the textile industry, ranging from large, multinational conglomerates such as BASF to small, niche formulators such as Piedmont Chemical.

However, despite this diversity, sales are dominated by the large dye, chemical and polymer producers, with three companies -- BASF, Ciba and DyStar -- alone controlling nearly one-quarter of the total market. While large chemical companies such as Imperial Chemical Industries and BF Goodrich are important volume suppliers, specialty companies such as Apollo Chemical and IVAX are key players due to their strong focus on textile applications, their close customer contact and important role in new formulation development.

## 3.7 Trends in final consumption

## 3.7.1 Evolution of the World population growth

World population may grow to approx. 11 bn people Recent studies demonstrate that population growth will not stop during the first half of the 21<sup>st</sup> century. It is however unclear whether global equilibrium will settle down at 10 or 11 bn people; indeed, it is not established whether the stabilisation of human population can be fully achieved by the year 2100.

As standards of living and education improve, the birth rates will fall and the rate of world population growth will subside. However, a huge worldwide bulge of fertile youth (mostly in poorer countries) is a key parameter to be taken into consideration in order to anticipate future trends.

Longer global lifespans Even with the prospect of smaller families, the effects of the medical revolution - which will provide and is providing longer lifespans – mean that there is a long way to go before world population stops growing.

It is clear that the increasing pressure of population on natural resources will be a one of the major problems of the 21st century.

## World population structural changes Asia India China Africa Developed countries in bn %9 2 1980 1990 1995 1997 2002 2005 1998 1999 2000 2001 2003 2004 2010 Growth 1.90% 1.58 % 1.32 % rate p.a. Source: US Bureau of Census

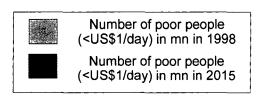
## 3.7.2 World GDP growth by regions

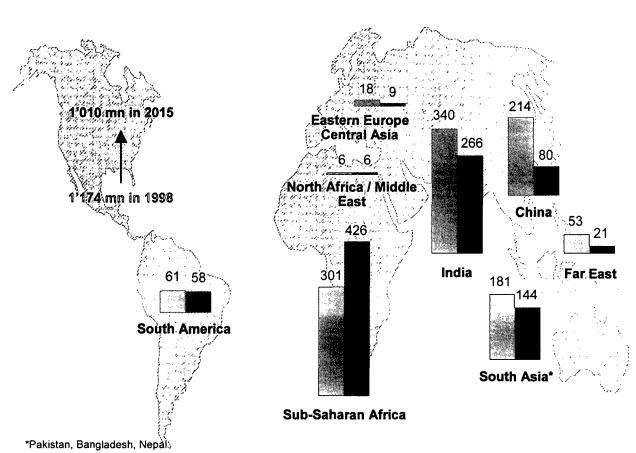
The skewed consumption position reflects the global economic imbalance between rich and poor nations.

However, despite the recent Asian crisis, overall economic and population growth rates have remained higher in the developing countries.

Poor populations should decrease except in Africa Figure n°3 shows some projections regarding the development of poor populations in the World and suggests that the only region which is not going to improve its current situation is Africa. All the others should see their poor population ration decrease over the next 10 years.

## **Evolution of the poor population**





Source: World Bank

## 3.7.3 Evolution of the fibre demand

More than 40% of the World population lived in China, India and Brazil The World population is continuing to grow mainly in the developing and emerging economies. At the end of the second millenium, more than 40% of the World population lived in China, India and Brazil and now that figure is approaching 50%. Since an increase in purchasing power is also evident in these countries, global fibre consumption is growing at a faster rate than the world population.

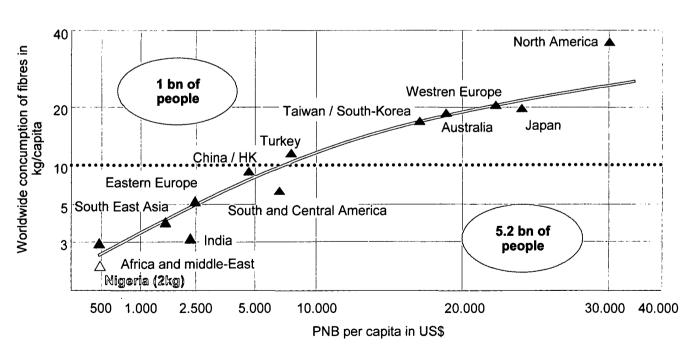
Developed countries consume more than 10kg/capita of fibres annually

The current per capita consumption of fibres in North America, Western Europe, Japan, Taiwan, South Korea and Turkey is more than 10 kg. One bn people live in these rich countries as shown in figure n°X. Annual per capita consumption of fibres in the rest of the World is less than 10 kg.

However the rest of the World accounts for more than 80% of the global population. A comparison of fibre consumption between industrialised countries and developing countries reveals striking growth potential for fibres, yarns and textiles.

Rising population figures and economic growth are therefore still regarded as the driving force of the textile and garment industries.

## Per capita consumption of textile fibres



Source: Rieter Link - 3/2000

Per capita
consumption of fibre
should increase by
2% annually

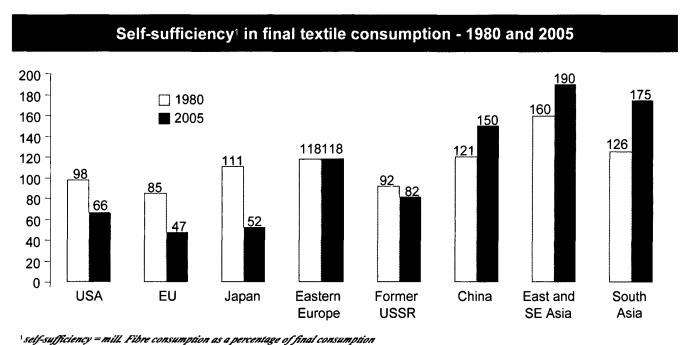
Population growth (approx. 1,32% per annum) will contribute to some 40% of the increase in fibre consumption, while economic growth and the rise in disposable income will account for 60% for the overall increase.

Annual per capita consumption of fibres will rise from 8,6 kg in 2000 to 10,1 kg in the year 2005. This is equivalent to a forecast of annual growth rate of 3,2%.

## Per capita fibre consumption Developed countries Eastern Europe Developing countries 23.2 21.9 21.6 14.4 10.5 9.0 6.7 5.2 4.7 4.5 4.2 1992 1995 2000 2005

Source: Textile Outlook International

The following figure indicates clearly the export potentials of Asia. In the mature markets of the West and Japan, the self-sufficiency ratio is declining opening thereby the countries to import further.



a percentage of final communitation

Source: Textile Outlook International

## 3.7.3.1 Natural fibre versus MMF

## The development of MMF

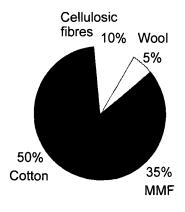
MMF have recorded impressive growth rate at the expense of natural fibres

Global fibre demand has been rising as a function of population growth and per capita usage. In 1982 the world managed its textile and garment requirements with 30 mn tons of fibre; 50% of it beeing cotton. 18 years later world fibre consumption stood at 55 mn tons and with a cotton share of 35%.

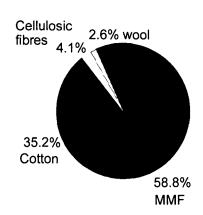
Development of polyester is one of the explainations for this rapid shift. The driving factor for the strong growth in PES are by the side of macroeconomic growth (population and economical development):

- Easy and cheap to produce
- Availability of raw material (PTA and MEG)
- Easy processing
- Flexibility in end-use
- And of course strong innovations fueled by R&D efforts engaged by strong oil and chemical companies (Shell, Dupont, etc...)

## World fibre demand (in tons)

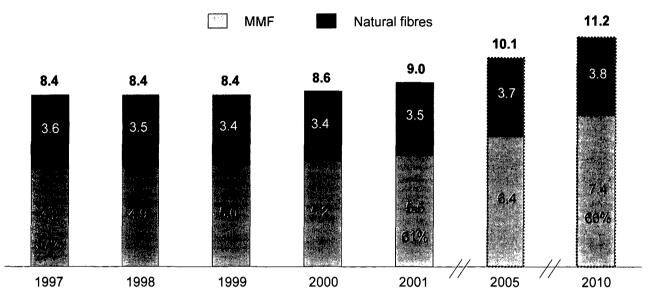


	1982	2000
Cotton	14.74	19.37
Wool	1.62	1.45
Silk	0.62	0.09
Cellulosic fibres	2.95	2.30
MMF	10.15	31.7
Total	29.52	54.91



Source: Gherzi

## Worldwide consumption of fibres (kg/capita)

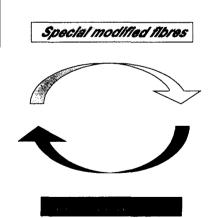


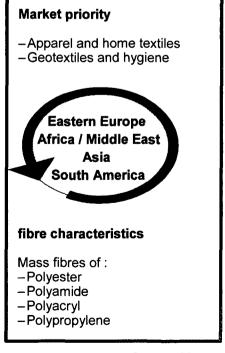
Source: PCI Fibres

## Fibre trade until 2010

MMF trade will remain global - whereas developed countries will focus on high function fibres, developing countries will concentrate on mass production of commodity fibres

# Market priority - Technical and functional textiles North America Western Europe Japan fibre characteristics Modified fibres for special functions through: - chemical changes - physical changes





Source: Gherzi

## 3.7.3.2 The evolution of MMF

PES dominates the world of MMF

The worldwide market for MMF is dominated by polyester fibre group which reported a production volume of approx. 19 million tons in 2000.

This total volume corresponds to a 60% market share.

The polyamide fibre group ranked second with its output of approx. 4 million tons, a total volume which corresponds to a 13% market share.

The next positions are occupied by:

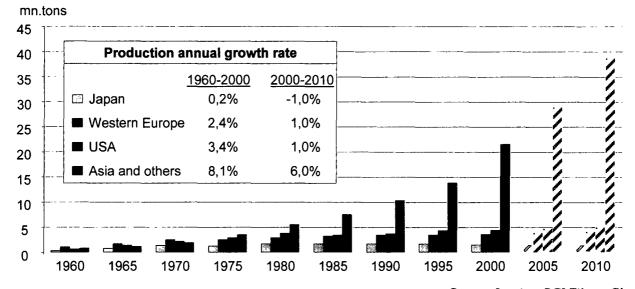
Polypropylene fibres are gaining market share rapidly

- Polypropylene fibres
- ... followed closely by cellulosic fibres,
- acrylic fibres...
- ... and other synthetics fibres such as elastane, aramide and carbon fibres

Filament yarns make up approx. 54% of the total market of MMF compared with staple fibres, which represent 46%.

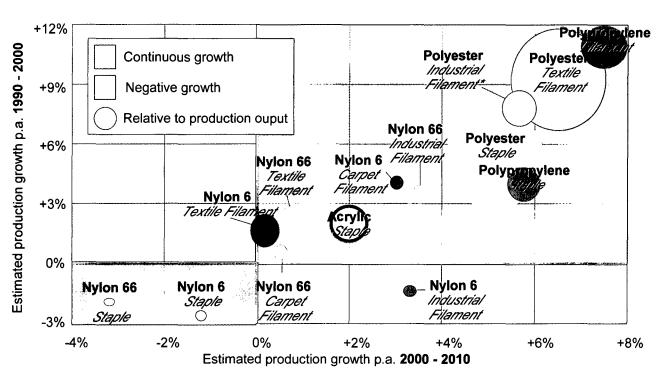
The following figures show some interesting developments of the MMF industries in the past and in the future.

## Worldwide production of MMF fibres



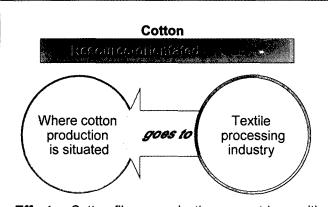
Source: Lenzing, PCI Fibres, Gherzi

## Proportion of staple-fibre versus filament

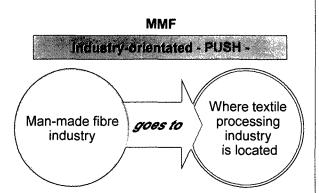


Source: Ghezi's analysis based on PCI fibres

## Fibre trade until 2010



**Effect:** Cotton-fibre production countries with developed infrastructure and low labor costs will attract spinners and other following players of the textile value chain. Cotton orientated countries, e.g. Uzbekistan will record a significant growth for their textile industry.



**Effect:** Man-made commodity fibre producers are in strong competition to each other. In order to survive, they need to move to countries with a high potential of demand. The production of high tech fibres, however, will remain where industrial knowledge is available.

Source : Gherzi

## 3.8 The importance of trade pacts in the international trade flows of textiles and garments

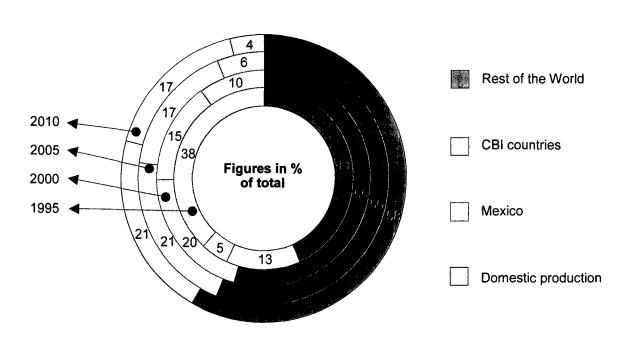
## 3.8.1 General overview

The markets in Asia and South America and, at later stage, also those of the former Soviet Union, still have considerable potential for growth. Economists maintain that the current turbulence may delay this development to some extent but will by no means stop it.

In the year 2010 the major developing countries will generate some 50% of the gross national product (GNP) of today's industrialized world. And 150 million Indians will have an annual income with a purchasing power comparable to income in Spain and 200 million Chinese with income levels like the USA and Canada.

Trading zones have been an efficient vector for growth Contrary to all several warnings, trading zones such as NAFTA and the EU have developed healthily. Mercosur is still in the process of establishing itself. Asia was thrown off balance by the Asian crisis and is still recovering in some sectors. The international textile trade will also grow, looking forward mainly to the start of quoto-free textile trading in 2005. More tarding groups operating worldwide will grow, since they will be able to achieve better economics of scale by virtue of improved market coverage.

## Origins of apparel in the USA



Source: Gherzi analysis, National Bureau of Census, KSA

## Source: Gherzi

## **Examples of regional trade blocks**

In a world which is characterised by trade pacts, it is important that Nigeria is the member of a regional trading block ECOWAS which it actually dominates...



NAFTA

USA Canada Mexico Caricom
Pact of 14 Carribean
countries

Andean Pact
Colombia
Venezuela
Bolivia

Peru Mercosul

Ecuador

Argentina Brazil Uruguay Paraguay



European Union

CIS

Germany United Kingdom
Belgium Netherlands
Luxemburg Greece
France Austria
Italy Sweden
Spain Finland
Portugal Denmark

EFTA

Switzerland, Norway and Iceland

Visegrad Group

5 Eastern Europe countries

African Pacts

CMESA (Eastern and Southern Africa) ECOWAS (West Africa) IOC (Indian Ocean) SACU (Southern Africa) CEEAC (Central Africa) SADC (Southern Africa)



ASEAN

Former Soviet Union States excluding 3 Baltic States

OCE Turkey

I uney Iran Pakistan 6 Muslim CIS States

SAARC

India

Bangladesh Buthan Pakistan Nepal Sri Lanka Maldives

Brunei Malaysia Indonesia Philippines Singapore Thailand Vietnam Laos

Myanmar (Cambodia) (South Korea)

APEC
(Asia-Pacific)
18 countries
(including Japan

and Australia)

## 3.8.2 The MFA and the ATC

As the success of new deevloping country, textile and garment exports took hold, textile and garment interests in developed countries grew increasingly protectionist. During the 1960s, efforts to contain textile and garment tarde were launched. However, increased product and market diversification outsripped policy makers' regulatory abilities. Under the Multi-fibre Arrangement (MFA), 1974-1994, textile and garment importers established bilateral import quotas in a variety of individual product categories to restrict imports. These were imposed whenever a trading partner's exports to its threatened domestic market interests.

This system of regulated textile and garment trade helped to spawn increased internationalization of production of these very products. As quotas were up in one exporting country, international clothing entrepreneurs frequently sought new production platforms in which to establish commercial relations with existing manufacturers or even establish new manufacturing operations all together. Exports could grow quota-risk free from a new platform for some time, before attracting the attention of importers. This "quota-hopping" behavior of the international garment industry is one of the factors which has enhanced the establishment of garment operations in developing countries.

Today, the MFA is dead and international textile and garment trade is managed by the Agreement on Textiles and Clothing (ATC), signed as part of the Uruguay Round Agreements Act (URAA) when the World Trade Organization was created. The ATC lays out the process of liberalization of the bilateral import quotas over a ten-year period., from 1994 through 2005. This obligation applies to the four countries (or country groupings) which maintained restrictions under the MFA, namely Canada, the European Community-15, Norway and the United States. It also applies to fifty-five countries which chose to use transitional import safeguard mechanisms. The US maintains bilateral textiel agreements with non-WTO member trading partners such Taiwan, Vietnam and Cambodia.

The ATC specifies a minimum percentage of trade to be liberalized in four stages. To date, liberalizing countries have emphasized lower valued products, raising some concerns among developing country textile and clothing exporters that the ATC's final objective of complete liberalization of textiles and garment trade will not be accomplished by 2005.

## 3.8.3 Trade pacts in Sub-Saharan Africa

## South African Customs Union (SACU)

The South African Customs Union (SACU) came into existence in 1969, making it the oldest customs union in the world. Current SACU members are Botswana, Lesotho, Namibia, South Africa and Swaziland.

SACU members are entitled to import raw materials duty-free from other SACU members. This is important for the development of the garment industries in SACU countries in that it provides them with access to cheaper supplies of high quality yarns and fabrics from South Africa, the biggest SACU member.

SACU members are also able to export finished goods duty-free to other SACU members. Again this is important for the development of apparel industries in the region as it provides them with duty-free access to markets other than the EU and the USA. The large South African market, comprising 43 mn people, is an especially attractive export target.

## Southern African Development Community (SADC)

The Southern African Development Community (SADC) comprises Angola, Botswana, Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Seychelles, Swaziland, Tanzania, Zambia, and Zimbabwe.

The objective of the agreement is to stimulate intra-regional trade. Under the agreement SADC countries are permitted to trade with each other at substantially reduced tariffs.

Thus agreement will assist Sub-Saharan African companies in their efforts to sell into SADC markets. It will also help them to source raw amterials from other SADC countries-especially in cases where preferial access to US markets under AGOA requires that garments are made from African-sourced materials.

This will become especially important after September 2004 when, under current AGOA legislation, the option of making garments using fabrics sourced from any country will no longer be available.

## > COTONOU

The Cotonou agreement, signed in June 2000, has replaced the EU-ACP (African, Carribean and Pacific) Lomé convention. The agreement provides textile and clothing manufacturers in Sub-Saharan African and other ACP countries with preferential quota-free and tariff-free) access to the European Union.

As in the case of AGOA, however, exporters seeking preferential access need to ensure that exported garments comply with certain rules of origin.

## > African Growth and Opportunity Act (AGOA)

AGOA provides garments made in accredited Sub-Saharan African countries with preferential (duty-free and quota-free) access to US markets.

Sub-Saharan African countries classified as lesser developed beneficiary Sub-Saharan countries (LDBCs) are permitted to export garments assembled from yarns and fabrics made anywhere in the world without losing AGOA benefits. However, this concession-which is available under the Special Apparel Provision-runs only until the end of September 2004.

In 2002 Botswana was added to the list of LDBCs. Originally, it had been denied LDBC status because its income per head-at more than US\$ 1,500-was considered "to high". As a result of the new ruling, Botswana is now able to use cheap fabric imported from Asia-at least until the end of September 2004, when the Special Apparel Provision expires.

The same ruling also applies to Namibia. Like Botswana, it was originally excluded from the Special Apparel Provision because its income was too high.

AGOA vs Cotonou: While both AGOA and Cotonou agreements give quota free access to SSA products the following differences are key:

- Cotonou has a wider coverage with both textiles and garments while AGOA allows only garments (and to an extent folkloric fabrics)
- AGOA allows use of third country fabrics however Cotonou gives duty free treatment to African textiles and fabrics provided they originate in Africa

## > ECOWAS

The ECOWAS Agreement provides under the Trade Liberalisation Scheme (ETLS) privileged access to West African countries.

## 3.8.4 Trade pacts in which Nigeria participates

Nigeria has three trade agreements with the EU15, the USA and West Africa as described in the following figure.

## Participation of Nigeria in trade pacts

Cotonou agreement The Cotonou agreement, signed in June 2000, replaced the EU-ACP (African, Carribean and Pacific) Lomé convention. The agreement provides textile and garment companies in Sub-Saharan African and other ACP countries with preferential quota-free and tariff-free access to the European Union.

As for AGOA, exporters need to ensure that exported garments comply with rules of origin



AGOA provides for garments made in accredited Sub-Saharan African countries with preferential (duty-free and quota-free) to access US markets. Sub-Saharan African countries classified as lesser developed beneficiary countries (LDBCs) may export garments made from yarns and fabrics from anywhere in the world without losing AGOA benefits. This concession ends on September 2004.

The ECOWAS Agreement under the Trade Liberalisation Scheme (ETLS) gives privileged access to West African countries members to intra regional free trade

## 3.9 The global spinning and weaving industry

The textile and clothing industry is one of the most globalized industries in the World, imposing its rules of the game on all players willing to participate in its growth.

- The textile industry (including the garment industry) is one of the industries in the world economy which is common to almost all countries
- As one of the key industries in the changing international division of labour it is one of the major battle grounds within and between the industrialised countries and developing countries
- The importance of the textile industry can be measured by its size. It ranks number 3 after the tourism and information industry

## 3.9.1 Flow of investments

A strong indication for the changes in the international division of labour in the primary textile industry is the flow of investments and the resulting installed capacities.

A brief analysis shows the dramatic decline in the installed capacities in the industrialised countries along the textile chain. South America showed a moderate increase, Africa stagnated, only South East Asia increased its share in the world capacities over the period 1985-1999.

In the year 1999:	In the year 1985 it was:
•70% of the Ring spinning capacities	53%
•29% of the Rotor capacities and	11%
•38% of the shuttleless weaving capacity	y stood in Asia 29%
Africa showed the following picture:	In the year 1985, it was:
• 7% of the Ring spinning capacity	5%
•2% of the Rotor spinning capacity	2%
•3% of the shuttleless weaving capacity	3%

## 3.9.2 Installed world capacities - short-staple spinning and weaving

The installed world capacities are described in the following table.

## Installed world capacities (1985-1999)

Region	R	ing S (mill	pindies ions)		Ro	tors (	millions	)	Shuttleless looms ('000)			
Kegion	1985	%	1999	%	1985	%	1999	%	1985	%	1999	%
North America	18.2	12	8.6	6	0.40	6	1.16	16	74.9	19	76.7	12
South America	8.6	6	9.8	6	0.13	2	0.41	5	15.2	4	51.9	8
Western Europe	12.4	8	5.8	4	0.56	9	0.50	7	66.7	17	55.1	8
Eastern Europe	21.3	14	10.0	6	4.6	70	2.62	35	127.0	33	183.4	28
Turkey	3.2	2	5.5	4	0.03	1	0.41	5	4.4	1	16.0	2
Africa	7.2	5	7.1	5	0.12	2	0.18	2	13.4	3	18.9	3
Asia	78.6	53	108.8	70	0.69	11	2.20	29	83.2	22	246.6	38
Total	149.70	100	155.6	100	6.58	100	7.42	100	384.8	100	648.6	100

Source : ITMF

## 3.9.2.1 Installed capacities - ring spinning short-staple

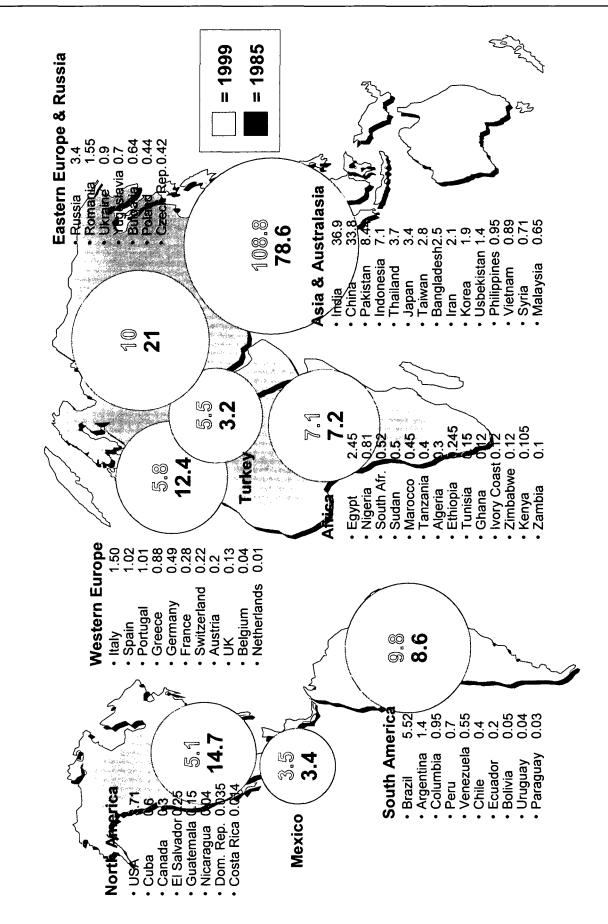
In 1985 about 12.4 mn ringspindles or 8.3% of the worldwide installed capacities stood in Western Europe. By the year 1999 the capacity was down to 5.8 mn ringspindles or 3.2% of the World ringspindles population

North America lost during the same period about 10 mn ringspindles. Mexico showed slight increase, so did South America.

Africa reveals an almost static situation.

Only Asia showed a continuous build up of its capacities form 78 mn ringspindles in the year 1985 to 109 mn ringspindles in the year 1999.

Today more than 70% of the worlds short-staple ringspinning capacities are located in Asia and about 44% of the longstaple ringspinning capacities.



Short staple spinning - installed ring spindles 1985 and 1999 (mn spindles)

## 3.9.2.2 Installed capacity - rotor spinning

Rotorspinning which for many years has been the domain of the industrialised countries is now loosing out to the developing countries.

On the basis of a rotor to rotor comparison Western Europe's share is static. Considering the higher output of the last generation machines there may be however an increase in output.

Turkey showed a spectacular increase of its rotor capacity from 25'000 rotors in 1985 to 416'000 rotors in the year 1999.

Eastern Europe lost about 2 mn rotors during the reference period (1985-1999).

The USA with Mexico showed an increase of their capacities from 37'000 rotors to over 1 mn rotors.

Africa showed a small increase.

Asia, still a continent where ringspinning is the preferred technology, increased its rotor capacities 4 fold and has now with 2.2 mn rotors about 30% of the world rotor population.

## 3.9.2.3 Installed capacities - shuttleless looms

The shuttleless loom population of a country is a good indicator of the international competitiveness of a country in terms of fabric availability for the garment sector.

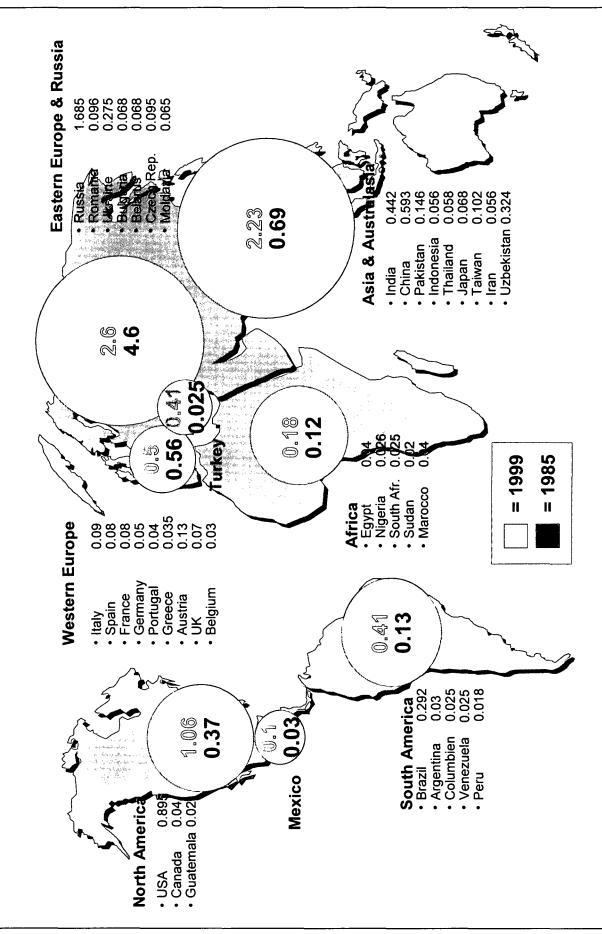
Asia shows a 3 fold incrase in its shuttleless loom population with the majority installed in China and Indonesia. China holds about 25% of the capacities in Asia.

Turkey has a 4 fold increase in shuttleless looms during the reference period.

South America increased its loomage by a factor of 3.

Europe retained its capacity not in numbers but in production capacity.

The USA showed a slight decline of its loom population, at the same time Mexico showed a 40% increase. This may be partly on account of DFI from the USA.



Rotor spinning 1985 and 1999 - installed capacities (mn rotors)

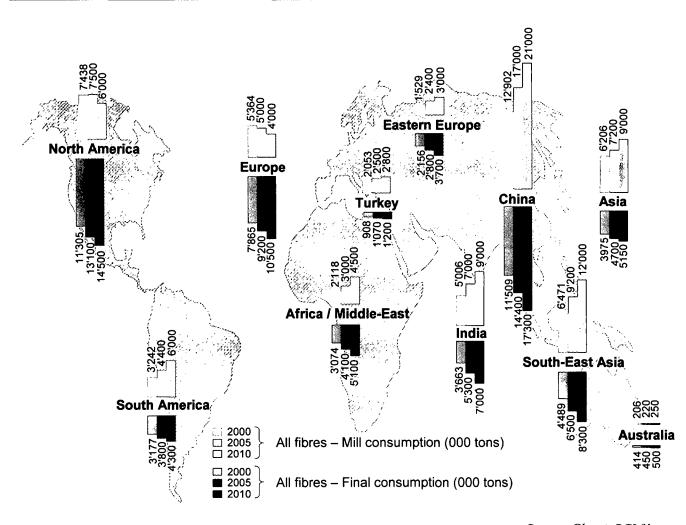
## 3.10 The future outlook

## 3.10.1 Mill fibre consumption and final demand

Projections concerning fibre mill consumption and final consumptions are shown in the following figure. This analysis suggests the following:

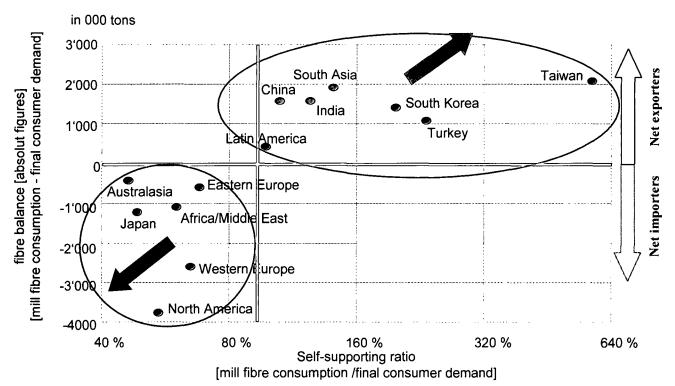
- China and South-East Asia will double its fibre mill consumption in 10 years
- North America and Europe should still record a significant increase in their final demand whilst their mill demand slightly decreases
- India should record impressive growth rate both in mill and final consumption

## Mill consumption versus final consumption



Source: Gherzi, PCI fibres

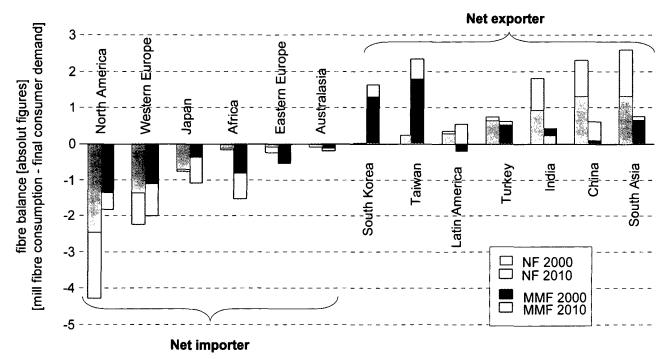
## Final consumer demand (1/2)



\* Pakistan, Bangladesh, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam

Source: PCI fibres, Gherzi analysis

## Final consumer demand (2/2)



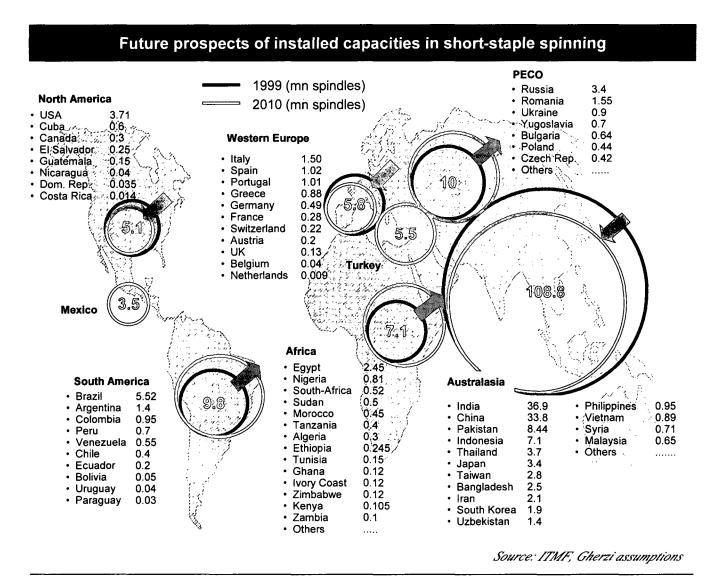
\* Pakistan, Bangladesh, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam

Source: PCI, Gherzi anaylsis

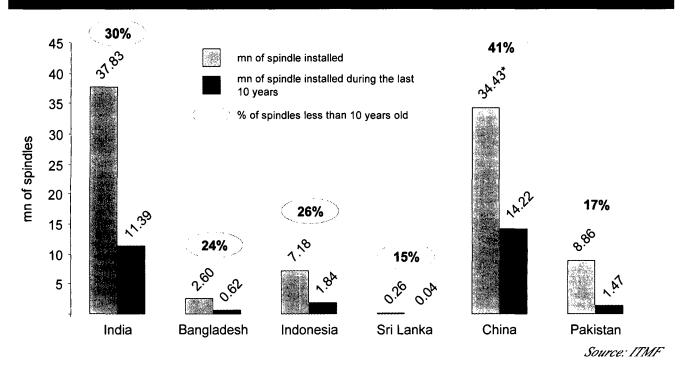
## 3.10.2 Demand and location of textile industry

The internationalization of marketing and production operations has been a major parameter in the evolution of the textile and garment industry. As foreign competition has intensified in their domestic markets, companies have sought to establish a presence in international markets either through exporting, foreign manufacturing operations or licensing. The most rapid movement has been in the garment sector where cost differences are greatest and which is relatively mobile. Movement in textiles has been slower. However, textile manufacturing is clearly being drawn to be close to garment operations to satisfy cost and speed requirements but also because of local FGN incentives.

As a example, consequences to this phenomenon have been - and will bemassive investments in spinning equipment as shown in the following figures.



## Investments in spinning in several Asian countries



## 3.10.3 The development of technical textiles

## Definition of technical textiles

The technical textiles industry is a diverse and dynamic one, embracing a wide range of materials, processes, products and applications. It also shares a number of technologies and has overlapping interests with other materials industries such as glass, plastics, films, membranes, metals, composites and paper.

The following definition is given by the Textile Institute:

Textile materials and products manufactured primarily for their technical performance and functional properties rather than their aesthetic or decorative characteristics

## > A promising future

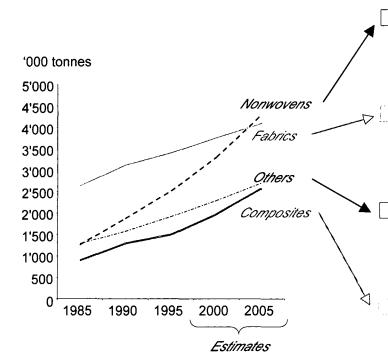
The technical textile sector represents a significant proportion of world textile manufacturing and trade. Recent studies within this field indicate that an estimated 40% of fibre consumption within developed countries is consumed in the manufacture of technical textiles.

Developments within the technical textile sector have been characterictic of high added value products, high technology and performance and a niche market orientation. Additionally, technical textiles are utilised in a broad cross-section of industries and applications.

Technical textiles are expected to continue to grow at a higher rate than any other segment of the textile market.

## World textile production by category mn of tons 80 70 Technical textiles (woven, knitted or others) 60 Knitted textiles 50 Woven textiles 40 30 20 10 1900 1910 1920 1930 1940 1950 1960 1980 1990 2000 1970 2010 Source: Gherzi

## Worldwide technical textiles consumption by product



## Nonwovens: +30% (2000-2005)

Include all dry, wet and spunlaid products used in industrial and technical applications other than for the manufacture of composites

## Fabrics: +9% (2000-2005)

Include all woven, knitted, interlaid scrim and braided materials used in industrial and technical applications other than for the manufacture of composites

## Others: +18% (2000-2005)

Include fibre and yarn products used other than in fabric, nonwoven or composite form, such as ropes, cords, twines, sewing threads and waddings/fibrefill

## Composites: +31% (2000-2005)

Reflect only the fibre and textile component of the composite materials, i.e. they exclude the weight of the matrix material and value of the finished composite

Source : DRA

## The 12 main application areas of technical textiles

	Mobiltech	Transportation textiles (road, rail, marine and aerospace)
<b>E</b>	Indutech	Industrial textiles (including filtration, hoses, cleaning, etc)
	Hometech	Functional textile components of furniture, household textiles and floor covering
	Medtech	Medical textiles (including health amd hygiene)
	Buildtech	Construction and architectural textiles
Ü	Agrotech	Agricultural textiles (including horticulture and forestry)
THE STATE OF THE S	Clothtech	Functional textile components of garments and footwear
	Packtech	Packaging textiles
	Geotech	Geotextiles and some geomembranes
	Sporttech	Sports and leisure textiles
<b>(</b>	Oekoteck	Environmental textiles (included in other segments)
A	Protech	Protective textiles (personal and property)

Source : DRA

## **Evolution of the technical textiles market by segments**

		Estimated Volume ('000 tons) 2000	Growth rate 1995-2000	Market share 1995	Market share 2000	Estimated market share 2005	Estimated growth rate 2000-2005
	Mobiltech	2.220	+16%	21%	20%	18%	+12%
<b>E</b>	Indutech	1.875	+23%	16%	17%	17%	+25%
	Hometech	1.803	+35%	15%	16%	17%	+25%
(2812)	Medtech	1.374	+17%	13%	12%	12%	+20%
<b>(1)</b>	Buildtech	1.026	+21%	9%	9%	9%	+23%
章	Agrotech	895	+21%	8%	8%	7%	+14%
	Clothtech	731	+13%	7%	6%	6%	+13%
	Packtech	533	+26%	5%	5%	5%	+23%
	Geotech	400	+59%	3%	4%	4%	+44%
	Sporttech	310	+31%	3%	3%	3%	+26%
<b>@</b>	Oekotech*	228	+37%				+34%
	Protech	159	+36%	1%	1%	2%	+35%

<sup>\*:</sup> Included in other groups

Source : DRA

## 3.10.4 Impact of the ATC phase-out

Many of the countries that are constraint by ATC quotas hope to benefit from the quota removal and to expand their exports. For a number of countries – and particularly for China – this will be the case. On the other hand, today's quotas offer export countries a guaranteed share in their export markets where they are protected from their (Asian) competitors. Once quotas are removed this protective function (which is actually much appreciated by many countries) will cease to exist.

Hence, after 31 December 2004 access to the EU market and buying decisions of European importers (retailers, wholesalers, clothing and knitwear manufacturers, etc.) will be determined by market forces instead of availability of quotas and licenses. As a result, the current market shares of the various supply countries will change.

According to estimates from EU retail and industry China will be the main "winner" of quota removal. Countries that have already lost market share, such as Hong-Kong, South-Korea, Thailand, Taiwan, Malaysia and the Philippines are expected to loose market share in the future, except for chemical fibres (Korea, Taiwan, Thailand, etc.).

Also Laos, Cambodia, Bangladesh and Indonesia are likely to lose market share to China. Vietnam will only be able to survive if it becomes a WTO member soon.

Part of the "losers" could also be Sri Lanka and Turkey, although both of them have largely moved out of the mass market and are therefore in much less direct competition with China. India and Pakistan are also likely to lose market share in the EU to China, but they are expected to compensate through market share taken from smaller supply countries.

In view of the expected changes, many quota countries are preparing for quota free competition after 2004. Both India and Pakistan have developed ambitious plans to remove the weaknesses of their textile and clothing industry in order to fully benefit from quota removal.

They intend to considerably increase their exports over the next 5-10 years and to improve both the quality and the fashion content of their products as well as their ability to supply within lead times.

Similar plans exist in almost all of the larger supply countries. Particularly countries such as Bangladesh fear that they will not be able to survive – particularly vis-à-vis China – if they don't invest in their textile industry (spinning and weaving).

In China, an ambitious Five-Year-Plan focuses on the modernisation of its industry and the creation of a complete textile-fibre-to-clothing production chain. Countries, such as South Korea, see their future in textiles.

Korea already started implementing an ambitious, partly state funded programme aiming at a slow withdrawal from clothing manufacturing and the build up of a powerful textile industry, including technical textiles.

However, with the exception of Korea and China many countries have already run into difficulties implementing their plans. In many cases, realising the sometimes very ambitious plans will therefore take more time than originally expected.

## **Quota-constrained countries by groups**

	Category	To USA	To EU		
1	Countries seriously held back, almost across the board, by quota today	Bangladesh, China, Hong Kong, India, Indonesia, Macao, Pakistan, Philippines, South Korea, Sri Lanka, Thailand	China, Hong Kong, India, Indonesia, North Korea, Pakistan, Vietnam		
2	Countries held back in a few categories	Romania, Cambodia, Malaysia, Myanmar, Turkey, Ukraine, Qatar	Belarus, Macao, Malaysia, Philippines, Serbia, South Korea, Thailand		
3	Countries for whom quota is little more than an administrative burdain	Belarus, Brazil, Bulgaria, Colombia, Macedonia, Mexico, Poland, Singapore, Uruguay	Argentina, Singapore, Taiwan		
4	Countries whose quota has been a valuable too, now threatened	Nepal, Oman, UAE			

Source: Arog Limited, WTO

## Countries constrained by quotas

(US\$ mn)	Que	ota to USA	Quota to EU	Quota to EU		
	N° of significant		N° of significant			
	quotas	Avr. Fill (%)	quotas	Avr. Fill (%		
Argentina	0		2	19,9		
Bangladesh	29	85,5	0			
Belarus	1	44,6	28	43,		
Brazil	20	28,8	0 from 2003			
Bulgaria	5	47,2	0			
Cambodia	25	58,6	Surveillance			
China	75	73,9	41	68,		
Colombia	1	78,7	0			
Hong Kong	54	61,5	22	47,3		
ndia	30	65,4	18	78,		
ndonesia	61	69,8	12	63,		
Macao	29	67,0	28	16,4		
Macedonia	5	41,0	Surveillance			
Malaysia	51	41,5	12	34,2		
Mexico	2	79,3	0			
Myanmar	11	53,1	0			
Nepal	12	34,4	0			
Noth Korea	0		28	16,4		
Oman	14	29,5	0			
Pakistan	39	64,0	14	62,6		
Philippines	42	61,8	11	26,9		
Poland	5	40,9	0			
Qatar	6	46,0	0			
Romania	22	34,5	0			
Serbia	0	,	11	51,6		
Singapore	17	22,0	10	3,0		
South Korea	71	55,2	30	36,6		
Sri Lanka	43	53,6	0			
Гаiwan	65	46,9	19	12,4		
Thailand	54	60,4	15	44,0		
Turkey	38	42,0	0	,.		
Jkraine	4	66,4	Surveillance			
JAE	26	55,7	0			
Jruguay	4	8,5	0			
/ietnam	0	0,0	29	75,5		

# 3.10.5 Impact of China's entry to the WTO

# > The negotiations' results

As a result of the negotiations, China has agreed to undertake a series of important commitments to open and liberalize its regime in order to better integrate in the world economy and offer a more predictable environment for trade and foreign investment in accordance with WTO rules.

Among some of the commitments undertaken by China are the following:

- China will provide non-discriminatory treatment to all WTO Members. All foreign individuals and enterprises, including those not invested or registered in China, will be accorded treatment no less favorable than that accorded to enterprises in China with respect to the right to trade.
- China will eliminate dual pricing practices as well as differences in treatment accorded to goods produced for sale in China in comparison to those produced for export.
- Price controls will not be used for purposes of affording protection to domestic industries or services providers.
- The WTO Agreement will be implemented by China in an effective and uniform manner by revising its existing domestic laws and enacting new legislation fully compliant with the WTO Agreement.
- Within three years of accession all enterprises will have the right to import and export all goods and trade them throughout the customs territory with limited exceptions.
- China will not maintain or introduce any export subsidies on agricultural products.

While China will reserve the right of exclusive state trading for products such as cereals, tobacco, fuels and minerals and maintain some restrictions on transportation and distribution of goods inside the country, many of the restrictions that foreign companies have at present in China will be eliminated or considerably eased after a 3-year phase-out period. In other areas, like the protection of intellectual property rights, China will implement the TRIPS (Trade-related Aspects of Intellectual Property Rights) Agreement in full from the date of accession.

# > Special provisions regarding textiles

Upon accession China will become a party to the Agreement on Textiles and Clothing and will be subject to its rights and obligations.

As for all WTO members, quotas on textiles will end at 31 December 2004, but there will be a safeguard mechanism in place until the end of 2008 permitting WTO Member FGNs to take action to curb imports in case of market disruptions caused by Chinese exports of textile products.

# 3.10.6 Global financing markets

Short term evolutions of the global financing markets can follow the following scenario:

- The world economy and above all the G-7 economies are struggling with serious structural problems. If the authorities do not take action then low inflation can turn into deflation. Given the heavy debts burdens this would be disastrous.
- Much of the fiscal and monetary room for manoeuvre has already been used up
- The €/US\$ should continue to trade within a range of 1.00-1.20 although it may run to 0.95 and 1.12 at certain times
- Both US\$/JPY and the €/JPY should head towards 140 over the coming months to quarters
- The US economy is weak. It has not responded to monetary and fiscal stimulation and the threat of war with Iraq is not improving the situation
- If other forces hamper US economic growth then the situation will be a sluggish world economy exacerbated by possible conflicts in the Middle-East and surging oil prices

# 3.10.7 The emerging competitive scenario

Competitive pressures acting within the textile and apparel industries will continue to intensify. This will be a result of low barriers to entry, the international diversity of companies and the high strategic stakes being played for as companies and national industries compete for their share of world markets.

Low entry barriers to world markets will continue to encourage many new entrants. The enduring characteristics of the global textile and apparel industries in terms of their ease of entry, through the ablility to combine low cost labour with older technology; the encouragement received from national FGNs; and the sourcing policies of international retailers, trading companies and manufacturers, is likely to continue.

In addition, an increasing number of companies will gain easier access to international customers via internet.

Competition will continue to escalate in the upper market segments as design and marketing capabilities of companies in Asia and elsewhere catch-up with those in Europe and in the US, and as consumers seek greater diversity. Consequently, brands from outside Western Europe and the USA will expand their share of international markets. Another factor is likely to intensify pressures in higher value market segments will be the growing ability of consumers to design and source their own products.

In choosing strategy, companies will consciously select a market position based upon servicing global, regional, national or local market segments.

With escalating international competition the emphasis will be on continuous innovation and on providing products and services with a customised element. In this environment, the trend towards focusing on core products, customers or market segments is also likely to grow. An exception to this may be in technical textiles, where higher research and development needs and interdependencies between products and markets in terms of technology and service requirements may sustain diversified groups. A key factor for success will be either the forging of a few closer partnerships or the creation of a looser network of alliances with other companies to create and deliver innovative and made-to-order products at high-speed and low-cost.

4

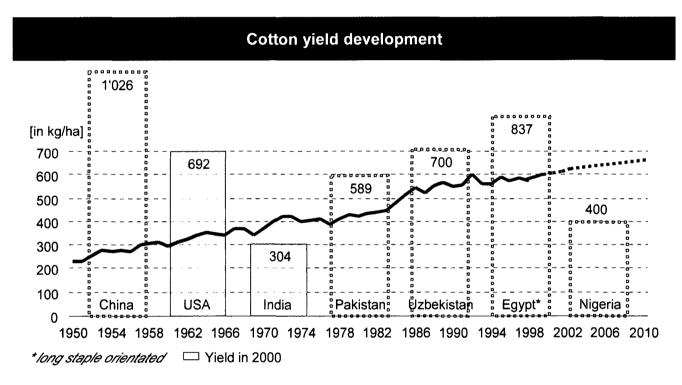
# THE RAW MATERIAL SUPPLY IN NIGERIA

# 4. The raw material supply in Nigeria

# 4.1 Cotton production

Nigeria is one of the smaller producers and exporters of cotton in Africa. Africa's biggest producer is Egypt, followed by Mali, Benin, Ivory Coast, Nigeria and Chad. Average land holding capacity of the farmers is about two hectares. All cotton is rain grown.

The area under cultivation in Nigeria ranges between 500 000 ha to 650 000 ha, only last year 2002-03 season the area declined to 350 000 ha. The average yield per ha is 400kg/ha. Yield in some other cotton producing countries are given below:



The following table shows the major data on the Nigerian cotton supply. Production of lint cotton is in the region of 90 000 t per year. There is however a sharp decline forecast for the production of cotton in 2002/03 down to about 55.000 t from the all time high production of 98 600 t in 2001/02. Low demand by the textile industry has led farmers to switch from cotton to other cash crops.

		4.0			
Cotton	nraduc	tion	ın	Nia	eria

	1999/00	2000/01	2001/02
Area planted (hectares)	490 000	630 000	662 000
Area harvested (hectares)	490 000	630 000	350 000
Beginning stocks (mt)	13 000	11 500	17 000
Production (mt)	64 000	93 000	98 000
Imports (mt)	14 500	15 000	10 000
Total supply	91 500	119 500	125 000
Exports (mt)	5 000	27 500	17 000
Use domestic consumption (mt)	75 000	75 000	75 000
Ending stocks (mt)	11 500	17 000	33 000
Total distribution	91 500	119 500	125 000

Source: USDA

The crop of 2002/2003 was much lower than normal due to both climatic factors and a decision by farmers to plant cotton on fewer acres. Last season the available cotton lint in the country was only around 55 000 tons. The consumption by the Nigerian industry is however over 80 000 tons.

# 4.2 Exports

Exports of cotton show also a drop from almost 30.000 t in 2001/02 to about 17.000 t in 2002/03 due partly to lower international prices.

# 4.3 Imports

Nigeria imports longer staple cottons from West Africa. Imports declined also over the same period due to low demand by the industry from about 15 000 t to 10 000 t. In January 2001, the FGN reduced the import duty for cotton from 35% to 25%, however, nearly all cotton enters Nigeria through smuggling, therefore avoiding the payment of duty.

# 4.4 System of cotton farming

Cotton farming is done by small farmers in Nigeria, with farm sizes ranging from 3-5 hectares. The Nigerian cotton is handpicked with the resultant low trash content. The cottons produced are mostly rain-grown.

# 4.5 Staple length

The majority of cottons produced in Nigeria is 1 1/16 and below "compared with staple length of 1 1/8" of cottons produced in other West-African countries.

# 4.6 Grading of cotton

Quite in contrast to other countries, the Nigerian cotton is not graded. As a consequence, Nigerian cottons are not represented on either the A or B international cotton price indexes.

# 4.7 Inputs

Industry sources indicate, that the unavailability of quality seeds at reasonable costs is one of the major constraints to increase cotton production in Nigeria. Earlier it was possible to plant specific cotton seeds in specific areas were soil conditions allow higher yields. At the moment ginneries process mixed seed cotton types from all over the country.

As farmers rely on mixed seeds, this leads also to poor resistance of the crops to plant diseases. Pest fighting chemicals are readily available to the farmers but high costs limit their use.

 $\rightarrow$  See positioning 8.1.3 for issues relating to the cotton sub-sector.

5

# THE NIGERIAN SPINNING, WEAVING AND PROCESSING INDUSTRY

# 5. The Nigerian spinning, weaving and processing industry

The Nigerian spinning, weaving and processing industry has been with the exception of a few mills a creation of foreign direct investment (FDI) in the 60s' and 70s' only and one composite textile plant has been added during the last 5 years. On the other side, at present all the companies are in distress, and some 25 companies having closed in the last 10 years.

At present Nigeria's textile companies are struggling with:

- stiff competition from massive illegal Asian imports of African prints even after the temporarily suspended imports legislation has been passed last year
- a decreasing purchasing power by the consumers, changing the scale of demand in the country
- an outdated production base resulting through low machine and labour productivity in high conversion costs.
- poor infrastructure which forces mills to generate their own electricity, find their own water supply and provide approach roads to the major roads network.
- a non-supportive FGN policy environment for manufacturing industries especially textile. Only after seeing the textile sector shrinking rapidly, the Nigerian FGN has temporarily suspended the import of printed fabrics to protect the textile printing industry, which represents the core competence of the Nigerian industry. However the industry reports that the import ban has up to date not been fully implemented by the relevant agencies.
- An industry with high input costs.

# Nigeria facing illegal imports

# **NIGERIA: Import Of Printed Fabrics Suspended**

President Olusegun Obasanjo has approved the temporary suspension of imports of printed fabrics, including African prints, super prints and wax prints with effect from September 1. Announcing this to journalists weekend in Abuja, Commerce Minister, Mustapha Bello said at the moment a lot of substandard products in terms of grammage, measurement, printing and type of chemicals used were dumped on the country due to the absence of an established order.

He said investigations revealed that the chemicals used in some cases were harmful to the skin, the grammage less than the standard 160 grammes and that they were single print instead of the stipulated double print.

The minister said that the Standards Organisaton of Nigeria (SON) would collaborate with the Nigeria Customes Service, Ministry of Finance and if need be, National Agency for Food and Drugs Administration and Control (NAFDAC) and the National Drugs Law Enforcement Agency (NDLEA) to establish systematic order of registration, testing, pricing and certification of all imports of printed fabrics.

Under the new system, the Finance Ministry will determine a minimum import price and quantity of printed fabrics based on the appropriate international import price and all imports "should pass through Apapa and Tin Can Island ports only to enable FGN have the relevant import statistics".

Any printed fabrics not imported through the two designated ports would be treated as contreband, while the customs patrol team that impounds such contraband would be entitled to 20 per cent of its price as an incentive, the minister said. Also a new HS code for printed fabrics in the Nigerian Harmonised Tariff Structure would be created with the description: "HS Code No 5210.6000: Folkrolic Articles Of African Prints, Super Prints and Wax Prints Consumed by the General Population Either in Pieces, Wrappers or Roll or Sewn'.

Bello said that only bona fide end-users of remnant textile materials like the blanket manufacturers would be allowed to import them.

"The imports are also expected to carry the name of the manufacturer and country, of origin so that it would be easy to know who to hold responsible when there is a problem", he said.

The minister empahasised that the new import system was important for handling illegal trans-shipment of printed fabrics, which had been approved as part of Nigeria's handmade, handloomed and folklore textile items under the African Growth and Opportunities Act (AGOA). He said the new system would ensure that unscrupulous persons do not trans-ship African prints from Asian countries only to deny Nigerians the relevant benefits in terms of employment and increased incomes that would enhance living standards.

Bello said the new measure was being introduced following FGN's observation of non-compliance with the 2002 fiscal policy measures relating to the textile sector. "The continued trend toward smuggling, under-invoicing and other unfair trade practices worsening the already precarious condition of the indigenous textile factories many of which had been forced to fold up," he said.

The minister explained that the new measure would allow customs the Standard Organisation of Nigeria (SON) to put in place effective control mechanism that would make for fair competition, stressing that it was not intended to give any advantage to the indigenous companies.

He warned unscrupulous importers that the new measure would also empower customs and SON to raid markets and impound substandard products on sale and expressed optimism that the period from now to the time of implementation would be sufficient for shipments already on their way to arrive.

Bharattextiles.com

August 12, 2002

# 5.1 Textile capacities installed in Africa

# 5.1.1 Spinning

The African continent has a share of only 4,4% of the World installed spinning capacity in ring spindles and a 2,1% share in the installed rotor spinning capacity.

The share in the world shipment of new textile machinery is a direct indication of the level of technology of a sub-sector in a particular continent.

On the shipment side, the figures of Africa are also not very impressive. From all the shipments made in the years 1992-2001, Africa had only a 1,7% share in ring spinning shipments and 1,8% in rotor spinning shipments.

The following table describes both installed capacities and cumulative shipments for all continents.

# World short-staple spinning installed capacities and cumulative shipments

	2000 installed spinning capacities			Cumulat	Cumulative shipments 1992-2001				
	Ring	%	Rotors	%	Ring	%	Rotors	%	
Africa	6 922 000	4.4%	179 600	2.1%	509 292	1.7%	46 861	1.8%	
North America	8225 000	5.3%	1028 600	12.4%	1 747 432	5.8%	667 752	26.3%	
South America	9 809 000	6.2%	436 700	5.3%	973 328	3.1%	198 800	7.8%	
Asia and Oceania	111 904 500	71.4%	2 230 700	26.9%	21 481 335	71.0%	726 389	28.7%	
Eastern Europe	8 778 000	5.5%	3 482 000	42.3%	897 402	3.0%	157 951	6.2%	
Western Europe	5 720 500	3.6%	496 700	5.9%	1 742 154	5.8%	306 129	12.4%	
Others Europe	5 554 000	3.5%	430 000	5.1%	2 646 076	8.8%	402 513	15.9%	
Not specified					260 472	0.9%	23 696	0.9%	
World	156 913 000	100%	8284 700	100%	30 257 491	100%	2 530 091	100%	

Source : ITMF

# 5.1.2 Weaving

The African continent had a 2,6% share of the world installed weaving capacity in shuttle less looms and 5,6% in shuttle looms.

In the cumulative shipments between 1992-2001, the share for Africa was 1,2% in shuttle-less looms and 2,3% in shuttle looms.

The following table describes both installed capacities and cumulative shipments for all continents.

# World weaving installed capacities and cumulative shipments

	2000 ins	talled we	eaving capa	cities	Cumulative shipments 1992-2			2-2001
	Shuttle-less	%	Shuttle	%	Shuttle-less	%	Shuttle	%
Africa	16 890	2.6%	80 080	5.6%	5 455	1.2%	2 416	2.3%
North America	74 650	11.8%	50 870	3.5%	30 713	6.6%	22	0.0%
South America	53 760	8.4%	156 000	10.9%	13 203	2.9%	69	0.0%
Asia and Oceania	247 560	39.0%	1 072 250	75.3%	313 091	68.0%	101 146	96.7%
Eastern Europe	175 050	27.6%	25 600	1.7%	21 892	4.7%	48	0.0%
Western Europe	51 770	8.1%	9 820	0.7%	58 413	12.6%	101	0.1%
Others Europe	16 000	2.5%	30 000	2.2%	17 552	3.8%	2	0.0%
Not specified					1 267	0.2%	798	0.79%
World	156 913 000	100%	8284 700	100%	461 586	100%	104 602	100%

Source: ITMF

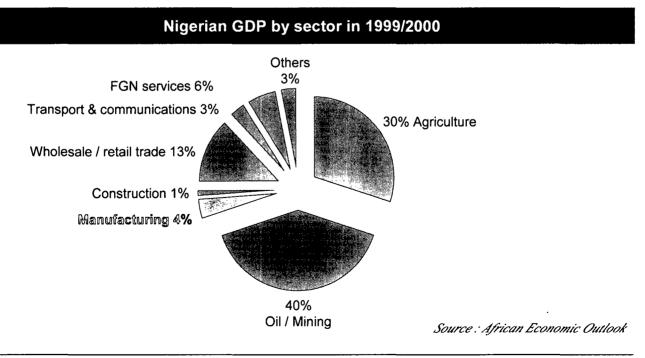
# 5.2 Importance of the Nigerian textile industry

The Nigerian textile industry is the largest employer in the manufacturing sector; until recently it provided about 25% of employment. However, employment decreased dramatically from approximately 137 000 in 1997 to less than 60 000 in 2003, or by almost 60% over 5 years.



The textile industry of Nigeria is still the largest industry in the manufacturing sector after agriculture and the oil industry even after the closure of some 25 companies and the subsequent loss in employment. However the manufacturing sector accounts for only 4% to GDP contributions as shown in the following figure.

The textile industry of Nigeria is unique in the sense that it is using a high percentage of locally produced raw materials, such as cotton and polyester, unlike other sectors in Nigeria.



# 5.3 Capacities installed in Nigeria

# 5.3.1 Short-staple spinning sub-sector

The Nigerian short-staple spinning industry ranks n°2 in Africa after Egypt. In the Sub-Saharan countries, it ranks n°1 before South Africa. However the sector is overaged with only:

- 2,4% of the ring spindles installed being less than 10 years old, whilst South Africa records a 39% ratio
- 28% of its rotor spinning capacity being less than 10 years old, whilst South Africa records a 91% ratio

The following table and the table on the next page summarizes installed capacities and shipments made between 1992-2001 in short staple spinning in Nigeria and compared them with three countries in Africa and three countries in Asia to show the scale differences.

# Installed capacities and machinery shipments, short-staple spinning in selected countries (2000)

	Nigeria	China	India	Pakistan	S. Africa	Ghana	Egypt
N° of ring spindle installed	810 000	34 435 000	37 698 000	8 567 000	280 000	120 000	2 600 000
Shipments 1992-2001	29 196	2 005 480*	11 041 023	1 351 632	110 816		148 900
Shipments 2001		611 844	874 264	475 764	6 480		8 208
N° of rotors installed	26 000	623 800	453 100	149 500	14 200	400	41 000
Shipments 1992-2001	7 300	208 363	162 083	8 604	12 984		1 976
Shipments 2001	1 824	118 656	4 704		1 124		480

<sup>\*</sup>only since 2001 internal shipments are included in ITMF statistics

# 5.3.2 Weaving sub-sector

# Shuttle looms

In the obsolete shuttle weaving technology, Nigeria has the highest population in Africa after Egypt.

# Shuttle-less looms

In the shuttle-less looms population, Nigeria holds the first place in Africa however with a negative age structure. Only 8% of the looms installed are indeed 10 years old and less against South Africa which records a 93% ratio.

Source: ITMF

# Installed capacities and machinery shipments, weaving in selected countries (2000)

	Nigeria	China	India	Pakistan	S. Africa	Ghana	Egypt
Shuttle looms installed	16 840	594 500	115 500	7 200	260	3 500	8 000
Shipments 1992-2001	290	67 720	10 983	1 855	260		
Shipments 2001	70	5 636	534		148		
Shuttle-less looms installed	2 640	68 700	11 509	20 217	1 330	30	2 600
Shipments 1992-2001	203	52 000	6 700	5 044	1 240		2 034
Shipments 2001		23 000	661	867	70		208

Source : ITMF

# 5.3.3 Processing sub sector

The advent of fabric processing in an industrial scale dates back to 1960's, even before the industry embarked on backward integration into spinning and weaving. Almost the entire output of the textile industry in Nigeria is converted into fully finished fabrics. As most of the mills are integrated, processing, i.e., dyeing/printing and finishing is done in house.

70% of the output consists of printed fabrics viz Real wax and Super prints. The remaining is dyed in the form of cloth (piece dyeing) or Yarn (yarn dyeing).

# Bleaching

There are still some mills which do scouring and bleaching in kiers, an obsolete process.

# **Dyeing**

Most of the dyeing is done on Polyester fabrics for suiting and shirting materials. The industry lacks in dyeing high quality plain cotton fabrics such as poplins. However some new investments are underway to upgrade this area.

# **Colour Separation**

Several mills have set up CAD (Computer aided design) system,s to generate designs and separate toe colours. The films are then engraved on nickel rotary screens or copper rollers.

# **Printing**

This is done on rotary printing machines which can typically produce up to 8 colours designs. Over the years the industry has acquired a high degree of finesse in printing both sides of the fabric with full penetration of dyes through the reverse of the fabric ("no face and back"). The industry has about **80 rotary printing** machines, though majority of which are over 10 years old. The machines can print generally up to 160 cms cloth width.

### Real wax

Nigeria still remains the world's largest producer of real wax prints which are popular all over West Africa. These are produced by a special (closely guarded) technique of applying wax to the cotton cloth which is the dyed and then cracked to create that unique crackling effect on the cloth. The pot pourri of designs and motifs transposed on the crackles lend high aesthetic appeal to the fabric. The African prints have become an integral part of the cultural or folkloric heritage of Nigeria.

# **5.3.3 Processing sub sector** (cont'd)

# **Finishing**

This is done on stenters. To impart luster ("shine-shine") to the surface the fabric is passed through heavy calendaring machines.

# Quality

The quality to processing in Nigeria could be considered adequate to good for African prints however average for Dyed fabrics.

# **Dyes**

For cotton fabrics, Reactive dyes are used. For Polyester fabrics, Disperse dyes are used. There are two local dyes manufacturers which produce reactive dyes. However, due to dynamic nature of consumer tastes and preferences about colours, the textile industry has to depend on a wide variety of dyes which are imported and cannot be adequately met by the local dyes manufacturers.

The processing sector needs to improve in the following areas:

# Recommendations

- · Upgradation of certain processes like bleaching
- Upgradation of dyeing of cotton fabrics continuous dyeing
- Finishing impart special finishes, control shrinkage etc.

# 5.4 Category-wise production imports and exports

# 5.4.1 Production focus

The product focus of the Nigerian textile industry is primarily directed to produce traditional African prints, wax prints and imitation wax prints. There is also a small production on shirting, suiting, furnishing materials, as highlighted in the following table:

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Approx.		<b>F</b>	ype of fabrics	Type of fabrics / Type of weave	e	
weight in g/m²	Flat fabrics	Dobby / Jacquard	Velvet corduroy	Terry cloth	Gauze	Technical textiles
50	• Ladies outwear				• Gauze	• Gauze
50 - 100	• Voile • Lining • Mosquito Nets • Ribbons	<ul><li>Labels</li><li>Handkerchief</li><li>Ladies</li><li>outerwear</li></ul>				• Elastic bandages • Parachute cloth
100 - 200	<ul> <li>Popelin</li> <li>Sheeting</li> <li>Tablecloth</li> <li>Shirting</li> <li>Lining</li> <li>Curtain</li> <li>Flannel</li> <li>Printing fabric</li> </ul>	<ul><li>Sheeting</li><li>Tablecloth</li><li>Shirting</li><li>Blouses</li><li>Ladies</li><li>outerwear</li><li>Curtains</li></ul>				Socks lining     Interlining
200 - 300	• Suiting • Matressticking • Workwear/ uniform • Drills	• Matress ticking • Curtains	• Velvet	<ul><li>Sportswear</li><li>Interlining</li><li>Filters</li><li>Velveton</li></ul>		• Tent fabric
300 - 400	Denim     Workwear/uni     form     Furnishing	• Furnishing	• Corduroy • Upholstery	<ul><li>Bathtowels</li><li>Handtowels</li><li>Bathrope</li></ul>		• Canvas • Sacks • Belting
400 - & above	<ul><li>Denim</li><li>Suiting</li><li>Blankets</li><li>Bedspreads</li></ul>	• Upholstery • Blankets		• Bathtowels		Canvas Filters Belting Felt Industrial

# 5.4.2 The Nigerian printing fabric production in the West African and global context

# 5.4.2.1 The Nigerian printing production within West Africa

In printed fabric production in West Africa is concentrated in 10 countries and is estimated to be in the region of 700 mn lm/year

Nigeria dominates the market with a share of more than 70% of the production.

# Fabric production in West Africa in 2003 in mn metres

	Super prints	Wax prints	Others textiles	Total	%
Nigeria	160	180	160	500	71.4%
Benin	4	0	16	20	2.9%
Togo	6	0	0	6	0.9%
Ghana	20	20	15	55	7.9%
Ivory Coast	: 15	20	25	60	8.6%
Mali	10	0	5	15	2.1%
Burkina	6	0	0	6	0.9%
Niger	6	0	0	6	0.9%
Cameroon	10	0	2	12	1.7%
Senegal	12	0	8	20	2.9%
Total	249	220	231	700	



Source: Industry assumptions

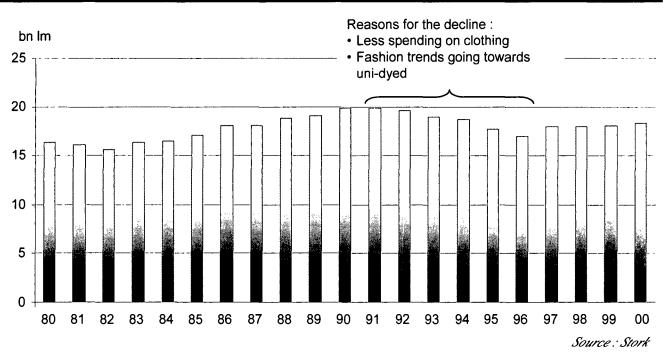
# 5.4.2.2 The world printing production

To position the Nigerian Printing Industry in the context of the World Printing Industry the following analyses is presented.

# 5.4.2.2.1 Global printing production

The total worldwide production was in the year 2000 about 19 bn metres. Printing production has however not reached its pick production of 1991. Predictions, based on quickly increasing fashion trends and population growth see however a continued increase of prints in the near future



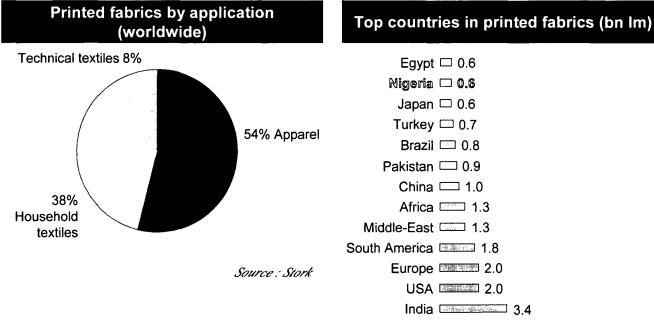


# 5.4.2.2.2 Printed fabrics by application - Worldwide

On a worldwide scale, garments account for 54% of total printed production followed by household textiles.

# 5.4.2.2.3 Top countries in printed fabrics

The Far Eastern region is the strongest in printing. Nigeria accounts for about half of the African production.



Far East ===

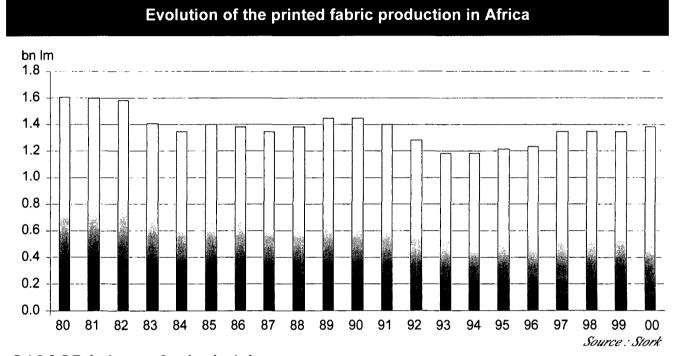
9.0

Source: Stork

# 5.4.2.2.4 Printing production in Africa

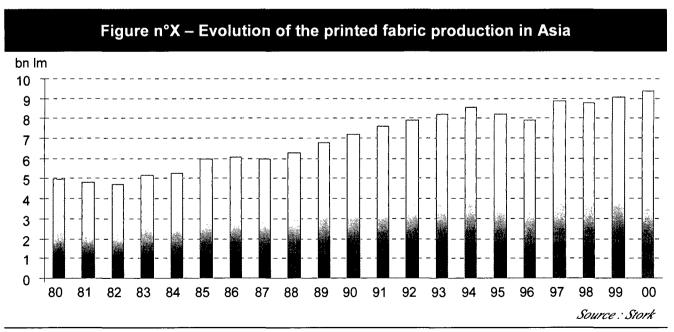
Printing production in Africa has been increasing continously after the strong dip in 1993 and was in the year 2000 back to the level of 1990 at about 1,5 bn metres. Negative developments can be registered both for the printing industry in South Africa and Nigeria which have not followed the upward trends.

Between 2000 and 2003, a 3% increase in production was predicted for the African continent in which however Nigeria did not participate.



# 5.4.2.2.5 Printing production in Asia

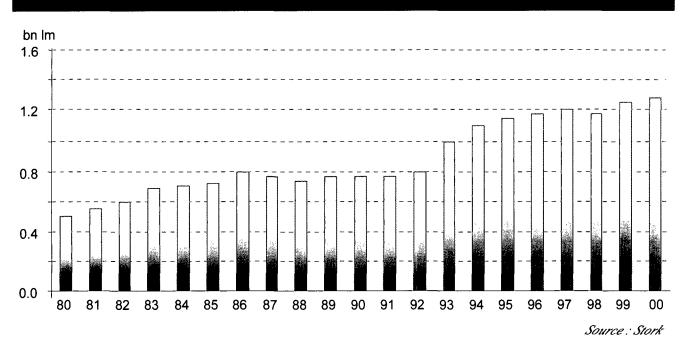
Asia is leading in textile printing and shows after the dip in 1996 again considerable growth



# 5.4.2.2.6 Printing production in the Middle-East

The printing industry in the Middle-East shows an impressive growth since 1992.

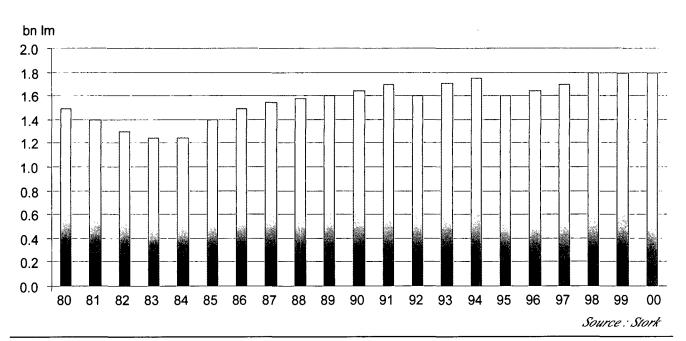
# **Evolution of the printed fabric production in the Middle-East**



# 5.4.2.2.7 Printing production in South America

Printing production in South America has been stagnant since 1998.

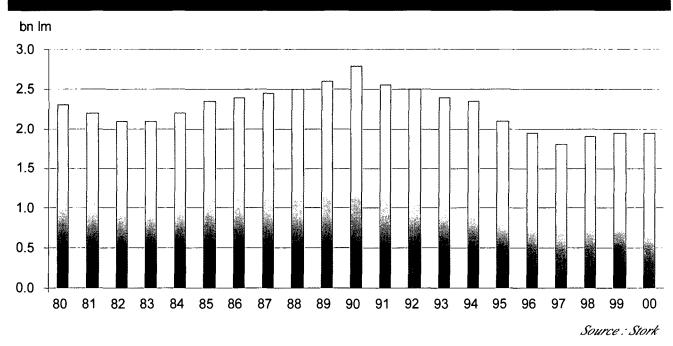
# **Evolution of the printed fabric production in South America**



# 5.4.2.2.8 Printing production in Western Europe

Production has started declining since 1990 and has become stagnant since 1998.

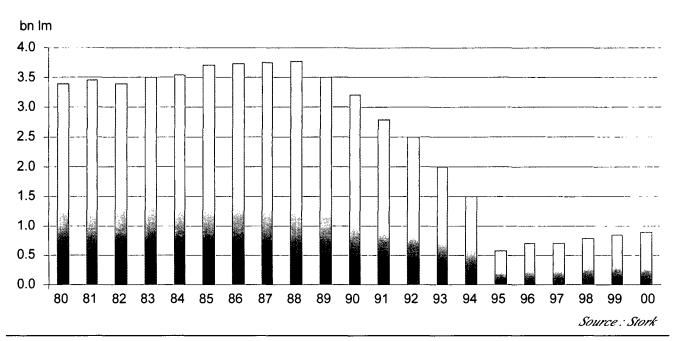




# 5.4.2.2.9 Printing production in Eastern Europe

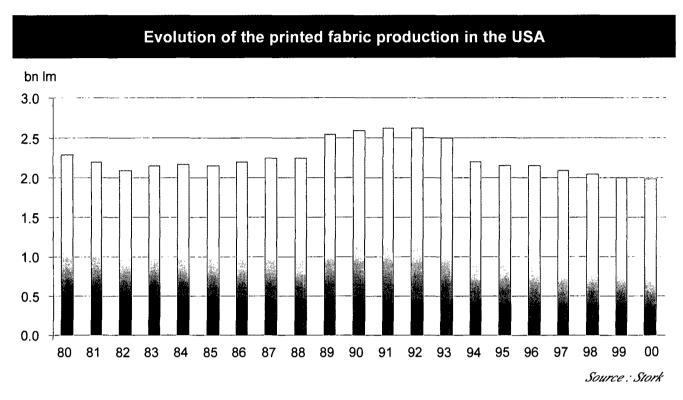
Production in Eastern Europe dramatically declined since 1998.

# **Evolution of the printed fabric production in Eastern Europe**



# 5.4.2.2.10 Printing production in the USA

The USA shows also a decline of its printing production but since 1998, the production stabilized.

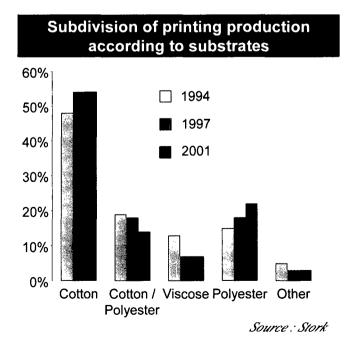


# 5.4.2.2.11 Subdivision of textile printing production based on substrates

Knitted substrates show the highest growth in printed fabrics.

Cotton fabrics are still the dominant substrates however they are stagnant; polyester fabrics show the highest growth.

Subdivisi ba	ion of pri ised on s			ion
Substrate	1992	1994	1997	2001
Woven	92.0%	90.5%	83.2%	80.0%
Knitted	7.5%	9.0%	13.1%	17.0%
Non-woven (and others)	0.5%	0.5%	3.7%	4.0%
			Source	e : Stork



# 5.5 Location and structure of the Nigerian textile industry

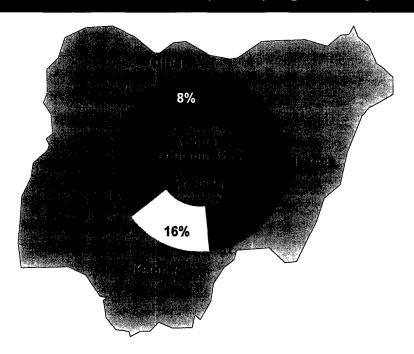
# 5.5.1 Location

There are 3 major geographical areas in which Nigeria's textile industry is located as follows:

- In Lagos or near Lagos
- In Kano or near Kano
- In Kaduna or near Kaduna

On the basis of cotton consumption, the Lagos area consumes about 50% of the Nigerian spinning industry's cotton input.

# Textile mills' cotton consumption by region in Nigeria



Source: NTMA

# 5.5.2 Total number of important mills

The textile sector in Nigeria consists of a total of 50 mills in operation.

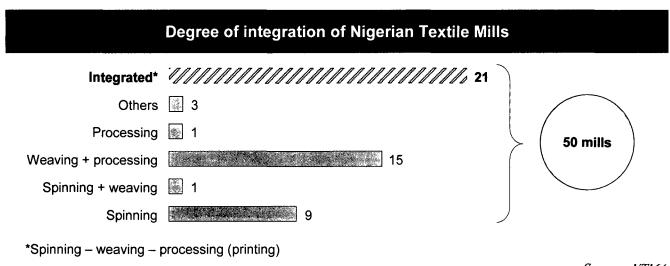
# Important textile mills



Source: NTMA

# 5.5.3 Degree of integration

Out of the 50 major mills, about 40% are fully integrated i.e. they manage spinning, weaving and processing plants. Printing mills with weaving and processing only, are the 2<sup>nd</sup> most important group. There are 7 stand-alone spinning plants in the country.



Source : NTMA

# 5.5.4 Trend analysis of the fabric production, exports and imports in Nigeria – 1998-2002

Due to the deteriorating trading conditions in the country, the overall production of fabrics has declined between 1998 and the year 2002 from 700 mn metres/year to 500 mn metres/year or by 30%.

Imports of textiles have FGNe up during the same period from 416 mn metres in 1998 to 800 mn metres in the year 2002 or by 48%.

# 5.5.4.1 Local production of textiles

Production showed in all product groups a sharp decrease since 1998.

Local production of textiles (mn metres p.a.)									
Product category	1998	1999	2000	2001	2002				
1 African prints									
Super prints	250	220	200	190	160				
Wax prints	190	200	210	200	190				
Sub total	440	420	410	390	350				
2 Suiting & shirting fabrics	160	150	130	115	100				
3 Others	100	80	75	70	50				
(Laces, Hosiery, Home Furnishings, towels)									
Total	700	650	615	575	500				
			So	urce : Indusi	try estimates				

**5.5.4.2 Import of textiles** Imports showed in all categories a dramatic increase between 1998 and 2002.

# Import of textiles (mn metres p.a.)

Product category	1998	1999	2000	2001	2002
1 African prints					
Super prints	10	35	75	100	125
Wax prints	6	7	10	15	25
Sub total	16	42	85	115	150
2 Damask (brocade)	150	150	180	250	200
3 Lace (emroidery)	110	120	130	120	150
4 Suiting & shirting fabrics	75	100	110	120	150
5 Others	65	120	130	150	150
(Laces, Hosiery, Home Furnishings, towels)					
Total	416	532	635	755	800

Source: Industry estimates

# 5.5.4.3 Export of textiles

Exports both formal and informal showed a continuous decrease since 1998

Export of textiles (mn metres p.a.)								
Product category		1998	1999	2000	2001	2002		
1 African prints Super prints Wax prints	Subtotal I (mn meters)	150 100 <b>250</b>	140 120 <b>260</b>	120 120 <b>240</b>	110 90 <b>200</b>	100 50 <b>150</b>		
2 Suiting & shirting fabric	s Total (mn meters)	60 <b>310</b>	60 <b>320</b>	50 <b>290</b>	50 <b>250</b>	30 <b>180</b>		
3 Cotton yarn	Tons	5'000	6'000	2'500	7'000	4'000		
4 Polyester fibre	Tons	0	1'000	4'000	8'000	8'000		
5 Cotton lint	Tons	7'000	5'000	27'500	17'000	10'000		

Source: Industry estimates

# 5.5.4.4 Mill fibre consumption

Mill fiber consumption declined as the fabric production declained.

# Mill fibre consumption (mn metres p.a.)

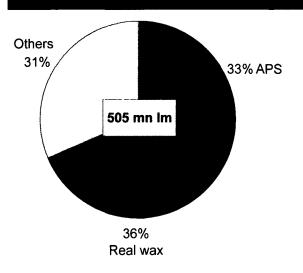
Product category	1998	1999	2000	2001	2002
1 Cotton	100'000	93'000	88'000	82'000	76'000
2 Polyester fibre & filament yarn	35'000	31'000	22'000	21'000	17'000
3 Others	8'000	7'000	6'000	6'000	5'000
1 Cotton production	72'000	64'000	93'000	98'000	57'000
1 Polyester fibre/filament yarn production	35'000	32'000	30'000	29'000	25'000

Source: Industry estimates

# 5.5.4.5 Mill wise fabric production

A few mills dominate the market as the following table shows:

# Mill wise fabric production in Nigeria



#### Wax

- 2 mills produce more than 30 mn metres/year
- 3 mills produce from 15 to 20 mn metres/year
- 5 mills produce less than 10 mn metres/year

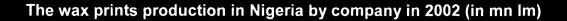
# African prints:

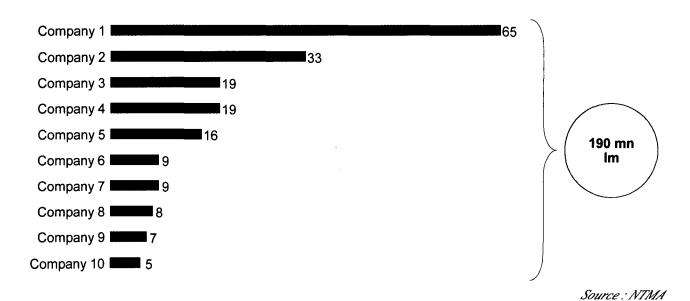
- 3 mills produce more than 15 mn metres/year
- 5 mills produce from 10 to 12 mn metres/year
- 10 mills produce less than 10 mn metres/year

Source: NTMA

# 5.5.4.6 Wax prints

There is a strong concentration in wax prints with the first 5 companies having a share of 81 % of the total production in wax prints.

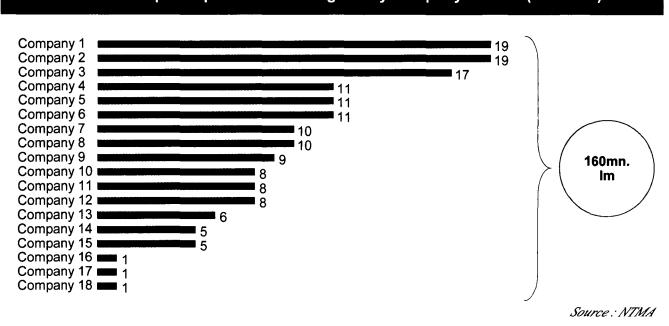




# 5.5.4.7 African prints

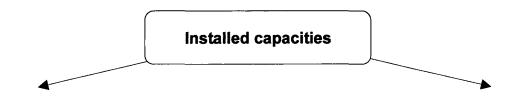
Also in African prints there is a strong concentration with 6 companies having a share of 56% of the total production in African prints.

# The African prints production in Nigeria by company in 2002 (in mn lm)



# 5.5.5 Summary of the Nigerian textile industry

# 5.5.5.1 The Nigerian textile industry in a nutshell



# Spinning:

Ringspinning: 810 000OE rotors: 26 000

# Weaving:

Shuttleless looms: 2 640Shuttle looms: 16 840

Mills in operations

50

Ownership

Equity ownership and management varies from 100% Nigerian owned and managed to 100% foreign-owned and managed (by Asian and Lebanese owners)

**Employment** 

At present, the sector employs directly about 58 000 persons

Size of the industry in the Sub-Saharan context

Nigeria's installed short staple ring spinning capacity has a share of 24%, open end spinning of 31% of the Sub-Saharan installed capacity. In shuttleless looms, Nigeria's share is 35%, in shuttle looms, it is 29%

**Production** 

In the years 2000, Nigeria produced about 500 mn lm of all types of fabrics. Nigeria's fabric production in the year 2002 represented 72% of the West African production

**Product focus** 

The textile industry primarily produces African prints both in real wax and imitation wax prints. The sector is characterized by little product differentiation in as much that one cotton substrate in a standard construction is printed

Competition

The competition intensity is high since Nigerian companies produce a product which allows little product diversification

### **Product**

Traditional African prints, colour ways and designs do not show big variation between companies. The background colours are in deep and bright shades. The finished width of the fabric is for all prints is 46 inches. The sewing operation for the printed final garments is either done at home or by local tailor-shops

# Quality

The quality of Nigerian made African prints and Wax prints is well accepted all over the African market, however the mills lack in technology to produce high quality dyed cotton fabrics meeting international standards

# Product presentation

Prints are offered in 6 or 12 yard pieces which are labeled or cellophane wrapped. For the clients, brands and names are printed on the selvedge of the piece. Some descriptions are misleading such as "super wax, made as wax, London wax.

# Specific product requirements

The product can only be offered with a real selvedge which can be produced only by the outdated, low speed shuttle technology or with a tucked-in selvedge as produced by the Sulzer projectile looms

# Markets

Prints are mainly sold in the domestic markets, some of the companies export also to the ECOWAS and CEMAC countries. Some companies have wholesale distributors and others sell directly to the final point of sale

# **Export**

Direct exports to the EU are mainly in the form of yarn. Some suiting and shirting materials are also exported. It is however estimated that more than 50% of the APS and wax production are exported to ECOWAS and CEMAC countries

# Size and degree of integration

Almost all the Nigerian companies which are in operation have a size which offers economy of scale. There are only a few stand alone spinning operations. Most of the companies are integrated with spinning – weaving - processing

# Level of technology

The level of technology installed is quite low as the following statement shows machines which are less than 10 years old are: In ringspinning, 3.6%, in rotor spinning 28%, in shuttle weaving 8%, in shuttleless weaving 15.6%

## Cotton

Nigerian cotton has a medium staple of length which is not only suited for print fabrics but also for many fabrics which could be made into garments if the cotton is not contaminated

# Human Resources

- In their struggle for survival, the sector has paid too little attention toward upgrading the skills of the workers
- The quality of technical education in textiles offered by universities and polytechnics is below average and falls short of industry expectations
- There is a need for closer interaction between the industry and technical education institutions

# **Polyester**

Fibre and filament are produced at a rate of about 25 000 tons / year (50% of capacity installed)

Major cost drivers in a textile industry are:

- The cost of cotton
- The cost of power
- The cost of labour
- The cost of dyestuffs and chemicals
- The cost of capital

# Major cost drivers for the sector

# 5.5.5.2 Analysis of the textile industry along the value chain

# Analysis of the Nigerian textile industry along the value chain

Insignificant

Parameters	Polyester fibres & yarns	Cotton Yarn	Grey fabric	Printed fabric (APS/rwax)	Dyed fabric (synthe- tics)	Made- ups Home textiles	Garments
Level of technology	Medium	Medium	Medium	Medium	Medium	Poor	Poor
Age of equipment	Satisfactory	Unsatisfac- tory	Unsatisfac- tory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Cost Competiti- veness	Deterio- rating	Deterio- rating	Deterio- rating	Deterio- rating	Deterio- rating	Deterio- rating	Non-existent
Ability to manage quality required for exports	Good to satisfactory	Good to satisfactory	Good to satisfactory	Good	Poor	Poor	Poor
Investment environment	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Core competencies	Good	Good	Good	Very good	Good	Poor	Poor
Present export potential	Good	Good	Good	Good	Good	Good	Non

Source : Gherzi

# 5.5.6 Installed fabric capacities, capacity utilisation and replacement value of textile industry

According to industry estimates the total sector has an installed capacity of 1.4 bn linear metres. The production in the year 2002 was about 500 mn linear metres resulting in a capacity utilisation of about 35%.

Based on the present production, the sector represents a replacement value of about US\$ 3 bn.

# 5.5.7 Quality standards

# 5.5.7.1 Yarn and Fabrics

The production of textile materials in Nigeria is covered by NIS standards laid down by SON. The textile mills comply with the standards and each year, those mills which are found to be consistent in meeting the standards are awarded with certificates.

NIS specifications apply to over 12 different types of textile materials, including African prints and Wax prints, lace fabrics and drill.

The quality of Nigerian made African prints and Wax prints is well accepted all over the African market, however the mills lack in technology to produce high quality dyed cotton fabrics meeting international standards.

A few spinning mills export Cotton Yarn to Europe meeting international standards.

# 5.5.7.2 Cotton

It is a well established fact that polypropelene contamination is the major quality problem afflicting Nigerian cotton. This is caused by use of recycled plastic bags during collection of raw cotton in the fields. This results in problems in spinning and cotton is downgraded for use in printed fabrics only, thus limiting its application. It is estimated that Nigeria looses over USD 30 mn annually due to this problem (ACE Consultants finding).

# 5.5.7.3 Recommendations

SON, in collaboration with NACOTAN and NTMA, should launch an awareness campaign aimed at educating the farmers about the harmful consequences of using plastic bags.

The Federal Ministry of Agriculture and State governments should implement the ACE consultants proposal for providing woven cotton bags to farmers. The local textile industry can easily produce such bags.

Bank of Industry should give priority to making available funds for modernization of equipment in the textile industry.

# 5.5.8 Human Resources

Nigeria has sufficient skilled manpower for the textile and garment industry. In fact due to the unabated closure of the mills the employment has been falling both in factories and farms (cotton growers).

# 5.5.8 Human Resources (cont'd)

In their struggle for survival, the sector has paid too little attention toward upgrading the skills of the workers.

The quality of technical education in textiles offered by universities and polytechnics is below average and falls short of industry expectations.

The other problems faced by the industry arise from:

- · Low labour productivity
- Absenteeism

The percentage of female workers in the sub sector is estimated below 5 %. However a lot of women are engaged in textile retail activity, particularly in the South west.

### 5.5.8.1 Recommendations

There is a need for closer interaction between the industry and technical education institutions.

Creation of a garment sector would create tremendous job opportunities for female workers and therefore should be encouraged.

Labour unions should recognize the need to boost productivity and should benchmark it to other successful textile producing countries such as China, India, Bangladesh and Mauritius.

# 5.5.9 Textile Education

# 5.5.9.1 YABA College of Technology – Department of Polymer and Textile Technology

# **Textile schools**

The Yaba College of Technology, Lagos is a multi-disciplined polytechnic with 15,000 students on a single campus. YABA is one of 4 colleges in Nigeria that offer courses in textile technology; the others are Kaduna Polytechnic, Ahmadu Bello University (ABU), Zaria and F.U.T, Oweri.

#### Textile courses

Only ABU offers degree courses in textile technology (B.Sc. [Textiles]) with a reported 20 graduates a year. The 3 polytechnics have a combined total, it is reported, of up to 50 qualified students in National Diploma (ND) or Higher National Diploma (HND) a year. The ND course is a 2 years, full time course that can be converted into an HND course with a further 2 years, full time course and with a 1 year industrial training period in between. Not all students who take the ND course return to complete the HND course.

Certificate courses in polymer and technology are also offered.

# **5.5.9 Textile Education** (cont'd)

# Textile technology

The textile technology course covers textile activities from spinning to fabric dyeing, printing and finishing and carpet production. Ginning and garment production are not part of the syllabi.

# Workshop facilities

The workshop facilities at YABA are poor; the equipment appeared to be limited in scope, to date from the early 1960s and much of it appeared not to be in working order, as spare parts or raw materials were awaited. A small hand flat machine represented the knitting sub-sector and no circular knitting machine was installed.

# **Diploma students**

It is reported that 13 YABA students received their diplomas in 2002 and 16 students in 2003. 70 students are currently in each of the 1<sup>st</sup> and 2<sup>nd</sup> year courses at YABA.

Careers 1: Certificated students enter the industry as supervisors but have no natural progression through the industry as "Most textile companies are foreign owned and have their own family or expatriate managers", it was commented.

Careers 2: During fieldwork discussions with company owners, the view was expressed that the calibre of the qualified students from all 4 of the textile colleges is less than they expect. Industrialists also comment that they have little dialogue with colleges except when interviewing candidates for jobs. For students to meet the industry's needs, it is necessary for the two parties to work closely together at all times.

#### Fees

Students pay N 3,000 a year that represents about 5% of the actual costs of the total costs (course fees + hostel costs).

# **Conclusions**

The ND and HND courses offered by YABA are considered mediocre and of too long duration for the standards achieved. The workshop technologies available for practical training are semi-obsolete at best and seem not to have worked for quite some time. As such, the courses cannot match the needs of the industry.

It is understood from our discussions at YABA College and with the industry that there is little dialogue between the two parties and so the contribution made by the College to the industry's progress can only be limited.

#### 5.5.9 Textile Education (cont'd)

#### **Conclusions** (cont'd)

If the other 3 colleges operate similarly and are in an equally deprived state, the overall contribution to textile education made by the 4 colleges will be of limited value to the industry.

It is recommended that the colleges invite represents of industry to join their boards of management, so that industry has the desired interest in the future development of the colleges. Together, they would prepare the curricula and jointly take interest in the students during their training and after they have qualified.

## 5.5.9.2 YABA College of Technology – Department of Industrial Design in the School of Art, Design and Printing Technology

#### Courses

The School offers a 2 years ND course in Fashion Design with the possibility of conversion to an HND course (with a further 2 years tuition); a 4 years HND course in Textile Design and a day release course in dress making. The printing courses refer to paper printing.

Certificated Students: the number of students receiving diplomas in 2002 was 6.

#### **Facilities**

The facilities available for practical training appear to be simple so, that however much enthusiasm is shown by the staff, the lack of facilities cannot be compensated for. The relevance of the courses to a ready-made garment industry is a problem. If the garment industry were to take-off, there would be an opportunity for a dynamic school to be upgraded and to work with the industry in the provision of training in production techniques and planning, pattern laying, quality control, product costing, training of trainers, work place engineering, work study, merchandising, styling, etc.

#### Conclusion

The courses on offer do not match the requirements of an export-oriented garment industry but this is hardly surprising, as they were not designed for this purpose. As the RMG industry becomes established, specific courses will be required in such subjects as production management; production planning; training of trainers; work study and work measurement; work place engineering; quality control; styling (rather than designing); merchandizing; pattern making, laying and cutting; machine maintenance, etc.

Colleges close to the garment making locations should provide these courses. The curricula should be formulated in conjunction with the industry in order that the industry will be encouraged to make full use of the courses and to employ the qualified students.

It is recommended that courses should be short courses wherever possible and on a day-release, part time basis, so that students can work in, say, the mornings and study in the afternoons, or some other form of split work- study programmes.

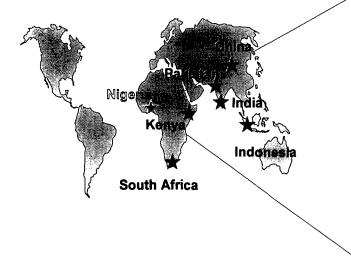
#### 5.6 Benchmarking Nigerian cost factors with a panel of countries

In the following tables, we benchmark a number of cost factors with a panel of countries with which Nigeria competes in an indirect way.

Generally, it can be said that Nigeria has a very unfavourable cost rating for a developing economy as the following comparison shows.

#### Benchmarking parameters and panel

#### **Panel of countries**



#### Factors which are benchmarked

- 1. Cost of power/kwh
- 2. Cost of water
- 3. Cost of steam/kg
- 4. Labour wages/h
- 5. Interest/depreciation/inflation
- 6. Export financing
- 7. Corporate tax
- 8. Import duties
- 9. Local duties
- 10. Foreign investment policy
- 11. Cost benchmarking, yarn, fabric grey, fabric printed
- 12. Age structure of the equipment installed in spinning and weaving
- 13. Mill operating hours

#### 5.6.1 Cost of power

Grid electricity which is available only through the state monopoly provider NEPA costs around 9.5-10.5 Naira/kwh on an average. Companies frequently have partially or completely to rely on their own diesel generators. With the current fuel prices diesel generated electricity costs at least 14 US Cents/kwh. Nigeria as can be seen has the highest power costs in comparison with the reference countries. For an oil producing country, this is an untolerable situation.

#### Factor Cost - Power (US Cents per kWh) (2002) Cost parameter Nigoria India South Africa Indonesia China **Pakistan** Kenya 5.83 -10.42 3.00 - 4.004.66 - 7.96 6.50 - 6.75Power cost (Range) 8.0 (grid) 4.0 - 5.26.0 - 8.0(Source of power) 14 - Diesel (Grid) (Grid) (Grid) (Grid) (Grid) (Grid) Actual 14.0) Diesel <sup>8.0</sup> → Grid Official 8.87 5.00 7.0 6.57 6.04 US Cents per kWh (Average) 3.65

Source: Gherzi analysis

Kenya

Pakistan

China

#### 5.6.2 Cost of raw water

Water is not available to the industry at attractive rates especially in the North where raw water has to be supplied by tanker to some of the mills.

South Africa

Indonesia

India

Nigeria

#### Factor Cost - Water (US Cents / m<sup>3</sup>) (2002) Cost parameter Nigoria India South Africa Indonesia China Pakistan Kenya 15.0 from Ground Raw water cost ellew 13.37 45.0 - 50.0 15.00 14.71 35.0 water 20.0 from US Cents per m<sup>3</sup> 5.0 rotined 47.5) US Cents / m3 15.0 14.7) 5.0 Nigeria India South Africa Pakistan Indonesia China Kenya

Source: Gherzi analysis

#### 5.6.3 Cost of steam

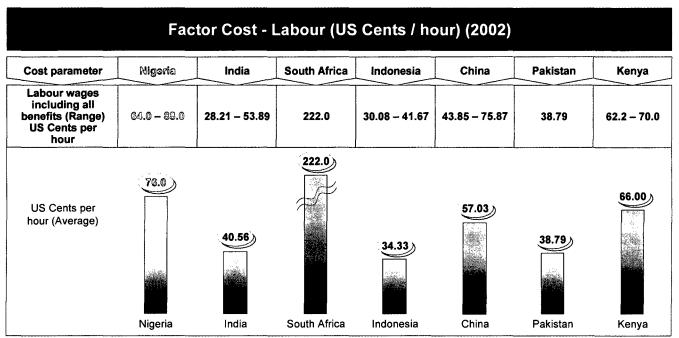
At the local official fuel oil price of 12-13 Naira/Litre, Nigerian steam costs are around 1.0 Cent/kg. In Kano, at fuel oil prices of 40 Naira/litre, the price is around 3.0. Again the cost compares unfavourably with the reference countries.

Factor Cost - Steam (US Cents per kg of steam) (2002)								
Cost parameter	Nigoria	India	South Africa	Indonesia	China	Pakistan	Kenya	
US Cents per kg of steam Fuel	1.0 - 3.0 Furnace oil	1.96 Furnace oil	0.50 Coal and Furnace oil	0.73 Furnace oil	0.58 Coal	1.41 Furnace oil	1.2 Furnace oil	
US Cents per kg of steam	3.0*)	1.96)	0.50	0.73)	0.58	1.41	1.2	
*Kano for example	Nigeria	India	South Africa	Indonesia	China	Pakistan	Kenya	

Source: Gherzi analysis

#### 5.6.4 Labour costs

The average hourly costs of wages including the social charges are very much above the level paid in the reference countries. When coupled with the relatively low labour productivity, it becomes clear, that Nigerian labour costs adversly affect, in addition to the other input costs, the competitive positioning of the Nigerian textile industry.



Final report - November 03

#### 5.6.5 Interest / depreciation / inflation

The cost of short term borrowing at the present rate of 28-30% is a major international cost disadvantage for the Nigerian textile industry

#### Financial cost – Interest, depreciation and inflation (2002)

Cost parameter	Nigoria	India	South Africa	Indonesia	China	Pakistan	Kenya
Rate of interest on foreign currency long term loan	LIBOR + 2.5 %	LIBOR + 2.5 – 3.0 %	LIBOR +	LIBOR +2.5%	6%	5-6%	LIBOR + 2.5 – 3%
Rate of interest on local currency long term loan	21% long term 30% short term	13 - 16% *	13.5%	16 - 18%	5.5%	13 - 14%	22%
Rate for Technology Upgradation	No special fund available	7 - 11%	No special fund available	- 16 – 18%	3%	13 – 14%	-
Rate of depreciation for textile machinery	6.64%	10.34% or 50% : TUFS	10%	10%	10%	10%	10%
Inflation rate : Yearly average consumer index	12-18%	4.7%	7%	12.91%	3%	4.7%	5%
Real rate of interest	3.0-9.0%	8 - 11%	6.5%	3 - 5%	2.5%	8 - 9%	17%

Source: Gherzi analysis

#### 5.6.6 Corporate tax

The corporate tax in Nigeria is generally in line with the reference countries.

#### Comparison of corporate tax (2002)

Cost parameter	Nigeria	India	South Africa	Indonesia	China	Pakistan	Kenya
Corporate tax rate	30%	Domestic co.: 37.50% Foreign Co.: 42% (incl. surcharge 5%)	30%	30%	5 - 12% for SEZ	Incl. surcharge Public Ltd:35% Private Ltd:45% Banking:50%	0% in EPZ
Other taxes	With holding Tax 10% (on dividends)  VAT 5%  Lagos tax 1%  Education tax 2% on profit	Dividend distribution tax : 10.20%	Dividend tax : 12.5%			Turnover tax: 0.5 to 1.0%  Export dev. Fund: 0.25%  Welfare fund: 2%  Educational tax: Rs.100/worker /annum	Dividends no tax

Source: Gherzi analysis

#### 5.6.7 Import duties

The local industry enjoys a strong protection when compared with the reference countries, however the protection is not enforced.

## Comparison of import duties on cotton textiles (2002) (Incl. of basic and others duties applicable for imports)

Product	Nigoria	India	South Africa	Indonesia	China	Pakistan
Cotton	25%	10.00	-	20.00	37.71	15.00
Yarn	40%	34.78	14.0 (EU)	20.00	28.47 to 29.87	26.50
Grey fabrics	75%	56.83	17.0 (EU)	20.00	37.71	55.25
Processed fabrics	75%	56.83		20.00	37.71	55.25
Made-ups (non terry)	75%	56.83	26.0 (EU)	20.00	37.71	55.25
Made-ups terry	75%	56.83		20.00	37.71	55.25
Textile machinery	5%	26.67 & 50.80		22.50	37.71	26.50 to 55.25

Source: Gherzi analysis

Nigeria : Basic custom duty exluding other levies

India : Basic customs duty + CVD+ SAD, (Modvat on CVD not considered)

South Africa

Indonesia : Basic customs duty + VAT + Advance income tax for capital goods

China : Basic customs duty (MFN) + VAT
Pakistan : Basic custom duty + Sales tax

#### 5.6.8 Local duties and taxes

Nigeria levies only a VAT charge on the locally produced textile products.

Figure n°X – Comparison of total local (excise, sales tax, ...) duties and taxes on cotton textiles and machinery (2002)

Product	Nigoria	India	s	outh Afr	ica	Indonesia	China	Pakistan	Kenya
			MFN	EU	SADC				
Cotton	No excise duty	4.00	160 r/kg	-	0.9 r/kg	10.00	17.00	10.00	-
Yarn	dito	13.57	20%	-	-	10.00	17.00	15.00	-
Grey Fabrics	dito	16.48	22%	17%	9%	10.00	17.00	15.00	-
Processed Fabrics	dito	16.48	30%	-	-	10.00	17.00	15.00	-
Made Ups-Non Terry	dito	16.48	-	29%	18%	10.00	17.00	15.00	-
Made Ups-Terry	dito	16.48	-	-	-	10.00	17.00	15.00	-
Textile Machinery	dito	20.64	-	10%		10.00	17.00	15.00	•

Nigeria : no excise on textiles. 5% on sale of textiles (local) nil on export

India : Excise duty + Additional Excise Duty or Sales Tax, no excise duty on exports

South Africa

Indonesia : Sales tax
China : Value Added Tax

Pakistan : Sales tax (Similar to VAT)

Source: Gherzi analysis

#### 5.6.9 Foreign investment policy

Nigeria allow 100% foreign share holding by foreign investors. This is in line with the reference countries.

## Foreign investment policy (2002)

Cost parameter	Cost parameter Nigoria		Indonesia	South Africa	China	Pakistan	Kenya
Foreign share holding allowed	Allowed 100%	Allowed 100%	Allowed 100%	Allowed 100%	Allowed 100%	Allowed 100%	Allowed 100%
FGN Sanction for Foreign Investment	No limit	Automatic route if more than 50 mn \$	Required, no restriction of minimum investment amount	Not required	Required	Not required	Not required

Source: Gherzi analysis

#### 5.6.10 Export financing

A comparison with leading textile exporting countries shows that exporters in Nigeria pay high rates for their export finance...

#### **Export financing (2002)**

Cost parameter	Nigeria	India	Indonesia	China	Pakistan
Pre-shipment credit up to 180 days	LIBOR + 2.5%	LIBOR + 0.75%	LIBOR + 2.5%	LIBOR + 2%	LIBOR + 2%
Post shipment credit	LIBOR + 2.5%	LIBOR + 0.75% 360 days	LIBOR + 2.5%	6%	LIBOR + 2%
Pre-shipment in local currency up to 180 days	17-18%	7.5 % (PLR –2.5%)	18	5.5%	13.5%
Post shipment in local currency	17-18%	7.5 % (PLR –2.5%) 360 days	18	5.5%	13.5%

Source: Gherzi analysis

#### **5.6.10 Export financing** (cont'd)

#### 5.6.10.1 Export Credits

- Export credit agencies all over the world enjoy support by way of interest subsidies so that they can promote national exports.
- The objective of subsidised interest rates is to neutralise competition between the home country exporter and a FGN sponsored competitor from another country, whose FGN is capable of offering an export credit at better than global market conditions.

#### 5.6.10.2 Export Credit, Global Trends

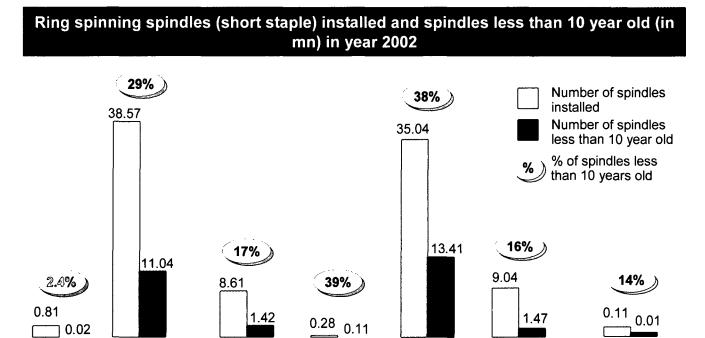
- A numer of countries offer export credit at conses commercial interest reference rate (CIRR) as determined by the OECD (Organisation for Economic Co-operation and Development) which comprises 29 member countries, mainly from the developed world.
- Export credit agencies (ECAS) of most of the countries ensure that their national exports do not suffer for want of competitive credit, generally tied to the OECDs concensus CIRR.
- A World Bank Study had emphasided that credit directed to exporters in the East Asian countries spurred the rate of growth in those countries.
- In China, effective export credit interest rates are often lower than the CIRR. Interest differential/subsidy/equivalisation is met thought FGN/ECA (Export Credit Agency) funding. The above is quaranteed by the Exim Bank of China, which is the policy Bank of China and ist business is completely under written by the FGN of China.

#### 5.6.11 Age structure of the machinery installed in the Nigerian textile industry

The following tables show the age structure of the Nigerian spinning and weaving equipment in comparison with some of the major textile producing countries of the world and shows the lack of modern equipment in Nigeria, resulting in low quality and low machine productivity.

#### 5.6.11.1 Ring spinning - Short staple

Compared with the reference countries, Nigeria shows the lowest level of modern ring spinning equipment. Only 2,4% of the ring spinning installed are less than 10 years or 10 years old.



Source: ITMF / Gherzi analysis

Kenya

Pakistan

#### 5.6.11.2 Open end spinning

India

Nigeria

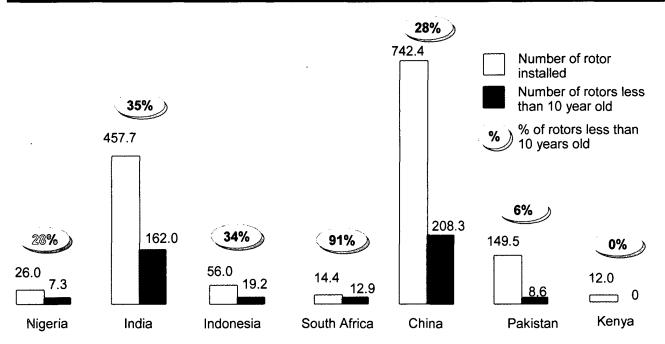
In open end spinning, the machines installed show a favourable age structure in comparison with the reference countries. 28% of the rotors installed are less than 10 years, or 10 years old.

South Africa

Indonesia

China

## Open end spinning rotors installed and rotors less than 10 year old (in thousands) in year 2002

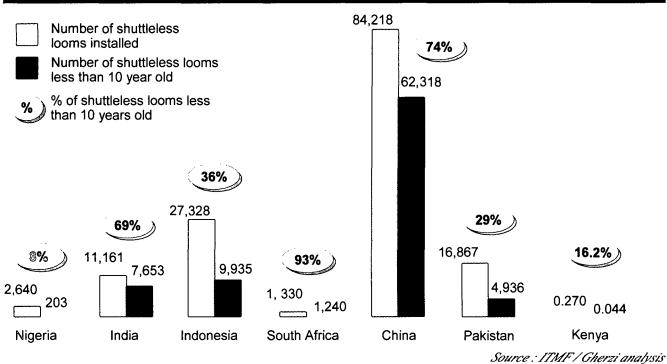


Source: ITMF / Gherzi analysis

#### 5.6.11.3 Shuttleless looms

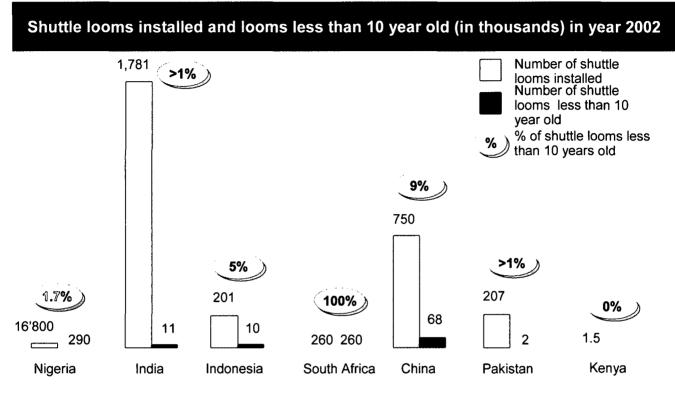
Only 8% of the shuttleless looms installed are less than 10 years or 10 years old. In South Africa, 29% and in Kenya 16,2% of the shuttleless looms are 10 years old.

## Shuttleless looms installed and looms less than 10 year old (in numbers) in year 2002 (Excluding waterjet looms)



#### 5.6.11.4 Shuttle looms

In the outdated shuttle loom technology, the age structure of the looms installed is on par with most of the reference countries.



Source: ITMF / Gherzi analysis

#### 5.6.11.5 Summary comparison between Nigeria and the reference countries

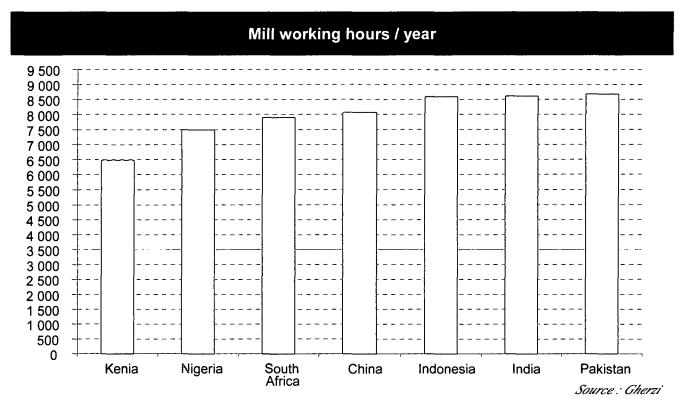
As a result of a nin-supportive policy framework and the uncertain future of the sub-sectors, mills invested very much below the level of the reference countries.

	Summary table							
Technology level	Nigoria	India	Indonesia	South Africa	China	Pakistan	Kenya	
Ring Spinning Spindles < 10 years	3.6%	29%	17%	39%	38%	16%	14%	
OE Rotor < 10 years	28%	35%	34%	91%	28%	6%	0%	
% of shuttleless looms in total loom populations	15.6%	0.62%	10.42%	80%	9.30%	6.15%	15.2%	
Shuttleless looms <10 years	8%	69%	36%	93%	74%	29%	16%	

Source : Gherzi analysis

#### 5.6.12 Mill working hours / year

For a developing country, the mill hours worked / year are quite low compared with the reference countries. This results in a low level of utilization of the capital intensive spinning, weaving and processing equipment in Nigeria.

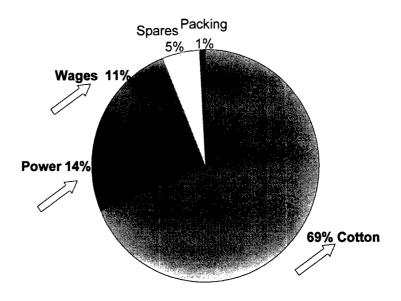


#### 5.6.13 Cost drivers in spinning, weaving and processing

#### Cost drivers in spinning and weaving

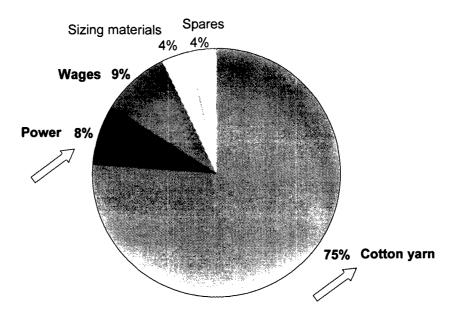
Raw material, cotton and the cost of power and wages are the main cost drivers in spinning. In grey cloth, the cost of yarn, the cost of power and wages...

#### 24/1 Ring carded production cost breakdown



Source: Gherzi

#### Grey cloth 50" production cost breakdown



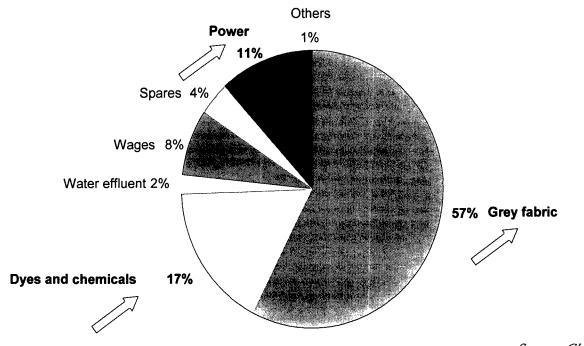
Source : Gherzi

#### 5.6.13 Cost drivers in spinning, weaving and processing (cont'd)

#### Cost drivers in processing

In African prints, the fabric cost, the cost of dyes and chemicals and the power costs are the main cost drivers...

#### 4 colour African print production cost breakdown



#### 5.6.14 Positioning of the Nigerian textile industry

In the following table we present the main challenges which the Nigerian textile industry faces, its strengths, weaknesses, threats and opportunities

#### The Nigerian Textile Industry can be positioned as follows...

Challenges	Strengths	Weaknesses	Threats	Opportunities
<ul> <li>Can cost competitiveness be improved?</li> <li>Can the Nigerian textile industry find a role in the changing global textile market environment?</li> <li>Can the decline be stopped?</li> </ul>	<ul> <li>A core of performing companies struggling against unfair competition from illegal imports</li> <li>Large pool of skilled manpower and middle management</li> <li>Seasoned management able to take-on fair world competition</li> <li>An established, efficient distribution system for its products</li> <li>A raw material base, both in cotton and polyester fibers</li> <li>Privileged access to the EU under the Cotonou agreement</li> <li>If AGOA is passed to the USA</li> <li>To West African, under the ECOWAS Agreement</li> </ul>	A sector which has to operate within a distorted policy frame work  Further divestments can be expected, unless FGN intervenes quickly  High cost of inputs viz power, fuel and wages  High tariffs on reactive dyes  High cost of the contaminated Nigerian cotton  Non availability of long-term funds and high interest rates  Obsolete machinery  Non-implementation of AGOA	The lack of the enforcement of the import ban of African prints by the relevant agencies has lead in 2003 to:  A further reduction in the home market share  A further reduction in employment  A blow to cotton growers, if industry shrinks further	To regain increased home market share  Nigeria could become an engine for cotton textile production in ECOWAS  To supply a US\$ 30 billion cotton textiles world exports market  Be a textile supplier to AGOA countries  Build a garment sector under AGOA

6

# THE NIGERIAN GARMENT INDUSTRY

#### 6. The Nigerian garment industry

#### Preface

The evolution of the textile and garment industry in Nigeria has been markedly different from the industry in almost all other cotton growing countries. The usual target has been to convert as much as possible of the local cotton into yarns and fabrics and, where commercially practical for the local and/or export markets, to complete the value addition chain by manufacturing garments and made-ups such as home textiles.

In Nigeria, this link into garmenting has not taken place despite the highly competitive local labour costs, the major expense component in the conversion of fabric into garments. And yet the local market demand of 120 million persons for Western style dress is huge.

It is more correct to speak of (i) the Nigerian Textile Industry and (ii) the Nigerian Garment Industry, as they are hardly associated and operate independently of each other. This, in part, is because the textile industry is a mono-product industry for the most part, producing yarns and fabrics for African Wax Prints and Super Prints, sold by the yard and then tailored into national dress, or are exported as fabrics. Consequently, the fabrics that are normally stitched industrially into garments are not produced locally. There is no base, therefore, for a Nigerian Garment Industry as a logical extension of the Nigerian Textile Industry.

Many countries that have competitive labour costs, but do not grow cotton, have invested in garmenting to meet their own local market needs or to develop an export trade, e.g. Bangladesh, Laos, Sri Lanka. These and other countries have developed garment industries with the creation of many thousands of jobs; generated the major part of the countries' foreign currency earnings and have often become the major contributor to poverty reduction in the countries. **This has not happened in Nigeria.** 

There is no reason why investments in garment companies should not be made in Nigeria, as the cost base is appropriate for a successful industry. Market access advantages, through COTONOU and AGOA, are available to export garments in very considerable quantities. The need, though, is for the FGN to implement strategic recommendations that are detailed in this volume. For example, to take firm measures to eliminate illegal imports, so that Nigerian Garment Companies have the possibility to be viable. The opportunities for a Nigerian Garment Industry are discussed in this volume, as required by the Terms of Reference for the Sector Study.

The two industries can have and should have a continuous dialogue and inter-action to their mutual benefits.

#### 6.1 The Nigerian garment sub-sector

#### 6.1.1 Introduction

It has been common practice in very many developing countries to utilize their competitive labour costs and abundant pools of available labour to focus on the labour intensive, ready-made garment sub-sector as one of the first steps towards industrialization of the country on the one hand and to develop an export garment trade for foreign currency earnings on the other. This continues to happen today. Until now, this has not happened in Nigeria.

One argument put forward for not having a ready-made garment industry to meet the Nigerian domestic market needs is 'non-standardization' of body sizes in Nigeria. This is exactly the same argument offered in other countries at the start of their industrialization periods. The argument is not valid in Nigeria, as it was not in other countries; distribution statistics show this argument to be wrong. The real reasons for not having a thriving industry for the local garment market are that:

- Using tailors' services to stitch many styles of clothes on a personal, made-to-measure basis is cheaper, until now in Nigeria, than buying ready-made garments in the markets
- The Nigerian domestic market is swamped with smuggled garments from Europe and Asia that are offered in the markets in huge quantities at prices lower than reasonable production costs. These smuggled items include new clothes, production overruns and used garments, that are banned, but are imported anyway despite the ban

In the recent past, attempts have been made to establish export-oriented ready-made garment businesses by at least three companies, to service the European markets as well as those in the neighbouring ECOWAS countries, as other developing countries have done during their industrialization programmes. These attempts failed, it has been reported, because delivery schedules were not maintained and quality consistency requirements were not maintained.

Consequently, in 2003, the ready-made garment sub-sector is almost inconsequential; it has failed to be competitive in supply terms and it has been almost beaten out of existence by cheap, illegal imports on the other.

And yet, given the opportunity to compete on an even playing field, it is believed, that Nigeria has the ingredients to be competitive in garment production:

- Local labour costs are highly competitive
- Labour is plentifully available and is "trainable"
- The country has a large domestic market demand for huge quantities of Western style dress
- There is volume demand for garments in the Regional Trade Pact (ECOWAS) countries of West Africa

• Nigeria has privileged market access to the European markets through the Cotonou Agreement (formerly Lomé Agreement for African, Caribbean and Pacific countries) and to the US market through the African Growth Opportunities Act (AGOA).

But the Nigerian FGN needs to take positive action to restrict the very large quantities of smuggled garments that enter Nigeria illegally (and the neighbouring partner countries of ECOWAS). Unless and until the FGN takes such positive action, the country will lose the considerable opportunity to develop a garment industry that has the potential to create many more direct jobs in manufacturing, as well as indirect jobs in the service sectors, than any other manufacturing industry sector. Additionally, the garment sector would allow the country to gain benefit along the entire textile supply chain and to earn maximum foreign earnings from its precious indigenous raw material, cotton.

#### 6.1.2 The garment industry sub-sector

#### 6.1.2.1 Number of companies

The number of companies in the Ready-Made Garment Subsector is small, reducing and produces only a limited range of garments:

- T-Shirts: One larger-sized company, two medium-sized company and 5 cottage industry-sized businesses
- Socks: 12 small- to medium- sized companies
- Work wear (overalls): Five small companies, e.g. Peacock Creations
- Men's dress shirts: One small company in the Export Processing Zone at Calabar, using imported finished fabrics

Note: One integrated, export-oriented garment company is under construction for bottom weight garments, starting with spinning

#### **6.1.2.2 Products**

The T-shirt and corporate wear companies supply garments into the promotional product markets in Nigeria (and, possibly also, to the neighbouring country markets, through indirect exports). The garments are characterized as being of lower quality, made down to a low (and reducing) price and semi-disposable. The garments are usually over printed with company's names or embroidered with advertising slogans. The combined capacity is of the order of 10,000 pieces per day but actual production is significantly less than this.

The sock companies produce low priced socks (100% filament polyester yarns, or alternating courses of polyester and cotton yarns), for school uniforms and institutional users, e.g. police, army.

The concept for the dress shirt company in the EPZ is to produce for export. Whilst the company produces good quality shirts, it has yet to grow to the size where it can contemplate exporting.

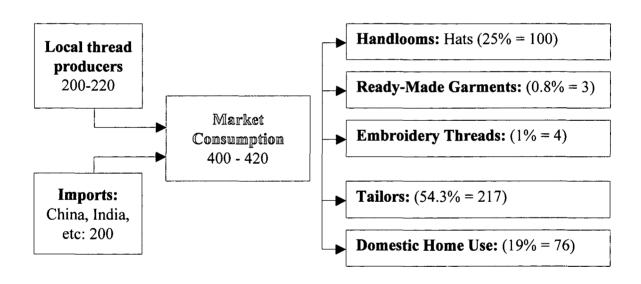
None of these companies sells products on the open market. All sell into institutional outlets. Competition from low priced smuggled garments in the domestic market is too intense. But illegal imports garments cannot easily enter the promotional and institutional niche markets.

#### 6.1.2.3 Raw materials overview

Raw Materials – fabrics: Knitting yarns for the T-shirt and socks companies are sourced locally for the most part from cotton spinners or local polyester producers. Woven fabrics used by the shirt and corporate wear companies are imported, as local weavers do not produce appropriate fabrics.

Raw Materials – sewing threads: local sewing thread producers supply about 50% of the market's needs, as shown in the diagram. It may be noted that the Ready-Made Garment Sub-sector is a minor consumer of sewing thread whilst tailors are the main users.

#### Sewing thread in Nigeria : Supply / End-use (mt/month)



100% polyester sewing threads are used exclusively in the market with approximately 50% supplied by local producers and 50% imported, especially from China and India. Tailors use more than half (54.3%), or 217 tons a month, of the sewing thread demand and private, domestic users a further 19% or 76 tons per month.

**Raw Materials – Trimmings :** all trimmings, i.e. buttons, inter linings, zips, narrow fabrics and the like, are imported.

#### 6.1.2.4 Strengths and Weaknesses of the Ready-Made Garment Sub-Sector

The small industry sub-sector, that was never big, is in decline. Several companies, especially in the T-shirts business, have closed down, as they were unable to compete with the illegal imports smuggled into the country from Europe and Asia. At least three companies that were export oriented have closed, as they were unable to meet the critical demands of overseas buyers for quality consistency and quick, short delivery lead times to Europe, it is understood.

The profile of the residual Ready-Made Garment Sub-Sector, based on fieldwork discussions with the companies, is weak, as summarized in the table.

#### Strengths and weaknesses of the garment sub-sector

	T-shirts	Shirts	Socks	Work wear
Company size  - Number	Large to cottage	Cottage	Medium to small	Cottage 5
Ownership	Private	Private	Private	Private
Technology level	Low	Good	Low	Poor
Market focus	Promotional Local		Institutional	Institutional
Company plans	Grow	Grow Export ?		?
Product cost N/pc	150	400 - 650	30 - 35	3000
Viability of plants	Poor	Unviable	Average	Poor
Productivity level	Poor	Very poor	Average	Poor
Product quality	Low	Good	Low	Average
AGOA company?	No	No	No	No
Strengths	Some fabric production, sales	Machines, infrastructure, designs	Low price, own sales	Positive marketing, own products
Weaknesses	Productivity, Imports Imports		Old machines, poor maintenance	Productivity, poor machines

Source: Gherzi fieldwork

The table highlights the overall weak position of the industry. As presently structured, the small Ready-Made Garment Sub-Sector can target only the niche outlets in the domestic market for promotional / institutional products that the illegal importers cannot access. These niche market opportunities are under price pressures from smuggled goods and the manufacturers are forced "to make down to a low price".

The exception is the one shirt company that should be developed to an economically sized unit for export but the company needs a business strategy and financial help to achieve this.

None of these companies is presently in a position to take advantage of the COTONOU and AGOA Treaties for RMG exports.

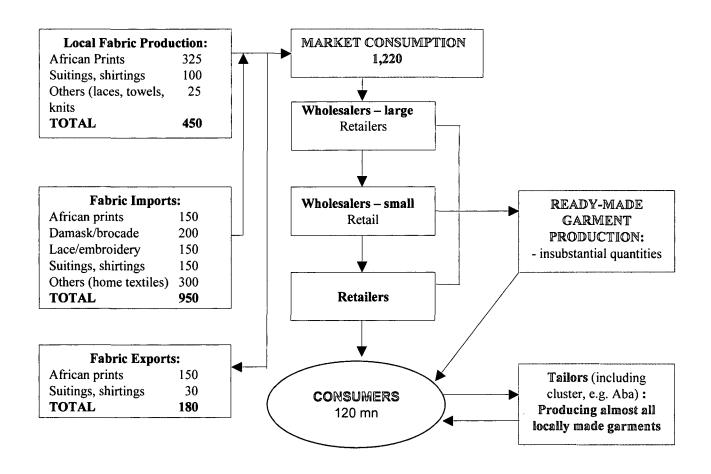
#### 6.1.3 Distribution

### 6.1.3.1 Fabric and Garments: materials flow through the sub-sector and to the Domestic Market

The supply and demand flow of fabrics and garments through the domestic market are shown in the following diagram. It may be noted that:

- Local weavers supply mainly African printed fabrics (real wax and super prints)
- Tailors meet the needs of the market for the national dress and some of the Western style dress demand
- The local ready-made garment sector supplies garments only for promotional and institutional needs and does not sell its products on the open market
- The ready-made garment market demand is supplied for almost 99% by garment imports that are smuggled illegally into the country. Imports of new garments and garment production overruns from Europe and Asia are permitted, subject to payment of duties, but used clothing imports are banned
- FADAAN (Fashion Designers' Federation of Nigeria) represents designers over a range of consumer products designed and manufactured in Nigeria. Some designers have garment manufacturing companies, e.g. "Rose of Sharon" that promote national and Western style garments through garment boutiques across the country. Their share of the consumer market, however, is very small
- Legally imported, international branded garments are retailed through own stores, e.g. Woolworth's (South Africa), Adidas, Nike and Wrangler (Ivory Coast)
- Fabric imports of African prints are still sourced in reducing quantities from Europe (UK and Holland) and now, in increasing amounts from China and India at competitive prices that the local printers cannot easily match
- Brocades for use in national dress, at an estimated volume of 200 mn m a year, are imported illegally from a number of sources, including Europe. Local producers cannot compete against these unfair prices and their machines stand idle

#### Fabric and garment supply to the domestic market 2002 (mn m / year)



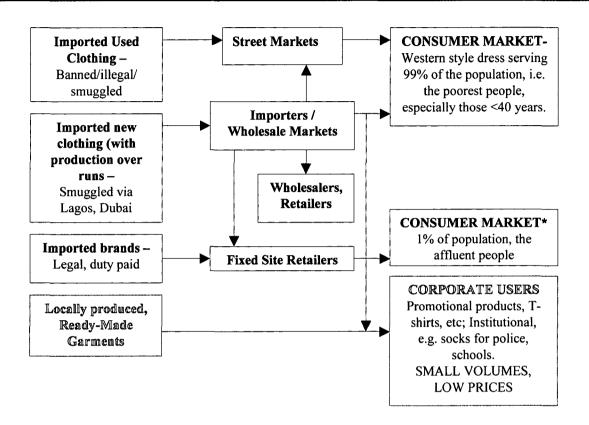
#### 6.1.3.2 Supply of garments to the consumer market

Despite the continuing strength of the tailoring trade, whereby consumers select and buy fabrics in the market and have garments made up to their selected designs and measurements, ready-made garments have a majority share of the market. Ready-made garments, it is estimated, account for 70% of the garments worn in the country but, unfortunately, almost all of these garments are imported illegally.

Used clothing imports are banned officially. New clothing, including production over runs, from Europe and Asia may be imported subject to the payment of import duties. However, even in these markets, most of the new garments are smuggled into the country, without payment of duties.

The flow of ready-made garments to the consumer market is shown schematically in the diagram.

#### Distribution of Western style, ready-made garment in the market



<sup>\*</sup>Fixed Site Retailers- Garment boutiques and international brand retailers, e.g. Woolworth's (South Africa), Wrangler (Ivory Coast), Nike, Adidas

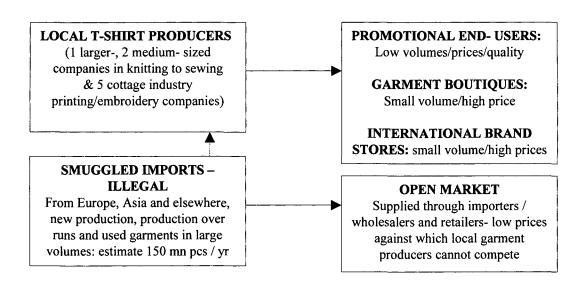
Illegally imported ready-made garments on which duties have not been paid are effectively available at low prices that would not be countenanced in other countries, as anti-dumping rules would apply.

The effect of such low prices in Nigeria is the same, i.e. low priced imports negate the competitiveness of the local industry

#### 6.1.3.3 T-shirts: Market supply and demand

- Local T-shirt manufacturers (1 larger company, 2 medium sized companies and 5 cottage industry sized-companies) either knit and finish T-shirts, or add designs, logos and slogans with printing or embroidery.
- All companies are operating at less than their installed capacities and are forced to operate down to relatively low (and reducing prices) prices, in order to meet the demands of the only niche market that they are able to supply, i.e. the low priced, promotional product market that the smuggled imports cannot supply.
- The supply to demand flow for T-shirts through the consumer market is shown schematically in the diagram

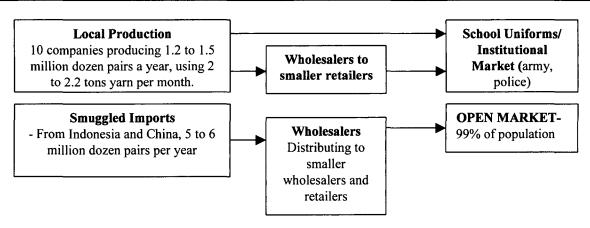
#### T-shirts: Supply and demand flow to the consumer market



#### 6.1.3.4 Socks: Market Supply and Demand

- It is estimated that about 6 million dozen pairs of socks are smuggled into the market each year
- Illegally imported cheap socks are in 100% cotton and nylon
- Locally produced socks are in 100% polyester or alternating courses of polyester and acrylic
- Estimates place the number of sock machines in Nigeria at 1,000

#### Socks: Supply and demand flow to the consumer market



- Additionally, some small quantities of legal imports (international brands) that are retailed through fixed site retailers
- The textured, fil pes yarns are sourced from local pes producers and are spun melt dyed, i.e. standard colours available from the producers or white

#### 6.1.3.5 Artisan Textile Companies: e.g. ABA

In the surrounds of Aba, and in some other areas also, e.g. Port Harcourt, there is a hybrid unit form of 'garment production' that does not have a formalized industrial structure and yet is more than being just a group of tailoring units. Members of the groups collaborate by sharing their specialized machine capacities, on a sub-contracting basis, in order to take advantage of their respective skills in producing garments and other products, mostly men's underwear, sportswear, shirts, trousers and mosquito nets. In recent years, some of the participants in the units have come from the industrial sector, as industrial companies have folded, and some from the independent tailors' sub-sector. Each participant brought their machines that resulted in a veritable mishmash of equipment, domestic and industrial types, for hemming, over-locking, buttoning, buttonholing, embroidery, specialist stitching, etc...

The units' activities cover knitting and processing as well as garmenting. For example, some knitters in Aba buy polyester filament yarn and make knitted garments and nets. Other scattered, garmenting (tailoring) units buy circular knitted fabrics from knitters in Lagos (e.g. Sunflag) and stitch garments.

On this 'semi-organized scale':

- There are 4 knitting factories in the Aba and Port Harcourt areas that have both circular and warp knitting machines as well as a small processing house.
- Garments are produced for the local market.
- The warp knitting machines produce polyester filament yarn nets for fishing and antimosquitoes. The total polyester filament yarn consumed by these units is estimated to be of the order of 100 to 150 tons per month.
- These hybrid units include: Rosie's Textiles, Niger Garments, Ogba Chukwu and Niko Industries. All the units are locally owned.

In the Aba region, there are reported to be more than 10,000 participants in these hybrid units. The share of the domestic market taken by the units is difficult to quantify; statistics are not available and there is no reasonable basis on which estimates may be made. For the purpose of this report, no attempt has been made to differentiate between the production of the hybrid units and the many, many tailors.

Some units are formally established but most are not; some are legal entities, have respect for the labour laws and pay taxes, others are not legal entities, have no respect for the labour laws and avoid paying tax. Some units do not respect international property rights, some do.

The units often occupy residential premises and could not easily convert into industrial premises without changing location. Their future prospects are limited. Finance is limited and the units are not the banks preferred customers.

The units' competitiveness for 'semi-bulk' supply into the local market is reported to be poor. There is 'cut-throat' competition between units as well as growing cheap import competition. If these units are to develop into something more meaningful for supply to the local market, investments will be needed in new premises and machines; if they are to become units that also export, investments will be needed in premises, machines, skills training to attain productivity levels and quality consistency, marketing / selling and achieving social accountability and labour safeguards. To catalyze these changes, support is needed with both management and finance.

The 'Aba Economic Miracle' has evolved over the past 15 to 20 years and may be considered as a "mini-industrial revolution" of this century. Aba Garment was registered as a Co-operative Society in 1989 to solve many problems facing members. There remain very many problems to be solved and outside help is desirable to help solve them.

#### 6.1.3.6 Home Textiles/Made-Ups

There are 9 small to medium sized mills in the organized sector producing home textiles/made-ups (terry towels, blankets and bed sheets) for the domestic market, one of which also exports terry towels to the ECOWAS markets.

- **Towels:** 4 companies producing an estimated 400 tons per month selling into the domestic market. One of these companies exports to the ECOWAS markets
- Blankets: 3 companies in the Kaduna / Kano region manufacture blankets and shawls for the domestic market as well as for the neighbouring countries in the North of Nigeria, where the night temperatures are low, during the December-February Harmattan season.

The **raw materials** used are imported acrylic rags (old clothes), polypropylene, polyester fibre waste and cotton waste.

**Production** of woven blankets (grey blue and coloured baby blankets), and non-woven baby shawls, amounts to an estimated 2 million pieces a year

However, the domestic market is flooded with **smuggled imports**, mainly from the Far East (e.g. from S. Korea, Taiwan, China, Dubai, India). These imports are often brightly coloured and attractively packaged acrylic mink blankets that cannot be produced locally. Other imports are sourced from COTONOU countries.

• **Bed Sheets:** 2 companies produce bed sheets and pillowcases. These are supplied mainly for institutional purposes to hotels and hospitals, i.e. end-use markets that are not easily accessed by smuggled goods, as in the case of socks and other garments.

Home Textiles (Made-Ups) that are smuggled into Nigeria are killing off local production of towels, blankets and bed sheets as smuggled garments are killing off the local garment industry.

#### 6.1.4 A ready-made garment industry in Nigeria

- Nigeria has the essential ingredients for a successful Ready-Made Garment Industry to serve the large, local domestic market of low labour costs if the FGN were prepared to reduce the vast quantities of garments smuggled into the country every day.
- Nigeria has the essential ingredients for a successful export-oriented Ready-Made Garment Industry if companies were to take advantage of the privileged market access terms to the EU and USA market; the low labour costs prevailing in the country and if the FGN were prepared to remove those factors of the policy framework that reduces the industry's competitiveness in the export markets.

## 6.1.4.1 Advantages and Disadvantages of a RMG Industry in Nigeria serving the Domestic Market

#### **6.1.4.1.1** Advantages

- Large domestic market of 120 million persons in Nigeria and access, a domestic market to all ECOWAS markets
- Indigenous cotton enabling the complete textile supply chain to be used from farming to garment production
- Competitive labour costs
- Thousands of jobs created
- Large pool of available, trainable labour
- Savings of foreign currency/ import substitution

#### 6.1.4.1.2 Disadvantages

- Market is flooded with illegal imports
- No anti-dumping regulations in place
- Low productivity, no garmenting tradition until now
- Indigenous cotton is contaminated (with poly-propylene)
- Over powering strength of labour unions
- Financial institutions not favourably disposed to RMG sector
- No recent FDI in private sector RMG companies

- Law and Order situation
- Bureaucracy covering all business aspects, especially of import/ export dealings, FGN control over companies
- The prevailing business and work cultures

These advantages and disadvantages are the main considerations for and against a strong local RMG Industry serving the local market. Until the FGN is prepared to take firm action with punitive measures for contravening the existing laws, the RMG industry has no future in Nigeria, as the competition is both unfair and unreal.

## 6.1.4.2 Advantages and Disadvantages of a RMG Industry in Nigeria serving the Export Markets

#### 6.1.4.2.1 Advantages

- Competitive labour costs, pool of available, trainable labour
- Export market opportunities exist and will increase in the Post MFA era. The world's major markets, EU and the USA, can be accessed via the COTONOU and AGOA Treaties respectively that already exist and not fully used
- Indigenous cotton fibre with opportunities to complete the textile supply chain
- Export Trade Zone with facilities that could enable RMG manufacturers to be competitive in the world markets- no unions, no strikes, no bureaucracy, next to container port, etc

#### 6.1.4.2.2. Disadvantages

- Nigeria's negative market image in the world markets- law and order, corruption, bribery, etc
- No established RMG tradition. Recent history has shown that the RMG industry has declined, as companies were unable to deliver on time to the EU markets with quality consistency
- Lack of essential FDI in private sector by RMG companies to provide technical know-how, management and market access
- Indigenous cotton is contaminated (with poly-propylene)
- Bureaucratic procedures, trades union problems and strikes unless working within EPZs
- Financial institutions not favourably disposed to RMG sector
- The prevailing business and work cultures

Despite the recent weakening export performance by the RMG industry, the RMG sector could provide Nigeria with solutions to its ever-pressing economic and social problems. The RMG industry offers the best opportunity for the employment of large number of persons in manufacturing in the short term and for which Nigeria's prevailing competitive labour costs are ideally suited.

As the country has larger crops of indigenous cotton than are currently consumed, it would be sensible to convert all, or as much as possible, of the indigenous cotton into consumer products for the local market or to export consumer products, to increase foreign currency earnings.

Additionally, it would be practical to import raw cotton of qualities that are not locally grown (or finished fabrics as necessary) to meet whatever further demands there are for materials (fibre to fabrics) and to sell the manufactured consumer products into the local or export markets.

If this concept is to be realized, major changes need to be made by companies, trades unions, employees and, especially, by FGN. These changes are discussed in the next chapter.

#### 6.1.5 Export trade zones - Calabar Free Trade Zone (CFTZ)

The Nigerian Export Processing Zones Authority (NEPZA) has the authority to operate EPZs in several parts of the country.

**Calabar Free Trade Zone (CFTZ):** Until now, only the Calabar Free Trade Zone (CFTZ), supported by UNIDO, is operational. CFTZ stands on 220 hectares of land in the South East of Nigeria, 2 kms from a container port and 20 minutes drive from Calabar Airport.

**CFTZ Infrastructure:** The CFTZ infrastructure has been fully developed with internal roadways, fences, power supplies, water treatment systems, canteen facilities, post office, banking and fire services. Standard-sized factories have been built and are available to rent or to buy; factories are also purpose built to match company's specific requirements. Each has production halls, offices and bathrooms.

Wages: A production worker's typical monthly wage is US\$ 45.

**Prime Features:** CFTZ offers a number of features to attract investors, especially foreign investors. These include:

- 100% foreign investments
- 'One-stop-shops' for investment approval
- Import and export licences are not required
- Raw materials are not subject to import duty
- Unrestricted remittance of capital, profits and dividends
- Tax holidays
- Trades unions are not permitted; strikes are not allowed
- •25% of products may be sold into the domestic Nigerian market subject to the payment of the appropriate taxes
- Gender and ethnic equality rules apply

The overall impression is that of a modern business park with excellent facilities in a clean, pleasant working rural-industrial work environment.

**Take up:** There are presently about 18 tenant companies at CFTZ of which 1 company is a small RMG company and a second is a recently installed textile-weaving mill.

#### **Conclusions:**

- The CFTZ project (and the other 5 ETZ areas) can provide the basis for establishing an exportoriented RMG industry in Nigeria. It can provide the opportunity for establishing new RMG companies without the complications of established practices that are not conducive to the efficient operations of labour intensive manufacturing.
- The rules and regulations pertaining to ETZs may need refining to include, for example, a similar export incentive that is offered at the rate of 40% to non-ETZ companies.

A labour cost comparison of operating in Lagos and the CFTZ is presented in Appendix 3.

#### 6.1.6 The global markets for garments

#### 6.1.6.1 Imports and Exports - Foreign Trade

**Introduction:** Foreign trade in garments has increased progressively in the last years and further growth is projected, as the global markets change from a market environment that has been restricted by quantitative quotas under the Multi Fibre Arrangement for the last 30 years, to the liberalized market of the Post MFA era, on 1 January 2005. Certain countries, and Nigeria is one such country, have preferential access opportunities to the major markets, if they organize themselves correctly to take advantage of the available opportunities.

#### On 1 January 2005, the Market Environment of the last 30 years that has been shaped by:

- Quantitative Quotas
- Import Duties
- Bilateral Agreements

#### Will change to a Market Environment of Liberalized Trade to be shaped by:

- Residual Import Duties
- Regional Trade Pacts (RTPs)
- Free Trade Agreements (FTAs)
- Social Accountability
- Labour Safeguards
- Retailers' Requirements
- Preferred Suppliers

**Residual import duties** will be paid on imports from sources that do not have bilateral agreements (RTPs or FTAs) with the importing countries. Nigeria has such agreements with the EU and USA through the COTONOU and AGOA Treaties respectively

Social Accountability, Labour Safeguards, meeting Retailers' specific Requirements as well as becoming Preferred Suppliers is the responsibility of each exporting company to ensure that it meets the necessary standards.

A Preferred Supplier is one who has a proven track record of supporting buyers with the required levels of service- quality, reducing lead times, flexibility of manufacturing programmes, new product development, matching price points and, perhaps above all, a direct personal relationship with the buyers. Such that when a buyer has an order, a problem or an enquiry, his first reaction is to contact the particular preferred supplier knowing that he has confidence in the supplier and can expect minimum hassle.

#### Nigerian companies are not yet in this preferred situation: They need to become so!

End of the MFA Era- Changes as Protection is removed: The MFA was designed to give protection to the textile and garment companies in some high- to medium- cost countries, so that the rate of decline of their industries could be controlled. Quotas have lasted for 30 years. Thus, whilst the textile and garment industries in the EU and USA have continued to decline since 1972, the rate of decline has been controlled and an industry remains until today. If MFA quotas had not been in place, the EU textile and garment industry, for example, would have largely disappeared some 20 or so years ago.

When quotas are finally removed, exporting countries will be able to increase their exports over and above the quota levels that have restricted them all this time. Especially will low cost-countries be able to increase their garment exports as garment capacities in the medium- and higher cost countries decline significantly without the continuing protection, as shown in the table on the following page.

#### 6.1.6.2 Textile and Garment exports ( = textile and garment imports)

The total of all countries' textile and garment imports in 1980 amounted to US\$ 96 bn that increased to US\$ 208 bn in 1990 and almost US\$ 350 bn in the late 1990s.

19 countries account for almost 90% of the world's garment imports, i.e. the EU (15 countries), the USA, Japan, Mexico and Canada. China supplies almost 90% of Japan's garment imports of US\$ 20 bn (2001).

The sum of all countries garment exports equaled, in value terms, the sum of all countries' textile (yarns, fabrics and home textiles) in 1990 for the first time. Hitherto, textiles had been the major export item. Since 1997, there has been only marginal growth in the sum of textiles and garments exports although garment exports have increased their share of the market from 55% to 64%. The reasons for this slow down in growth have the succession of continuing problems in the markets, namely:

- Financial crisis in the Far East in 1998 and 1999
- Economic recession since 1999 in some European countries and Japan
- The aftermath of 11 September 2001

In the coming years, following the ending of quotas (2005 - 6), the total world export values of textiles and garments are projected to increase to US\$ 450 - 450 bn of which garment exports are projected to be US\$ 300 - 350 bn.

**EU and USA- preferential market access for Nigeria.** The EU is the largest exporter of garments as well as being the largest importer whilst the USA is a major and increasing importing country. The ending of quotas will see a further increase in these countries' imports. Nigeria has preferential access to these markets.

China's major share of Japan's growing garment imports: Japan's garment imports have increased very significantly in the last years and almost 90% are sourced from China. China has modernized and expanded. Its textile and garment industry over the last 14 years or so with FDI of US\$ 3 bn per year and has an export target for garments of US\$ 50 bn by 2005.

Mexico's importance in the garment world is attributable to RTP and FDI: Mexico is a major garment exporting country and an important importing country. The value of being a part of an RTP and of welcoming FDI is well illustrated in the case of Mexico.

Lower cost countries in S. Asia: The lower cost countries of S. Asia (Bangladesh, India, Pakistan and Sri Lanka) have established themselves as garment exporters in the last years.

## 6.1.6.3. Changing Global Location of the Garment Sub-Sector and the value of Foreign Direct Investment (FDI)

Garment production has changed locations around the world from higher cost countries to lower cost ones on a continuing basis during recent decades, as costs in some countries have become too high for volume garment production, as shown in the diagram.

## Location and re-location of the global garment industry as manufacturing costs have increased with time

Key: Countries in bold print = cotton growing countries

Countries in parenthesis (..) = phasing out RMG

Countries marked \* = FDI used to develop RMG sub-sector

1930	1940	1950	1960	1970	1980	1990	2000	2010
(USA) (W. Europe) (Japan)	China* India*			Indones Turkey Caribbe C. Ame C. Ame	an* erica*	E. Europe* Laos* Vietnam* Lesotho* Kenya*	Other African countries NIGERIA? Myanmar Cambodia*	
		Pakis	stan		Tunisia Banglad (Malays	lesh	Myanmar Cambodia* CIS* UAE* Madagascar*	Kenya Lesotho <b>NIGERIA?</b>

The chart illustrates how RMG production has shifted from high cost countries since the 1930s, initially to Asia but is now moving, in part, to African countries. Certain Asian countries, e.g. Hong Kong, S. Korea, Taiwan and, more recently, Malaysia and Mauritius have become too costly in terms of labour costs.

Now garment companies are re-locating to Vietnam (from Malaysia), to Madagascar (from Mauritius), to Caribbean countries from the USA and to African countries, e.g. to Lesotho from Asia.

This continuous shift to lower cost countries around the world is no accident. The shift to new locations is driven by investors who are no longer satisfied with their companies' present operating performances, as they become too costly in their present bases or no longer have easy market access. Investors seek alternatively locations for their operations.

Foreign Direct Investors (FDI)- Investors have a choice of host countries in which to site their investments. Investors' priorities are to obtain satisfactory returns on their investments whilst serving their customers and with the least hassle.

Competition between host countries to attract FDI is strong. Some have to offer very special financial and fiscal incentives to attract investors.

**Disincentives to investors:** Those countries that cause delays in shipments to customers (or in importing raw materials), through excessive bureaucratic procedures, cause customs procedures or hold-ups at the ports, by trades union militancy or through bribery and corruption will be deterrents to investors, as host countries. Countries that offer positive incentives, work closely with foreign investors and have privileged market access features will clearly be attractive as host countries. In this regard, opaqueness and a lack of trust are negative features; trust and transparency are positive features.

Nigeria must improve its performance if foreign investors are to consider it a preferred host country, offering attractive incentives.

#### 6.1.6.4 Effect of ending MFA Quotas and the start of the New WTO Market Environment:

Four significant changes in supply and demand will take place:

• The traditional, high cost garment producing and exporting countries such as the EU and the USA will reduce their production capacities as a result of the ending of the MFA quotas.

#### Garment imports will increase significantly.

• Those recent entrants to garment production during the last 20 years and whose labour costs are now increasing will move out of garment production and exports in the near term, e.g. Malaysia, Mauritius and some E. Europe countries.

#### Garment imports will increase.

• The large, low cost, long established garment producing/ exporting countries such as China and India will continue to increase their garment exports.

Garment imports to these countries will also increase, as all WTO member countries will be obliged to import from other member countries.

• The new, low cost entrant countries to garment exporting of the last 10 years or so, especially those with foreign direct investments and who are members of Regional Trade Pacts (RTPs) or Free Trade Agreements (FTAs) will show positive growth in garment exports. AGOA countries are examples of recent entrants to garment exporting that are discussed in the next section of this report.

As WTO members, these exporting countries will also import some quantities of garments.

**6.1.6.5** AGOA: The African Growth Opportunities Act (2000) has provided opportunities for 35 Sub-Saharan African (SSA) countries to export textiles and garments to the USA without quota /import duties, subject to certain rules of origin criteria and capped quantities. The level of capping should not be a problem for Nigeria's exports!

The AGOA Bill is valid initially for 8 years (from 2000) and applies to SSA countries that meet specific requirements in terms of (i) The Generalized System of Preferences Programme (GSP), (ii) Human and Workers' Rights and (iii) Economic conditions, i.e. an approved customs visa system to address the trans- shipment risk.

Nigeria is well positioned to take advantage of AGOA as there is indigenous cotton; the country has an established textile industry; a ready-made garment industry could be developed as the labour costs are competitive and the Parliament will, it is reported, approve the necessary laws to qualify for membership of AGOA within a short time.

Less Developed Countries (LDCs) of SSA with per capita incomes of less than US\$ 1,500 per year, including Nigeria, have a special provision for the first 4 years (until end September 2004) so they may use fabrics from any global source to convert into garments. This rule would allow a Nigerian garment industry to be set up now on the basis of imported fabrics before the local textile industry is able to supply suitable fabrics. Thereafter, the rules of origin for fibre, yarn and fabric are more critical but, as Nigeria has indigenous cotton, these rules should not pose a problem in the future.

Duty free access to the USA means a reduction of 17.5% duty advantage that is, effectively, a significant price reduction for the AGOA member countries.

Garment exports under AGOA from the SSA countries are capped at 1.5% initially (and then at 3.5) % of the total USA imports of garments by product category (measured in square metre equivalents of fabric- not in value terms) and this could possibly become restrictive at some time in the future. However, some negotiation is possible. In any case, it is expected that the total USA garment imports will rise in the coming years and that the limit on AGOA exports will increase also.

'Knit to shape sweaters' are excluded from the AGOA Bill.

The following 5 listed Sub-Saharan African countries are already using their membership of AGOA to export garments to the USA without having a cotton crop! Garment exports to the USA of 5 AGOA qualifying countries are presented in the table for the period 1998 to 2002

# Garment exports from 5 AGOA countries to the USA 1998-2002 (US\$ mn)

	1998	1999	2000	2001	2002
Lesotho	100	106	140	205	322
Kenya	34	41	44	54	121
S. Africa	81	98	146	182	188
Madagascar	22	46	110	179	90
Mauritius	227	230	248	244	252

Source: US trade statistics

- Lesotho has been the main beneficiary country of AGOA until now, as it is the largest exporter country in Sub-Saharan Africa, and is discussed in more detail in Section 6.7.5.
- Kenya has had a garment industry for several years that was in decline. Membership of AGOA resulted in a revival of the industry. New foreign investments have been made with investments of US\$ 10.8 mn over 9 factories and 20,000 jobs, to help the recovery in garment exports.
- S. Africa has had a well-established textile and garment industry for many years, including foreign investments that formed the basis of the recent increases in garment exports to the USA. The excellent infrastructure in the country has facilitated the renewal of export led growth.
- Madagascar's exports to the USA has benefited from AGOA membership building on the established trade to the EU. The political upheaval in the country at the end of 2001 disturbed the industry and spoilt the export growth pattern (reference the above table in this chapter)
- Mauritius was the country that first took advantage of the Lomé Convention that gave the 64 Afro-Caribbean-Pacific countries privileged market access to the EU markets back in the 1960s. Foreign and local entrepreneurs invested in textile operations, including the re-location of established plants to the island, to take advantage of the competitive labour costs and quota/duty free market entry
- Garment exports increased to almost US\$ 1 billion a year, especially to the EU, but labour costs increased, labour productivity remained low, expatriate labour was being used increasingly and Madagascar (and other countries in Southern Africa) appeared more attractive for garment production, so some companies re-located.

The remaining industry has up-graded its products with recent investments of US\$ 78 mn, so that export value increased for less volume.

• Garment investments in other AGOA countries are taking place: Malawi; Namibia (US\$ 250 mn investments and 10,000 jobs); Swaziland (11,000 jobs); Uganda (US\$ 20 mn and 500 jobs)

#### 6.1.6.6 Examples of 3 garment exporting countries in a nutshell

### 6.1.6.6.1 Lesotho - an 'infant example of the 5 years'

Asian producers relocated their manufacturing operations to set up the embryonic Lesotho Export-Oriented, Ready-Made Garment Industry within the last 5 years. These companies included C&Y, CGM Garments and United Clothing.

In early 2003, there are 23 foreign-owned garment companies employing more than 10,000 workers. 11 of these companies produce jeans and trousers whilst the other 12 companies manufacture T-shirts and sportswear.

Today, garment exports to the USA from Lesotho are the largest of all the SSA countries with US\$ 322 mn in 2002, an increase from US\$ 100 mn in 1998 and an increase of 130% since AGOA was established in 2000. The garment industry has created jobs as well as needed foreign currency earnings for the country.

All companies work on a CMT basis, using imported finished fabrics, accessories and trimmings, and export to the USA.

Labour costs are competitive at US\$ 80 – 110 per month.

Lesotho is a small land-locked kingdom of 2.1 million persons surrounded entirely by The Republic of South Africa (RSA). It may, therefore, be considered to have potential disadvantages in terms of rapid importation of raw materials/ exportation of finished products. Experience, however, has shown this not to be so. The companies are established in Export Free Zones (EPZs) similar to ETZs in Nigeria, with minimum bureaucratic procedures, and with open access to the excellent infrastructure of RSA, i.e. low cost power, motorways, electronic communications, etc and it is also close to the Port of Durban.

#### 6.1.6.6.2 Madagascar – a 'recently established example of the last 10 years'

Madagascar is a large (the size of France) island country off the East coast of Southern Africa. It has a population of 15 million persons and an average GNP per capita of US\$ 260 and with 75% of the people living below the poverty line. The industry is largely based on the capital city, Antananarivo, in the centre of the island. The infrastructure is poor with communications to the main port on the East coast still rather difficult.

The French speaking country has had a textile and garment exporting industry for some 10 to 15 years, based to a considerable extent on foreign investments, initially from France, and selling high quality garments to France (and other European countries). The specialities of the country's women workers are hand embroidery and hand lace making; both skills are used to add value to garments and to household textiles.

Subsequently, in the last 5 to 7 years, Asian (especially from Mauritius), the Middle East and UAE companies have made investments. Investors were, for example, The CIEL Group from Mauritius (including Floreal Knitwear, Aquarelle- men's shirts and trousers, Feirney Fine Knits, Tropic- Tshirts and polos, etc.) was a major investor with 12,000 jobs; Nova Knits and the Crystal Group, Hong Kong brought 6,000 jobs.

Tax holidays apply but they are not too generous as the country is poor.

Madagascar is not only a member of AGOA but is also a member of COMESA, SACU and SADC.

Garment exports to the USA were small in the late 1990s but increased rapidly, when the country qualified under the AGOA Bill, as shown in the table.

Unfortunately, the political upheaval at the end of 2001 damaged the industry, some foreign investors moved out and exports declined, as shown in the table. This may not have caused permanent damage to the exporting industry but the image of the country was dented and the confidence of distant buyers, who may not have an understanding for the island's local politics, will have been disrupted at least.

At the peak performance in 2001, the industry employed 35,000 persons and produced 50 million pieces of woven garments and 70 million pieces knitted garments.

US buyers included Banana Republic, Costco, Eddie Bauer, Gap, Liz Claybourne, Mast Industries and Russell. EU buyers include Burton's, George Clothing, Debenhams, Next and Principles.

Labour costs are very competitive at US\$ 50 per month compared to costs of US\$ 200 – 300 per month in Mauritius.

#### 6.1.6.6.3 Bangladesh – 'a mature garment exporting country, dating from the 1970s'

The export-oriented, ready-made garment industry of Bangladesh had its foundations in 1978, when a small number of Asian investors established a few companies on the EPZ at ChittaFGNg, to take advantage of the opportunity to export from Bangladesh when increases in exports from their own countries were no longer possible as Taiwanese and S. Korean MFA quotas had been fully utilized. Subsequently, the RMG business grew. Garment exports reached US\$ 0.64 bn- 1990 and US\$ 5.1 bn-2002.

This remarkable rate of growth has been based on local entrepreneurs, as foreign investments have not been permitted, by FGN decree, for the last 20 years unless backward integration was part of the deal.

The raison d'être for the garment industry was:

• The Multi-Fibre Arrangement (MFA) gave the basis as the more traditional exporting countries were restricted by quotas

- The European Economic Community, forerunner of the EU, Provided the opportunity with the Generalized System of Preferences (GSP)
- Quota facility advantages were later offered by the USA- and now Canada, Norway, Australia and New Zealand offer GSP
- Buyers and buyers' agents exploited the opportunities and gave orders for manufacturing capacities on the basis of cut, make and trim (CMT or CM)

In 2003, there are some 3,500 RMG companies listed although not all are active. Only a few, the larger companies have active marketing and selling departments. The remaining 3,000+ companies or so are dependent on buyers and the buying agents providing orders for their stitching capacities.

CMT prices offered (down by more than 50%) by buyers' agents have been reducing since 11 September 2001, as the lower market segments in which these companies operate are the most vulnerable at times of a turndown in market demand. These low market segments are the most competitive at any time. As a result, and in spite of the remarkable export led growth since 1990, the industry is nervous about the future.

Today, woven fabric garments represent about 45% of production and knitted garments about 55%. Backward integration investments in woven fabrics have not taken place, so that 80% of the woven fabric needed for garments is imported, as finished fabrics. The knitted garment sector, on the other hand, is self-sufficient for 80% of its finished fabrics requirement, as investments in knitting and knitted fabric manufacturing have been made in the last 8 years.

Labour costs are highly competitive- US\$ 50 per month but labour productivity generally is too low.

#### **Industry Statistics 2003:**

- RMG exports: 1990 = US\$ 0.64 bn; 2001 = US\$ 5.1 bn
- Major export markets (2002), by value:

$$EU = 53\%$$
;  $USA = 44\%$ ; Canada = 1%; others = 2%

- Direct employment: 1.8 million persons (80% female)
- Indirect and service employment = about 4 million persons
- RMG exports' share of foreign currency earnings = 76%
- RMG sector is the main contributor to FGN's policy of poverty alleviation

#### • Recent investment trends:

- -Knitting: Total backward integration: spinning, knitting and knitted fabric processing
- -Weaving: Backward integration in fabric processing
- Incentives offered to the textile and garment industry for export-oriented investments in BMRE (balancing, modernization, restructuring and expansion of substantive plants) with capital interest rate 6% lower than normal rates. Interest rates on working capital also reduced by about 4%. Interest rates on "Green Issues" will probably be set at 0%. Tax holidays apply.

Note: (The Cash Incentive of 25%, that was started 4 or 5 years ago to encourage downstream textiles companies to use locally spun yarns, is being withdrawn progressively and will be 0% by end 2004.)

• BUT no membership of RTP or FTA

#### 6.2 The way forward: An export-oriented, ready-made garment industry for Nigeria

#### 6.2.1. Introduction

The recent history of the small Ready-Made Garment (RMG) Industry in Nigeria would suggest that there could not be a future for an RMG industry in Nigeria. In the last years, two export-oriented companies that were concerned with the production of jeans and knitted tops closed because, it is understood, they were unable to deliver on time and the product quality was too variable. Further, the companies aiming to serve the domestic market were unable to match the low prices of the illegally imported smuggled goods and they either closed or had to move into the small, low priced/low quality market segments that the smuggled garments could not easily access, i.e. the promotional part of the garment market, where slogans and company names are printed or embroidered onto garments, and for the institutional market for certain products.

The present situation is that the Nigerian RMG industry is very small and meets the needs of only a fraction of the country's huge garment needs.

#### 6.2.1.1 Why Garments from Nigeria

An RMG industry has been the starting point for almost all countries industrialization programmes. Firstly, food, then housing followed by garments production has been the industrialization route that countries have taken. Initially, garment production was for the purpose of import substitution but, as companies developed their skills, so the same products were exported.

**Indonesia**: Indonesia is a case in point. In the 1970s and 1980s, Indonesia's economy was based almost totally on its oil revenues that effectively fed and housed the population. A manufacturing base was established in the early 1980s, so that the economy could stand on more than one leg. An RMG industry was developed, based on practical FGN policies to attract foreign investments, that created jobs for the employment of persons in their thousands and generated foreign currency, using imported finished fabrics. Progressively, this led to investments in fibre and primary textiles production which today support a textile industry to meet not only the needs of the domestic population of more than 250 million people but also exports of more than US\$ 4 billion of garments a year. (Political stability in the country was not rated high in the early 1980s and special financial/fiscal provisions were put in place to attract the foreign investors.)

**Nigeria:** Nigeria has oil revenues as Indonesia had in the 1980s: Nigeria also has cotton, the basic ingredient for textile production, and it has an abundance of trainable people at very competitive costs. These aspects are considered in the next chapter.

#### 6.2.2 Inherent ingredients for an RMG Industry

#### 6.2.2.1 Key Ingredients

Nigeria has the inherent ingredients on which an RMG industry can be based- and has been based- in other countries.

China, India and Indonesia are examples of successful RMG producing and exporting countries. What do they have that Nigeria does not have? Some of the key ingredients are considered in the following table.

# Comparison of the Key Elements in Nigeria and other RMG Producing Countries (China, India and Indonesia)

	NIGERIA	China	India	Indonesia
Domestic market	Large	Large	Large	Large
Style of dress wor	Western, traditional	Western, traditional	Western, traditional	Western, traditional
Labour cost	Low	Low	Low	Low
Labour pool	Large	Large	Large	Large
Labour productivity	Low	Good	Average	Average
Economy base	Oil	Agro/Mfg	Agro/Mfg	Oil/Mfg
Manufacturing start	1960s	1900s	1940s	1980s
RMG sector start	?	1940s	1950s	1980s
RMG imports	Yes, illegal	Yes	Yes,	Yes
Policy framework	Weak	Good	Adjusting	Good
Business culture	Good*	Good	Adjusting	Good
Work culture	Good*	Good	Changing	Good
Social accountability	Improving	Improving	Improving	Improving
Labour safeguards	Improving	Improving	Average	Average

Source : Gherzi

Footnote: \*Foreign investors from the Primary Textile Sector have spoken highly of the acceptance by the workers of the required business and work cultures that they introduced into their companies. Additionally, the trainability of the workers was commented on and this is an excellent indicator for advancing an RMG industry.

#### **6.2.2.2** Fibres

Nigeria, China and India have major cotton crops (and now also have Man-Made Fibres -MMF). Indonesia had a very small cotton crop when the RMG sector started and no MMF. Investments in the last 20 years, to convert the down-stream oil based products into polyester, has resulted in Indonesia having some of the largest polyester capacities in the world in 2003.

#### **6.2.2.3 Primary Textiles Sector**

Each of the 4 countries has a primary textile sector although the Nigerian industry is geared more to the supply of specialized African prints.

In China and Indonesia, the export RMG sectors began with imported finished fabrics and gradually became more and more self-sufficient, as investments in fabric weaving/ knitting and processing have been made. India has mostly used its own PTS sector manufacturing, to produce fabrics for its export oriented RMG sector.

The Nigerian Primary Textile Sector is not protected by anti-dumping measures (or strong action to minimize illegal imports) as the other countries' industries are protected. Hence the industry is being forced into decline.

#### 6.2.2.4 RMG production for export

China and Indonesia have RMG companies that are largely based on Foreign Direct Investments (FDI) which are either 100% foreign or joint ventures. Some RMG companies in India are joint ventures.

#### 6.2.2.5 Regional Trade Pacts (RTPs) and Free Trade Agreements (FTAs)

All 4 countries are WTO members but only Nigeria is a member of FTAs that give privileged access to the major markets in the EU and the USA, i.e. COTONOU and AGOA.

#### 6.2.2.6 Local Support Strengths for a Nigerian RMG Industry

Additionally, the following support strengths are available:

- Existing economically sized, integrated textile mills (spinning to processing) which would be AGOA yarn and fabric supply sources
- An indigenous cotton crop (80,000 tons a year) of medium staple length that is suited to the bulk production of woven and knitted garments **EXCEPT** that the avoidable contamination problem with extraneous polypropylene fibre precludes this end-use
- An ETZ system has recently been developed with serving the export markets specifically in mind
- Efficient ports located in favourable positions relative to the markets in comparison with the ports in the established RMG exporting countries, e.g. Madagascar, Mauritius and S. Africa. Savings in shipping times are reported to be 3 to 8 days compared to E. African ports
- Nigeria earlier received FDI from Asia and the Middle East countries
- A 40% export incentive that is highly attractive to investors. (It is proposed that this incentive should be guaranteed by legislation for a period of 10 years and made available to all manufacturing exporters.)

#### 6.2.2.7 Conclusion

- Nigeria has many of the ingredients for a successful garment industry in common with China, India and Indonesia
- Nigeria would, of course, be a late starter but that should not be a handicap
- Nigeria has enormously huge problems with smuggled, illegal imports that have damaged the textile and garment industry. These problems need to be addressed
- The Industry has to achieve the correct business and work cultures. This can be done, as has been demonstrated by the foreign-owned textile companies
- The FGN has to be prepared to implement a correct Policy Framework, including financing arrangements, so that a basis can be established on which to construct a meaningful RMG Industry in Nigeria.

#### The benefits of a strong export-oriented RMG sector to Nigeria:

- The country can be an important LDC/AGOA exporter
- The creation of thousands of jobs in the short term the RMG sector is probably the most labour intensive of all sectors in manufacturing industry.
- No other manufacturing sector can create so many jobs so quickly
- Jobs will be created on a large scale both as direct jobs in the RMG sector and indirectly, as service jobs in support of RMG companies
- Export of yarns and fabrics from Nigeria is permissible to other AGOA member countries that do not have strong primary textile sectors
- The capital investment needed to create one working place is between US\$ 30,000 and US\$ 50,000, according to the technologies used, compared to between US\$ 800,000 and US\$ 1,000,000 for a work place in spinning and weaving
- Additional benefits will accrue in terms of an improved overall infra-structure (ports, road and rail transport systems, telecommunications, etc); national tax revenue will increase; hotel occupancy will rise, etc

#### **6.2.3 Scenario options**

#### 6.2.3.1 Issues

Whilst it is not a pre-requisite that the Nigerian RMG Industry should serve the domestic local market, it is recommended that it should do so because failure would send the wrong messages to industry and the markets that the FGN is not prepared to face up to the major commercial issue of the day, i.e. the acceptance that illegal smuggled goods is the way of life and is the norm. Smuggling denies Nigeria of the:

- (i) Revenues that import duties should be generating from imports
- (ii) Possibility of establishing a meaningful RMG industry
- (iii) Thousands of job opportunities that should be available in the industry
- (iv) Opportunity of earning additional foreign currency from RMG exports
- (v) Smuggling has bred a culture and a philosophy on life and human relationships that creates the wrong image for Nigeria in the outside world.

These are 5 definitive issues to be addressed for the sake of the country; the last one, especially, damages the reputation of Nigeria in the eyes of the world, where bribery, corruption and smuggling is considered anathema.

The benefit of stopping 50% of the smuggling would be very significant to Nigeria; to stop 100% would be miraculous! It must be worthwhile introducing a policy to achieve this objective and then policing it correctly to ensure that it is effective.

# 6.2.3.2 Option 0 – Address the issue of illegal imports before the textile and garment industry is killed off - To be undertaken in any event

FGN to address the issue of smuggling, by enforcing existing bans on imports and ensuring that goods are imported legally and with duties paid.

It is reported that the problems are enormous: the land borders are large and the sea coastline is extensive; the containers of garments travel overland from Benin (and other partner countries in ECOWAS) and therefore they cannot be correctly policed.

But, is it not that, "The true value of partnerships is in working together to improve the lot of the members?" In which case it must be in the interests of all ECOWAS partner countries to stop these containers of garments from moving entering one of the countries and from crossing borders into another member country and to take joint punitive action against miscreants.

#### 6.2.3.3 Option 1 - Local RMG Investments for the Local Market - Clusters

There are very, very many freelance tailors working independently of each other in the country. Their skills are undoubted but the manner of their working must necessarily be less than efficient. Many tailors in the region of Aba, as described in Chapter 1.3.5, work in the form of a co-operative on a cluster basis, to pool their machine resources and to sub-contract specialist work to each other. There are advantages in doing this: greater productivity, lower costs and higher earnings. But there are problems also, as the product quality is considered to be low, competition between units is high and the import penetration of cheap products is increasing.

Yet these units are probably the best available resource in the country on which to build a resurgent garment production, to serve the domestic market.

Option 2 is to assist tailors to work together even more on a collaborative basis, to assist them to relocate to more suitable premises, to invest in industrial type machines, to provide some skills training and to help in selling. Some special financing will be required for this purpose, as the financial institutions do not normally look too favourably on these small units. (It is noted that under the SMIE Scheme {Small- and Medium- Sized Industrial Enterprise Development Scheme} The Bank of Industry should consider the RMG sector as a priority area for lending.)

#### 6.2.3.4 Option 2 – Local/Foreign Investment in Polyester Production

Nigeria has the raw materials refined from local oil, to produce polyester for textiles, pet bottles and other consumer products. The demand for all of these products will develop in the coming years as the standard of living increases.

**Present Demand:** It is reported that the textile industry and the garment sector presently uses about 20,000 tons a year of polyester fibres and yarns. Many of the imported fabrics and garments are also made with polyester.

**Present Supply:** Local polyester plants convert imported chips into fibres and yarns. These (4) plants are small in size and are most probably uneconomic.

**Future Possibilities:** Nigerian oil can be cracked to give ethylene that is catalytically oxidized to ethylene oxide and hydrated to ethylene glycol. Terephthalic acid is formed from para-xylene - a distilled product from petroleum. The esters of terephthalic acid and ethylene glycol are polymerized at high temperatures in a vacuum and the polymer extruded.

The opportunity to make polyester in Nigeria, starting from oil, and to market it in Nigeria and neighbouring country markets should be studied.

#### 6.2.3.5. Option 3 - Foreign Investments - Export-Oriented Companies

The basis for an export-oriented RMG company has to be that it has a foreign partner who will bring the technical know-how and management expertise, including the needed business and business culture, and, especially, the commercial know-how with market access through an established selling organization. This is considered to be vital.

#### 6.2.3.5.1 Why foreign, private entrepreneurs should invest in an RMG business in Nigeria

Foreign investors will invest in RMG projects if they then have access to an attractive domestic market and/or if the project could serve buyers in third countries without hassle and better than from other countries. Unless and until the policy framework changes drastically in Nigeria, the needs for a domestic market RMG business will not be met and the opportunity for an export-oriented RMG business will also not be met.

Can the Nigerian FGN bring about such radical changes in established practices? It will not be easy but progress can be made and has to be made! Examples of countries where similar radical changes are slowly being brought about are India and Pakistan, where law and order matters have improved in the last years and corruption as well as bureaucratic procedural delays are being addressed seriously.

If the FGN were prepared to tackle the many serious issues immediately, so that the foundations of a new philosophy for Nigeria could be formed – and to make certain that the philosophy were implemented, then it would be a pragmatic move to attract one or more foreign investors (up to half a dozen) with special packages to bring their businesses to Nigeria.

Woven or Knitted Garments: There are probably more knitted garments in use today in the world than woven garments. Some countries such as Turkey produce more woven garments than knits; in Bangladesh it is the reverse situation.

For Nigeria, preference should probably be given to investments in knitted garments, as it is possible to have an integrated manufacturing operation for the least capital cost and to serve the markets with a great variety of products.

However, the foreign investor will determine the choice, based on established market possibilities.

#### 6.2.3.5.2 Knitted Garment Company- based on imported knitting yarns

A limited investment of the order of US\$ 5 mn would provide a balanced circular knitting, fabric processing and garmenting unit of international performance, producing about 5 tons of fabric and garments a day.

Such a unit would be flexible in terms of products and manufacturing programmes. Short delivery times in line with market demands in the EU/USA or ECOWAS.

T-shirts other knitted tops for sports/ casual wear are required in volume in all of the major markets.

Example 1: 100% cotton T-shirts, 140 to 180 gms

<b>Production:</b>	10,000 pieces per 8 hours day	
Personnel:	Sewing room operators:	120
	Cutting, finishing operators:	45
	Line supervisors:	6
	Line service operators:	7
	In-line quality inspectors:	6
	Management, etc.	8
	TOTAL:	192
<b>Buildings</b> :	Sewing room:	720
	Cutting, finishing:	150
	Offices, etc:	116
	TOTAL (m²):	986

#### Technology level: 2

Requirements for necessary productivity levels- skilled production engineers, production engineer, defined methods training systems

**Example 2: 100% cotton Polo Shirts** 

<b>Production:</b>	10,000 shirts per 8 hours day	
Personnel:	Sewing room operators:	306
	Cutting operators:	21
	Finishing operators:	70
	Sewing supervisors:	12
	Service operators:	13
	In-line quality inspectors:	12
	Management, etc:	15
	TOTAL:	449
<b>Buildings</b> :	Sewing room:	1837
	Cutting room:	230
	Finishing area:	490
	Offices, etc:	116
	TOTAL (m²):	2637

#### Technology level: 2

Requirements: Skilled production engineers, operators trained in defined methods and modern garment production techniques.

Detailed feasibility studies will be developed in the next phase of the project, based on Nigerian costs and incentives, as a sales tool to attract foreign investors to Nigeria.

# 6.2.3.5.3 Socks Company- based on imported, fine count cotton yarns and a variety of other yarns

The sock markets around the world are large and diverse. The products vary from men's fine cotton socks to sports socks, often in acrylic yarns. Whilst the actual knitting is highly automated, the associated manufacturing processes are labour intensive, including linking, turning, setting, inspection, labeling, packing and dispatch. Further, the yarns may be mercerized and dyed as yarn or the socks may be dyed as socks- all of which are labour intensive activities and are suited to Nigeria

The sizes of sock plants are variable. It is possible to operate a plant of, say, 5 sock machines with a linking machine or up to 40 or 50 machines on a more industrial basis. The investment needed, therefore, could be less than UDS 1 mn to US\$ 4 mn.

A detailed feasibility will be developed in the next phase of the project, based on Nigerian costs and incentives, as a sales tool to attract foreign investors to Nigeria.

#### 2.3.5.4 Woven Garments Company- based on imported finished woven fabrics

Men's trousers, jeans and shorts, men's shirts, ladies' blouses and ladies' trousers are the items imported in the largest volume by the major markets of the world. Many of the biggest competing export supply countries for these garments, e.g. Bangladesh and Sri Lanka, work mainly with imported finished fabrics that the RMG companies assemble into garments. It is not necessary to have backward integration in weaving and processing at this stage.

It is recommended that foreign entrepreneurs should start trouser and shirt garment plants in Nigeria, using imported finished fabrics initially. Whilst there is a need to have definite sources of fabric supply, the greater need is to have assured market outlets that should come from the foreign investor.

Two examples are offered, as shown:

#### **Example 1 : Tailored Dress Trousers- made to US chain store specification**

<b>Production:</b>	2,500 pieces per 8 hours day	
Personnel:	Sewing room operators:	267
	Cutting Room staff:	28
	Finishing operators:	24
	Sewing section supervisors:	14
	Inline quality inspectors:	14
	Inline service operators:	14
	Management, etc:	21
	TOTAL	382
<b>Buildings</b> :	Production area:	2434
	Stores, offices, etc:	146
	TOTAL (m²)	2580

#### Technology: Level 2

Operator training: operators to be trained to defined methods; supervision based on new systems/production technology/production management in modern manufacturing techniques.

#### **Example 2: Woven Dress Shirts**

Production: 10,000 shirts per 8 hours day

i i duuction .	10,000 sum is per o nours way	
Personnel:	Sewing room operators:	500
	Cutting, bundling operators:	25
	Finishing operators:	105
	Production supervisors:	20
	Line service operators:	20
	In-line quality inspectors:	20
	Mechanics, electricians, etc:	12
	Management, etc:	14
	TOTAL:	716
<b>Buildings</b> :	Production area:	4555
	Stores, offices, etc:	156
	TOTAL (m²)	4711

#### Technology level: 2

Requirement: Acceptable productivity levels from skilled production engineers and correct skills training.

Detailed feasibility studies will be developed in the next phase of the project, based on Nigerian costs and incentives, as a sales tool to attract foreign investors to Nigeria.

#### **6.2.3.5.5 Conclusions**

Nigeria has the ingredients to start a successful RMG Industry. It is not too late to start! The global market's demand for increasing garment imports is clear, especially as the MFA is phased out over the next 1½ years. And garment manufacturing locations are switching continuously from higher cost countries to lower cost ones.

#### Nigeria offers:

- Competitive labour costs & a large pool of labour in the rural areas
- A 'trainable work-force'
- Indigenous cotton and an established primary textile sector
- Privileged market access to the EU and the USA
- Attractive export incentives
- Export Trade Zones
- The major industrial country in W. Africa and ECOWAS market

#### Nigeria needs to:

- Achieve an attractive image in the outside world
- Attract a handful of foreign investors in the RMG sector
- Implement the package of 10 Strategic Recommendations
- Achieve competitiveness in terms of quality consistency, delivery reliability, reducing lead times, service to customers, trust and transparency in the markets
- Reform labour market policies to achieve flexibility: The E. Asian experience demonstrates that flexible labour markets contribute to high quality growth with wages and jobs determined by the interaction of labour supply/ demand- not by FGN legislation, public sector leadership or union pressure. It demonstrates that flexible labour markets encourage the efficient allocation of workers to tasks, often with the use of more labour intensive technologies and greater security for long-term employment. Labour market reform is more likely to result in improving employment standards, as the market will be the protector of labour in the future.

#### 6.2.4. Strategic Recommendations

#### 6.2.4.1 Ten Strategic Recommendations for FGN

10 Strategic Recommendations are made to FGN with the intention of eliminating distortions in the policy framework that impact negatively on the export competitiveness of the industry.

- (i) Introduce new policies aimed at reducing smuggling significantly. Discuss these policies with the partner countries in ECOWAS and get their support to join with you to take similar actions in their countries. This would benefit all national economies considerably.
- (ii) Create a Local Operating Environment, based on trust and transparency, to make the country more attractive for private sector, foreign investments, i.e. to reduce crime, bribery and corruption. Also minimize bureaucratic procedures covering general business activities and commercial trade (imports and Exports). This approach should cover companies in the Export Trade Zones (ETZ) and elsewhere in the country
- (iii) The existing Primary Textile Sector is presently being forced into decline by unfair, low-cost competition from imports, both legal and illegal. Anti-dumping protection regulations against unfair import competition of yarns and fabrics should be promulgated immediately, and enforced, or the companies will be forced to close, jobs will be lost and the foreign investors will be forced to move to bases outside of Nigeria. It may be noted that it was foreign investors who developed the Primary Textile Sector in the first place! It is an almost 100% certainty that it will be foreign investors who will develop the Ready-Made Garment Sector in the short term, given the opportunity. The continuing interest of foreign investors in Nigeria has to be sustained!
- (iv) Export incentives to be established for 10 years and "set in stone" by means of legislation, i.e. so they cannot be changed by short-term policy changes whichever regime is in power. The export incentives should be geared, so that investors can make long term plans that are in the best interest of the economy and advantageously support the export of goods of the highest value addition, that create the largest number of jobs and that contribute most to foreign currency earnings. Presently, the export incentive stands at 40%. It may be considered that the incentives should continue for a period of 10 years with reducing levels of 40% for the first 5 years and then reducing progressively by 10% a year. (This progressive reduction is given as an example and not as a recommendation at this stage. The exact levels of incentive for each year have to be determined during the implementation phase).

Export incentives should be on offer to companies in ETZs, at rates to be determined.

(v) The ETZs should be fully developed; now there is one ETZ operating at Calabar whilst 5 are on the drawing board. ETZs provide the opportunity for a new beginning for the industry and particularly the RMG industry: The regulations concerning how RMG companies can operate in the ETZs are to be written. Here is an opportunity, not be sacrificed, to write these regulations to meet the needs of dynamic, export-oriented companies, to satisfy the demands of buyers for quality products supplied with short delivery times.

The experiences of ETZs in other countries, especially with regard to RMG companies, have been extremely positive and can only serve as examples to Nigeria.

The benefits have been, for example, minimal bureaucratic procedures, 'one-stop-shops', no trades unions, prescribed working hours and minimum wages, availability of power, water, other utilities and services such as financial and banking 'with soft loans', canteen, courier, postal, testing, fire, etc..

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- (vi) Guarantee the supplies and prices of power, diesel oil, fuel oil, water and other utilities (by elimination of the man-made shortages and supply variations), so that industry can control its conversion costs.
- (vii) Consider limiting trades union activities in newly established RMG companies outside of the ETZs in the same way as they are limited inside the ETZs, for an initial period of 5 years.
- (viii) Address the educational needs of the industry and the rest of society for trained, skilled workers as well as for skilled management in all disciplines, e.g. technical, commercial, personnel and general management; production planning and quality control techniques; work study measurements; workplace engineering, etc...
- (ix) Several of the recommendations listed above will contribute to changing the image of Nigeria in the eyes of the outside world. The FGN has a further special task to catalyze this change. A subtle promotional programme is recommended that will gradually have an impact. This programme should also include trade promotion, to assist export companies in the overseas markets, to participate in international fairs, to organize inward and outward trade missions and the like
- (x) A dynamic campaign should be embarked upon now to attract foreign RMG investors to Nigeria, to kick-start the RMG sector. Special attractive incentives should be offered to the first handful of investors. It is believed that, once, say 5 companies have been enticed to Nigeria, and have demonstrated their exporting capabilities from a Nigerian base, others will then follow.

A special fund should be made available to the Textile and Garment Industry to provide favourable rates of funding for modernization, balancing and expansion as occurs in the competing countries

A series of 10 major strategic recommendations to FGN are listed above. It will not be sufficient for the FGN to address only one or even a few the recommendations that it may choose. If there is to be a serious intention to create a dynamic, export-oriented RMG industry, with all the benefits that could accrue to the country, the FGN needs to address all of the recommendations simultaneously, as a package.

Other, less crucial recommendations will fall into place as details of the major recommendations are being put into place.

#### **6.2.4.2** Attracting Foreign Investors

**RMG Investment Recommendations:** Nigeria has all of the facilities necessary to be an excellent host base for RMG investments. The country is one of only a few that can meet the 'Country of Origin' requirements of the AGOA Bill, as Nigeria has indigenous cotton and the possibility of converting this fibre along the complete textile supply chain into textiles and value-added garments and other consumer products, at highly competitive conversion costs.

**Foreign or Local Investors:** It will be necessary to attract foreign investors to fulfill these investment opportunities in a Nigerian RMG sector in the same way, as it has been the foreign investments that have spearheaded the investments in primary textiles production (spinning, weaving/knitting and processing). Foreign investors will have to be the driving forces as they, rather than local investors, have the garment manufacturing expertise, the established access to markets through their own sales organizations, technical know-how and management skills.

#### How to attract foreign investors:

- Nigeria does have a market reputation for garment exports. This has to be created!
- Nigeria does not have a reputation for garment manufacturing. This has to be created!

But then neither did Lesotho until 3 or 4 years ago, nor Uganda, Namibia and Swaziland until now. It was only within the last 10 years that Madagascar started to export in serious quantities. In each instance, it was foreign investments that kick-started the RMG industry.

- What did the investors want? The answer is clear the opportunity to manufacture at competitive costs with limited hassle and to have access to the world's major markets
- What did these named countries have to offer apart from AGOA membership? What incentives were offered that appealed to the foreign investors? What would Nigeria have to offer in order to attract the next line of investments? The answers to these questions have to be determined in detail, by field visits in these countries, by the preparation of a selling document to persuade investors to choose Nigeria and by visiting RMG investors in China, S. Korea, Taiwan, the USA and other countries.

# 6.2.4.3 Further Consultancy Projects to assist in fine-tuning and implementing the Strategic Recommendations, under new contracts

#### 6.2.4.3.1 Task Force

It is proposed that Gherzi should provide further assistance to the FGN of Nigeria:

- To fine-tune the 10 strategic recommendations with the respective FGN Departments, Trade Associations and a high-powered Task Force that is representative of all Ministries of FGN, the Industry Associations, Chambers of Commerce, Customs Authority, Education, the Investment Authority of Nigeria, Export Promotion Agency and Federal Micro- and Small- Industries Development Agency.
- To prepare Action Plans for implementation
- To agree the detailed Action Plan with FGN and the Task Force and to assist the Task Force in its implementation

#### **6.2.4.3.2** Attracting Foreign Investors

Once the FGN, with Industry representatives and consultants, has finalized the long term, export and investment incentive policies, the priority activity will be to attract an initial group of foreign entrepreneurs to make RMG investments in Nigeria. The consultants will, for example:

- Prepare a selling profile for Nigeria and the RMG industry
- Prepare feasibility studies for the options for RMG, primary textile sector and polyester projects
- Establish what incentives were offered in Kenya, Lesotho, Namibia, Swaziland and other countries. Determine who were the foreign investors (from China, S. Korea, Taiwan, the USA) in those countries and hold discussions with their parent companies (and other target companies), to persuade them to make their next investments in Nigeria.
- Identify the terms and conditions under which they would agree to invest in Nigeria and discuss the pre-determined terms on offer
- Encourage investors to visit Nigeria to see for themselves; to meet FGN officials and industrialists, union officials, banks and financial institutions and all other concerned parties
- Act as the intermediary answering questions, following up on the visits, taking whatever actions are necessary

#### 6.2.4.3.3 Other Projects

As the work proceeds, it is anticipated that other projects for assistance may be identified.

#### Appendix 1: Findings and recommendations based on technical visits to garment mills

#### a. T-shirts

The overall production performance of companies concerned in 100% cotton T-Shirt production was less than may be expected. It is not a question of the market niche that companies are supplying being low-priced. The following summarizes the findings in several areas and the recommended performance targets.

T-shirts: Supply and demand flow to the consumer market

Items	Average profile	Target
Cutting technology	3-5	2
Sewing technology	3-4	2
Printing technology	4	1
Working methods	3-5	2
Workers' skills	4-5	3
Management skills	3-4	1
Training methods	3-5	2
Production planning	3-5	1
Logistics	4-5	1
Maintenance	3	3

Key: 1 = very good; 2 = good; 3 = average; 4 = poor and 5 = very poor.

**Technologies employed:** The technologies employed generally are lower than may be expected in units wanting to produce quality garments. The quality of printing and embroidery need to be first quality as these operations give the speciality value addition to the product. This is especially noticeable in printing although one company has a new carousel- printing machine.

**Sewing Machine attachments:** Garment stitching quality can be improved and made more consistent if the available attachments are used on the machines. Sewing machine speeds should average 7,000 stitches per minute with automatic thread cutting devices, the foot presser should be lifted automatically and hemming devices fitted. This will significantly reduce the "off-standard production" and the excessive re-working.

**Labour Productivity:** labour productivity is somewhat too low. In part, this will be because the amount of work orders available for production were reduced during the field work visits but also because of the 'informal training' methods used, whereby a new recruit works alongside an experienced worker and does not have a period of formal training when the correct work methods and work tempo can be taught.

Working methods and operator skills should be oriented to mass production with each operator trained for 2 to 3 operations of higher quality work.

**Management skills:** management skills should be improved to achieve high quality/ low cost production. Middle management need to be exceptionally well trained and flexible to respond to a very wide variety of problems and issues.

**Machine maintenance:** the standards of maintenance need to be improved in order to achieve the best performances from the installed machines. Mechanics need to be re-trained.

**Production planning:** production planning and bar code label systems are essential modern tools for controlling mass production, to minimize costs and to optimize production.

T-shirts: Recommended mill

#### **Recommended T-shirt mill:**

Overall efficiency %

The average Nigerian T-shirt mill and the recommended (target) mill are profiled in the table.

	Average Nigerian Mill- 2003	Target mill Year 1	Target mill year 2	Target mill year 3
Daily capacity	3,500- 5,000	6,500- 7,000	8,000- 9,000	24,000
% Capacity usage	70	80	90	100
Direct workers	100 - 160	100 - 160	100 - 160	300
Total employees	180 - 250	180 - 250	180 - 250	500
Sewing machines	80 - 110	80 - 110	80 - 110	250
Garments (mins/ pc)	9 - 23	8 - 15	7.5 - 10	5

It is recommended that companies should increase their size over a three years period with continuous incremental improvements in performance. This will take the output level from 3,500 to 5,000 T-shirts per day to 24,000 pieces per day.

The target minutes per T-shirt can be achieved with enhanced skills training of the operatives in the correct work methods and work tempo and with effective management controls. It should be noted that investments in new machines possibly may not be required!

The data presented indicates the reduction in the minutes per piece that can be achieved, and needs to be achieved, to reach international competitive norms as well as the overall efficiency improvements that have to be attained.

It is proposed that 1 shift working patterns are used in order to have group routines and for flexibility.

Once these improvements have been made with a first group of workers, the mill can be expanded to achieve a business of a more economic size with 500 employees. Presently, companies have only 100 to 200 direct workers whereas the total of direct workers should be 300.

#### Summary of requirements for a competitive T-shirt garment industry:

- Highly skilled technical management
- Most appropriate sewing technology with automatic sleeve hemming, thread trimming, auto foot presser lifter, etc. machines should be low cost and above average performance
- Correctly trained, skilled operatives
- Quality systems to meet export customers' standards consistently
- Purchase order audit systems
- Inspection procedures
- Planning and logistical systems for quick response, output optimization and for required performance levels, i.e. bar code- production planning systems
- Competitive garment costs achieved by increasing the number of direct workers to 300 or more, controlling indirect costs
- Start with basic T-shirts and underwear and progress to polo shirts, fleece, etc...
- Elemental <u>times</u> for manufacturing T-shirts, men's boxer shorts, polo shirts and woven shirts:

The recommended time elements and off-standard targets for these 4 products are shown in the table.

#### Recommended time elements

	<u>T-shirts</u>	Men's Boxers	Polo shirts	Woven shirts
Fabric	100% cotton, jersey 140-180 gsm, Ne 24-30 combed yarn	100% cotton, jersey/ inter-lock 120-140 gsm, Ne 24 cb	100% cotton pique/jersey 180- 220gsm, Ne 24 combed	100% cotton
Time elements:	mins/pc	mins/pc	mins/pc	mins/pc
Cutting	0.2	0.15	1	2
Sewing, inspection	5.0	4.0	15	22.5
Ironing, pressing	0.8	-	1	1.5
Packaging	1.0	0.35	1	1.5
TOTAL	7.0	4.5	18	27.5
Targets:	%	%	%	%
Re-working	2	2	4	4
"off quality"	6 to 8	4	8 to 10	8 to 10
"off quality sewing	1	1	2	2

Source : Gherzi

## Appendix 2: Open market (retail) prices - Lagos and Aba

## Retail prices at Lagos and Aba

		Prices (Naira per pce)
KNITTED	Basic T-shirts, no name	280 – 450
	T-shirts (false name, copy brand)	800 – 1,200
	Men's underwear (cotton)	250 – 800
	Men's boxer shorts	300
	Socks	100
WOVEN	Men's boxers	200
	Casual shirts (false, copy of brands)	800 1,200
	Dress shirts (imported brands)	2,300
	Men's suits (imported brands)	35,000 – 45,000
	Men's casual trousers	1,000 – 1,500
	Men's formal trousers	5,000
	Jeans (false copy brands)	1,000 – 1,200

Note: Garments imported from global sources and particularly from China, Indonesia and India

Appendix 3: Cost comparison of knitted RMG plant in Lagos and CFTZ(Calabar FTZ)

## Cost comparison of knitted RMG plant

	LAGOS	CFTZ
All employees	500	500
Direct workers	362	362
Indirect workers	138	138
Working minutes/ day/ op	440	440
Overall efficiency %	80	80
Shifts per day	1	1
Absenteeism %	10	10
Sewing machines	310	310
Payroll- direct workers Naira	4,332,000	3,255,000
Payroll- indirect workers Naira	1,928,000	1,791,000
Basic T-shirts- capacity / month	500,000	500,000
Men's boxers- capacity/ month	630,000	630,000
Polo shirts- capacity / month	165,000	165,000

The table assumes that the target minutes per garment and manufacturing efficiencies are achieved. If this should be so, the labour costs in Lagos are Naira 6,260,000 and in CFTZ 5,046,000 – or almost 20% less in CFTZ. However, if the targets are not achieved in Lagos but are achieved in CFTZ, the cost difference between the two locations becomes even more significant and especially in the cost per garment.

## Appendix 4: Knitted T-shirts and woven shirts production

## Knitted T-shirts and woven shirts production

Items	Knitted T-shirts	Woven Shirts
Personnel: -Cutting	12	20
-Sewing, inspection, pressing	300	300
-Packaging	40	10
-Logistics	27	14
-Administration	111	110
-Total	500	454
(direct workers)	362	340
(indirect workers)	138	114
Production – pieces per day	24,000	3,500
Efficiency (%)	80	70
Garments- minutes per piece	5	24
Floor area – square metres	7,000	6,000
Machine Costs US\$		
CAD and Patterns	-	40,000
Cutting	36,000	95,000
Sewing	900,000	495,000
Finishing and pressing	13,000	55,000
Packaging	1,000	10,000
Miscellaneous	10,000	10,000
Total machine costs*	960,000	665,000
Infra-structure**	200,000	240,000
IT equipment / software	35,000	35,000

Footnotes: \* = machine investment for woven shirt production is less than for T-shirts, as sewing machines for knitted garments are more costly but cutting, finishing and packaging machines are cheaper.

<sup>\*\* =</sup> infra-structure includes power generator, lighting system, steam boiler, network, etc.

7

# THE REVIVAL OF THE NIGERIAN TEXTILE INDUSTRY

#### 7. The revival of the Nigerian textile industry

#### 7.10verview of the operational environment

In the following, Gherzi is analysing the Nigerian textile industry in 7 critical areas as follows:

## **Problems faced by the Nigerian Textile Industry**

1

# Market environment / FGN policies

- · Widespread smuggling
- · Import of 2nd clothing
- Firm price ceiling for APS
- · Duty, tariffs and taxation issues



#### **Exports**

- The EEG incentive
- · World exports
- · Nigerias role
- Export potential



#### **Garments**

- No garment industry on an industrial scale
- Non passage of AGOA legislation hinders FDI in AGOA

2

#### Infrastructure issues

- · Electrical power supply
- · Power supply disruptions
- · Voltage fluctuations
- Fuel oil supply
- · Diesel oil supply
- · Heavy fuel oil supply



#### **Rising costs**

- · Working capital cycle
- · Cost of finance
- · Long term loan
- · Banking sector lending aversion
- · Bank of Industry
- · Financial situation of the Industry
- Profitability
- · Investment plans
- Exchange rates
- · Inflation rates

3

#### Raw material base

- Cotton contamination
- · Cotton price
- Ginning
- · Pending policy issues
- · Polyester production



#### Financing issues

- No garment industry on an industrial scale
- Non passage of AGOA legislation hinders FDI in AGOA

#### 7.2 Overview of the key issues

#### 7.2.1 Issues relating to the local market environment

The industry is characterised by the fact that it produces a mono product, African prints, for the home market and exports the same product to its West-African neighbours. As such the industry has never had the advantage to participate in a growing world export market both for textiles and garments. Since there can be little product diversification also in African prints, the illegal import of just one product "African prints" can throw the industry into crisis and through the non-payment of duties, the smuggled fabric can be sold at very low prices in the Nigerian market and making the local production uncompetitive.

#### 7.2.1.1 Widespread smuggling

The smuggling of African prints, particularly from the Far East was cited by most respondents in our field study as the biggest problem confronting the domestic Nigerian textile producers today.

These goods are often dumped at very low prices on the Nigerian market. Additionally, these goods often arrive without the payment of the stipulated Import Duty in the country.

The very low landed price of these goods again means that Nigerians with a restricted spending budget will certainly buy these items in preference to traditional dress made from the superior domestic printed fabrics.

Most companies believed that not enough was being done to tackle the problem of smuggling and dumping after the ban on import of African prints was introduced and indeed that up till now there had been not enough political will to tackle these issues as the business was very lucrative for the individuals involved in it.

The level of Smuggling was said to have increased significantly over the last 5 years since a ban on imports was lifted and it is now at crisis point.

The Presidential Committee has also addressed this issue of smugling and listed the following main complaints:

- The impact of smuggling of textiles, auxiliaries and garment into Nigeria including under invoicing and false declarations especially through neighbouring countries
- These large quantities of certain products such as brocade being dumped in Nigeria by Asian manufacturers. The dumpring of these produts cause serious injury to local producers who were forced to shut down production
- Absence of enabling law empowering the Nigerian Customs Service to seize illegal imports beyond the 45 km mark from the border
- Low level of compliance by Nigerians with existing laws against smuggling, such as, CAP 86 (LFN 1999), Pre-shipment Inspection Act No 36 of 1978 as amended by Decree No 11 of 1996; the Tribunal Miscellaneous Offences CAP 410 LFN 90

• Problem of border communities who engage in smuggling as occupation; and inadequate antismuggling infrastructure of the Nigeria Custom Service;

What has been done so far?

- Ban on import of printed fabrics
- Restriction on imports of other textiles (non printed) through sea parts only
- 50% incentive for Customs and General Public on seized textiles
- Establishment of a Presidentioal Committee on textiles led by the HMI
- Tariff relief on imputs used in textiles
- Increase of export incentive to 40%
- Commissioning of UNIDO / Gherzi to undertake study of the textile and garment industry

While the industry is grateful for all that has been announced, we can confirm that the industry continues to be in a serious crisis. Since the announcement of the ban on importation, there has been no improvement. Three more textile mills have closed down and several others have declared staff redundancies thereby causing over 3 000 further job losses.

The single most important factor responsible for this sad state of affairs is the lack of Customs enforcement of the restrictive imports measures.

- Import of printed textiles was suspended from September 2002 but markets are flooded with printed goods
- ALL other textiles were to be imported through Apapa and Tincan ports only but hundred of trucks carrying textiles from across the borders enter Kano market every week.
- 50% incentive was approved by Mr. President in November 2002 as reward for seizure of illegal imports but upto now not a single case of reward has been reported to the industry.

After consultation, the Industry came to the conclusion that further drastic measures are required to make the ban work which should include :

• To set up a temporary task force for six months directly reporting to the President. It should monitor imports and smuggling activities and arrange seizures. The task force should include Nigerian Textile Workers Union and Nigerian Textile Manufacturers Association. This task force should take up the job on a "war footing". It should meet every week under the Chairmanship of the Honourable Minister of Industry.

- The FGN should deal with the clearing agents with a firm hand, particularly the ones at Katsina
- The possibility of Police involvement in ban enforcement should be investigated
- Clearing agents and traders known to the NTMA as textile smugglers should be prosecuted in accordance with the law
- FGN should communicate with the Industry on a regular basis and seek assistance from NTMA in implementing the ban. We know from our sectorial study in Brazil, that the Brazilian Textile Association has actively assisted the local customs authorities in controlling smuggling.

#### Benefits resulting from a 20% reduction in smuggled printed fabrics

• Benefits from a 20% reduction in smuggling

• A 20% increase in local production capacity utilisation



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-Industry:	100 mn metres of additional production	(N 1.

(N 1.0 bn)

-Farmers:	15,000 tons of additional cotton consumed	(N 1.8 bn)

-Labour: 3.6 mn extra man-days required

(N 1.8 bn)

-FGN: extra VAT / customs revenue

(N 0.2 bn)

-FOREX: saving of Forex on imports

(US\$ 50 mn)

-Lower consumer

Price:

N 5 to N 10 less / 6 yard piece

Source : Gherzi

#### 7.2.1.2 Import of 2nd hand cloth

Import of used second hand clothing into Nigeria from Europe and the USA is also understood to have increased very significantly despite the ban. These items often include international clothing brand names which are very sought after by the people. The fact that these items are abundantly available in the local market and at very low cost makes them an obvious purchase choice for the local population.

The key purchase criteria for many Nigerians remains PRICE. As these second hand clothes are very cheap and branded, they are bought in preference to locally produced fabrics.

This fact is a be a very strong negative feature for the local fabric producers of shirting and suiting in Nigeria which are orientated towards the domestic market as the floor price set by these second hand clothing imports is very low and makes local materials uncompetitive in price.

#### 7.2.1.3 Firm price ceiling for African prints

The price of a piece of APS has declined in real terms, i.e. US\$ terms, which is due to increasing competition from imports. This has squeezed the textile mills margins because all their other costs such as power, wages, spares and general overheads have increased in this period.

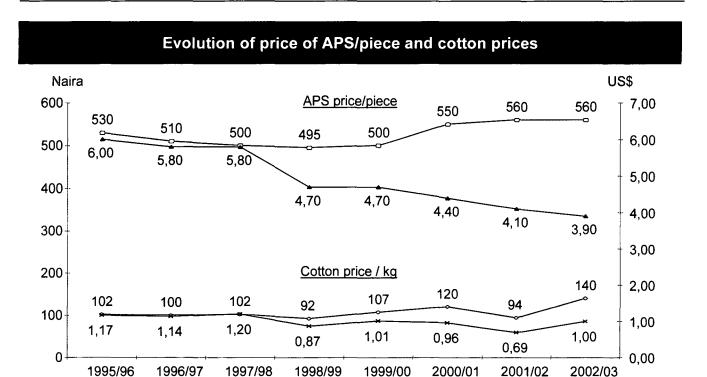
Despite the general and significant increase of a range major inputs as said before, textile companies have found it very difficult or impossible to increase the selling prices of their domestically produced printed fabrics to compensate even for inflation.

This inability to offset, even partially, rising costs with higher market prices arises from the extremely difficult domestic market situation which exists in Nigeria for textiles today.

This situation has resulted also in a very significant squeeze on margins, which has left almost all fabric producers in a loss making situation with many also suffering a cash drain.

On the other hand, cotton prices in US\$ terms have been more stable, except for season 2001/2002. The gap between World cotton prices has been narrowing thus eroding the raw material advantage by local textile mills.

Generally the cotton price as a percentage of the APS price has been below 20%. In 2002/2003 it has increased to 25%. This created further pressure on the mills earnings.



Source: Gherzi analysis

#### 7.2.1.4 Duties and tariffs

Most respondents felt that the current level of duties in place was adequate to protect local producers if they were enforced. The problem lay in the fact that most goods arrived illegally directly in Nigeria or were trans-shipped through neighbouring countries without the payment of any duties or tariffs other than the bribes paid to secure entry.

Respondents also stated that a major problem was a lack of consistency in setting import duty tariffs. Frequently a lobby group representing a particular textile sub-sector or minority interest would succeed in getting a duty rate changed to their own advantage but to the detriment of the rest of the industry.

The cost to the country of failing to adequately enforce the existing duty regime is very large indeed. It is directly responsible for a major decline in textile employment, domestic added value and tax generation. In addition to seriously damaging the domestic market and the local producers, the FGN is also losing directly millions of dollars of direct duty income each year.

#### 7.2.1.5 Corruption

Many companies also reported wide-spread corrupt practices within the country. The extent of corruption posed further additional hidden cost on textile manufacturers who had to pay extra for many services such as the release of goods from customs.

#### 7.2.1.6 Neighbouring markets

The neighbouring countries around Nigeria were always important export markets for Super Prints produced in Nigeria. This trade was carried out through both formal and informal exports.

The same forces which have been destroying the domestic Nigerian market, namely smuggling and second hand clothes have also been at work in the surrounding countries. This has meant that these neighbouring country markets are also now much less receptive to exports of Nigerian produced African prints.

This point is important as it represents a weakening in the market environment, which is not within the power of the Nigerian FGN and authorities to control.

A significant portion of the Wax and Super print trade was traditionally made with these neighbouring countries through both formal and informal exports.

#### 7.2.1.7 Issues relating to the FGN policy framework

Most companies also sited FGN Policies as a major problem for manufacturers.

In particular there was a lack of consistency in policy decisions. Particular lobby groups with ministerial access frequently managed to secure changes in FGN policy to suit their own individual needs and to the detriment of the textile manufacturers as a whole.

This was sited by many companies as being particularly true for rates of import duty on particular textile products which were prone to be cannged without prior warning or notification.

Companies also stated that some aspects of FGN policy which were set in Abuja were never clearly communicated to front line FGN workers such as customs officials. This seemed to arise from failings in the Nigerian civil service who would normally be responsible for ensuring that new policies entering the statute book were clearly communicated to other FGN departments and enforced.

Even policies which can be considered beneficial to the industry such as the Export Expansion Grant (EEG) and which we discuss later in this chapter, were a source of concern as there was always a doubt in the minds of companies as to how long such policies would last.

#### 7.2.1.8 Issues raised by the Technical Committee

The Technical Committee identified the following problems as major factors militating against the development of the textile industry.

- Incidence of cotton contamination as a result of traditional harvesting methods
- Illegal dumping of textile fabrics in Nigeria

- The impact of smuggling of textiles through neighbouring countries, under-invoicing and false declarations
- Under-capitalization, poor maintenance and low productivity brought the yarn forming process (spinning) into a vicious circle
- Out-moded technology and maintenance level of the installed fabric forming (weaving & knitting) machinery did not permit the production of exportable fabrics
- Poor and inadequate infrastructural facilities such as roads, electricity, pipe-borne water, etc...
- Inconsistency in FGN policies especially in the past which resulted in the collapsed of many mills
- Incidence of high interest rate
- High cost of dyes, chemicals and spare parts

#### 7.2.2 Issues relating to the Nigerian infrastructure

#### 7.2.2.1 Electrical power supply

Grid electrical power in Nigeria is only provided through a state owned enterprise NEPA. Almost all respondents were highly critical of all aspects of the electrical power service provided by NEPA. The main criticisms centred on very frequent power supply disruptions, and Voltage fluctuations.

#### 7.2.2.2 Power supply disruptions

These disruptions are so frequent and serious in some areas of the country that some manufacturers actually use generators as the primary source of power and the grid as a stand-by.

Others use generators to safeguard critical operations such as OE where a supply disruption of even a few seconds causes machine downtime of 2-3 hours, as all ends will be broken.

Power disruptions also lead to product wastage in the Printing process.

A common view among companies was that the cost of Power from NEPA was far too high and the service provided deplorable.

#### 7.2.2.3 Voltage fluctuations

In all regions companies also experienced frequent voltage fluctuations. This damages a wide range of sensitive electronic process control equipment over time. Many companies either avoid appropriate electronic controls or have to suffer the additional cost of frequent repairs and replacement of this equipment.

## 7.2.2.4 Fuel oil supply

It is a strange paradox that in a country that is the sixth largest oil exporter in the world, manufacturing industry suffers from frequent shortages of both Heavy Fuel oil and Diesel oil.

#### 7.2.2.5 Diesel oil supply

Diesel oil is very important to all textile manufacturers in Nigeria as it is used to fire generators as either the primary source of electricity or stand-by cover. During the field visit many manufacturers informed us that the official price of diesel was 26 N per litre. However due to supply shortages the current price was around 40 N.

In the northern city of Kano, which suffered even higher prices, there were additionally problems of even securing supply at any price.

#### 7.2.2.6 Heavy fuel oil supply

Heavy fuel oil was used to fire the boilers of all textile manufacturers visited. The normal price of this fuel was 12-13 N. However, as again observed during the field visit, there were acute shortages of this fuel particularly in Kano. The price had risen to around 40 N per litre and supply was very restricted. At least 2 companies were on the point of closing production due to lack of an oil supply.

The high price was also eliminating the already thin margins making it uneconomical to continue production in some cases.

## 7.2.2.7 Water supply

The water supply situation of most companies in the Lagos area was not sited as a particular problem. Most mills were serviced with water either from own ground-water bore-holes or from river extraction.

In Kano all companies indicated water shortages. The reasons given were a lack of investment over the years by the state to expand the supply of available water. In the intervening period water consumption had risen due to population expansion and the development of the local leather tanning industry.

Many companies in Kano were buying water from tankers and did not have any continuity of supply guarantees.

#### 7.2.2.8 Road transport

Companies expressed problems with road transport. The road transport Lagos to Kano (the main distribution center for African prints) was cited as problematic as the length of delivery time could never be guaranteed.

#### 7.2.2.9 Communications

Companies also expressed problems with telecommunications. The terrestrial telephone services offered by NITEL were said to be very poor and unreliable.

Mobile phones were the means of communication of choice.

These Infra-structure problems together with the road transport and weaknesses contribute to making the manufacture of textiles in Nigeria more difficult and certainly more costly than it would be in many competing countries.

There has been a lack of investment in the infrastructure of the country, and these under-investment places Nigerian textile manufacturers at an international disadvantage.

The Technical Committee addressed in its report infrastructure issues as follows:

[... **poor infrastructure**: Inadequate and poor infrastructural facilities such as roads, electricity, pipe borne water and telecommunication services. Cost of energy for production is high when compared with other developing countries such as India and South Africa; and frequent power outages causing interruptions in the manufacturing process resulting in defective and substandard products...]

### 7.2.3 Issues relating to the financing of the textile industry in Nigeria

The textile industry is generally very capital intensive both in terms of Fixed Asset and Working Capital investments required. The availability of a secure supply of competitively priced financing is very import for maintaining the competitiveness of producers.

In this respect our investigations have revealed that Nigerian producers are again at a very strong disadvantage.

#### 7.2.3.1 Working capital cycle

In textiles production generally the Working Capital cycle can be quite long. In Nigeria the cycle is much longer than elsewhere.

Firstly producers have to buy the cotton crop for cash usually before it is even harvested in order to ensure supplies. Since there is only one crop per season (November – February) producers also have to buy up the entire years supply during this period and hold stocks for up to 7 months.

When selling the yarns and fabrics produced producers have to extend credit to their customers for around 45 days.

This means that Working capital is turned-over only between 1.5 - 2.0 times pa.

In other countries cotton is often bought on generous credit terms and supplies can be secured in the local Spot Market significantly reducing Working Capital needs.

#### 7.2.3.2 Cost of finance

The problem of a long Working Capital cycle is made much worse in Nigeria by the cost of short-term financing. This costs from 20.5% pa and upwards.

This adds very significantly to producer costs and places Nigeria at a competitive disadvantage against textile producers elsewhere in the world who enjoy much lower Working Capital needs and cheap finance to fulfil their needs.

Many companies also stated that banks impose many additional handling and bank charges, which significantly increases the cost of capital even further.

#### 7.2.3.3 Long terms loans

A curious feature of the Banking system in Nigeria is the fact that there is a total absence of Long-Term funding available to manufacturers from local banks.

Most loans available are for less than 12 months, with the top companies occasionally being offered loan facilities for up to 3 years.

Most textile machinery has a life span of at least 10 years and internationally is usually financed with loans of more than 5 years duration.

Such loans as are available in Nigeria are again offered at interest rates of 20.5% and upwards making it prohibitively expensive to invest other than by using ones own equity.

This is a key factor in the long-term under-investment that is evident in many companies. The very poor local market environment coupled with prohibitively expensive bank financing has deterred many companies from making critical investments, which would improve their productivity and costs. As a result, such companies are becoming progressively less competitive.

#### 7.2.3.4 Banking sector lending aversion

From discussions with various commercial banks it is clear that the Banking Sector in Nigeria is more focused on lending to traders and to certain preferred industrial sectors such as Oil, Telecommunications and Food & Drinks.

Banks are certainly reducing their lending exposure to textile companies generally in Nigeria, and where they are lending preference is given to the larger textile producers who are seen by the banks as being the more secure investment.

Smaller companies will find it increasingly more difficult to secure adequate lending facilities from commercial banks, and will probably have to pay a further risk premium on top of the already high lending rates quoted.

## 7.2.3.5 Bank of industry

There is a distinct shortage of competitively priced short term financing available in Nigeria for the manufacturing sector.

It was foreseen that the newly restructured Bank of Industry would fulfil this important role of making long terms loans available to suitable projects, which had been approved.

However, the Bank of Industry has been seriously under funded since its creation in 2001 and currently does not a have sufficient capital base to meet even 1% of the funding applications submitted.

The situation for 2003 was not yet clear as the bank did not expect to receive any confirmation of its current year funding status until at least August.

In the meantime all manufacturers in Nigeria are still denied any access to competitively priced long-term financing.

#### 7.2.3.6 Financial situation of the industry

The industry has been suffering a sustained decline in all the key measures of employment, production and financial viability since around 1997.

During this period many textile producers have either closed down entirely, or scaled back production by closing down one or more of their mills.

The decline seems to have gathered further pace with many companies reporting the situation in 2003 to be much worse than the previous year.

All companies visited were in a loss-making situation in 2003, there was very little confidence in the future outlook that things were likely to improve.

The companies who have invested over the last 5 years and improved their productivity levels look best placed to ride out the current very harsh market environment and rising costs.

The only optimistic note was sounded by some spinners who are currently experiencing strong demand for their yarns. This fact, coupled with the availability of the Export Incentive Grants, meant that the many local cost disadvantages of Nigeria could be overcome and the business operated with modest profits.

# 7.2.3.7 Profitability

Profitability at all companies visited has been declining steadily over the past years. Even the best oroducers now feel that they have FGNe as far as they probably can with cost saving programmes.

All companies reported a very firm price ceiling for their Super Print fabrics and were simply having to absorb a general increase in the level of a variety of Operating Costs at the expense of their margins.

The situation was less acute for companies producing wax prints as this segment of the market was less affected by cheap and illegal smuggled goods.

## 7.2.3.8 Investment plans

Most companies had postponed or cancelled planned capital investments in their plants due to a lack of confidence in the future outlook for textile manufacturing in Nigeria.

The sector generally has been under-invested over a number of years, and this fact is now being reflected in the levels of productivity achieved and the poor financial performance of these companies.

Many of the least well invested companies have now closed down or severely scalled back production.

#### 7.2.3.9 Exchange rates

Exchange rates in Nigeria are now effectively set by means of a twice weekly Dutch Auction of FOREX which is conducted by the central bank.

Under this procedure commercial banks bid for their foreign currency requirements against funds made available by the central bank. The rates bid by banks for this FOREX constitutes the official exchange rate for the Nairae. Thus the prevailing exchange rate is set by the market forces of supply and demand.

In addition to the Official exchange rate there also exists a parrallel market rate.

This rate is currently about 8%-10% more than the offical rate and constitues a secondary market for currency exchange. The parallel market rate has narrowed somewhat in recent years, and was previously traded in a range of up to 35% above the official rate.

The Naira exchange rate has slid steadily against the US\$ in recent years as the following numbers indicate:

	<u>Interbank</u>	<u>Parallel</u>
• Dec 2000	109.3	120.0
• Mar 2001	121.5	127.0
• Jun 2001	111.6	132.0
•Oct 2001	111.1	129.5
• Dec 2001	115.0	132.0
• Mar 2002	115.5	136.0
• Jun 2002	119.2	136.0
•Sep 2002	126.2	137.5
• Dec 2002	128.0	137.0
• Mar 2003	128.7	139.0

#### 7.2.3.10 Inflation rates

It is difficult in Nigeria to find official FGN backed statistics on the prevailing rate of inflation. Several commercial banks and economic groups do however publish their own unofficial inflation data for Nigeria.

This data shows that in recent years inflation has been as high as 20% and is currently running at around 13% and is on a rising trend that is expected to take the rate of inflation back above 15% in the coming months.

### 7.2.4 Issues relating to the rising costs

Textile companies sited generally rising prices of essential inputs as being a major problem. Specifically, it was stated that in recent years the cost of Labour, Cotton, Electricity and Oil had all risen significantly.

The extremely difficult market environment meant that in most cases rising costs could not be passed on to customers in higher prices. Most companies have simply had to absorb these rising costs and have seen there profit margins significantly reduced or wiped out completely.

#### 7.2.4.1 Cost of cotton

Cotton prices in Nigeria, in common with the international situation, have risen sharply over the last year.

Prices paid in 2003 for ungraded Nigerian cotton bought in the local market ranged from 140 - 155 Naira per KG of cotton lint. (50 - 55 cents/LBS).

At these levels and taking account of the ungraded nature of the available cotton textile manufacturers do not enjoy any local cotton price advantage.

#### 7.2.4.2 Cost of electricty

Based on the data collected during the field work it is clear that grid electricity, which is available only through the state monopoly provider NEPA costs around 9.5 - 10.5 Naira/KWh on average.

This equates to a cost of around **8** US \$ cents KWh which is very high by international standards. When the appallingly low level of service provision offered by NEPA is also considered the true cost of power is actually much higher.

As outlined in chapter 2.1.1 companies frequently have to partially or completely rely on Diesel generators with high maintenance and running costs. Grid users suffer frequent power supply disruptions that cause extra waste and reduced operating efficiency.

During Diesel generation with current fuel prices Electrical Power cost is over 13 US \$ cents / KWHr.

#### 7.2.4.3 Cost of water & effluent

Water was generally available at competitive prices from either own ground water sources or from river extraction.

The exception to this was in the north around the city of Kano. Here an increased water demand from the increasingly significant leather tanning industry has led to a local water shortage.

In this region many companies were entirely dependent on water tanker deliveries.

#### 7.2.4.4 Cost of fuel oils / steam

Heavy Furnace Oil was used by most companies as the primary fuel for steam generation. At the local official oil price of 12-13 Nairae/litre local steam costs are around 10 US \$ per ton of steam.

However, in the Lagos area at the time of the filed visit the market price for furnace oil was around 25 Nairae/litre meaning the actual cost of steam generation was around 20 US \$ which is high by international standards.

In Kano, where there was an acute shortage of this fuel the price had risen to 39-40 Naira/litre. Giving a very high international steam cost of almost 30 US \$ / ton.

#### 7.2.4.5 Labour costs

There are several issues surrounding both labour costs and productivity which need to be highlighted.

Costs of labour has risen strongly in recent years and the textile industry is now bound by national union agreements on textile workers remuneration and conditions. These conditions limit worker hours to 40 per week with hefty overtime premiums for additional Saturday and Sunday working. These conditions mean in effect that almost all textile companies only work a 3 shift system for 5 days per week (Monday – Friday). Overtime pay is used to cover additional hours on Saturday and Sunday. The Sunday take-up is usually low at around 50%-60% turnout.

The average hourly cost of a textile worker in Nigeria, including overtime premiums is around **0.76** US \$/h. This cost is already above the level paid by many textile producing regions, and when coupled with the relatively low levels of local labour productivity, means that labour unit costs are becoming internationally uncompetitive.

#### 7.2.4.6 Cost of interest

Interest charges for both Working Capital and Fixed Asset investments in Nigeria are very high. These range from a minimum of 20.5% for the larger textile companies up to 25% for smaller companies.

The cost of borrowing in Nigeria is a major international cost disadvantage for textile producers which significantly increases working capital costs compared to most other textile producing regions and countries.

### 7.2.5 Issues relating to the cotton base

#### 7.2.5.1 Cotton contamination

A major issue with Nigerian cotton relates to the fact that the crop is contaminated with Polypropylene.

This contamination arises from the practice of using polypropylene bags to collect the hand picked cotton during harvest. The problem seems to be one of education and making available suitable alternative collection bags.

NACOTAN and NCCI have addressed this fact in as much that the propose "The replacement of polypropylene bags with jute bags or Hessian flats" which would be a major factor for quality enhancement. Gherzi would propose however that cotton bags are used , which could easily be produced by the local weaving industry on their old shuttle looms.

Some ginneries are making a manual cotton pre-check and picking of polypropylene prior to ginning in order to reduce the polypropylene contamination levels.

This contamination issue, which is present in all Nigerian cotton to a greater or lesser extent, is very negative for both domestic textile producers and exporters of cotton fibre.

For producers the PP remains virtually invisible until dyeing or printing where it then shows up as white spots in the cloth. This can affect the price of the cloth at a point in manufacturing where the maximum added-value has already taken place. For yarn exporters. The number of applications in which the yarn can be used is seriously restricted and this is reflected in the selling prices which can be achieved by Nigerian yarns, which have to be sold with the label "Not suitable for dyeing"!

For fibre exports, the fact that the fibre is contaminated also restricts its market and reduces the price buyers are willing to pay for Nigerian cotton.

In fact according to the Swiss Consultants report, the Nigerian cotton has been internationally "declared ungraded and polyprobylene fibre contaminated" (see below).

#### 7.2.5.2 Evolution of the Nigerian cotton prices

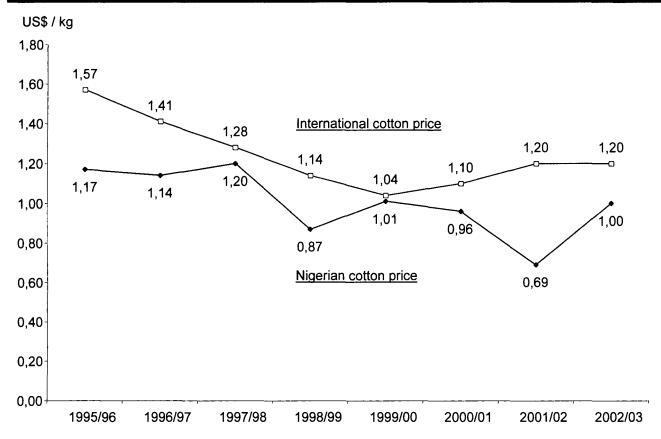
The following table shows the price of Nigerian cotton compared with World prices. Nigerian cotton is always discounted compared with the international prices. This is due to the fact that 95% of the cotton grown in Nigeria is medium staple only and 85% of it is polypropylene contaminated and the balance 15% is poly-reduced. This is one of the major reasons for the discounted prices.

The international prices which are relevant for comparison with Nigerian cotton is Cotlook B' Index. Generally on an average, the Nigerian cotton is discounted by 8 Cents / pound compared with the Cotlook B' Index prices (the difference between Cotlook A' Index and B' Index is around 4 to 6 Cents / pound).

Only during the last year season (2001/2002), Nigerian lint prices were higher than the international B' Index prices, or on par due to scarcity in the early part of the season.

In conclusion, it can be said that the Nigerian textile industry pays prices for the Nigerian lint which are lower than World prices, however for a contaminated low grade cotton.

# Evolution of Nigerian cotton prices vis-à-vis World prices (US\$/kg)



Source : CCI Department of Agriculture, Gherzi analysis

# **7.2.5.3 Ginning**

There are about 50 ginneries of varying age and technology level installed in the country. The total installed capacity is about 800 000 t of seed cotton. Capacity utilisation is estimated to be only about 25% in the past years. 80% of the ginning is done by only 10 ginneries. FGN should not encourage investments in new gins until the installed capacities are fully utilized.

#### 7.2.5.4 Pending policy issues

The problems of the Nigerian cotton growing sector have been addressed in the past and at present by many different agencies. A comprehensive study of the sector was prepared as recently as the year 1999, by the Swiss based Consulting Company ACE, Audit Control and Expertise S.A., which was commissioned by Nigeria's Federal Ministry of Commerce.

A report was issued in November 2000 termed "Programme for the improvement of cotton quality out put, marketing and trade in Nigeria". The report which addresses in detail the problems and opportunities of the cotton sector in Nigeria was made available to Gherzi by UNIDO and we quote below the summary and conclusions of the report presented in November 2000.

#### 7.2.5.5 Swiss Consultants report – Summary and conclusions

"The quality and quantity of cotton produced in Nigeria have suffered major decline in the last decade. The peak of cotton lint production was reached in 1969/70 when a total of 503.640 – 185 kg bale was reported. The production in 1998/99 was reported as not more than 110,000 bales of assorted weights. Assuming an average bale weight of 185 kg, the production in 1998/99 was only 22% of 1969/70 production. In addition to the decline in quantity, the quality of cotton lint produced has deteriorated to such an extent that Nigeria cotton cannot be freely traded in the world market. Nigeria cotton has been declared ungraded polypropylene fibre contaminated. Due to quality problems, the price received is not more than 70% of average world price. Thus for every tonne, Nigeria loses about US\$ 300. This will translate to a loss of US\$ 33 million in 1998/99.

Concerned with the continuing deterioration of quality and decline in quantity, and the resulting colossal loss to the economy, FMC commissioned a study to identify the problems faced by the cotton sector and to propose ways to resolve them. It has been emphasised to the consultant that any proposal put forward must be self-sustaining within the shortest period.

A feasibility study was carried out and report entitled "Programme for the Improvement of Cotton Quality, Output, Marketing and Trade in Nigeria" was submitted in July 1999. The report identified the following problems as the main causes of the unenviable performance of the cotton sector.

Disorganisation of the production and marketing system and cessation of support services which followed the dissolution of the Cotton Marketing Board in 1986.

Deterioration of the seed system which has led to lack of varietal purity and eroded the basis of cotton uniformity, a key quality required to sell cotton at a good price in the world market. The poor quality of seed also meant low yield and quality output resulting in low returns to farmers, ginners and cotton merchants.

While quality and quantity of cotton produced in the last decade declined, the sector witnessed a rapid expansion of investment in ginneries. About half of the existing ginneries were built in the last decade. This expansion led to stiff competition for local seed cotton and uncontrolled importation of seed cotton from ECOWAS countries, and low utilization of the capacity of ginneries which now stands on the average at less than 25%.

Inadequate input supply and credit to cotton farmers; and low price received by farmers for seed cotton which is a reflection of poor quality produced.

The consultants noted the efforts of the Federal Ministry of Agriculture which started in 1992/93 with a funding of N38.01 million to improve varietal purity through a re-establishment of the seed system. The efforts has not succeeded and has no chance of success even in future. Were it to succeed, it will not be adequate to respond to the above mentioned problems.

The consultant therefore, recommended that a comprehensive and co-ordinated approach be followed in rehabilitating the cotton sector. A co-ordinated approach is sine qua non for the production of good quality cotton.

Cotton is sold by country name, therefore, the poor action of a single ginner or trader affects the whole cotton sector. For example, the varietal purity problems can only be addressed nationally as misdeeds of any operator will impact negatively on the whole sector. They concluded that the following approach which built on Nigerian and other countries' experiences should be followed.

- A co-ordinated production and marketing system run by an association of concerned private sector operators should be put in place,. The National Ginners Association being the central operator in the sector is proposed to take-up this role.
- A new seed system manned by the private sector should be put in place to undertake all the commercial aspects, while the FGN mainly IAR Zaria, NSS and the State extension services will provide support services.
- The public and the private sector should collaborate in policy and legal framework development.
- A reliable able input supply and credit system should be put in place for the smallholders in particular.
- Cotton market system should be re-instituted and this will include the re-establishment of the cotton marketing centres, the resuscitation of quality assurance by State SPIS, and quality control and certification by FMC-FPIS and weight and measure divisions.
- The cotton development programme should be self supporting with little or no FGN financial support.

Detailed proposals on the first five items are contained in the report while self sustainability of the proposed development was also demonstrated in the proposals.

The FMC subjected the feasibility report to a stakeholder workshop held in IAR- Zaria, 21- 23 August 00. The report proposals were enthusiastically accepted and proposals were made to improve the design of the programme. FMC was urged to finalize the report and bring the new proposals to implementation. The conclusions of the stakeholder workshop is in annex I of this final design report."

#### **7.2.5.6 NACOTAN**

Gherzi in its field work visited together with some textile industrialists and the UNIDO consultant, the National Cotton and Textile Association (NACOTAN) in Zaria, which comprises of textile manufacturers, cotton merchants and cotton processors, and representatives of the National Committee for Cotton Improvement (NNCCI). To our surprise, many of the textile companies are not aware of this organisation.

Gherzi was handed over a copy of a recently prepared "Programme for Improving the Quality and Production of cotton, technical and financial support to NACOTAN – NNCCI out of which we quote as follows:

# • Programme for improving the quality and production of cotton – technical and financial support to nacotan – NNCCI

#### - Background

Nigeria Cotton Sector has underFGNe major deterioration in the last decade and this has now culminated in the deterioration of quality to an extend that Nigeria cotton can no longer be easily exported. FMC has been aware of the growing difficulties of exporting Nigeria cotton since 1998/99 when it commissioned studies to define a programme to rehabilitate the sector. Even though a clear programme was defined in 1999/2000, no action was taken until 2001 when international buyers classified Nigerian cotton as of very poor quality and highly contaminated. This global declaration made exportation of Nigerian cotton virtually impossible. Consequently, National Cotton and Textile Association of Nigeria (NACOTAN) set-up a National Committee for Cotton Improvement (NNCCI) to undertake measures to improve production and quality of Nigerian cotton.

NNCCI was inaugurated by FMC and FMARD in 12 March 2002 and has since been making efforts to re-establish order in the management of the cotton sector. Its good intentions has however been constrained by inadequate finance. It therefore, made ...?

The FGN, through FMC has now granted a modest loan N33 million to NACOTAN – NNCCI to assist it in carrying out its cotton sector resuscitation programme.

National Cotton and Textile Association of Nigerian (NACOTAN) comprised of textile manufacturers, cotton merchants and cotton processors. It was established in .....and registered as a body corporate with a registration certificate number ......NACOTAN is permitted by its MA to borrow for the purposes of its establishment.

#### • The programme of action and loan disbursement and repayment schedules

#### - Objective

The financial assistance has the objective of assisting NACOTAN through its implementation body NNCCI, to set-up administrative capacity to rehabilitate the Nigerian cotton sector including activities in production, processing, and orderly export/trade of cotton lint, cotton seed and related products.

#### - Purpose

The Intention is to increase production and quality of cotton and its associated products and re-establish the position of Nigerian cotton in the world market.

#### - Goal

The goal is to improve the income of smallholder cotton producers, merchants, ginners and traders and enhance foreign exchange earning and FGN revenues from cotton and its associated products.

#### - The Programme

The loan will be used in support of the following activities.

#### 1. Establishment of Executive Capacity of NACOTAN/NNCCI

NACOTAN need immediately to establish an executive office to monitor operations of 2002/2003 to guarantee quality output; and to plan for orderly private sector takeover of all commercial activities for cotton sector. For these purposes, an amount of N 16.7 million is required. NACOTAN7NNCCI is already mobilizing its members to raise funds but no significant results can be expected in first six months i.e. before the cotton harvesting season. Part of the loan will therefore be used for undertaking measures to make NACOTAN –NNCCI office functional in readiness for cotton harvesting processing and marketing. A total of N11 million will be used for this purpose. The summary of items of expenditure is as follows:

#### 2. Technical and Management, Support Services

The key activities that will be carried out are the following:

- a. Assist NACOTAN/NNCCI to establish its management office staff recruitment, setup of office and training of staff.
- b. Support to NACOTAN coordinating office to develop its data collection, analysis and dissemination system. Data on production, marketing, credit, inputs use, producers, etc. will be involved. It will take about 6 months.

#### 3. Financial Support Services

- a. Bring all the stakeholders together (these are Nigerian Agricultural Cooperatives, and Rural Development Banks; Central Bank Agricultural Guarantee Scheme; Commercial Banks; the Farmers Cooperatives, NAIC, Merchants, Textile operators and Ginners for 2-3 days for sensitization and exposure workshop to expose to them structured trade credit arrangement for the cotton sector development. This is important to establish the modalities for credit financing of the sector.
- b. From (a), above initiate Tripartite Collateral Management discussions and subsequent Tripartite Collateral Management Agreements for farmers cooperatives, ginners, cotton merchants as a basis for structure trade credit funding from Agricultural Bank and Commercial Banks.

# 4. Implementation Arrangements

NNCCI which is the executive arm of NACOTAN for cotton sector development will assume overall responsibility for the programme implementation. The day to day management of the programme will be entrusted to a Chief Executive that will be recruited using part of the loan. NCCI will give policy direction and oversee the operations to ensure the achievement of the programme objectives. The FGN has recommended the appointment of ACE – Audit Control & Expertise (Nig.) Ltd to provide necessary technical and financial services etc.

#### 7.2.5.7 Cotton improvement programme

A second report termed cotton improvement programme (plan of work and budget for the 2002/2003 cropping season) was also made available to Gherzi out of which we quote its executive summary:

• The production programme for 2002/2003 is constrained by the available seeds. Based on the actual situation of seed supply and assuming that certified seeds still available with out growers will be timely purchased as directed in the last NNCCI meeting, the following targets will be feasible.

- Total	-	58 455,7 ha
- Seed cotton by farmers	-	56 107 ha
- Certified seed	-	2 186 ha
- Foundation seed II	-	115 ha
- Foundation seed I	-	43 ha
- Breeder seed	-	4,7 ha

- Apart from timely purchase of outstanding certified seeds, there will be a need to speed-up ginning of purchased seed cotton, treatment and packaging of certified and foundation seed. CAP and AFCOT will have to ensure readiness of seed for distribution not later than 10<sup>th</sup> May.
- The total inputs requirements have been estimated and reflected in the table below. The procurement of inputs particularly fertilizers will have to be given attention noting that the first application will be by May/June. Insect control chemicals will need also to be sourced and procured as soon as possible.
- The replacement of polypropylene with jute bags or Hessian flats is a major effort in quality enhancement. A decision will need to be taken as to materials to use. The sub-committee is of the opinion that Hessian flats should be used as against jute bags because it is cheaper, provides demand for cotton, and business for textile companies that are members of NACOTAN. The NNCCI will have to make a decision on this.

#### 7.2.5.8 NTMA representatives recommendations

During a meeting held by Textile Industrialists one member presented the following paper, which lists issues which he felt need urgent addressing, which we repeat below:

A meeting is proposed with all stakeholders involved in ensuring sufficiency in supplying cotton lint to the textile industry ..:

- Federal Ministry of Agriculture
- Cotton growing States' Ministries of Departments of Agriculture
- Cotton growing Associations
- Cotton Ginneries
- Textile Industry (Cotton Spinners)

This meeting will proffer ways and means to revamp the constant decline of Nigerian produced cotton lint for the textile industry, from which part of the cotton lint is exported with an export incentive.

In the past, the sixties and seventies and some part of the eighties, the cotton lint produced locally has been enough for the textile industry and with some left for export. With this in mind, the meeting will endeavour to see that all those involved in it, particularly the cotton growers, aim towards an increase in seed cotton yield. This will also boost the Nigerian economy. This standing committee will have the function of co-coordinating all aspects of total demand and quality of cotton lint required.

Furthermore, it may be noted that various administrations in the country over the last thirty five years had enunciated different policies on cotton ranging from total ban on imports to duties ranging from 5% to 15% in those years where there have been shortages of cotton lint. Under normal circumstances, every FGN should be concerned with the local input in a manufacturing process.

The task of such a standing committee should be:

- To assess the total demand of cotton lint from year to year
- To inform the cotton growing associations and cotton farmers of the aggregate total demand
- Tore-introduce a grading system
- To avoid contaminants particularly polypropylene from cotton lint
- To ensure a guaranteed minimum rate to the cotton farmers for the seed cotton
- To regulate export permits
- Seed multiplication programme

#### 7.2.5.9 Conclusion

The foregoing shows that a number of initiatives have been started in the cotton subsector to adress the problems known to everybody in the industry. What seems important now is that all stakeholders are informed about the various activities started by a number of organisations, which seems is at present not the case. At the same time, a concensus should be reached between all interested parties especially about the way forward. The first step in this direction could be that NACOTAN coordinates its activities with the major ginners and the textile industry.

# 7.2.6 Polyester production

There are 5 companies in Nigeria producing polyester filament and fibres.

The installed capacity is about 48 000 t. Capacity utilisation is around 50%.

The polyester is produced from imported chips. The local producers are protected by an import duty of 35%.

The plants are in our view below scale and their future viability is doubtful.

# Polyester fibre production and fibre consumption in Nigeria (2002-2003)

Company	Location	Capacity (ton/year)	Total fibre production (in ton)
(1)	Lagos	11 000	\
(2)	Port Harcourt	11 000	Others 5 000 Polyester
(3)	Kano	4 000	22 000
(4)	Lagos	11 000	
(5)	Lagos	11 000	Cotton 76 000
	To	otal: 43 000	1

Source : Industry assumptions

The split up in filament and staple fibers is as follows:

- Filament 26'000 tons
- Staple fiber 17'000 tons

#### 7.2.7 Issues relating to the export of Nigerian textiles

During the period 1998-2002, Nigeria showed heavy losses in its textile exports with the exception in fibre exports.

Total exports of fabrics declined from 310 mn lm in 1998 to 180 mn lm in the year 2002.

Cotton yarn exports went down from 5 000 t to 4 000 t in the same period. Only the fibre export of polyester and cotton increased.

Rising costs, the uncertaintay in the market are, according to industry sources, responsible for this development.

## 7.2.8 The view of the Nigerian textile industry stakeholders

Gherzi asked a sample of 52 textile entrepreneurs, managers, bankers, cotton growers, ginners and foreign investors to express their priorities for FGN actions to revive the Nigerian Textile Industry.

The results clearly indicate a major demand for intervention by the FGN on market environment / smuggling / stabilisation of policy framework / infrastructure / reduction in cost of capital and an answer to the cotton issues.

# Priorities expressed by a panel of stakeholders 83\* Market environment / Smuggling 76 Cotton issues The results clearly indicate a major demand for intervention by the FGN Support for export 72 on smuggling. Clarification of the EEG policy, removal of infrastructural bottlenecks leading to rising costs 68 Rising cost, infrastructure and availability of long-term funds at concessional interest rate Stabilisation of Policy Framework 56 Reduction in the cost of capital 49 \*% of response

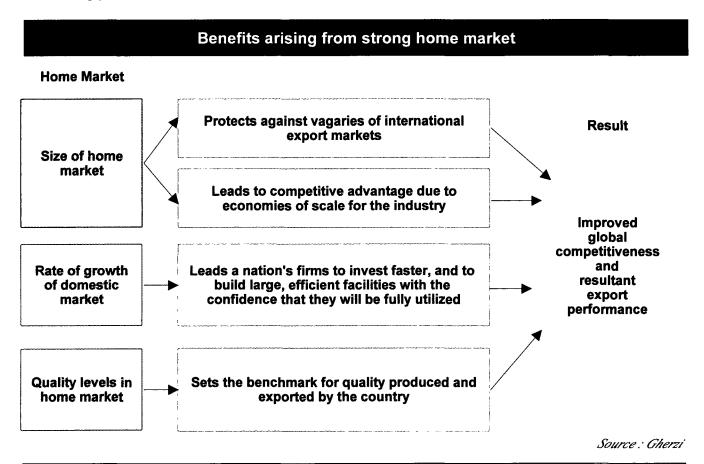
#### 7.2.9 Conclusion on the operational environment

The foregoing analysis has shown, we believe convincingly, that the first move for the revival of the Nigerian textile industry will be to stabilize the home market by protecting it from the damaging impact of smuggling.

The need for protecting the home market cannot be overemphasized since it would lead to a situation in which:

- Production and employment would increase
- Investors confidence returns
- Mills would modernize and expand
- New product lines would be taken up
- Capacity would expand and not shrink as for the last 10 years ...
- ... And the sector would be rebuilt.

The benefits arising from a strong home market would be manifold as the following figure shows convincingly:



The uncertainty in the home markets of the Nigerian textile industry can also be illustrated. By the fact, that the industry has not participated in the recent global trends which all the successful countries follow:

# Nigerian participation in global textile trends

#### **Global trends**

- Major textile producing countries offer wide range of fabrics which gives a certain degree of protection
- Relocation of production facilities to selected low cost locations
- Increased importance of garments in the textile value chain
- Increased importance of technical textiles

Huge world export market for:

- · Cotton yarn
- · Grey fabric
- · Processed fabric
- Made-ups

Total market size in US\$ 31 bn

#### **Extent of Nigeria's participation**

 Nigeria's industry is almost a mono product industry which can easily be attacked with the imports of one product

No participation in world production relocation even after AGOA

Practically no garment industry. Therefore no demand for fabrics from Nigerian textiles industry other than African prints

Cotton yarn:

~4000 mt (US\$ 10 mn)

Grey fabric:

- No

Processed fabric:

- ECOWAS

Made-ups:

- No - No

Garments: Polyester

~ 8 000 mt (US\$ 6 mn)

staple fibre

8

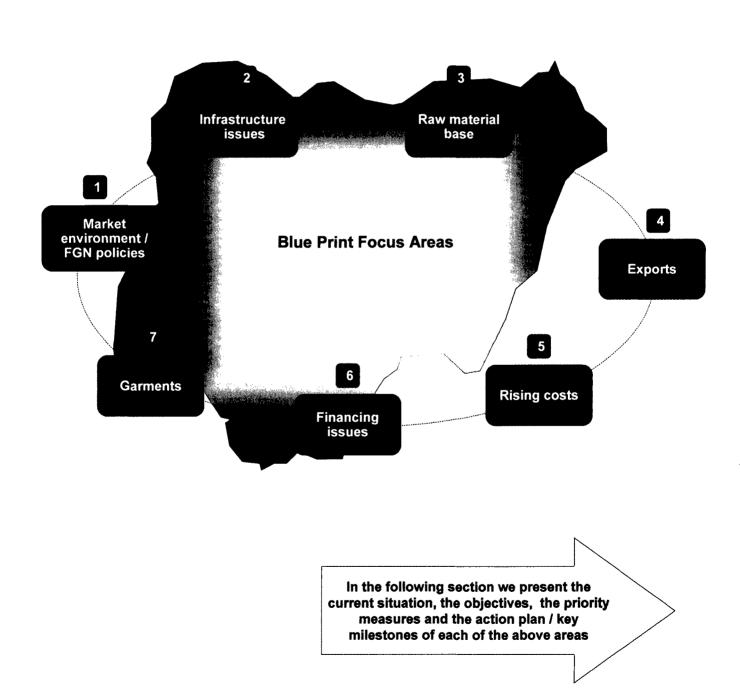
# BLUE PRINT / ACTION PLAN

# 8. Blue Print / Action plan

#### 8.1 Focus areas

The following figures summarize the different areas where actions need to be taken in order to revive the Nigerian textile industry.

# Focus areas of the Nigerian textile industry revival



# 1

# Smuggling (1/5)



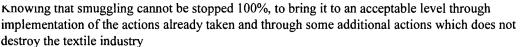
#### **Current Situation** -

- Smugling is destroying the Textile Industry in Nigeria
- It is happening on a massive scale
- Illegal inflows of Textiles and Garments are estimated at 16 000 containers year (value US\$ 1 bn) resulting in a duty evasion of N80 bn
- Smuggling impacts not only on the Textile industry but also on Cotton Farmers, Ginners and Traders

#### Actions up-to-date -

- Ban on import of Printed Fabrics and restriction on imports of other textiles (non printed) through sea ports only
- 50% incentive for Customs and General Public on seized textiles
- Establishment of a Presidential committee on Textiles led by the HMI
- Tariff relief on inputs used in Textiles
- Increase of Export Expansion Grant to 40%
- Commissioning of UNIDO / GHERZI to undertake study of the Textile & Garment industry







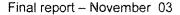
#### Priority measures

- Have the restrictive import measures endorsed by the customs authorities
- Import of printed textiles was suspended from September 2002 but markets are flooded with printed goods
- ALL other textiles were to be imported through Apapa and Tincan ports only but hundred of trucks carrying textiles from across the borders enter Kano market every week.
- 50% incentive was approved by Mr. President in November 2002 as reward for seizure of illegal imports but upto now not a single case of reward has been reported to the industry.
- To set up a temporary task force for six months directly reporting to the President. It should monitor imports and smuggling activities and arrange seizures. The task force should include Nigerian Textile Workers Union and Nigerian Textile Manufacturers Association. This task force should take up the job on a "war footing". It should meet every week under the Chairmanship of the HMI to access the progress made
- The FGN should deal with the clearing agents with a firm hand, particularly the ones at Katsina
- The possibility of Police involvement in ban enforcement should be investigated
- Clearing agents and traders known to the NTMA as textile smugglers should be prosecuted in accordance with the law

# Action plan / Key milestones

- FGN should communicate with the Industry on a regular basis and seek assistance from NTMA in implementing the ban. We know from our sectorial study in Brazil, that the Brazilian Textile Association has actively assisted the local customs authorities in controlling smuggling
- A 20% reduction in smuggling shows considerable benefit to the Industry, Farmers, FGN and consumers





# 1 Firm price ceiling for APS (2/5)



#### **Current Situation**

- The price has declined in real terms, i.e. US\$ terms, which is due to increasing competition from imports. This has squeezed the textile mills margins because all their other costs such as power, wages, spares and general overheads have increased in this period
- Despite the general and significant increase of a range major inputs, as said before, textile
  companies have found it very difficult or impossible to increase the seliing prices of their
  domestically produced printed fabrics to compensate even for inflation
- This inability to offset, even partially, rising costs with higher market prices arises from the extremely difficult domestic market situation which exists in Nigeria for textiles today
- On the other hand, cotton prices in US\$ terms have been more stable except for 2001/2002. The gap between World cotton prices has been narrowing thus eroding the advantage by local textile mills
- Generally the cotton price as a percentage of the APS price has been below 20%. In 2002/2003 it has increased to 25%. This created further pressure on the mills

## Objectives -

Create an attractive market environment through the control of smuggling which allows the mills to to improve capacity utilisation and cost reduction



#### Priority measures

• Control smuggling



• Provide soft loans for working capital requirements (see also the focus area "rising costs")



# 1 Duties and tariffs (3/5)



#### **Current Situation**

- Both the Industry and Gherzi feel that the current level of duties in place was adequate to protect the local producers if they were enforced
- The problem lay in the fact that most goods arrived illegally directly in Nigeria or were transshipped through neighbouring countries without the payment of any duties or tariffs other than the bribes paid to secure entry.
- The major problem was a lack of consistency in setting import duty tariffs. Frequently a lobby group representing a particular textile sub-sector or minority interest would succeed in getting a duty rate changed to their own advantage but to the detriment of the rest of the industry.

# Objectives -

- Promote a system where import duties are fair and protect all members throughout the entire value chain
- Use the imports duties as a temporary protection during the implementation of the measures aimed to revive and develop the local texile industry



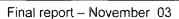
#### **Priority measures**

• Set up a system in which the Ministry of Industry and NTMA would discuss intended policy changes before they are implemented. This would ensure a fair deal for everybody in the Industry

# Action plan / Key milestones -

- Ministry of Industry and NTMA to set up a Steering Committee
- Enforce the existing duty regime to stop the decline in textile employment, domestic added value and tax generation





# 1 Import of second hand garments (4/5)



#### **Current Situation**

- Imports of used second hand clothing into Nigeria from Europe and the USA is also understood to have increased very significantly. These items often include international clothing brand names which are very sought after by the people. The fact that these items are abundantly available in the local market and at very low cost makes them an obvious purchase choice for the local population.
- The key purchase criteria for many Nigerians remains PRICE. As these second hand clothes are very cheap and branded, they are bought in preference to locally produced fabrics.
- This fact is a be a very strong negative feature for the local fabric producers of shirting and suiting in Nigeria which are orientated towards the domestic market as the floor price set by these second hand clothing imports is very low and makes local materials uncompetitive in price.

# Objectives -

• Enforce the ban



# **Priority measures**

· Enforce the ban

# Action plan / Key milestones -

- FGN to review existing policy
- Enforce the ban



# 1 FGN policies (5/5)



#### **Current Situation**

- Most companies also sited FGN Policies as a major problem for manufacturers.
- In particular there was a lack of consistency in policy decisions. Particular lobby groups with ministerial access frequently managed to secure changes in FGN policy to suit their own individual needs and to the detriment of the textile manufacturers as a whole.
- This was sited by many companies as being particularly true for rates of import duty on particular textile products which were prone to be cannged without prior warning or notification.
- Companies also stated that some aspects of FGN policy which were set in Abuja were never clearly communicated to front line FGN workers such as customs officials. This seemed to arise from failings in the Nigerian civil service who would normally be responsible for ensuring that new policies entering the statute book were clearly communicated to other FGN departments and enforced.
- Even policies which can be considered beneficial to the industry such as the Export Expansion Grant were a source of concern as there was always a doubt in the minds of companies as to how long such policies would last. This lack of certainty about the present and future FGN moves is a matter of grave concern by the textile companies in Nigeria.

# Consequences -

- The ban on fabric imports has brought no relieve to the industry so far
- Practically no investment for replacement or expansion
- Declining productivity levels
- Deteriorating cost advantage
- · Overaged equipment
- Closure of mills
- Loss in employment

# Inconsistent FGN policies led also to:

- A non supportive infrastructure
- Lack of political will over many years to control smuggling
- Dramatically detoriating cotton supply situation

# **Objectives**

• FGN policy must be consistent, and predictable for the industry.



## **Priority measures**

- Before anything is changed in the policy framework affecting the textile industry the respective FGN body initiating the change should meet with NTMA to have their view before final decision are made.
- Avoid Grant of Duty Concessions / Waivers to individual companies

# Action plan / Key milestones

• Better cooperation between FGN and NTMA



#### 8.1.2 Infrastructure issues

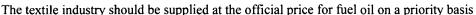
# 2 Fuel oil supply (1/2)



#### **Current Situation**

- It is a strange paradox that in a country that is the sixth largest oil exporter in the world, manufacturing industry suffers from frequent shortages of both Heavy Fuel oil and Diesel oil
- Diesel oil is very important to all textile manufacturers in Nigeria as it is used to fire generators as either the primary source of electricity or stand-by cover. During the field visit many manufacturers informed us that the official price of diesel was 26 N per litre. However due to supply shortages the current price was around 40 N.
- In the northern city of Kano, which suffered even higher prices, there were additionally problems of even securing supply at any price.
- Heavy fuel oil was used to fire the boilers of all textile manufacturers visited. The normal price of this fuel was 12-13 N. However, as again observed during the field visit, there were acute shortages of this fuel particularly in Kano. The price had risen to around 40 N per litre and supply was very restricted. At least 2 companies were on the point of closing production due to lack of an oil supply.
- The high price was also eliminating the already thin margins making it uneconomical to continue production in some cases.

# Objectives -





## **Priority measures**

• The industry should be assured of an undisruptive supply of this important input

## Action plan / Key milestones

• The Ministry of Energy Resources should address the matter on a priority basis





#### 8.1.2 Infrastructure issues (cont'd)

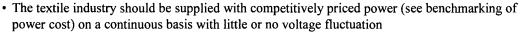
# Power supply (2/2)

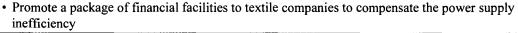


#### **Current Situation**

- Grid electrical power in Nigeria is only provided through a state owned enterprise NEPA. Almost all respondents were highly critical of all aspects of the electrical power service provided by NEPA. The main criticisms centred on very frequent power supply disruptions, and Voltage fluctuations.
- Power supply disruptions are so frequent and serious in some areas of the country that some manufacturers actually use generators as the primary source of power and the grid as a stand-by.
- Others use generators to safeguard critical operations such as OE where a supply disruption of even a few seconds causes machine downtime of 2-3 hours, as all ends will be broken.
- Power disruptions also lead to product wastage in the Printing process.
- In all regions companies also experience frequent voltage fluctuations. This damages a wide range of sensitive electronic process control equipment over time. Many companies either avoid appropriate electronic controls or have to suffer the additional cost of frequent repairs and replacement of this equipment.
- A common view among companies in Nigeria was that the cost of Power from NEPA was far too high and the service provided deplorable.

# Objectives





# Priority measures

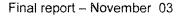
• NEPA should address the power supply issue together with FGN

#### Action plan / Key milestones

The Ministry of Energy Resources to initiate actions







#### 8.1.3 Raw material base

# 3 Cotton supply



#### **Current Situation**

- Continuous decline in quality and quantity
- Disorganisation of the production and marketing system and cessation of support services which followed the dissolution of the Cotton Marketing Board in 1986
- Unavailability of quality seeds at reasonable costs
- High level of contamination due to the use of polypropylene bags in the picking process
- Inadequate input supply and credit to cotton farmers
- · Heavy investments in the ginning sector made

## **Objectives**

- Harmonize the relationships between the local textile industry and the cotton farmers
- Improve the quality and the quantity of cotton production in Nigeria



#### Priority measures

#### The Swiss Consultants made the following key recommendations:

- A co-ordinated production and marketing system run by an association of concerned private sector operators should be put in place, the National Ginners Association being the central operator in the sector is proposed to take-up this role
- A new seed system manned by the private sector should be put in place to undertake all the commercial aspects, while the FGN – mainly IAR – Zaria, NSS and the State extension services will provide support services
- The public and the private sector should collaborate in policy and legal framework development.
- A reliable input supply and credit system should be put in place for the smallholders in particular
- Cotton market system should be re-instituted and this will include the re-establishment of the cotton marketing centres, the resuscitation of quality assurance by State SPIS, and quality control and certification by FMC-FPIS and weight and measure divisions.
- The cotton development programme should be self supporting with little or no FGN financial support

These priority measures are inspired by the conclusions of a previous report made by a Swiss consulting firm in 1999 on the cotton sector in Nigeria

# Action plan / Key milestones

- Communicate the vision of the consultants to all the stakeholders in a national conference
- There after agree with all the stakeholders about the way forward
- Address the issue of the EEG for cotton which should be not more than 10%



#### 8.1.4 Exports

# 4 Exports



#### **Current Situation**

- Exports, apart from the Ecowas have declined considerably over the years
- The recently introduced export expansion grant (EEG) should dramatically reverse the situation
- The EEG is the most significant among the export incentives introduced to encourage non-oil
  exports. Under the EEG, financial assistance is provided to exporters of semi-manufactured and
  manufactured products to enable them to increase exports. The EEG is made available only to
  those exporters who produce evidence of exports with proceeds repatriated into their domiciliary
  accounts in Nigeria
- The rate of EEG was increased from 20% to 40% (of the value of exports) in 2003. As per the year 2003 fiscal policy EEG is to be categorised and calculated as follows:
  - Category A,40%: for intermediate and fully manufactured products with high local value addition
  - Category B,5%: for all other exports not classified under Category A
- · Unfavourable export financing scheme

# **Objectives**

• Export incentives are normally given to industries which lack export competitiveness



#### **Priority measures**

- During the year 2003 EEG Policy has shown that there are several ambiguities with respect to value addition and the definition of "intermediate" and fully manufactured" products.
- In the case of the textile industry the EEG Policy has some fundamental contradictions. Export of cotton, which is the basic raw material for the industry, is encouraged, thus creating shortage and high price of raw material for the local textile industry.
- At the moment (June 2003) there is a debate at various ministerial levels of increasing the EEG for cotton from the current 5% to 20% of the lint price.
- This grant if introduced by the FGN would lead to a situation that more cotton fibre than normal actually leaves the country, thus exacerbating the supply shortage already being felt by cotton spinners in Nigeria.
- It is quite unusual to find export grants at this level for what is in effect an international commodity product. There was even talk by some cotton producers of their hope that the EEG is increased to 40%. Such a policy would make no sense when the EEG level for cotton yarns spun in Nigeria was also 40%.
- It should be noted that in most cotton producing countries, e.g. China, India and Pakistan cotton is considered an essential raw material for the local textile industry. Usually export of cotton is allowed in exceptional circumstances only when a surplus is found after meeting the requirements of the local textile industry. In fact the FGN encourages export of value added, manufactured textiles such as Yarn, fabrics and garments. Nigeria's francophone neighbours, who have abundant cotton but lack a sizable textile industry, are trying to encourage the establishment of textile mills to manufacture value added cotton textiles. A new spinning and weaving mill was set up in Republic of Benin in 2002.
- Therefore there is an urgent need to reconcile the EEG Policy as far as it relates to export of raw materials; such as cotton lint, which should be converted into higher value, added manufactured products in Nigeria.
- A doubling of the earlier fixed incentive for cotton exports at 5% to 10% would be appropriate—this is the feeling of Gherzi.

# Action plan / Key milestones -

- Nigeria could leverage the 40% EEG for export led new capacity building in the textile and garment sectors. The EEG could be a major attraction for new foreign investment.
- However, to build confidence with investors the EEG should be available for the next 10 years and "set in stone" by means of legislation, i.e. so that it cannot be changed by short term policy changes, by which ever regime that is in power.
- Improve export financing scheme.



# **5** Rising costs



#### **Current Situation**

#### Cost of interest

- Interest charges for both, Working Capital and Fixed Asset investments in Nigeria are very high. These range from a minimum of 20.5% for the larger textile companies up to 28-30% for smaller companies.
- The cost of borrowing in Nigeria is a major international cost disadvantage for textile producers, which significantly increases working capital costs compared to most other textile producing regions and countries.

#### **Labour Costs**

- There are several issues surrounding both labour costs and productivity, which need to be highlighted.
- Costs of labour has risen strongly in recent years and the textile industry is now bound by national union agreements on textile workers remuneration and conditions. These conditions limit worker hours to 40 per week with hefty overtime premiums for additional Saturday and Sunday working. These conditions mean in effect that almost all textile companies only work a 3 shift system for 5 days per week (Monday Friday). Overtime pay is used to cover additional hours on Saturday and Sunday. The Sunday take-up is usually low at around 50%-60% turnout. This is quite unique for a developing country. In all major textile producing countries employees work for 7 days a week on a 4 shift basis without overtime payment.
- The average hourly cost of a textile worker in Nigeria, including overtime premiums is around 0.76 US \$/h. This cost is already above the level paid by many textile-producing regions, and when coupled with the relatively low levels of local labour productivity, means that labour unit costs in Nigeria are internationally uncompetitive.

#### **Power Costs**

- grid electricity, which is available from NEPA at around 8.0 US\$ Cents/KWh on average. Companies frequently have partially or completely rely on their own diesel generators.
- As said earlier companies frequently have to partially or completely rely on Diesel generators with high maintenance and running costs. Grid users suffer frequent power supply disruptions that cause extra waste and reduced operating efficiency.
- During Diesel generation with current fuel prices Electrical Power cost is over 14 US\$ cents / KWh.
- Nigeria is therefore as in labour costs in its power cost internationally uncompetitive.

#### Cost of fuel oils

- Heavy Furnace Oil was used by most companies as the primary fuel for steam generation. At the local official oil price of 12-13 Naira/litre local steam costs are around 10 US\$ per ton of steam.
- However, in the Lagos area at the time of the filed visit the market price for furnace oil was around 25 n/litre meaning the actual cost of steam generation was around 20 US \$ per ton of steam, which is high by international standards.
- In Kano, where there was an acute shortage of this fuel, the price had risen to 39-40 n/litre giving a very high international steam cost of almost 30 US \$ / ton.

#### Cost of cotton

- Cotton prices in Nigeria, in common with the international situation, have risen sharply over the last year.
- Prices paid in 2003 for ungraded Nigerian cotton bought in the local market ranged from 140 –
   155 Naira per KG of cotton lint. (50 55 cents/LBS).
- At these levels and taking account of the ungraded nature of the available cotton textile manufacturers do not enjoy any local cotton price advantage anymore.

#### Dyes and chemicals

Reactive dyes attract a 20% duty, which is very high, and we propose to bring it to a level of 5% to be globally competitive.

# 8.1.5 Rising costs

# 5 Rising costs (cont'd)



# **Objectives**

• The FGN should assure that the industry is supplied with internationally competitive inputs.

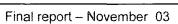


# Priority measures \_

• FGN to discuss with the industry how the objective can be achieved.

# Action plan / Key milestones

• The various relevant Ministries to prepare Action Plans.



## 8.1.6 Financing issues

# 6 Lending (1/3)



#### **Current Situation**

- The textile industry is generally very capital intensive both in terms of Fixed Asset and Working Capital investments required. The availability of a secure supply of competitively priced financing is very import for maintaining the competitiveness of producers.
- In this respect our investigations have revealed that Nigerian producers are again at a very strong disadvantage.

#### **Working Capital Cycle**

- In textiles production generally the Working Capital cycle can be quite long. In Nigeria the cycle is much longer than elsewhere.
- Firstly producers have to buy the cotton crop for cash usually before it is even harvested in order to ensure supplies. Since there is only one crop per season (November February) producers also have to buy up the entire years supply during this period and hold stocks for up to 7 months.
- When selling the yarns and fabrics produced producers also have extend credit to their customers of around 45 days. This means that Working capital is turned-over only between 1.5 2.0 times pa.
- In other countries cotton is often bought on generous credit terms and supplies can be secured in the local Spot Market significantly reducing Working Capital needs.

#### **Cost of Finance**

- The problem of a long Working Capital cycle is made much worse in Nigeria by the cost of short-term financing. This costs from 20.5% pa and upwards.
- This adds very significantly to producer costs and places Nigeria at a competitive disadvantage against textile producers elsewhere in the world who enjoy much lower Working Capital needs and cheap finance to fulfil their needs.
- Many companies also stated that banks impose many additional handling and bank charges, which significantly increases the cost of capital even further.

#### **Long Term Loans**

- A curious feature of the Banking system in Nigeria is the fact that there is a total absence of Long-Term funding available to manufacturers from local banks.
- Most loans available are for less than 12 months, with the top companies occasionally being offered loan facilities for up to 3 years.
- Most textile machinery has a service life of at least 10 years and internationally is usually financed with loans of more than 5 years duration.
- Such loans as are available in Nigeria are again offered at interest rates of 20.5% and upwards making it prohibitively expensive to invest other than by using ones own equity.
- This is a key factor in the long-term under-investment that is evident in many companies. The
  very poor local market environment coupled with prohibitively expensive bank financing has
  deterred many companies from making critical investments, which would improve their
  productivity and costs. As a result, such companies are becoming progressively less
  competitive.

#### Banking Sector Lending Aversion

- From discussions with various commercial banks it is clear that the Banking Sector in Nigeria is
  more focused on lending to traders and to certain preferred industrial sectors such as Oil,
  Telecommunications and Food & Drinks.
- Banks are certainly reducing their lending exposure to textile companies generally in Nigeria, and where they are lending preference is given to the larger textile producers who are seen by the banks as being the more secure investment.
- Smaller companies will find it increasingly more difficult to secure adequate lending facilities from commercial banks, and will probably have to pay a further risk premium on top of the already high lending rates quoted.

## 8.1.6 Financing issues (cont'd)

# 6 Lending (1/3) (cont'd)



#### **Current Situation** (cont'd)

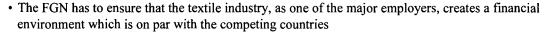
#### **Borrowing Charges**

• The cost of borrowing in Nigeria is a major international cost disadvantage for textile producers, which significantly increases working capital costs compared to most other textile producing regions and countries.

#### Bank of Industry

- There is a distinct shortage of competitively priced short term financing available in Nigeria for the manufacturing sector. It was foreseen that the newly restructured Bank of Industry would fulfil this important role of making long terms loans available to suitable projects, which had been
- However, the Bank of Industry has been seriously underfunded since its creation in 2001 and currently does not a have sufficient capital base to meet even 1% of the funding applications
- The situation for 2003 was not yet clear as the bank did not expect to receive any confirmation of its current year funding status until at least August. In the meantime all manufacturers in Nigeria are still denied any access to competitively priced long-term financing.

# Objectives -





#### Priority measures \_\_\_

Interest rates should be below 10%

## Action plan / Key milestones -

- The Ministry of Finance has to address the matter on a priority basis.
- There seems also to be an urgent need to define the future role of the Bank of Industry, which should be playing a decisive role in the rebuilding of the textile industry.



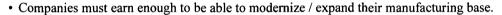
# 6 Profitability (2/3)



#### **Current Situation**

- The industry has been suffering a sustained decline in all the key measures of employment, production and financial viability since around 1997. The decline seems to have gathered further pace with many companies reporting the situation in 2003 to be much worse than the previous year.
- All companies visited were in a loss-making situation in 2003, there was very little confidence in the future outlook that things were likely to improve.
- The companies who have invested over the last 5 years and improved their productivity levels look best placed to ride out the current very harsh market environment and rising costs.
- The only optimistic note was sounded by some spinners who are currently experiencing strong demand for their yarns. This fact, coupled with the availability of the Export Expansion Grant, meant that the many local cost disadvantages of Nigeria could be overcome and the business operated with modest profits in this segment if demand levels continue.
- Profitability at all companies visited has been declining steadily over the past years. Even the best oroducers now feel that they have FGNe as far as they probably can with cost saving programmes.
- All companies reported a very firm price ceiling for their Super Print fabrics and were simply having to absorb a general increase in the level of a variety of Operating Costs at the expense of their margins.
- The situation was less acute for companies producing wax prints as this segment of the market was less affected by cheap and illegal smuggled goods.

# **Objectives**





#### **Priority measures**

• Create confidence through appropriate policy measures.

#### Action plan / Key milestones

• FGN to make appropriate changes in the policy frame work.



## 8.1.6 Financing issues (cont'd)

# 6 Investments (3/3)



#### **Current Situation**

- There has been very little investments in the last 10 years, as the age structure of the equipment in spinning and weaving shows.
- In processing (printing) a number of companies made strategic investments.
- Most companies however, had postponed or cancelled planned capital investments in their plants due to a lack of confidence in the future outlook for textile manufacturing in Nigeria.
- The sector generally has been under-invested over a number of years, and this fact is now being reflected in the levels of productivity achieved and the poor financial performance of these companies.
- Many of the least well invested companies have now closed down or severely scalled back production.

# Objectives -

• Successful companies in Europe and Asia invest a least 10% of their sales to keep their equipment state of the art.



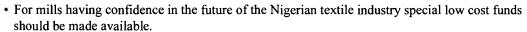
Priority Measures: Define the role of the Bank of Industry for financing investments.

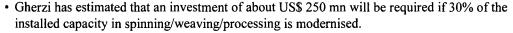


#### **Priority measures**

• Provide low cost funds for mills ready to modernize / expand their plants

# Action plan / Key milestones -







### 8.1.7 Garments

# 7 Garments



See chapter 6

### 8.2 The way forward

### 8.2.1 The market size for fabrics in Nigeria

Suiting and shirting materials

In 2002, the total market size for textiles in Nigeria was estimated as follows (in mn lm)

100

### Local production

• African prints	350

• Sub-total:	500 (38%)
--------------	-----------

### **Imports**

African prints	150
• Damask	200
Suiting and shirting	150

• Others Others (laces, hosiery, furnishing, towels, etc...) 300

• Sub-total	800 (64%)
-------------	-----------

Grand total: 1 300 (100%)

Exports: 180

### Apparent consumption: 1 120

The above shows that the local production accounts for only 45% of the apparent consumption. In terms of the share of the local market, after excluding exports, the local manufacturers have only 27% while imports enjoy 73% market share. Moreover the market share of imports has been increasing at the cost of local producers in the last years.

In the case of garments, imported garments enjoy over 80% market share too.

### 8.2.2 Exports / Imports in Nigeria

Despite the fact, that Nigeria has favourable trade agreements its exports declined whilst imports increased dramatically leading to a situation that the Nigerian textile industry has a market share of only about 27% in the home market.

Between 1998 and the year 2002, exports suffered a sharp decline as follows:

• In African prints : -40%

• In suiting and shirting : -42%

• In cotton yarn : -20%

Only the polyester fibre export and the cotton export increased between 1998 and 2002.

During the same time, imports increased between 1998 and 2002 as follows:

• In African prints from 16 mn lm to 150 mn lm or by more than 800%



• In suiting and shirting from 75 mn lm to 150 mn lm or by 100%



• In damask (brocade), from 150 mn lm to 200 mn lm or by 33%



We believe that it is possible to reverse this trend and to increase exports and reduce imports. If the industry is assured that the 40% EEG stays in place at least for the next 8-10 years, we are sure that the industry could regain the loss it made in exports.

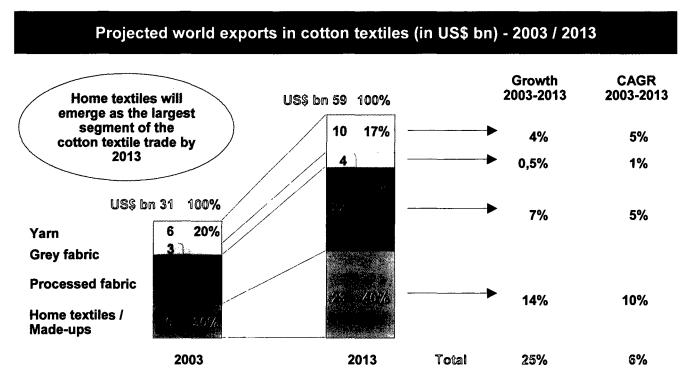
> In the following section we present the expected evolution of the export market for cotton textiles between 2003 and 2013.

### 8.2.3 World exports in cotton textiles

World exports in cotton textiles which are estimated to be in 2003 about US\$ 31 bn in the following major segments :

- Yarn
- Grey fabric
- Processed fabric
- Home textiles / made-ups

The world exports in these segments are estimated to double by 2013 to about US\$ 60 bn. Home textiles / made-ups are expected to have the highest growth rates, followed by processed fabrics, and yarns. In grey fabrics, the least growth is expected.



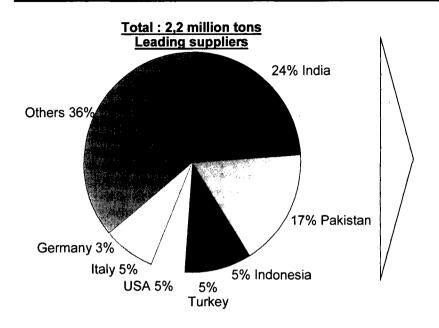
Source: Gherzi, UNCTAD

#### 8.2.3.1 Yarns

The yarn exports in cotton yarn in the year 2000 was estimated to be approx. 2.2 mn t. India is the world's leading exporter with a share of about 24% followed by Pakistan. The major importing countries are the EU15, China, Japan, Korea and the USA.

The C.A.G.R. between now and 2013 is expected to be around 5%.

### Worldwide exports in cotton yarn in 2000 (in mn tons)



### **Major importing countries**

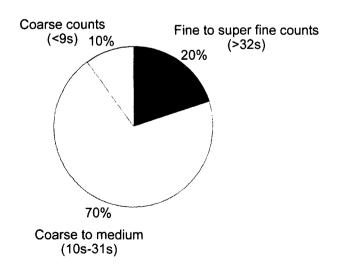
- EU 15
- USA
- China
- Japan
- Korea

Source: UNCTAD, Texprocil

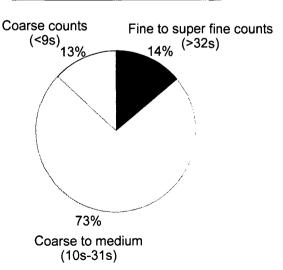
In yarn exports, Nigeria could be strong in the course to medium count segments, which represent about 70% of all yarn exports. The large yarn market of China offers also huge exports potential in coarse counts.

### The yarn market by count ranges

### **Export yarn market: 6 bn US\$**



### Chinese yarn market: 1,4 bn US\$



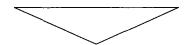
Source: UNCTAD, Texprocil

China is expected to double its yarn imports between now and 2013.

### China imports of cotton yarn

### **Assumptions**

- ☐ It is the declared policy of the Chinese Government to increase investments and production in weaving, processing garmenting and less in spinning
- □ Cotton fabric and cotton yarn consumption is expected to grow by a CAGR of 1%

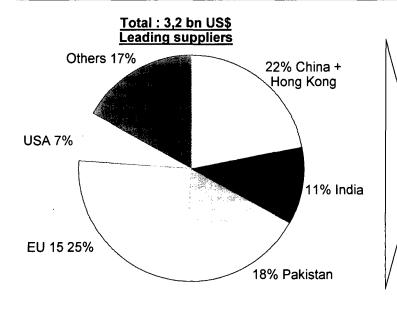


China also imports polyester cotton yarns of about of 400 000 t / year. A market which could also be served by Nigeria

### 8.2.3.2 Grey cotton fabrics

World exports in grey fabrics stood at the value US\$ 3.2 bn. The export market is expected to have a C.A.G.R. between now and 2013 of 1% only.

### World exports of grey fabrics in 2000 (in bn US\$)



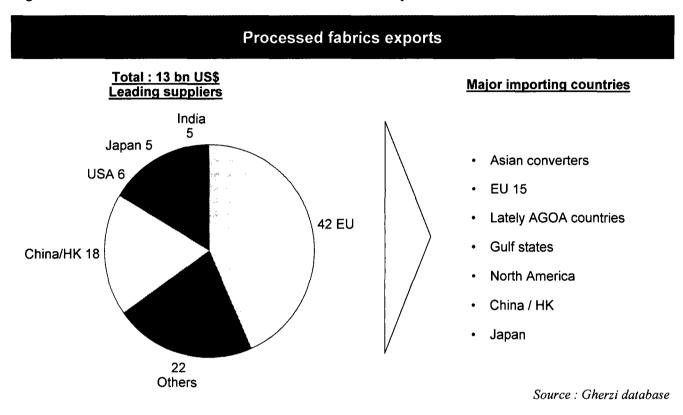
### **Major importing countries**

•	EU 15	0,9 bn US\$
•	China+HK	0,8 bn US\$
•	USA	0,5 bn US\$
•	Japan	0,3 bn US\$
•	Others	0,7 bn US\$
•	Total	3,2 bn US\$

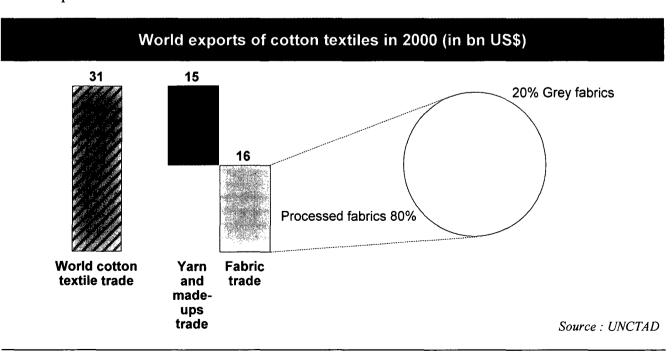
Source: UNCTAD, Texprocil

### 8.2.3.3 Processed fabrics

The world export for processed fabrics in the year 2000 was estimated to be about US\$ 13 bn. The EU is the leading exporter of processed fabrics. Processed fabrics are the most sophisticated market segment in textiles. The CAGR between now and 2013 is expected to be 5%.



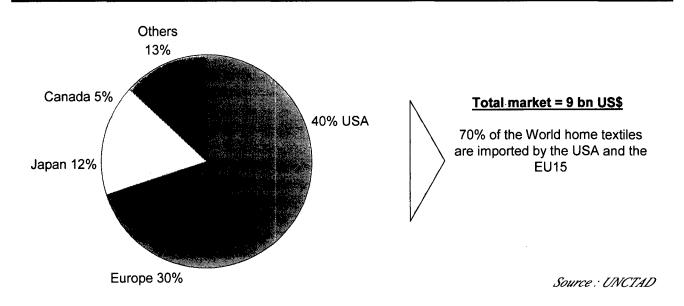
World exports in cotton fabrics both grey and processed account for more than 50% of all cotton textile exports.



#### 8.2.3.4 Home textiles

World home textiles exports are large with the EU15 and the US accounting for about 70% of all home textile imports. The CAGR for home textiles between now and 2013 is estimated to be 10%. It is expected to be the fastest growing segment in the export of cotton textiles.

### Worldwide share of home textiles imports in 2000 (in bn US\$)



### 8.2.3.5 Cotton textiles target markets

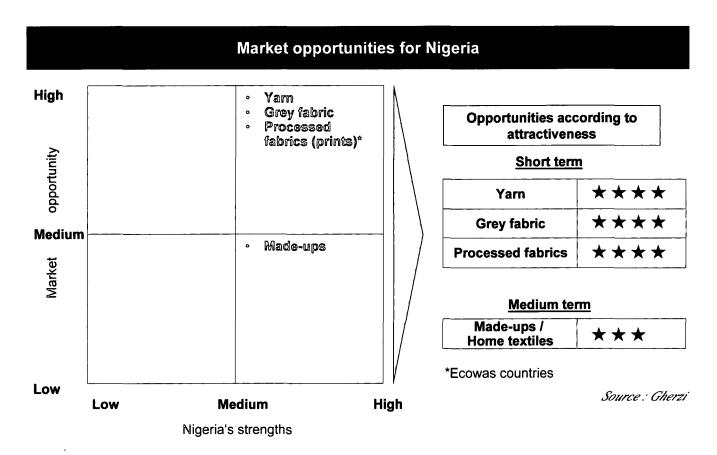
The table below shows the markets which textile producers in Nigeria should target.

#### Cotton textile target markets **Yarns Grey fabrics Dyed/print fabrics** Home textiles ECOWAS • EU / EFTA • China • China • USA · Bangladesh • Hong Kong • Garmenting land: · Mauritius · Bangladesh Bangladesh, Laos, Japan Madagascar Mexico Cambodia, Dubai, Norway • Australia • Vietnam Malaysia Bahrain, South Africa, · New Zealand • EU (reducing) Russia China, Mauritius, Mexico • Canada • Russia Lesotho, Kenya, Morocco Poland Madagascar, Sri Lanka Others Korea Russia Furnishings: EU, · AGOA countries AGOA countries EFTA, USA, Norway, Others • Others Australia, Russia, New Zealand, others

### 8.2.4 The role Nigeria could play in World textile exports

Opportunities can be defined in the 4 following market segments:

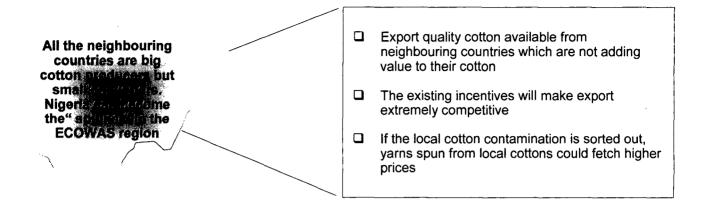
- Cotton yarn
- Cotton grey fabrics
- Cotton processed fabrics
- Made-ups / home textiles



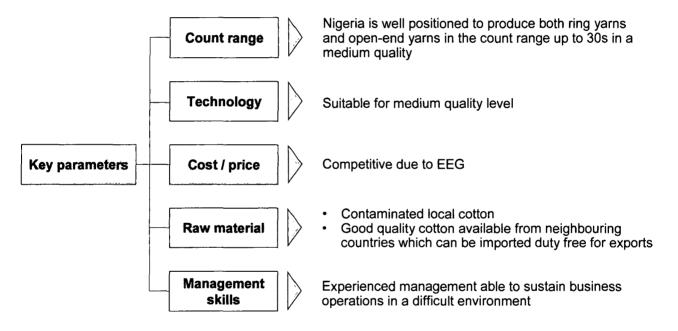
### 8.2.4.1 Cotton yarn

- Nigeria can capitalize on EEG incentives which bridge cost-gap with key competitors. Improve quality consistency of local cotton and import high quality cotton from neighbouring countries for exports of yarn
- Focus on Asian, European markets and AGOA countries which will need yarn from other AGOA countries after 2004
- Move from coarse to medium counts (with imported cotton) to the extent possible with the existing equipment (ring diameter, combing capability as limiting factors)

Nigeria has key strength to compete in the international cotton yarn trade.



Nigeria comparative advantage to compete in yarn and grey fabric:



### 8.2.4.2 Grey cotton fabrics

- Capitalize on existing incentives which bridge cost-gap with key competitors
- Import cotton for critical exports
- As Nigeria has wide width Sulzer looms (110-153 inch), there is a big market for grey cloth for bed sheets for printing applications where contaminated cotton is a less critical factor.

### 8.2.4.3 Processed cotton fabrics

Nigeria has a track record in the export of processed cotton fabrics in the form of African prints to the ECOWAS markets ranking from 310 to 180 mn lm during the period 1998-2002. **This market should be regained!** 

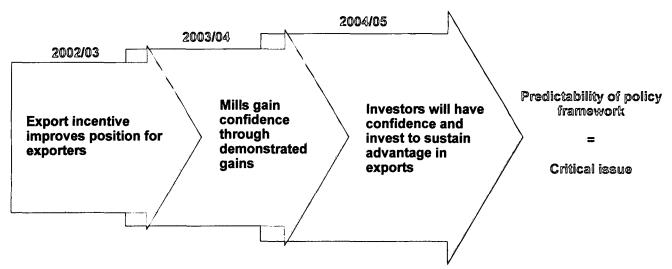
### 8.2.4.4 Cotton home textiles

In the medium term, Nigeria could become a participant in the home textiles export market through medium prices cotton towels.

In the following section we present the achievable export targets for the Nigerian textile industry

### 8.2.5 Export targets

An opportunity window for increased exports exists with the export incentive granted by the FGN.



With this 40% EEG in place we believe that the following export targets should be realistic over the next 5 years if the proposed corrective measures are implemented:

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Product category	2002	2008-2010 (F US\$ Million	
1 Cotton yarn	10	30	
2 Suiting & shirting fabrics	30	70	
3 Grey cloth	1	10	
4 African prints *	150	300	
5 Polyester fibre	6	10	
6 Cotton lint**	15	22	
7 Garments	0	558	
	212	1000	

<sup>\*</sup> Includes informal exports to Ecowas

Source : Gherzi

<sup>\*\*</sup>Subject to surpluses after meeting local spinners demand

### 8.2.6 Basic strategic building blocks for textile sector strategy

The following figure summarizes in a nutshell the different building blocks of the strategic Blue Print with regard to the revival of the Nigerian textile industry.

### Building blocks and Action Plan for textile sector revival

1

#### **SMUGGLING**

- Provide kick-start to the revival of the Nigerian textile industry by implementing the measures proposed by the Presidential Committee and have the restrictive import measures enforced by the custom authorities
- Create a "task force" to initiate and supervise actions (TSRU)

2

### **INFRASTRUCTURE**

 Debottleneck the system and provide the industry with competitively priced inputs (with officially priced fuel for power and steam generation) 3

### **COTTON SUPPLY**

- Implement proposals made by Swiss Consultants
- Create "standing body" representing all the various stakeholders and make them agree on a road map for the sub-sectors revival

4

### **EXPORT (EEG)**

- Export incentive to be established for 10 years and "set in stone"
- The 40% EEG should be made available to all textiles (yarn, MMF, fabrics, made-ups and garments) and should be leveraged for export led new capacity building
- For cotton lint the EEG should not exceed 10%

5

#### **DYES**

 Reduce import duty on reactive dyes to 5% 6

### TECHNOLOGY UPGRADATION FUND (TUF)

 Create a fund for low interest financing to mills willing to modernize their plants

7

# INVESTMENTS IN NEW PRODUCTS TO WIDEN PRODUCT RANGE IN NIGERIA

- Provide low interest financing to mills willing to invest into new products such as:
  - Damask
  - · Terry towel
  - Bottom weights

8

# FINANCING ISSUES / RISING COSTS

 Make credits available to industry at competitive rates for working capital and long term financing 9

#### **AGOA**

- Pass visa legislation
- Attract AGOA investments through EEG incentives

10

### MONITORING MECHANISM / ESTABLISH A TEXTILE SECTOR RESTRUCTURING UNIT (TSRU)

• The TSRU should manage the multiplicity of tasks and problems related to the revival of the textile sector, incl., the cotton sector and the AGOA investments

In the following we give further explanation to our strategic recommendations to the FGN as follows:

## To 1 (smuggling)

- Provide kick start by controlling smuggling and thereby protect the home market of the industry.
- The study confirms the view of the industry that the existing Primary Textile Sector is presently being forced into decline by low-cost competition from imports, both legal and illegal. If nothing is done, the companies will be forced to close, jobs will be lost and the foreign investors will be forced to move to bases outside of Nigeria. It may be noted that it was foreign investors who developed the Primary Textile Sector in the first place! It is an almost 100% certainty that it will be foreign investors who will develop the Ready-Made Garment Sector in the short term, given the opportunity under AGOA.
- For ready made garment, production in Nigeria can only be attracted if the decline of the existing primary textile sector is stopped. Accepted rampant smuggling (and illegal imports) generates totally the wrong culture in the minds of the impressionable, young, local population of the country on the one hand and the wrong image for the country in the minds of foreigners, specifically in buyers' minds who look for trust and transparency in dealings with their suppliers.
- Investments in Nigeria are becoming increasingly idle, as local product costs are higher than competition from the smuggled imports.
- Create a Local Operating Environment, based on trust and transparency, to make the country more attractive for private sector, foreign investments. Also minimize bureaucratic procedures covering general business activities and commercial trade (imports and Exports).

### To 2 (infrastructure)

Make without delay fuel for power and steam generation available at competitive prices. Indonesia should be taken as example, where the textile industry is driven by low power and steam costs which should be available to Nigeria also, as an important oil producing country.

### To 3 (cotton supply)

The cotton sector has been studied in detail by many agencies, what is lacking today, is a road map to which all stakeholders can agree. FGN has to create a "standing body" representing all the various stakeholders which formulate this road map. Up to date, only "island solutions" are proposed which do not unify the conflicting interests of all the stakeholders. The report of the Swiss Consultants has addressed all the problems the sub-sector faces and its implementation should be enforced by the FGN.

In the following we give further explanation to our strategic recommendations to the FGN as follows:

## To 4 (exports / EEG)

The EEG incentives should be established for 10 years and "set in stone" by means of legislation, i.e. so they cannot be changed by short-term policy changes whichever regime is in power. The export incentives should be geared, so that investors can make long term plans that are in the best interest of the economy and advantageously support the export of goods of the highest value addition, that create the largest number of jobs and that contribute most to foreign currency earnings. Presently, the EEG stands at 40%. It may be considered that the EEG should continue for a period of 10 years with levels of 40% for the first 5 years and then beeing reduced progressively. The exact levels of incentive for each year have to be determined during the implementation phase.

## To 5 (dyes)

Reactive dyes should not be loaded with the existing import duty of 20%. The core business of the Nigeria is printing, high input cost for dyes make it uncompetitive.

# To 6 7 (Technology Upgradation Fund (TUF)) / (Investments in new products to widen product range in Nigeria)

Gherzi is of the opinion, that for a real revival of the sector, that apart from the FGN intervention to control smuggling, the sector needs a heavy dose of investment to increase productivity and reduce costs.

We propose a programme to modernize the sector as follows:

- Spinning: 30% of the capacity installed in the country over the next 10 years
- Weaving: 30% of the capacity installed in the country over the next 10 years
- Processing: 30% of the capacity installed in the country over the next 10 years

We have calculated the investment requirement for the above, which is in the order of US\$ 250 mn.

### New capacity for new products

Also soft loans should be made available for entrepreneurs who would like to set up new capacity however in new product segments. Here Gherzi foresees the following trust areas:

- Spinning: Dedicated spinning mills supplying the AGOA markets, the EU, Asia and the growing local market with yarn
- Integrated plants for bottomweights, shirting and home textiles for AGOA
- Plants for knitting: In the leading textile countries all over the World, knitted garments are playing a leading role at the expense of woven garments. Therefore fully integrated knitting plants should be set up.
- Bringing back some of the brocade business: Nigeria imports about 200 mn lm of brocade a year for its national dress. In the past, mills set up jacquard capacity to service the brocade segment. Legal and illegal imports have completely destroyed the local production. We believe that at least part of the market should be served again from the local industry.
- Soft loans for power generation should also made available for mills distressed by NEPA supply, so they are able to generate their own power.
- Investments in environmentally friendly projects, e.g. waste water effluent treatment plants, should be supported by FGN with interest free capital loans also.

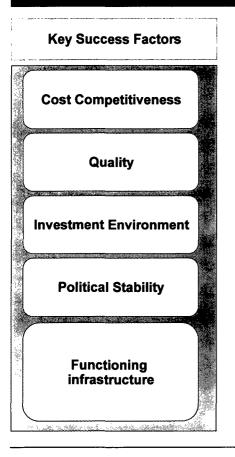
# To 9 (AGOA)

- After September 30, 2004, the current AGOA legislation, with regard to the rules on yarn and fabric sourcing, will be changed. Under the so-called Special Apparel Provision, AGOA benefits apply to garments made in poorer countries. Regardless, from where the yarns and fabrics used to make those garments are sourced. Thus materials can be from the cheapest sources anywhere in the world. But from October 1, 2004, exported garments will have to be assembled from materials made in an AGOA country or in the USA, in order to have the AGOA benefits.
- There is already now a growing shortage in the region of certain types of yarns and fabrics which are used for manufacturing garments under AGOA. This situation will be made worse after 2004. Nigeria could capitalize on this!
- AGOA has so far attracted considerable investment from textile and clothing companies in Asia. In the past, foreign direct investment in Sub-Saharan Africa has tended to come mainly from Taiwan (as in the case of Nien Hsing), from Hong Kong (as in the case of Crystal), from Malaysia (as in the case of Ramatex) and from Sri Lanka (as in the case of Tri-Star). However, it now appears that other countries are entering the field.

# **To 9 (AGOA)** (cont'd)

- By making investments in Nigeria, Nigerian or foreign companies would be making a contribution to the upgrading and expansion of the local industry while, at the same time, serving the long-term interests of Western countries by opening up new sources of low cost garments.
- If the AGOA agreement is not renewed in 2008, tariff-free access to US markets will cease unless other legislation is introduced. This could be a factor holding back investments.
- However, Nigeria will continue to enjoy tariff-free / quota-free access to the EU markets under the Cotonou Agreement.
- As Nigeria is offering now the 40% export incentive (EEG), this should be leveraged as one of the major instruments to attract foreign investors. (see also garment section)
- The most urgent action for the FGN is however to pass without further delay the AGOA legislation to attract foreign investors.
- For foreign direct investment (FDI) Nigeria would have to provide the following success factors:

### **Key Success Factors to attract FDI (Foreign Direct Investment)**



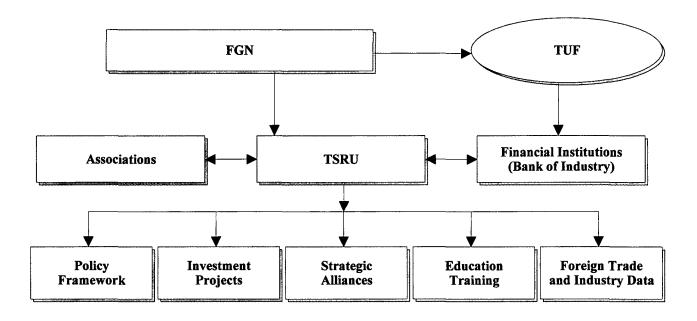




# To 10 (Monitoring Mechanism /Textile Sector Restructuring Unit (TSRU)

To monitor and review the progress of the strategic recommendations made above, the existing Presidential Committee under HMI should be formalised and extented to a Textile Sector Restructuring Unit (TSRU).

- The TSRU that we propose to establish will manage the multiplicity of tasks and problems related to the revival of the Nigerian textile industry, including the cotton sector and the garment sectors.
- The TSRU should be established by the FGN and administered by a Supervisory Board comprising representatives FGN, Industry Associations and Financial Institutions. A Supervisory Board would approve TSRU's policies and budget, and monitor TSRU's performance.
- The TSRU's staff will be formed by a small team of experienced textile business professionals, supported by international Consultants.
- The scope of TSRU's activity will range across the whole textile chain, from fibres to garments. The duration period of the TSRU should be of 5 years.
- The role of the TSRU will be to provide direction, and selecting investment projects for public funding on the basis of feasibility studies.



### More in detail, the TSRU's responsibilities will cover the following tasks:

### Policy Framework

- Formulate with the FGN a detailed Textile and Clothing Industry implementations plan based on the Blue Print
- · Agree with FGN the size of investments and incentives required
- Negotiate the removal of the distortions that exist within the Nigerian policy framework and that may result in competitive disadvantages relative to competing countries

### Investment Project

- Establish the eligibility criteria for investment support from the TUF
- Evaluate company projects submitted for TUF support, including techno-economic feasibility studies
- Recommend projects to the Financial Institutions to be supported by the TUF
- · Monitor progress of projects during their setting-up and first year of operation

### Industry Revival

- Encourage industry restructuring through mergers and acquisitions
- Promote and encourage strategic alliances between Nigerian and foreign companies, as the most rapid way of acquiring marketing and manufacturing knowhow for new products. The alliances may be joint-ventures, licensing agreements, technical know-how transfers or commercial arrangements

### Education/ Training

• Guide the development of the educational and vocational training facilities in Nigeria to meet the needs of the industry

### Foreign Trade and Industry Data

 Provide guidance and appoint the most appropriate organisations (public institutions, associations, private organisations, consultants) to collect, analyse and disseminate data relating to foreign trade and industry key factors, such as productivity standards, technology options etc..

### 8.3 Conclusion

Based on the findings and recommendations of this report we believe that we have demonstrated, that the textile industry of Nigeria is not a "lost case" if urgent measures are taken by the FGN to revive the industry considering that we have:

- ➤ A strategic non-oil industry for Nigeria
- A basic industry almost all countries have as their first industrial activity and most developing economies show a high degree of self sufficiency
- An industry which is raw material driven Nigeria has a cotton and polyester base
- An employer of 57'000 people
- The second largest textile industry in Africa (after Egypt)
- On a replacement basis the present installed textile manufacturing capacity in Nigeria represents a US\$ 3 billion investment
- An industry that is still the largest industry in the manufacturing sector after agriculture and the oil industry. And this, even after the closure of some 25 companies and the subsequent loss in employment
- The textile industry of Nigeria is unique in the sense that it is using a high percentage of locally produced raw materials, such as cotton and polyester, unlike other sectors in Nigeria

### 8.3 Conclusion (cont'd)

What we can have after the revival:

- Protection of 57'000 jobs
- > Secured captive market of 250'000 tons of raw cotton for growers
- A 20% increase in the textile industry output means additional:
  - > 100mn metres production
  - > 60'000 tons of raw cotton consumption
  - > 100'000 jobs created in cotton farming and in the textile industry\*
  - > \$50 mn forex savings
  - > \$30 mn exports
  - > N200 mn revenue for FGN
- > The Creation of a garment sector in 5 years would result in:
  - > 75'000 new jobs
  - > \$ 500 mn of exports p.a. (year 5)
  - > \$ 250 mn of FDI

<sup>\*</sup> There are at present 250'000 cotton farmers in Nigeria employing 500'000 labourers.

### 8.4 Implementation of Blue Print for the Nigerian Textile and Garment Industry

Given the current state of challenges, threats and opportunities the textile industry faces, immediate policy measures will have to be taken to stop the decline and to realise the industries full potential.

We foresee a phased three level strategic approach for the implementation of the Blue Print as follows:

#### 2003

### LEVEL 1

### Revival of sector, Export Boost

- the consolidation / revival of the Nigerian textile industry by fully implementing the ban on import of fabrics
- Creation of a "task force". Implementation and formulising its working to initiate and supervise the ban.
- FGN to address all distortions in the policy framework
- Start export drive built on existing investments and the new EEG incentive
- Implement Swiss
   Consultants report on cotton. Create "standing body" representing all stake holders in the cotton sub-sector
- "Set in stone" the EEG incentive through legislation for at least 10 years to secure the export drive
- The 40% EEG should be made available for all textiles
- Pass AGOA legislation on a priority basis and attract FDI for AGOA investments
- Create a Textile Sector Restructuring Unit (TSRU)
- All new investments in the textile sector (spinning/weaving/processi ng/knitting/madeups/garments should be entitled to pioneer status tax holiday

### 2004

### LEVEL 2

# Modernisation of sector, Export Boost

- Create low interest Textile Upgradation Fund (TUF) and make finance available to mills willing to modernise their plants to make them again internationally competitive and to improve quality levels
- Continue attracting FDI for AGOA investments
- Establish export promotion office to guide mills on exports. (Examples: Pakistan & India)
- Rebuilt lost capacity in Brokade & Damask
- Widen industries product mix though new investments

### 2005

# LEVEL 3 Expansion of sector, Export Boost

- Become the spinning / weaving HUB for the West African cotton producing countries (ECOWAS) by investing in new capacity
- Build local garment industry on the AGOA experience
- Continue to attract FDI for AGOA investments



9

# **NEXT STEPS**

### 9. Next Steps

In the following chapter we describe projects, which will support the strategic moves proposed and will help to retain the momentum the study has so far created.

2 projects have so far been identified, which need to be discussed with Unido and the FGN.

9.1 Project Title: Identification of Training Needs of the Nigerian Garment Industry

9.2 Project Title: Guided Study Tour

9.3 Project Title: Investors Forum

### 9.1.1 Background

One of the recommendations, for the further development of the textile and garment industry as presented in the Blue Print, was the creation of a Ready-Made Garment sub-sector on an industrialized basis, as this would benefit the national economy with the creation of the greatest number of jobs in the whole manufacturing sector. It would also generate the greatest value addition from Nigeria's indigenous cotton and increase foreign currency earnings.

A major challenge remains for the Government to address and that is to put an end to much of the smuggling of cheap garment imports into Nigeria. Unless and until smuggling is significantly reduced, it is unlikely that garment companies capable of efficiently producing garments of a consistent quality will be viable. The existing garment units (one large- and 6 cottage industry-sized companies) would not (and could not) claim to meet international standards either in terms of quality, design or cost.

At present the garment sub-sector is structured as follows:

- There are 5 garment units of an organized/semi organized nature producing promotional T shirts though with low labour productivity and quality
- There are 5 tailoring out fits employing 50 workers each catering to the institutional market for uniforms
- There are several semi-organized "fashion houses" that cater for the affluent customers for designed ethnic wear. These houses work within FADA, THE Fashion Designers Association of Nigeria
- There are a large number of tailoring units in the country with many of them concentrated in and around Aba. It is reported that the number of these tailoring units is around 10,000

As Government has shown the intention to minimize smuggling, plans for setting up an organized garment sector may be formulated. The important parameters for an efficient garment unit include a consistent quality of products manufactured to an agreed specification and with productivity levels approaching, if not actually reaching, best practice, international standards. The needed productivity levels are not dependent only on the performance of the shop floor workers but the need is for management to ensure that production losses do not occur through errors on their part. All employees, both shop floor workers as well as management, need to have the essential specific skills to undertake their respective tasks that can result, in our opinion, only from formal training programmes.

In order that the necessary skills levels in the embryonic garment sector are achieved, resulting in the creation of better quality products with wider marketability and improved returns, comprehensive training programmes at different levels are proposed. These programmes should be tailor made for the technical, production, commercial and financial management of garment companies, using the types of equipment used in the local industry and with expertise of the local stakeholders.

In forming "clusters" from a number of small garment enterprises (i.e. tailors) in, for example, Aba, and where equipment is owned collectively for each individual's use, if that is the preferred way of machine/ work sharing, special but training programmes will need to be offered.

A common facility centre, which could become the focal point for the emerging sub-sector, could provide the infra-structure for conducting appropriate workshop training. Typically, one facility centre would be located in Lagos, one in Aba and others in new garment locations as they develop. If the garment sectors were to develop on EPZs (Export Free Trade Zones), as may be preferred to facilitate imports and exports, the facility centres could also be located on the EPZs. The same facility centres could serve other industry's training needs also.

### Project - the training needs, target beneficiaries and the issues to be addressed

The project addresses the needs of the small- and medium- scale enterprises in the Lagos and Aba regions. It will provide assistance in the manufacture of garments with a view to enhancing design, productivity and quality. The further aims are to develop production, product development and business management skills through purposely designed training programmes, including on the job training, wherever possible. The concept is to provide the appropriate stimulating environment that is vital for the further development of the sub-sector

Improved production methods linked with a better understanding of quality awareness will result in an increased demand for ranges of garment products for which a ready local and export market exists. Extra garment sales and production will increase the demand for fabrics that will benefit the local textile industry, creating more job opportunities in the industry.

### **Development Objectives**

The establishment of a Common Facility Centre (CFC) within or in close proximity to the garment cluster in Aba will provide the means for training of entrepreneurs with the availability of the needed tools and equipment. The Aba Garment Cluster will assist the many resident SME entrepreneurs willing to join clusters and willing to learn and acquire the new technologies in their bid to manufacture high quality garments that will generate reasonable returns and so enhance the cluster's entire operation.

### Expected end of project situation

The CFC, located, for example, within the area of the Aba garment cluster, will be the cornerstone for the further development of the industry.

The centre should be fully equipped for conducting training courses and workshops, including extension services. The centre will provide the opportunity for the SMEs to bring their own materials or semi-finished products and to complete production of the garments using tools and equipment that they do not have in their own tailoring shops. Nominal payments will be charged to recover some of the costs.

The centre will also become the administrative focal point for the established and registered enterprises in the garment sub-sector. A well staffed and efficient CFC will strengthen the status of the emerging garment industry vis a vis the FGN.

### Counterpart support capabilities

The National Garment Association, based in Lagos, will represent the Nigerian Garment Industry and would serve as the local operational office until the CFC is opened.

### 9.1.2 Information on the garment sector

The number of companies in the "organized" Ready-Made Garment sub-sector is presently quite limited but there are many thousands of small-sized companies in the "informal sub-sector", especially in the Aba region. The range of garments produced by the "organized" companies is restricted whilst the "informal" companies produce a wide range of garments according to the demands of their individual clients.

- T-shirts: One larger-sized company, two medium-sized companies and 5 cottage industry-sized businesses
- Socks: 12 small to medium-sized companies
- Work wear (overalls): Five small companies, e.g. Peacock Creations
- Men's dress shirts: One small company in the Export Processing Zone at Calabar, using imported finished fabrics for the export markets
- 10,000 tailoring units, especially in the region Aba
- Under construction: one integrated, export-oriented garment company for bottom weight garments (trouser), starting with spinning

The T-shirt and corporate wear companies supply garments into the promotional product markets in Nigeria (and, possibly also, to the neighbouring country markets, through indirect exports). The garments are characterized as being of lower quality, made down to a low (and reducing) price and semi-disposable. The garments are usually over printed with company's names or embroidered with advertising slogans. The combined capacity is of the order of 10,000 pieces per day but actual production is significantly less than this.

The sock companies produce low priced socks (100% filament polyester yarns, or alternating courses of polyester and cotton yarns), for school uniforms and institutional users, e.g. police, army.

The dress shirt company in the EPZ produces for exports.

The 10,000 tailoring units meet the needs of individual customers.

### 9.1.3 The garment cluster in Aba

There are many entrepreneurs in Aba working as tailors and knitters, usually as individuals in their workshops, or with, say, up to 10 persons, making national dress and western style clothing on a bespoke basis. These units buy stock lots of material from importers and knitted fabrics from textile mills situated in Lagos. The ready made garments are sold in Aba and Lagos markets. Labels of popular foreign brands are attached to attract consumers.

The equipment used by the tailors is often old and limited in scope, so that many of the operations have to be completed by hand. The result is that the time to make the garments can be long and costly too. Further, the process can be wasteful in terms of material usage and the resultant quality may be unsatisfactory.

However, the entrepreneurs are unable to change the situation by themselves. Financially, they cannot command bank loans to invest in modern equipment even if they could envisage changing from their long established work practices. It is difficult to see how they will modernize even if they could envisage changes without an external catalyst.

Some tailors sub-contract part of the manufacturing operations to third parties in other workshops.

### 9.1.4 Target beneficiaries

The target beneficiaries are the 10,000 or so tailors, knitters and other small textile entrepreneurs within the "Aba garment cluster" as well as the existing companies based in Lagos.

### 9.1.5 Training courses

The following notes are intended only to give a brief out line of the training courses that should be offered initially.

Some adjustments to the content and duration of the proposed will be necessary initially to meet the specific needs of the experienced entrepreneur participants. The proposed courses will be appropriate to new entrants wishing to attain a qualification for a more senior work position

# 9.1.5.1 Production Managers course Outline Syllabus

### **Quality Control (including Total Quality Management)**

- Quality Control (including Total Quality Management)
- Construction Analysis and Flow Charts
- Construction Improvements
- Equipment Selection
- Work Aids
- Method Study
- Time Study
- Loss of Production
- Factory Layout
- Line Balancing
- Production Systems
- Job Evaluation
- Payment Systems
- Management Controls and Standard Costing
- Selection and Training of Operators, Supervisors and Management.
- Safety in the Factory
- The Production Planning and Control Function
- Capacity Planning Calculations
- Sales and Capacity Budgets
- Cutting Room Controls
- Sewing Room Controls

**Duration:** 106 hours

Aim:

To train established entrepreneurs and newly appointed managers in the techniques of managing the production in a modern clothing unit

**Trainee Profile:** 

The persons attending the course should be either experienced entrepreneurs who have managed their own business, e.g. operation, or newly appointed managers of garmenting units. It may be desirable – but is by no means essential as experience is an excellent qualification- that trainees should have a diploma in clothing production, or should be qualified as an industrial engineer, or have at least two years experience as a production line supervisor.

**Method of Assessment:** 

There should be a short test at the end of the first and second weeks of training, based on the work undertaken in each of the two weeks and a 2 hour test at the conclusion of the course. Practical work will be monitored by continous assessment on results achieved.

Outcome:

At the successful conclusion of the course, the participants will be qualified to manage a production unit, using the following techniques

- to control quality and output to meet factory and sales requirements
- to establish the most efficient methods of manufacturing
- · to control costs and waste
- to control the labour force
- to use the most appropriate reward and motivation systems
- to plan production to ensure the efficient use of the factory capacity

Торіс	Objective	Methotology	Duration
Introduction	To welcome the course participants, and outline the programme to be covered, as well as deal with administrative points	participants, and outline the programme to be covered, as well as deal with administrative	
Quality Control Including total quality management	To teach the systems of controlling quality, and the management of quality throughout the factory	controlling quality, and the management of quality practical exercises.	
Construction Analysis and Flow Charts	To teach the analysis of garments to determine the operation sequence, and the preparation of Flow Charts.	Lecture and practical exercises.	6 hours
Construction Improvements	To look at seam types and to challenge existing construction methods and consider possible improvements.	Lecture and practical exercises in groups – in the workshop.	6 hours
Equipment Selection	To teach the present range of available equipment, and to consider machine characteristics	Lecture and practical examples and exercises in the workshop.	4 hours
Work Aids	To teach the benefits of using Work Aids to assist in the production of garments	Lecture and practical exercises in groups	4 hours
Method Study	To teach the principles and the practical application of Method Study/Motion Economy.	Lectures followed by practical exercises. Divided into a least three sessions.	12 hours
Time Study	To teach Time Study to a standard to enable the manager to check existing time standards, or establish Standard Minute Values for an operation.	Lecture followed by practice sessions of 30 minutes per day for 15 days.	9 hours
Loss of Production	To teach the methods and causes of loss of production, and look at ways of avoiding this	Lecture and theoretical exercises	3 hours

Topic	Objective	Methotology	Duration
Factory Layout	To teach the principles of floor layout in factories in order to obtain optimum performance.	Lecture with theoretical and practical exercises.	6 hours
Line Balancing	To teach the methods of Line Balancing, and the use of SM Values to establish a theoretical balance.	Lecture and practical examples. Computerised theoretical balances for a range of garments.	6 hours
Production Systems	To teach the different production systems.	Lecture and examples	3 hours
Job Evaluation	To teach the principles of Job Evaluation so that the manager can consider grading systems for workers and relevant payment systems.	Lecture and examples with practical exercises.	5 hours
Payment Systems	To teach the principles of different payment systems.	Lecture and examples.	4 hours
Management Controls & Standard Costing	To teach the various methods of Management Control, and the principles of Standard Costing.	ontrol, and the	
Selection and Training of Operators, Supervisors and Management	To teach the principles of selection and training of the various grades – including the use of various selection tests and the identification of training needs.	EDIT system for identification of Supervisor and Management Training Needs)	
Safety in the Factory	To teach the moral and legal requirements of factory management in relation to safety.	Lecture	5 hours
The Production Planning and Control Function	To teach the principles and simple application of Production Planning and Control.	Lecture and practical exercises.	6 hours
Capacity Planning Calculations	To teach the calculation of factory capacities.	Lecture and examples	3 hours

Торіс	Objective	Methotology	Duration
Sales and Capacity Budgets	To teach the budgeting for Sales targets and factory capacities.	Lecture and examples	3 hours
Cutting Room Controls	To teach the various methods of controlling work in the Cutting Room.	Lecture	3 hours
Sewing Room Controls	To teach the various methods of controlling work in the Sewing Room.	Lecture	3 hours
Tests			5 hours
		TOTAL	106 hours

# 9.1.5.2 Production Supervisors Course Outline Syllabus

- Role and duties of a Supervisor
- Leadership and Motivation of people
- Quality Control
- Selection and Training of Operatives
- Management Structure
- Discipline
- Method Study
- Labour Standards
- Production Line Balancing
- Safety at work

This course covers some of the same topics as the managers' course but at a lower level. The lectures will provide supervisors to know more about their company's business and their role in its success.

**Duration:** 

29 hours

Aim:

To train production line supervisors in the role and duties of a supervisor and to teach techniques that will imporive their performances.

### Trainee profile:

The required qualification options to the course are several:

- Applicants should have a diploma in clothing design and production
- Or hold a ...th grade school certificate and have been a sewing machine operator for 3 years on more than 2 machine types
- Or have 3 years experience in a factory as quality controller
- Applicants should have a diploma in clothing design and production
- Or hold a ...th grade school certificate and have been a sewing machine operator for 3 years on more than 2 machine types
- Or have 3 years experience in a factory as quality controller

**Method of Assessment:** A 2 hour test will be held at the end of the course

Outcome:

At the successful conclusion of the course, participants will be able to:

- control production through the Production Line
- assist operators in the organization of workstations
- control quality
- maintain discipline
- balance the production line using simple techniques
- maintain safety standards

Торіс	Objective	Methotology	Duration
Introduction	To welcome the participants and outline the programme, as well as deal with any administrative point	Discussion	1 hour
Role and Duties of a Supervisor	To teach where the supervisor fits in to the organisation, and the duties that a supervisor needs to perform.	Lecture	2 hours
Leadership and the Motivation of People	To teach the principles of Leadership, and to consider what methods of motivation might be used by the Supervisor.	Lecture and discussion	3 hours
Quality Control	To teach the basic principles of Quality Control.	Lecture, discussion, and practical examples	3 hours
Selection and Training of Operators	To teach the principles of Operator Selection and the basics of Operator Training.	Lecture	3 hours
Management Structure	To teach the structure of management, including service management.	Lecture and discussion.	1 hour
Discipline	To teach the supervisor how to maintain discipline, and what to do when discipline breaks down.	Lecture	2 hours
Method Study (Basic Motion Economy)	To teach the basics of Method Study/Motion Economy, so that the Supervisor can assist in the layout of work stations.	Lecture, discussion and practical examples – in the work room.	3 hours
Labour Standards	To teach the Supervisor the principles of setting and applying Labour Standards.	Lecture and practical example.	3 hours
Production Line Balancing	To teach the supervisor the principles of Line Balancing, by using a theoretical balance, and by using multi-skilled workers.	Lecture and practical illustrations.	3 hours

Topic	Objective	Methotology	Duration
Safety in the Factory	To teach the Supervisor the principles of industrial safety.	Lecture and discussion	3 hours
End of Course Test			2 hours
		TOTAL	29 hours

### 9.1.5.3 Quality control and inspection course **Outline Syllabus**

- The Need for Quality
- Methods and Types of quality control an overview of total quality management (TQM)
- Pareto Analysis
- **Faults Analysis**
- Frequency of Inspection and Random Sampling
- Inspection Work Aids
- Training of Garment Examiners

This course is for quality control inspectors and garment examiners.

**Duration:** 

26 hours

Aim:

To train factory Quality Controllers in the principles and application of Quality Control throughout a factory.

Trainee profile:

Applicants should have:

- A general secondary school certificate
- And 2 years work experience in a clothing factory
- A working knowledge of the English language
- And have perfect colour perception

**Method of Assessment:** A 2 hour written test will be held at the conclusion of the course

Outcome:

At the successful conclusion of the course, the participants will be able to:

- Use appropriate methods of quality control
- Use Pareto analysis
- · Use fault analysis and report back to management for corrective actions to be taken
- Improve the standard of quality control and inspection in the factory

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
The Need for Quality	To establish the reason for having quality controls in factories.	Lecture and discussion	4 hours
Methods and types of Quality Control – An Overview of Total Quality Management	To teach the main methods of controlling quality, and to give an insight into the overall system of Total Quality Management (TQM)	Lecture, discussion and practical examples, including Charts and Graphs. Inspection of sample garments.	8 hours
Pareto Analysis	To teach the use of this very important tool in determining priorities for dealing with quality problems.	Lecture, discussion and practical exercises.	2 hours
Faults Analysis	To teach the system of analysing (and recording) faults to determine the causes and likely effects. How to build a Faults Album.	Lecture, discussion, practical examples and exercises.	3 hours
The Frequency of Inspection and Random Sampling	To teach the need for various levels of inspection based on results and statistics.	Lecture, discussion and examples	3 hours
Inspection Work Aids	To teach the benefits of having proper tables and aids for inspection.	Lecture	1 hour
The Training of Garment Examiners	To teach the Quality Controllers the basics of training Examiners in company.	Lecture and discussion	2 hours
End of Course Test			2 hours
		TOTAL	26 hours

# 9.1.5.4 Sewing instructor course Outline Syllabus

- Instructional Techniques
- Induction
- Job Analysis
- Exercise Design
- Motion Economy and workplace layout
- Training Standards Time Targets, Safety and Quality
- Quality Training and Faults Analysis
- · Trainability Testing
- Use of Training Records, Control of Training
- Intensive Training
- Job Training and Element Timing
- Safety

**Duration:** 

60 hours

Aim:

To train trainers who will be capable of training operators in the most efficient way, and to the highest performance standards.

Trainee profile:

Applicants should be competent and experienced sewing machine operators with:

- ✓ Either a diploma in clothing design and production and 3 years work
- ✓ experience
- ✓ Or a general secondary school certificate and 5 years work experience
- ✓ And perfect colour perception

**Method of Assessment:** 

A 1 hour written test will be given after first five days tuition and a 2 hours written test at the conclusion of the course. The course trainer will assess the performance on the practical exercises

**Outcome:** 

At successful conclusion of the course, the participant will be trained in:

- Job analysis
- Design of basic and job related training exercises
- Establish factory level performance standards and apply these in training
- Keep training records
- Use intensive training techniques when appropriate
- Develop trainees to factory performance levels

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Instructional Techniques	To teach the instructor the requirements of the Instructors Job, and cover the principles of giving instruction (Demonstrating and the Presentation of Knowledge)	Lectures covering the Instructors Job, Demonstrating, Presentation of Knowledge, plus extensive practice throughout the course.	8 hours (in total)
Induction	To teach the trainer the importance of Induction Training, and to encourage them to prepare Induction subjects for their own factory.	Lecture and the use of prepared samples	1 hours
Job Analysis	To teach the trainer the process of Job Analysis, covering Job Descriptions, Task Analysis and identification of Basic Skills	Lecture and practical application through a series of excises based on the trainers own factory situation.	4 hours
Exercise Design	To teach the trainer the principles of exercise design and to commence the preparation of their own manual of exercises.	Lecture and practical exercises continuing from the Job Analysis. The subject is dealt with through 7 sessions.	10 hours (in total)
Motion Economy	To teach the principles of motion economy and workplace layout, and so enable the trainer to encourage trainees to organise their workplaces in an orderly fashion.	Lecture and practical work with their own exercises	2 hours
Training Standards	To teach the trainer to establish standards of performance covering Speed, Quality and Safety.	Lecture and practice over a number of sessions.	7 hours
Quality Training & Faults Analysis	To teach the trainer the details of Fault Identification and Analysis.	Lecture and practice using the trainer's own exercises. Start up a Faults Album.	4 hours

Topic	Objective	Methotology	Duration
Trainability Testing	To teach the trainers how to apply the Trainability Test for Sewing Machinists.	Lecture and practice in pairs, and then on non-sewing 'volunteers'.	6 hours
The use of Training Records/Control of Training	To teach the trainers how to use a number of different training records in order to have a better control on the progress of the trainees.	Lecture and examples, and practice.	4 hours (in total)
Intensive Training	To teach the trainers how to use the intensive approach to training for very small numbers.	Lecture	2 hours
Job Training & Element Timings	To Teach the instructor the basics of Work Study Element Timings.	Lecture and practical timings.	4 hours
Safety	To teach the need for safety in the factory. This is also a part of Training Standards.	Lecture	1 hour
Transfer to Production	To teach the trainer the method of building up the trainees capability to reach production performance standards	Series of lectures	4 hours
Progress and Final Tests	To test progress and make a final assessment		2 hours
***************************************		TOTAL	60 hours

# 9.1.5.5 Technical design (garment construction, pattern making & design) Outline Syllabus

- Garment Construction
- Stitch Formation
- Construction Techniques
- Basic Pattern Construction/Block Patterns
- Style details interpretation of drawings
- Grading size progression
- Size charts
- Design
- anatomy
- seam arrangement
- measurements
- fashions
- variations
- fabric limitations
- lay making

Theory and extensive use of practical exercises should provide the participants with a through knowledge of the subject.

#### **Training course specification**

**Duration:** 

120 hours

Aim:

To train participants in garment construction methods, pattern making and grading to a standard whereby they can take a fashion sketch, picture or photograph of garments and convert them into a set of factory production patterns. It is necessary that trainees are familiar with manual techniques before progressing tother CAD system techniques

#### Trainee profile:

Applicants should preferably have:

- Several years of experience as an entrepreneur in the industry
- Or at least the general certificate of secondary education and the diploma in clothing design and production
- Or the certificate in the production of clothing with 2 years work experience in garment production and with a basic knowledge of sewing and quality control
- Computer literacy would be helpful as would be knowledge of the English language to allow the study of fashion, colour and styling on the internet
- Perfect colour perception

### **Method of Assessment:**

The course trainer should maintain a continuous assessment of each trainee in the practical work. A 1 hour written test will be held at the conclusion of the course

### **Outcome:**

At successful conclusion of the course, participants will be able to:

- construct basic block patterns
- use style variations
- grade up or down to produce appropriate sizes
- use size charts
- · construct efficient lays for cutting
- prepare patterns from photographs or sketches.

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Garment Construction	To teach the participants the techniques of garment construction, stitch formation, and seam types.	Lecture, samples and practical application by using workshop machinery.	10 hours
Basic Pattern Construction - Block Patterns	To teach the participants the techniques of creating basic block patterns for a variety of garments, from which style variations can be generated.	Lecture, Demonstration and practice.	28 hours (in total)
Style Details – the interpretation of drawings	To teach the participants how to interpret style details and incorporate them into the patterns	Lecture, Demonstration and practice.	24 hours
Grading and Size Progression	To teach the participants the rules for the grading of a range of garments, and the principles of size progression.	Lecture, Demonstration and practice.	20 hours
Size Charts	To teach the participants how to interpret size charts, and how size charts are constructed.	Lecture and example, with some practical work on selected garments.	10 hours
Design	To teach the participants the basic principles of Design, covering Anatomy, Seam Arrangement, Measurements, Fashions, Variations, and Fabric Limitations	Lectures and practical work.	24 hours
Lay Making	To teach the participants the principles of Lay Making in order to achieve the optimum use of fabrics.	Lecture and, if there is a Cutting Course running, a practical session on the cutting table.	2 hours
Final Test			1 hour
		TOTAL	120 hours

# 9.1.5.6 Sewing machine mechanic course Outline Syllabus

- Use of tools
- Electrical Workings Single phase and Three-phase
- Motor Servicing
- Sewing Machine Maintenance all types
- Stitch Formation
- Fault Diagnosis all types
- Settings and Timings
- Stores/Spares Procedures
- Folders/Folder Making
- Safety
- Attachements

### Training course specification

**Duration:** 

324 hours

Aim:

To train participants in the basics of sewing machine construction repair and maintenance to a standard whereby they can make repairs f or most machines in a factory

Trainee profile:

Applicants should hold:

- ✓ A general certificate in secondary education (academic or vocational)
- ✓ And a skill level from a general maintenance course
- ✓ A knowledge of the English language would be an asset

**Method of Assessment:** 

The course trainer will make a continuous assessment of the practical work for each trainee. There will be a 2 hours written test at the conclusion of the course

**Outcome:** 

At the successful conclusion of the course, the participants will be able to:

- repair and maintain a range of sewing equipment
- · diagnose faults
- maintain a spares store
- make and repair folders
- fit and adjust machine attachments

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Use of tools	To teach the participants the correct method of using tools.	Lecture, Demonstration and practice.	3 hours
Electrical Workings	To teach the mechanics the essentials of electricity supply, covering both Single Phase and Three Phase working.	Lecture and practice.	6 hours
Motor Servicing	To teach the basics of motor servicing.	Lecture, Demonstration and practice	6 hours
Sewing Machine Maintenance	To teach the mechanics the principles of machine maintenance covering all types.	Lecture and practical work, based on manufacturers repair and maintenance manuals. This work should be spread over the whole course starting with the simple machines and progressing to the more complicated. Old/damaged machinery should be obtained from the industry, and used to give the mechanics practice on stripping and rebuilding machines.	114 hours
Stitch Formation	To teach the mechanics the principles of stitch formation in order for them to fully understand the precise setting standards for each machine type.	Lecture and practical work.	12 hours
Fault Diagnosis	To teach the mechanics the basics of fault diagnosis for all types of machine.	Lecture, and practical examples, with the Trainer setting faults on machines for the trainees to find and rectify. This should be linked to the sessions of Machine Maintenance.	40 hours

Topic	Objective	Methotology	Duration
Settings and Timings	To teach the mechanics the basic settings and timings for each machine.	Lecture and practice	24 hours
Stores and Spares Procedures.	To teach the mechanic the importance of having a well organised system of ordering and storing spare parts.	Lecture	2 hours
Folders and Folder Making	To teach the use and fitting of folders, and the manufacture, maintenance and repair of simple folders.	Lecture, Demonstration and practice.	12 hours
Safety	To teach the mechanics the importance of safety, not only with regard to their own work, but across the factory	Lecture	2 hours
Attachments	To teach the mechanics about the use of Attachments and Work Aids, and how these can improve machine and factory performances.	Lecture and examples	4 hours
In Company Work	To familiarise the mechanic with work in the industry.	Placements in factories to carry out work under the direction of the factory management	96 hours
Final Test			2 hours
		TOTAL	324 hours

# 9.1.5.7 Cuter and trimmer course Outline Syllabus

- Understanding of the terms used for fabrics and Trimmings
- Machine/Equipment maintenance
- Safety
- Interpretation of Cutting Sheets
- Marking In
- Cutting Procedures and Methods
- Laying Up/Spreading
- Calculations/Measurements
- Waste Reduction
- Ticketing and Bundling

### **Training courses**

**Duration:** 

52 hours

Aim:

To train participants in the basic functions of the cutting room to a standard that meets factory performance levels

Trainee profile:

Applicants should hold:

- General certificate in secondary education
- And have perfect colour perception

**Method of Assessment:** 

The course trainer will maintain a continuous assessment of the trainees during the practical work. A 2 hours written test will be held the conclusion of the course

Outcome:

At the successful conclusion of the course, participants will be able to:

- interpret Cutting Sheets
- make markers, or use prepared markers
- spread fabric
- use the appropriate equipment to cut fabric
- reduce waste by increasing the efficiencies of the lays
- · understand ticketing and bundling
- maintain quality by accurately cutting and checking for shade variations

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Appreciation of Fabrics and Trimmings	To teach the cutters the different fabrics used by the industry, and to give some knowledge of the fabric characteristics, and the terminology used.	Lecture with examples of the different types of fabric.	3 hours
Equipment and maintenance	To teach the different types of equipment used in the Cutting Room, and to teach the basic maintenance needed to keep the equipment in good condition.	Lecture and practical exercises.	6 hours
Safety	To teach Safety in the Cutting Room and Personal Safety – with emphasis on the use of Safety Gloves.	Lecture	2 hours
Interpretation of Cutting Sheets.	To teach the interpretation of Cutting Sheets, and the conversion calculations needed to work out optimum size Lays.	Lecture and practical examples	4 hours
Marking In	To teach the methods of Marker Making - from Patterns, or from Computer-generated markers.	Lecture, Demonstration and examples (on paper)	9 hours
Cutting Procedures & Methods	To teach the cutters the methods of Cutting using Straight Knives, Band Knives, Circular Knives and Die Press Cutters.	Lecture, Demonstration and practice.	9 hours
Laying Up/Spreading	To teach the various methods of Spreading fabric – by hand or by machine; one way, face to face etc	Lecture and practice	9 hours
Calculations and Measurements	To teach how to measure fabric, and how to calculate fabric requirements for an order.	Lecture and practical examples	2 hours

Topic	Objective	Methotology	Duration
Waste Reduction	To teach how to reduce waste in the Cutting Room, by increasing the efficiency of the markers, and reducing end wastage.	Lecture and practical examples	3 hours
Ticketing/Bundling	To teach how the cut work is ticketed, numbered and divided and bundled for progression through the factory.	Lecture and examples	2 hours
Final Test			2 hours
		TOTAL	52 hours

# 9.1.5.8 Cutting room management course Outline Syllabus

- Handling and Storage of Materials
- Improving Cutting Room Layout
- Equipment and Maintenance
- Effective use of Labour and Materials
- Fabric Techniques for handling and associated problems
- · Dividing, Separating and Numbering
- Fusing
- Supervision

### **Training courses**

**Duration:** 

12 hours

Aim:

To train newly appointed Cutting Room Managers and Supervisors, in the principles of Cutting Room Management.

Trainee profile:

Participants should be either newly appointed cutting room managers or experienced managers whose skills are to be upgraded

**Method of Assessment:** 

A 1 hour test will be given at the conclusion of the course

**Outcome:** 

At the conclusion of the course, the successful participants will be able to:

- plan the handling and storage of all materials
- plan the lay out the Cutting Room to improve the work flow
- manage maintenance of equipment
- organise labour and materials effectively
- maintain quality, output and safety standards

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Handling and Storage of Materials	To teach the principles of materials handling, and safe storage of fabrics and other materials.	Lecture	1 hour
Improving Cutting Room Layout	To teach the basic principles of floor planning, and laying out of the Cutting Room to improve work flow and avoid unnecessary handling.	Lecture and practical exercises.	2 hours
Equipment and Maintenance	To teach the key elements of Cutting Room Equipment, and to encourage managers to use a system of planned maintenance.	Lecture and practical examples.	2 hours
Effective Use of Labour and Materials	To teach the managers the principles of labour and materials utilisation	Lecture and practical examples	1 hour
Fabric – Techniques of Handling, and Problems	To teach the managers the best ways of handling fabrics that have properties which occasionally cause problems in the Cutting Room.	Lecture and examples	1 hour
Dividing, Separating and Numbering.	To teach the best methods of dividing separating and numbering ensuring a better work flow through the factory, avoiding problems such as shading.	Lecture	1 hour
Fusing	To consider methods of fusing to ensure higher product quality and consistency.	Trainer-led Discussion.	l hour
Supervision	To teach the most appropriate methods of supervising the work of the Cutting Room	Lecture	1 hour
Final Test			1 hour
		TOTAL	12 hours

# 9.1.5.9 Industrial sewing machine operator course Outline Syllabus

- Machine Servicing
- Machine Control
- Basic Cloth Exercises
- Job Related Cloth Exercises
- Experiential Exercises
- Faults Analysis
- Fault Rectification
- Induction Topics
- Safety
- Other Equipment
- Production Runs

This course is designed to train industrial sewing machine operators from the cluster to a level of performance so that they can be transferred straight on to a production line with the minimum of in company training if required.

**Duration:** 

80 hours

Aim:

To train Sewing Machine Operators for industry to the highest standards of performance in relation to speed of operation, quality, and safety.

Trainee profile:

Applicants for this course should have the General Certificate in Secondary Education, and should preferably be competent in the manual production and grading of patterns. Experienced Cutters could also be considered. Computer literacy is essential.

**Method of Assessment:** 

As each exercise has performance standards, continuous assessment is provided, and it is only possible for trainees to reach the end of the course by completing each exercise to the required standards. The trainers will keep records of performance.

Outcome:

On successful completion of the course, the participants will be able to:

- sew at high speed using an industrial sewing machine
- maintain quality standards to a very high level
- identify and rectify faults in the processes
- carry out simple machine servicing
- maintain a steady work rate for a full shift.

NB.

The specific details of the course cannot be completed until the equipment has been purchased, and the equipment specification and capability is known.

Topic	Objective	Methotology	Duration
Introduction	To welcome the participants, and outline the programme as well as deal with any administrative points.	Discussion	1 hour
Machine Servicing Exercises	To teach all aspects of Machine Servicing such as threading, cleaning and oiling, changing spools, winding spools, and changing needles,	Separate exercises for each aspect should be demonstrated and the trainees then practice. Time targets should be used when the method has been perfected.	6 hours
Machine Control Exercises	To teach the finer details of machine control, so that the machinist should be able to stop at a point and control whether the needle is up or down.	Demonstration and the trainees should practice on the special exercise sheets. This exercise should not be performed for more than 15 minutes at a time, but repeated frequently throughout the course.	4 hours
Basic Cloth Exercises	To teach the basic skills of sewing two pieces of cloth together.	Each exercise should be demonstrated by the trainer. Then the trainees should practise to establish the method and then practice to time targets with quality marking. Each attempt <b>must</b> be recorded	12 hours
Job Related Exercises	To teach the skills associated with particular sewing jobs within the factory. Exercises are constructed for each particular skill, such as edge stitching; sewing a curve etc.	Each exercise should be demonstrated by the trainer. The trainees should then practise to establish the method and then practise to time targets with quality marking. Each attempt <b>must</b> be recorded.	18 hours
Experiential Exercises	To teach the several and combined skills required in particular operations. The operations are normally reproduced in part instead of using complete garment parts.	The task should be demonstrated by the trainer. The trainees should then practise to establish the correct method, then they should then practice to target time and quality standards. Each attempt <b>must</b> be recorded	18 hours

Topic	Objective	Methotology	Duration
Faults Analysis	To teach the identification of common sewing (and cloth) faults and instil in the trainees the discipline to deal with the fault before the garment leaves their workstation.	Lecture and examples of faults.It is best to teach only two or three faults at a time, and repeat the sessions throughout the course	4 hours
Fault Rectification	Rectification  To teach the practical side of fault repairing, by practising unpicking of stitching without damaging the fabric.  Demonstrate and allow trainees to practise on sewn exercises. If the trainees are arranged in pairs, they can check each others work.		2 hours
Induction Training	To teach the basics of induction into the factory system. Detailed induction should be carried out by the factory managers/trainers, when the trainee joins the factory.	Lectures and discussions carried out several times throughout the course.	3 hours
Safety  To teach the key points of safety in the factory. Safety for each exercise should have been taught when the exercise was taught.		Lecture.	2 hours
Other Equipment	To allow familiarisation with other items of sewing machinery.	Demonstrate each machine and allow short practices for each trainee.	4 hours
Production Runs	To teach how production is achieved.	Form the trainees into a production line for a few hours to manufacture a number of simple garments.	6 hours
		TOTAL	80 hours

#### **Programming notes:**

- 1. To obtain best performances, simple exercises should be kept to periods of no more than 30 minutes duration
- 2. The longer exercises should be of no more than 1 hour duration
- 3. Knowledge subjects should be used to break up periods of activity in the early part of the course.
- 4. It is essential that all exercise pieces and T/test pieces are cut to a pattern, in lays by straight knife or band knife. This will ensure that all parts fit together, and are always the same size for target purposes.
- 5. In the final part of the course, familiarisation with other items of equipment should be programmed in, and finally, a production line organised to give the trainees experience in producing to a performance standard.

### Training course specification

#### 9.1.5.10 CAD SYSTEM COURSE

**Duration:** To be decided

**<u>Aim:</u>** To train CAD System Operators for Industry, mainly in the activities

of Pattern Production and Pattern Grading, and Marker Making for

optimum fabric consumption.

**Trainee profile:** Applicants for this course should have the General Certificate in

Secondary Education, and should preferably be competent in the manual production and grading of patterns. Experienced Cutters

could also be considered. Computer literacy is essential.

**Method of Assessment:** There should be continuous assessment of practical work, and a

written test on completion of the course.

#### Note:

The specific details of the course cannot be completed until the equipment has been purchased, and the equipment specification and capability is known.

### 9.1.6 Project Implementation, Outputs Activities and Costs

In implementing the strategy of setting up a Common Facility Center (CFC) the following steps are proposed:

Output

Activity

No.	Description	Description	Responsible	Month
1	Infrastructure of the Common Facility Centre(CFC)	Formation and appointment of the Steering Committee to supervise the establishment of CFC	UNIDO/NGA	1
		Evaluation of sites proposed by local counterparts, selection of the most appropriate building/premises	UNIDO/NGA	2
		Computation of costs related to acquisition or leasing and refurbishing of the building/Premises, negotiation of conditions	NGA	3
· · · · · · · · · · · · · · · · · · ·		Preparation of contracts for acquisition and renovation (if needed) of the premises	NGA	3
		Preparation of CFC layout, specification for utilities and lighting	UNIDO/NGA	3
		Award contract for civil and related (electricity, water, sewage,telecommunication etc.) works	NGA	4
		Refurbishing the premises assigned for the CFC	Local contractor	6

Note: \* After launching the project.

## 9.1.6 Project Implementation, Outputs Activities and Costs (cont'd)

### Output

### Activity

No.	Description	Description	Responsible	Month
2	Set of equipment and tools required for servicing the selected cluster	Assessment of needs of the cluster in equipment, prioritizing of the needs	NGA	2
		Finalization of equipment list	UNIDO/NGA	3
		Purchase and supply of equipment and set of tools	NGA	3
		Installation, commissioning and test run of equipment	UNIDO	6
		Training of local counterparts in preventive maintenance of installed equipment	UNIDO	7
		Selection of and subscription to important technical periodicals for CFC	UNIDO	6

# 9.1.6 Project Implementation, Outputs Activities and Costs (cont'd)

## Output

## Activity

No.	Description	Description	Responsible	Month
3	Trained local personnel capable o operating the CFC	Selection of managerial, operational and service personnel CFC	NGA	5
		Training of local counterpart personnel in operation of installed equipment and use of tools	UNIDO	7-9
		Compilation of a list of services to be offered by CFC for the cluster, computation of costs and setting fees for services	UNIDO	6
		Demonstration of capabilities of CFC	NGA	9
		Training course in use of CFC equipment for potential clients from the cluster	UNIDO/NGA	10-12

## 9.1.6 Project Implementation, Outputs Activities and Costs (cont'd)

## Output

# Activity

No.	Description	Description	Responsible	Month
4	Capacity to assist local cluster in pattern engineering and size grading	(Re)training of local counterpart in pattern making and cutting for footwear and leather goods	UNIDO	6-9
		Purchase and installation of equipment for design and pattern grading	UNIDO	7-9
		Local training of CFC staff in use of supplied pattern making equipment	UNIDO and suppliers	10-11
		Setting up a list and process of design and pattern engineering services	NGA/NGA	11
		Demonstration of available pattern making and product development services	UNIDO/NGA	12
5	Enhanced NASMSLAPI(function services, management etc.)	Assessment of the operation of NASMSLAPI, recommendations on improved/extended operation	UNIDO	8
		Study tour to well functioning national and/or regional footwear and/or leather products associations	UNIDO	10
		Revision of membership scheme, functions, services, management and public relation of NASMSLAPI	NGA	12

### 9.1.6 Project Implementation, Outputs Activities and Costs (cont'd)

### **Inputs**

#### National staff

The Government (FMI) in close cooperation with NGA will assign suitably qualified counterparts to the UNIDO experts and provide them with the relevant information required for the successful implementation of the project.

### Other national inputs (in kind)

- a) Appropriate premises and auxiliary equipment, furniture etc. as office facilities according to internationally standards;
- b) Local transport of imported equipment and tools;
- c) Local transport of international and national experts assigned to the project;
- d) Secretarial services and support personnel as needed;
- e) Interpretation services (if and when required).

### **Estimated input cost**

Item	wm	US\$
Short term international consultants	24	360,000
Administrative support	12	24,000
Project travel		4,000
National consultants	36	72,000
Study tours		15,000
In-service training		5,000
Equipment (see separate list 2 below)		389,000
Sundries (Telecommunication, mailing and transport, printing)		15,000
TOTAL	72	884,000

### **Equipment cost estimates**

No.	Broad specification	Estimated cost in US\$
1.	Sewing machinery different types, button hole machines etc	80,000
2.	Cutting room equipment	32,000
3.	Pressing, fusing, finishing equipment	100,000
4.	CAD-system, including training	120,000
5.	Miscellaneous equipment	17,000
6.	Teaching equipment	40,000
	TOTAL	389,000

### 9.2 Guided Study Tour

### 9.2 Guided Study Tour

### 9.2.1 Background

One of the project recommendations was that a study tour should be made by prospective garment industry investors together with a number of Ministry officials.

### 9.2.2 Objectives

The objectives of the study tour are:

- a) To demonstrate to the participants how garment companies were established in the selected other countries having similar profiles to Nigeria
- b) To show the support that was offered to the local and foreign stakeholders in those countries when making their initial investments as well as the continuing support provided until now
- c) To highlight the successes achieved to-date
- d) The opportunity to encourage investors in the selected countries to consider expanding their plant capacities by making investments in Nigeria

#### 9.2.3 Selected countries

The selected countries recommended for the Study Tour are:

- > Lesotho
- ➤ Mauritius
- ➤ Sri Lanka

### 9.2.4 Methodology

#### 9.2.4.1 Study Tour guide:

A study tour guide should be appointed to oversee planning and execution of the tour project. It is recommended that the person selected should be a senior person having a general knowledge of the global industry and have leadership and decision making characteristics. The appointed person should make the preliminary tour as well as the tour itself.

Gherzi is able to provide the Study Tour Guide.

### 9.2 Guided Study Tour

#### 9.2.4.2 Plan:

The guide should make preliminary visits to the countries selected for the study tour to prepare the necessary organisational plans. These plans will include:

- ✓ Identification of the preferred dates for the tour from the side of the host country
- ✓ Identification of companies willing to open their plants for visits and to discuss their experiences freely
- ✓ Identification of hotel availability (conflicting conventions, fairs, etc) and transport costs in the host countries. Seek costs for block booking
- ✓ Identify (negotiate as possible) international flight rates on a group basis

Prepare a draft Study Tour Agenda and discuss with the Minister / Ministry officials and stakeholders in the Nigerian garment industry and parties interested in entering the garment industry. Finalize the agenda, the dates, the maximum and minimum number of participants and the cost to participants. Prepare a budget for the tour expenses and ensure that the needed revenues will be forthcoming either from the participants and / or from external funding. (Decide if and when to cancel the tour if the minimum number of participants is not forthcoming.)

Agree with the Minister who will join the tour from the Ministry side.

Advertise / promote the study tour to attract the needed number of participants.

### 9.2.4.3 Nigeria country profile and investment opportunity

The study tour guide should prepare a profile of Nigeria, describing the country, the present industry and the opportunities for investments in the garment industry in Nigeria.

#### 9.2.4.4 Operational:

The Study Tour Guide will have responsibility for leading the tour group according to the agreed agenda. The guide will also be responsible for making adjustments to the programme (with the agreement of the participants), as may be necessary during the course of the tour.

Discussions will be held with Ministry officials and with local company managements, including the foreign investors in joint-ventures. Visits to company plants will also be made.

At the conclusion of the tour, the views of the participants will be collected, analyzed and documented.

Follow up actions to include detailed discussed to discuss participants' plans to progress their interests in setting up Nigerian garment plants. There may be special interest in working within Export Processing Zones.

### 9.3 Investor's Forum

#### 9.3 Investors' Forum

#### 9.3.1 Recommendation

A further recommendation from the main report was that an INVESTORS' FORUM should be held once Nigeria has (i) reduced the significant quantities smuggled textiles and garments entering the country that undercut market prices and result in losses by the existing manufacturing companies and (ii) the law and order situation has been improved

### 9.3.2 Objective

The objectives of the Investors' Forum are:

- a) To bring potential garment investors to Nigeria so that they can appreciate the advantageous opportunities for selling into the local and export markets
- b) To demonstrate the advantages of manufacturing in Nigeria and the investment incentives on offer
- c) To bring potential foreign investors into direct contact with local entrepreneurs
- d) To sign joint-venture memoranda of understanding

### 9.3.3 Requirements

The Investors' Forum requires the following:

- A clearly defined and transparent investment incentive package available to local and foreign investors.
- Ideally, the availability of Export Processing Zones (EPZs) that will facilitate importing, exporting and other activities free from bureaucratic procedures and corruption.
- Preparation of case studies of typical projects based on the investment incentives on offer and the export opportunities.
- Attracting a sufficient number of interested foreign and local stakeholders to participate in the Forum. Possible participants will have to be identified, offered the opportunity to invest, invited to attend and, most likely, have their costs paid for by the forum organizers.
- Availability of Ministers and officials to receive participants to the Forum. Official and other receptions will be needed for the Minister to present the case for investing in Nigeria.
- Visits will have to be made to the prospective locations (EPZs and others) by the investors.
- Local transportation costs in Nigeria will have to be covered by the Forum organizers.

#### 9.3.4 Conclusions

At the end of the forum, an analysis of the results will be made to identify the lessons that have been learnt, both positive and negative, to determine the next steps that should be taken.