Growth Avenues for Indian Textile Industry

27-29
Jan'19

CODISSIA TRADE FAIR COMPLEX
COIMBATORE, INDIA

IND-TEXPO

TEXPROCIL

GHERZI

Presented By
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Senior Consultant

Introduction

Key Takeaways

- Disruptive trends is effecting the traditional way of doing business
- Emerging technologies are creating new trends
- Sustainability in the textile value chain is becoming a key aspect
- Global competitiveness and shift in trade
- Emerging segments for India
- Learn from success stories
- …emergence of new business models?

Introduction

About Gherzi: Integrated Consulting

1 Management & Operations	2 Corporate Finance	3 Engineering & Logistics
Feasibilities studies	Mergers & Acquisitions	
Restructuring and Turn-around	Succession Planning & Divestitures	
Strategy	MBO/MBI	
Market Studies	Corporate Financing	
Supply Chain	Capital Markets	
Operational Improvement	Business Development	
Product Development		

Gherzi References - Across the textile value chain

EXTRACT

Fibers

- Reliance Industries Limited
- UNIFI
- KERMEL – Performance is our profession
- LENZING
- سابك sabic
- INDORAMA
- ADITYA BIRLA GROUP

OEM's

- SAURER.
- RIETER
- TRÜTZSCHLER
- PICANOL – why weavers win
- itema
- GROZ-BECKERT
- MAYER
- KARL MAYER
- STOLL – KNIT AHEAD
- monforts
- DILO

Textile companies

- ADITYA BIRLA – PT INDO LIBERTY
- TRIDENT GROUP
- Vardhmān
- WELSPUN
- TAYPA
- Gabel – Bella la casa, bene tu.
- PT. LOTUS INDAH TEXTILE INDUSTRIES
- KALTEX – Calidad y Servicio en Telas
- SEFAR
- Karsten
- Himatsingka
- Arvind
- TENCATE – materials that make a difference
- faurecia – Technical perfection, automotive passion.
- canclini 1925
- CHATextiles 查氏紡織集團
- COATS

Brands/Retailers

- Ermenegildo Zegna
- DSQUARED²
- FILA
- IKEA
- TOM TAILOR
- le coq sportif
- HELLY HANSEN
- BOSS HUGO BOSS
- KARL LAGERFELD
- Wolford
- VERSACE

Gherzi presence in new industry areas

univers

SEPTEMBER 2019
ZURICH, SWITZERLAND

30
industry players

36
courses

Sustainable Textile School - Website

http://sustainable-textile-school.com/

Sustainable Textile School - Facebook

https://www.facebook.com/stschemnitz/

Sustainable Textile School - Twitter

https://twitter.com/sts_chemnitz

Introduction

International presence

- 130 fully employed professionals
- Partnership on a worldwide level
- 6 own HQ offices
- More than 6‘000 completed projects
- Activities in more than 80 countries

Key trends & impact

Emerging trends in textile & clothing industry

Production

Produce clean, local, with respect and efficiently

11. 3D printers for garments
12. Digital printing and finishing
13. Short value chains
14. Automation in sewing process
15. Yarn performance
16. Innovative joining techniques
17. New technologies in the pipeline

Retail

Hack the take-away-waste model

18. E-commerce
19. New shopping experience
20. Take-back-waste model
21. New definition of ownership

Design

Design for eternity

7. Design to last
8. Design for rebirth
9. Smart & functional textiles
10. Mass customization on the rise

Consumption

Go slow, connected, and take good care

22. Wise consumer
23. New rules for shopping (online mobile)
24. Importance of « Made in »
25. Increasing importance of activewear

Resources

Materials matter

1. Blends on the rise
2. Nonwoven innovation
3. Reuse and redesign waste
4. Precision farming
5. Filament era
6. The predominance of PES

Systems thinking

Be transparent and work together

28. Smart textile manufacturing systems
29. CSR is a must
30. Transparency & traceability
31. Sustainability
32. Data integration
33. Norms and standards

End of life

Consider every ending as a new beginning

26. Biodegrade organic textile
27. Upcycle, reuse and recycle

Source: Gherzi

Key trends & impact

The consumer is driving change - he has all options

Who will lead the consumer?

department store			shopping mall		category killers	discounter	online	mobile
1880	1900	1920	1940	1960	1980	2000		2020

Google

- alternative to digitization? ▶ NO: loss of sales to the risk of existence!
- who or what drives the digitization? ▶ the customer - not the service or product provider!

Sell content!

Create attraction!

Know your customer!

Key trends & impact

New business model

amazon shopbop.com → On-demand apparel manufacturing system

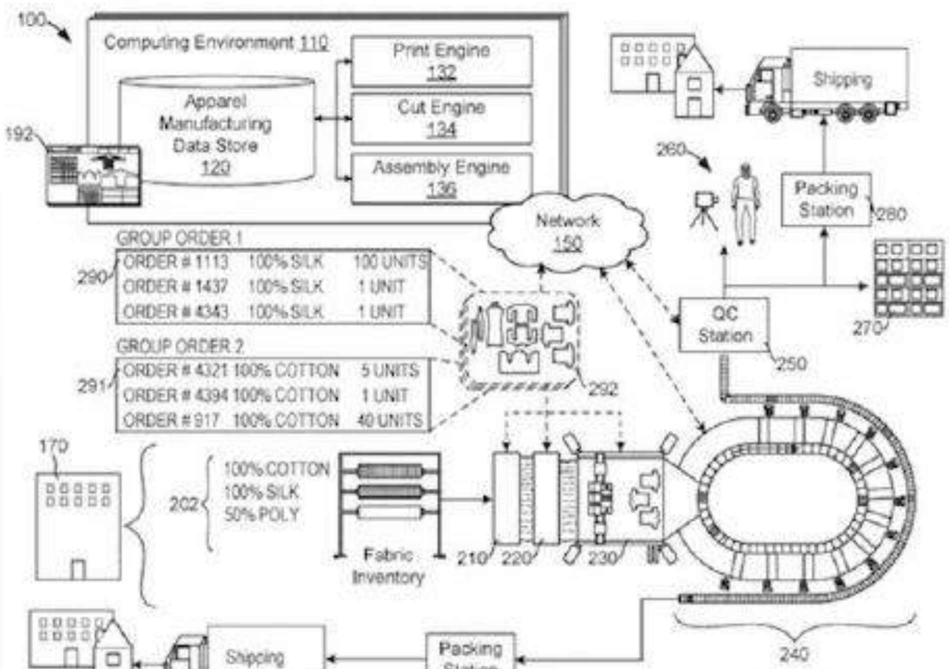


FIG. 2

→ 1 hometex brand

4 ladies garment brands

3 gents garment brands

→ 1 kids brand

Mass customization

Key trends & impact

Impact

Economic trends affecting American brands and retailers

~~SPORTS AUTHORITY~~	460*	~~Walmart~~	269
~~macy's~~	100	~~AMERICAN EAGLE OUTFITTERS~~	150
~~AÉROPOSTALE~~	113	~~JCPenney~~	80

Source: USFIA

*Numbers denote recent store closures

Disruptive technologies: Robotized garment manufacturing

SoftWear
AUTOMATI

SEWBO

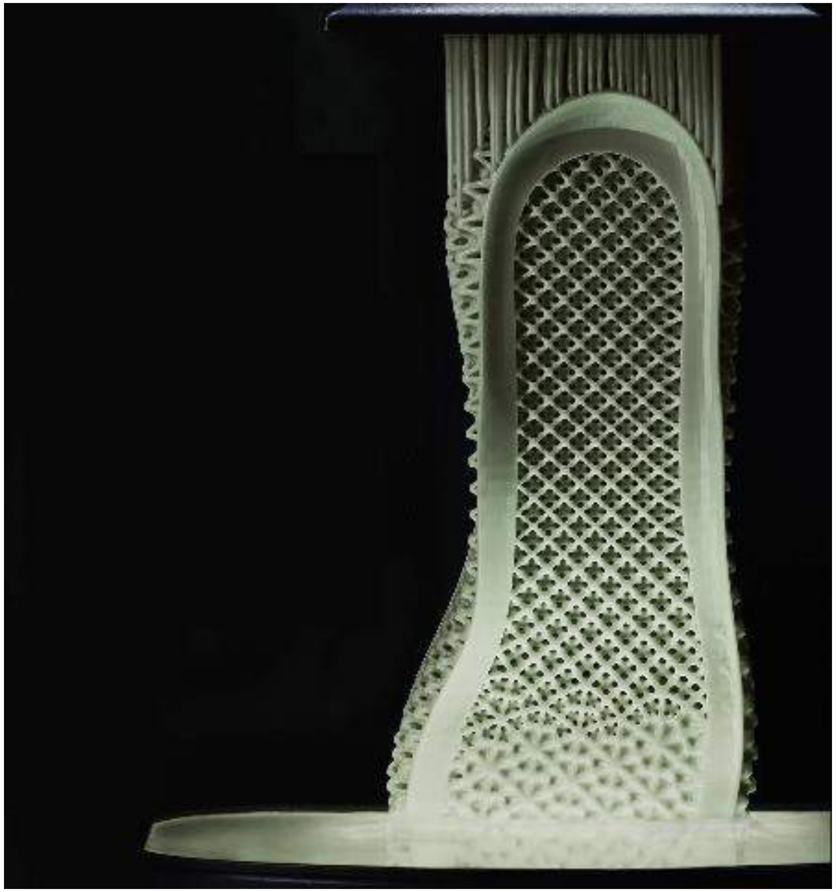
Disruption → Autonomous garment production lines

https://www.youtube.com/watch?v=OsSDI8wWAyQ

https://www.clearslide.com/view/mail?iID=dQqm8MBDWmR4fvC8C2VH

Key trends & impact

Additive Manufacturing



- Adidas intends to use the **3-D printed** soles to make trainers at 2 new highly automated factories in Germany and America
- Capacity: 500,000 pairs/ year
- Lead time : 1 Week
- Process: Conventional 3-D printing involves 'adding' done according to instructions from a computer program that contains the virtual representation of the object to be made, in a series of the slices. The layers of material are built of molten polymer
- Adidas uses Carbon's Digital Light Synthesis process which is 100 times faster than conventional polymer-based printers

Disruption → No need of the textile chain anymore

Source: The Economist

Key trends & impact

AI and Big Data
Automated inspection systems

- Reduced dependence on human errors
- Saving of manpower and materials
- Quick response
- Reliability

Digital Eye

The 4 Point System

Automated online inspection

Disruption → New Business models

Key trends & impact

Digital printing & finishing

Disruption → Less need of finishing machines, Mass customization, single lot production

Key trends & impact

Digital Technologies Opportunities for OEMs

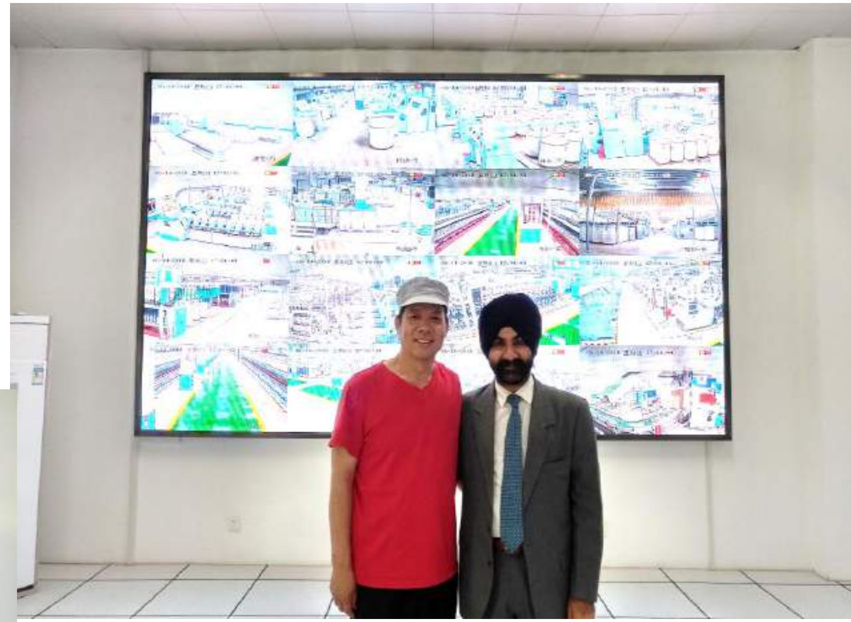
China intelligent spinning mills

Intelligent Spinning Mill, China

No of spindles: 100,000

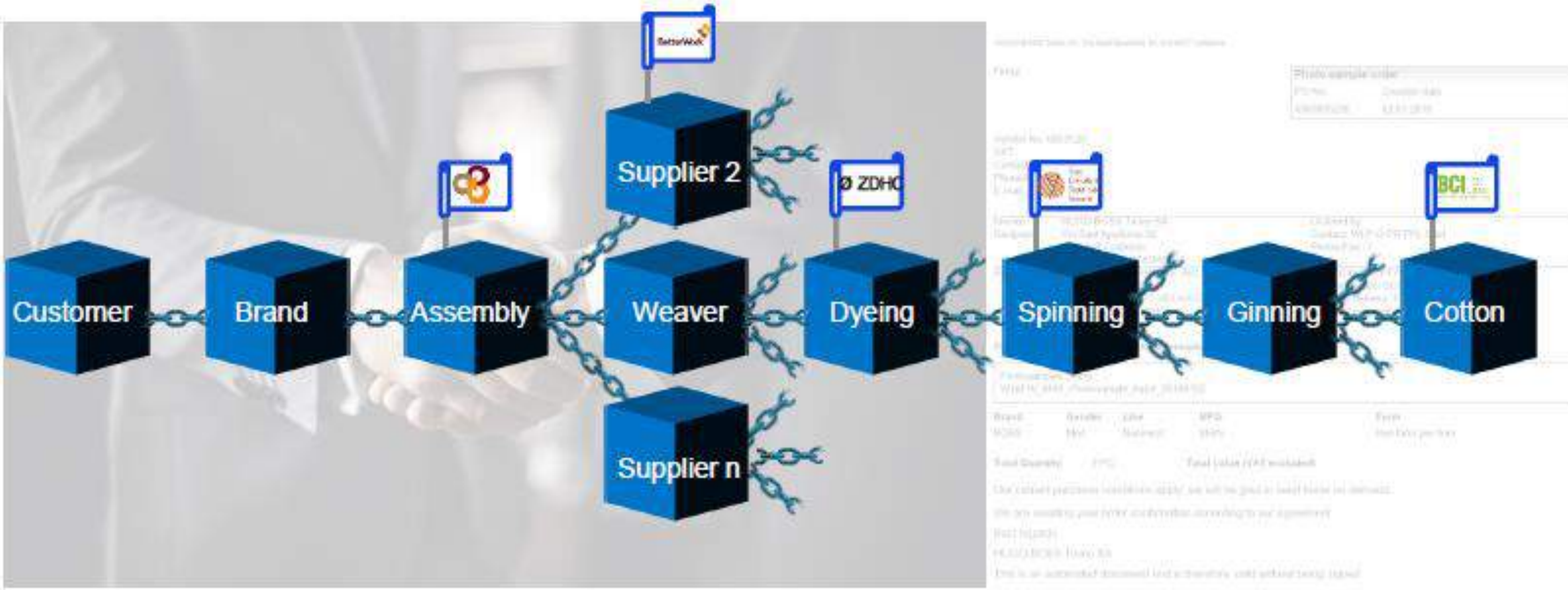
Workers: 125

Average count: Ne 70’s



New business model: Hugo Boss and Block chain technology

Blockchain
supply chain visibility and a first integration of CSR requirements into the procurement process

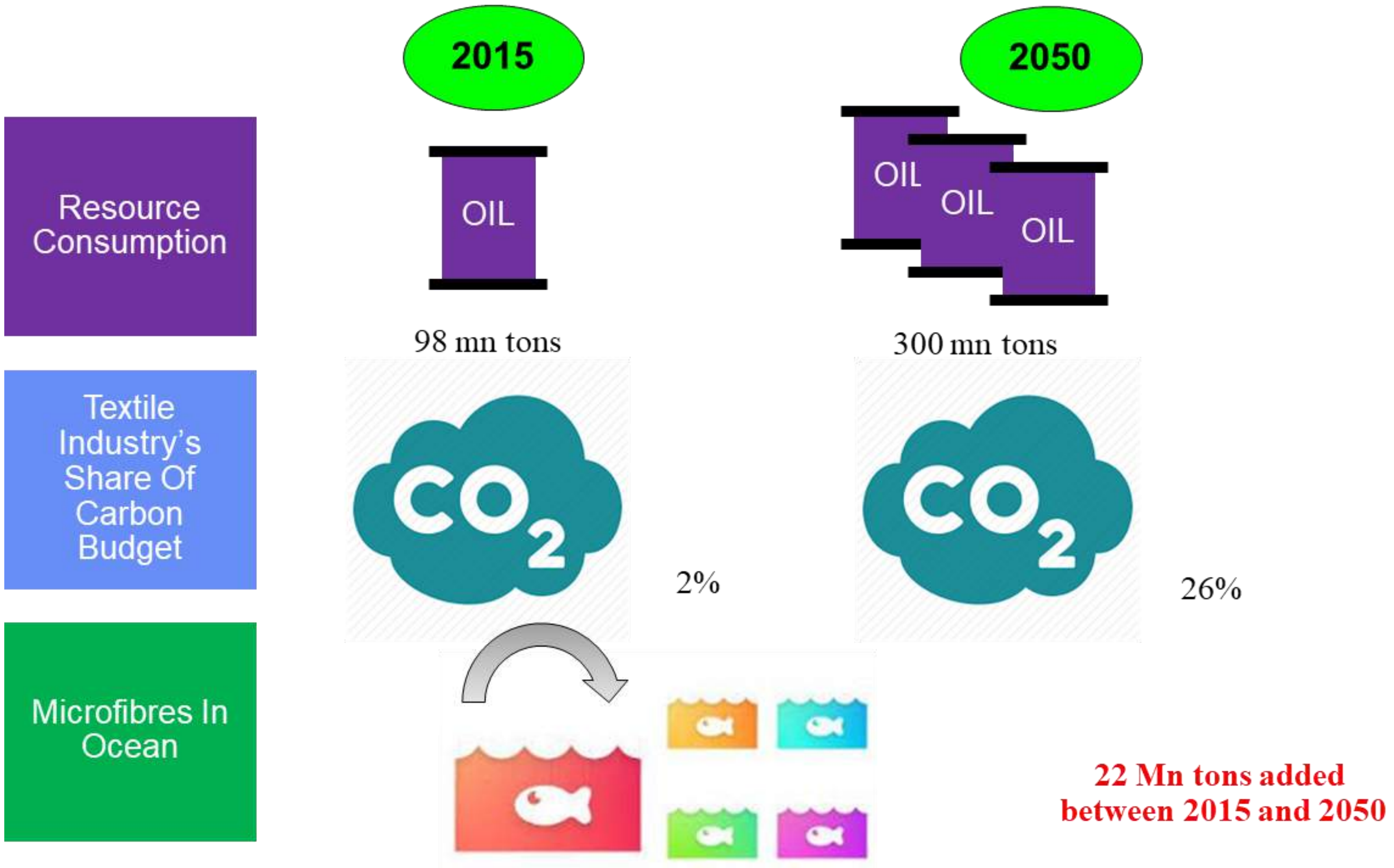


- Secured information sharing for dedicated supply chain partners eliminating multiple certification and audit processes
- Enabling supply chain transparency while offering business related information like stock, capacity and more in real time

Source: HUGO BOSS ©

Sustainability

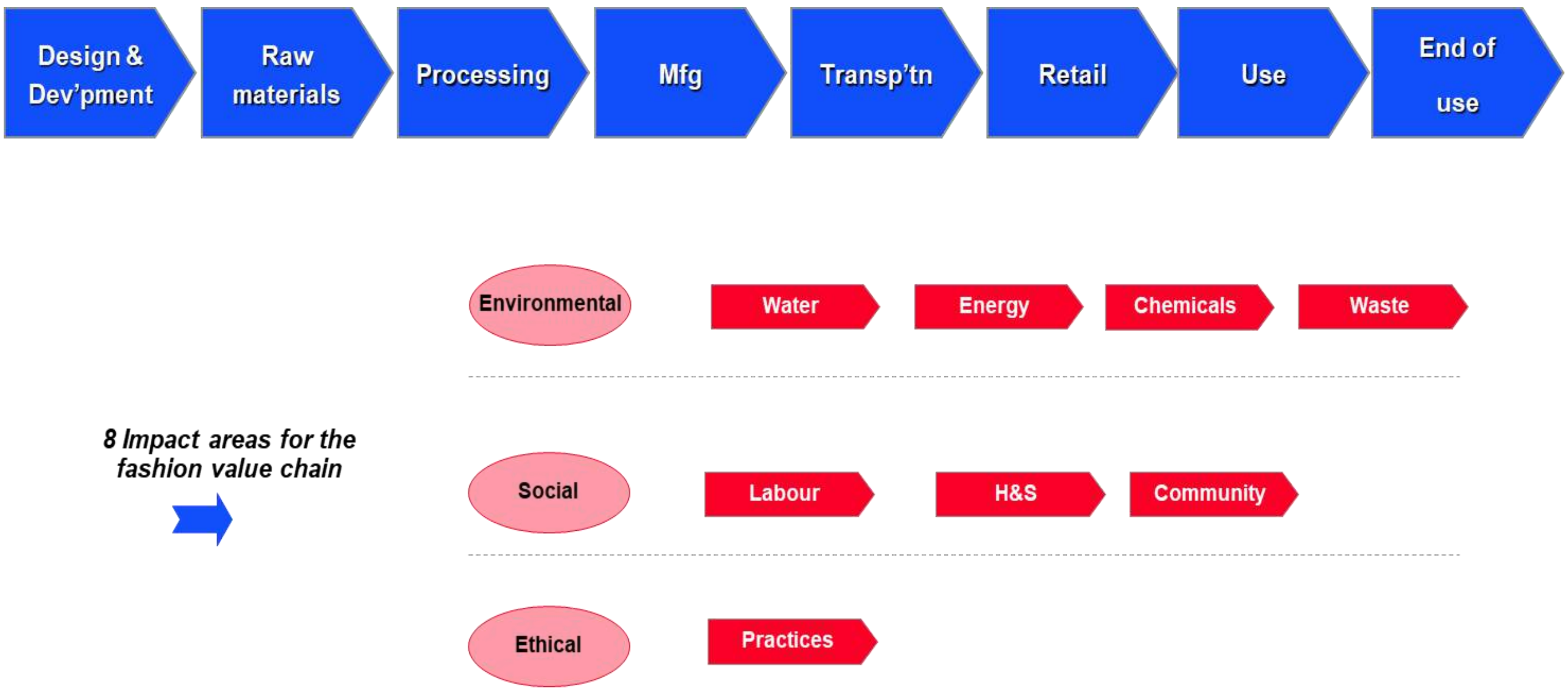
The trajectory of the industry points to the potential for catastrophic outcomes if status quo prevails



Key trends & impact

Sustainability

Global fashion industry has an opportunity to create sustainability across the value chain



Source: "Pulse of the Fashion Industry" by BCG

Sustainability

The development of the sustainability movements in the global textile chain

THE PRODUCT	THE PEOPLE	THE PLANET
TEXTILES VERTRAUEN Geprüft auf Schadstoffe nach Oeko-Tex® Standard 100	BSCI Business Social Compliance Initiative	DETOX
1990	2012	2011-2020

Key trends & impact

Sustainability

Adidas 2020 mission targets:
- 50% water savings
- 20% energy savings
- 75% paper reduction
- 50% waste reduction
- Achieving 100% sustainable input chemistry by adopting the ZDHC MRSL

Adidas

Nike 2020 targets:
- **100% renewable energy** by 2025
- **Zero footwear waste** to landfill
- 20% reduction in freshwater use in dyeing and finishing
- Zero hazardous chemical discharge
- **10% reduction** in products environmental footprint

Nike

Key trends & impact

02

Sustainability

r-PET trends: Knitted Shoes

In 2017, Adidas sold 1 mn shoes made out of ocean plastic

Rothy's lightweight flats are made from knit composed of **100% post-consumer plastic** and other recycled shoes

Nike's Flyknit shoes reduce the material waste of traditional cut and sew production by an average of 60%, and each pair is made from the equivalent of six recycled plastic bottles

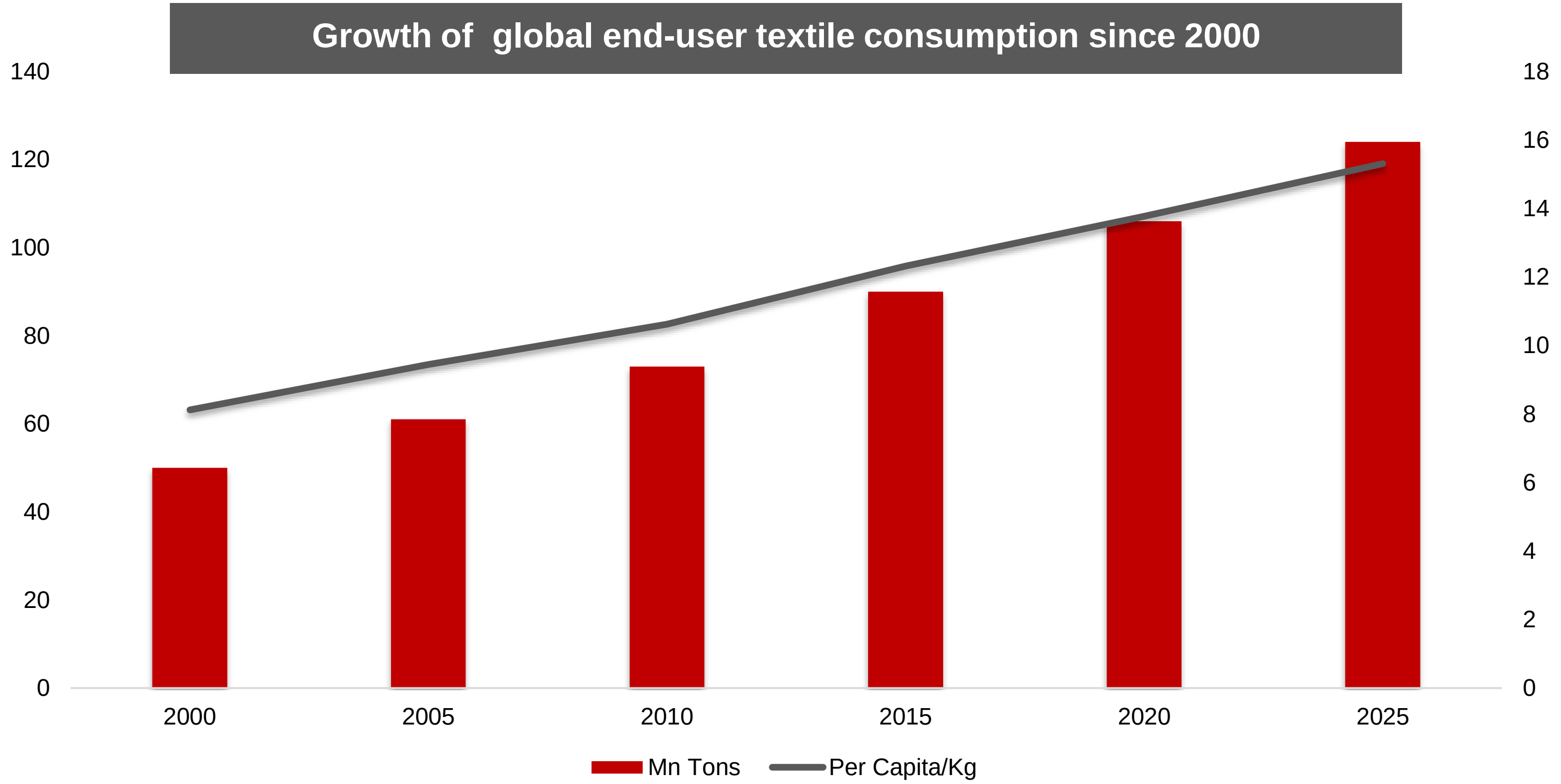
The PET offers minimalist sports shoes, trail shoes, 'ultimate' land and sea boots, etc. The company released eco-canvas and eco-suede in 2015 (each using 50% recycled PET)

Spanish fashion label Ecoalf make lightweight trainers from recycled PET bottles

Textile and clothing - Global

Textile consumption trends

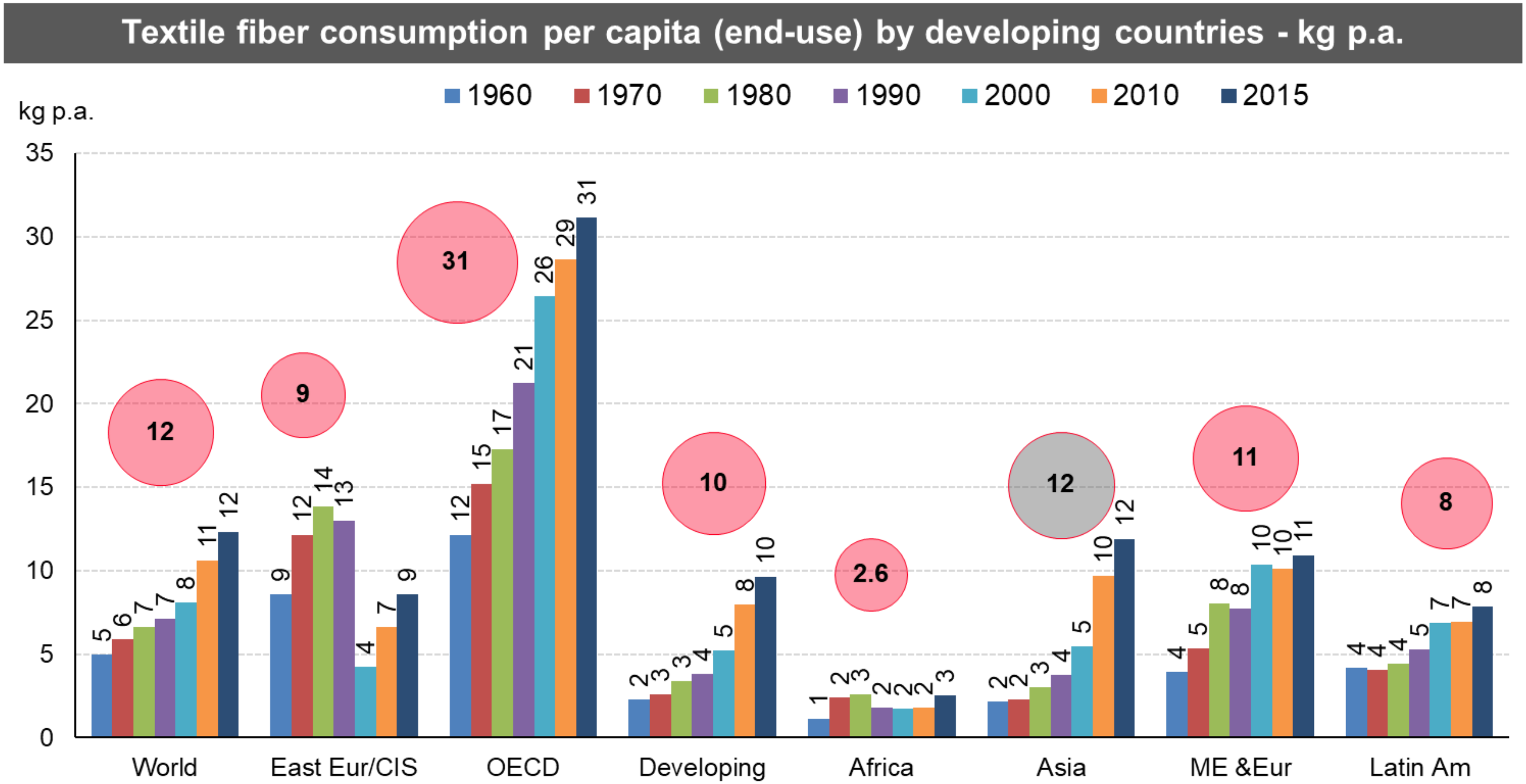
- 2025: 8.1 billion people will require clothing



Source: ICAC

Textile consumption trends

Per capita textile consumption will continue growing, mainly in Asia



Source: ICAC

Textile and clothing - Global

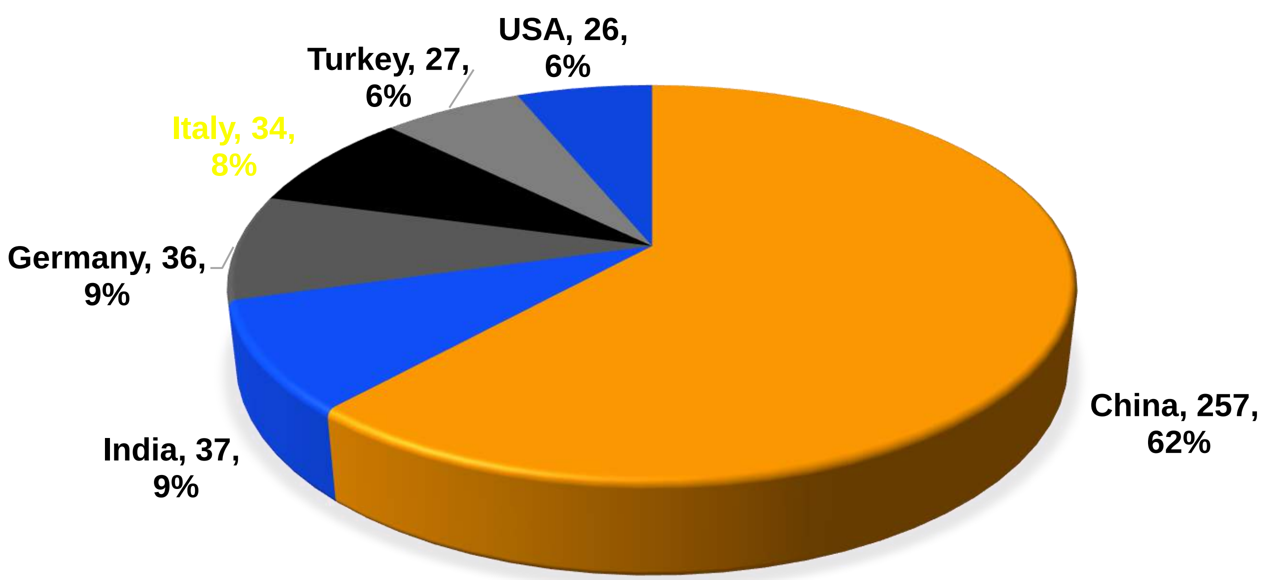
Competitiveness

Top six exporting countries of textile and clothing

- China is the top most exporter with 257 Bn US$ in 2017
- India is the second largest exporter of textile and clothing with 37 Bn US$ in 2017

US$ Bn

Top 6 Exporting countries



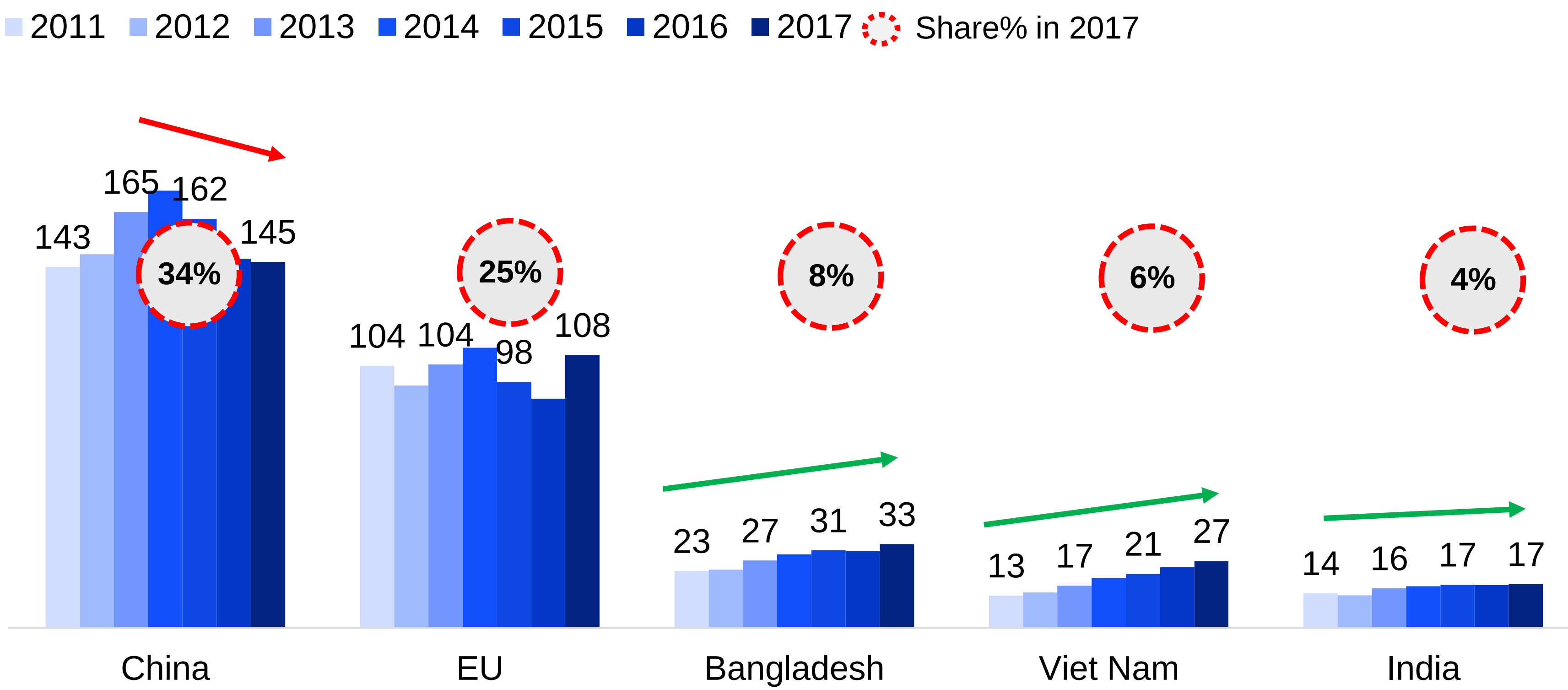
Source . Gherzi analysis & UN comtrade

Textile and clothing - Global

Future sourcing: "China + N"

China remains the largest clothing exporter ($145 Bn) in the world with 34% share – although with declining trend- followed by EU and Bangladesh

Major exporters of clothing [Bn US$]

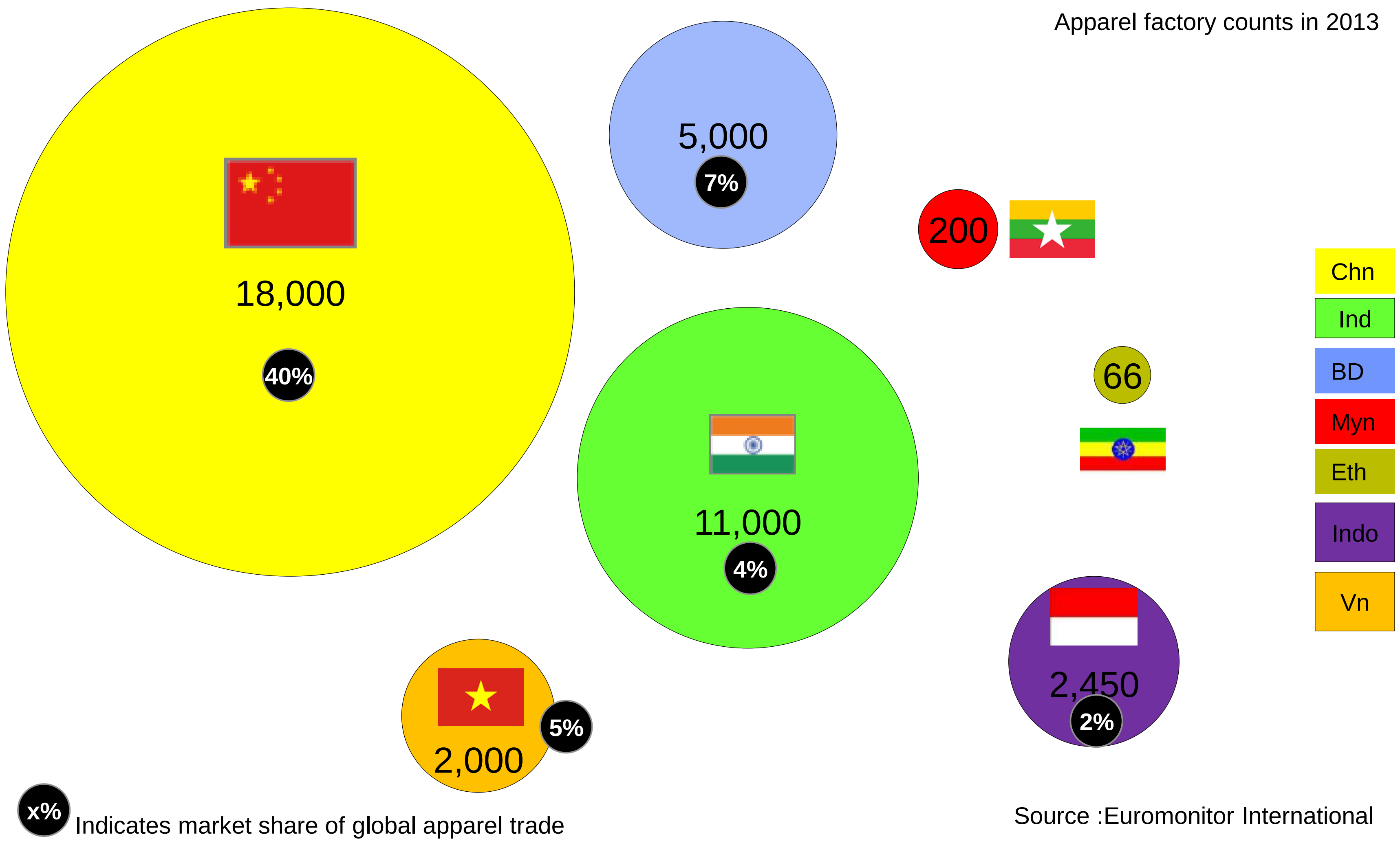


HS codes: 61 & 62

Source: UN Comtrade

Textile and clothing - Global

Future sourcing: "China + N"



Source :Euromonitor International

Textile and clothing - Global

Competitiveness

African countries have competitive wages however many countries face cost disadvantage, especially power

Cost parameters	China	India	Vn	B'desh	IDN	Kenya	ET	Mada	Nig	EGY	UG	BF	CI
	Asian					African							
Wages													
Monthly wages USD	600	175	275	130	300	150	75	100	150	125	100	75	125
Electricity													
Electricity tariff (US$ per kWh)	13	10	7.5	10	9	15	3.5	12.00	12	6.5	12	23	12
Finance cost													
Interest % pa	6	7*	8	10	12	12	10	10	7*	6	7*	11	10

* Concessional interest rate for textile industry under special programme

Source: Gherzi database

Technical Textiles – Global View

Global TechTex market is estimated at USD 171 Bn with CAGR of 5%;
EU, USA and China represent about half of the world market

2017 World TECHTEX Market

World TECHTEX Market*
2014 to 2020

Technical Textiles is becoming an important (in size) global business

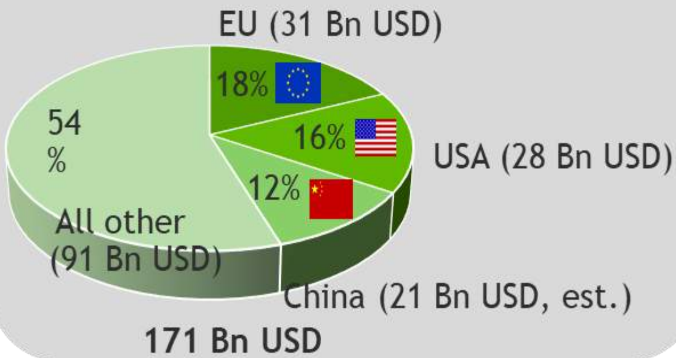
*on roll good level

Five largest segments in staple fibre based TechTex

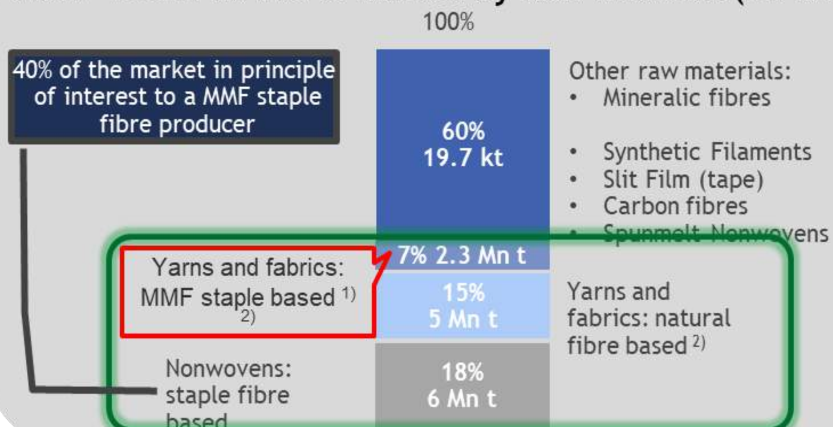
- Hometech
- Packtech
- Indutech
- Hygiene
- Mobiltech

8.6 Mn t (2/3 of total TechTex ex staple fibre

2017 World TECHTEX Consumption



2017 TECHTEX World Market by Raw Material (33 Mn t)

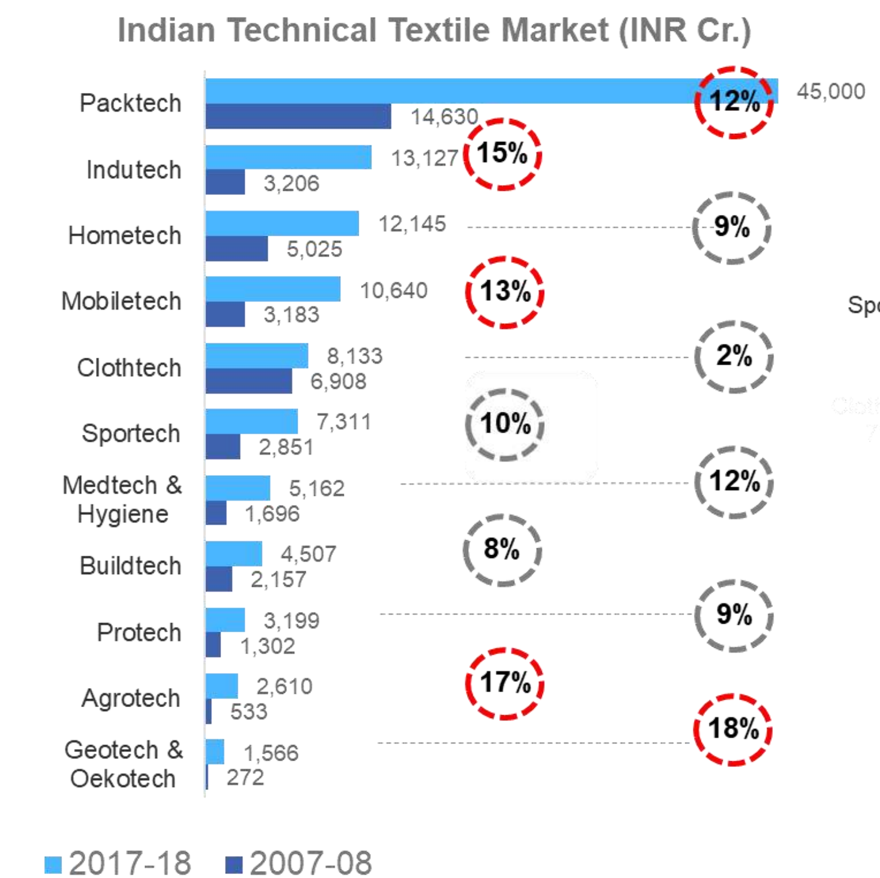


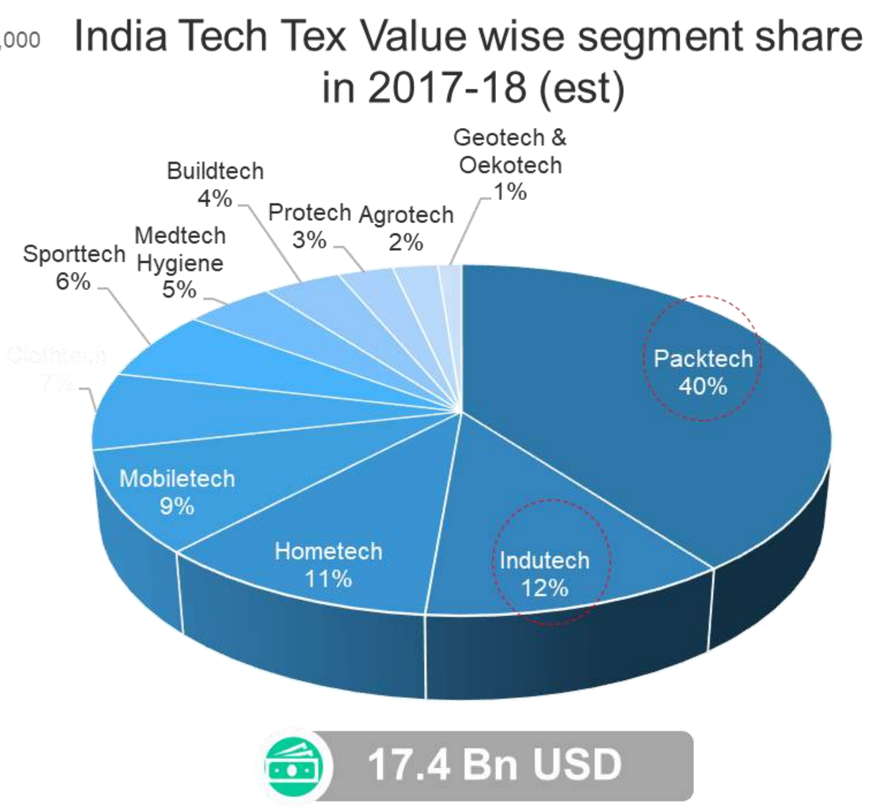
Sources: World Bank, Gherzi analysis and estimates

Textiles - Key Segments

Technical Textiles – India View

Indian Techtex market is estimated at US$ 17.4 bn is growing over 13% CAGR with 5 segments growing above average rate



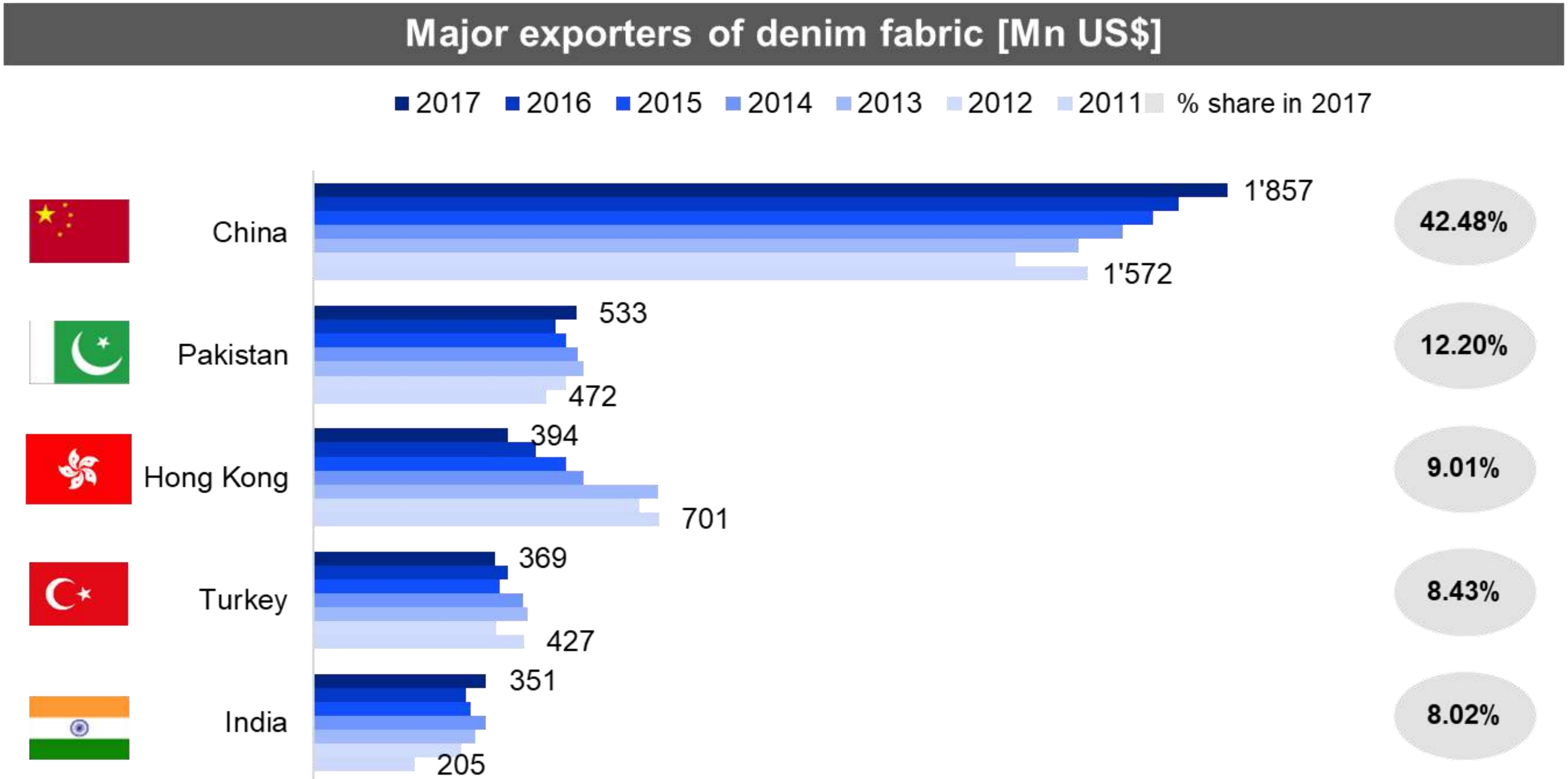


Avg. USD / INR : 40 (2007-08), 65 (2017-18)

Source: Gherzi analysis based on industry data

Denim fabrics

China is the major exporter of denim fabric having 42.48% share followed by Pakistan with 12.20% and Hong Kong with 9.01% share in 2017

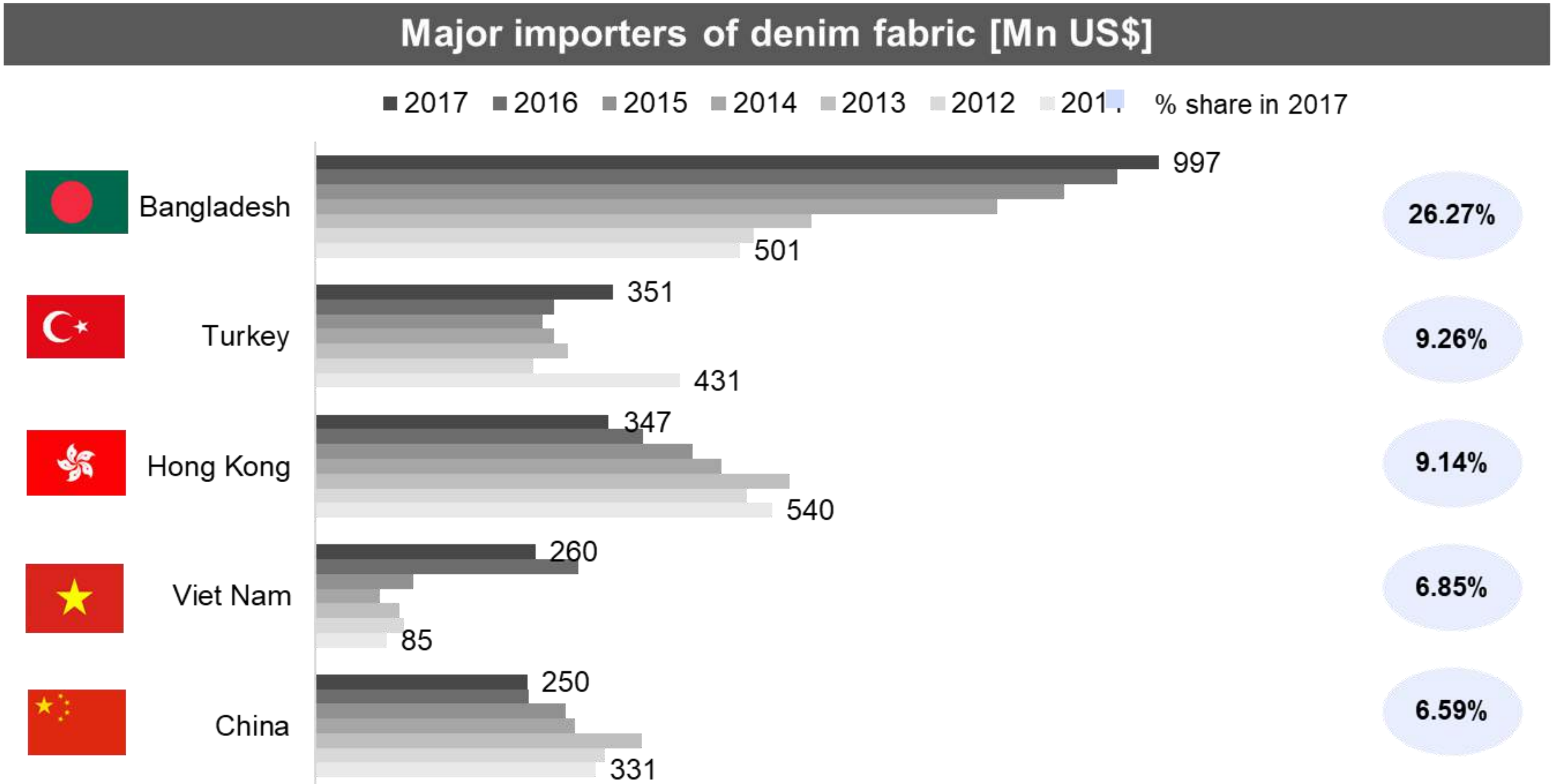


HS code: 520942/ 521142

Source: UN Comtrade

Denim fabrics

Bangladesh is the major importer of denim fabric having 26% share followed by Turkey with 9.26% and Hong Kong with 9.14% share in 2017

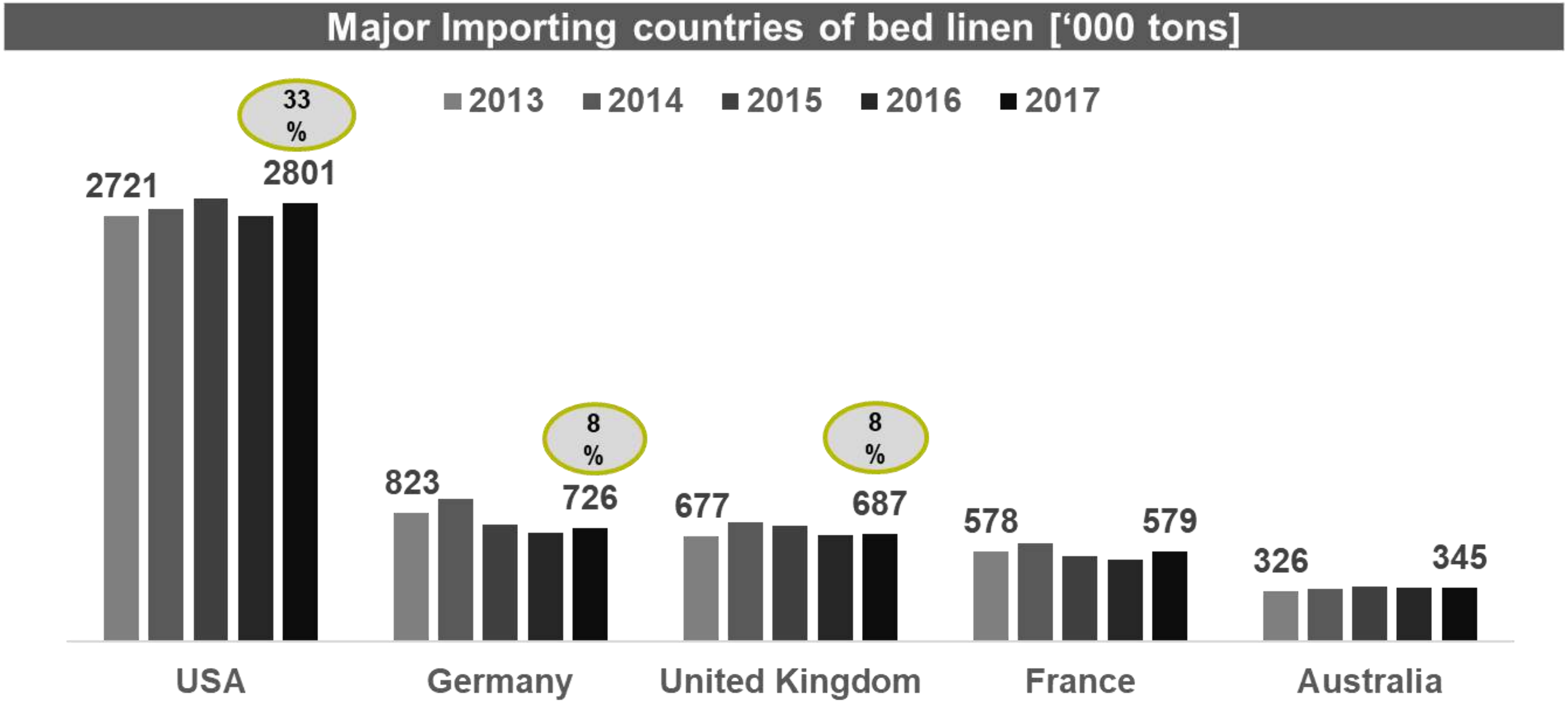


HS code: 520942/ 521142

Source: UN Comtrade

Made-ups: Bed Linen Segment

Top five import countries represent 60% share in total imports, with the USA, UK and Germany being key destinations

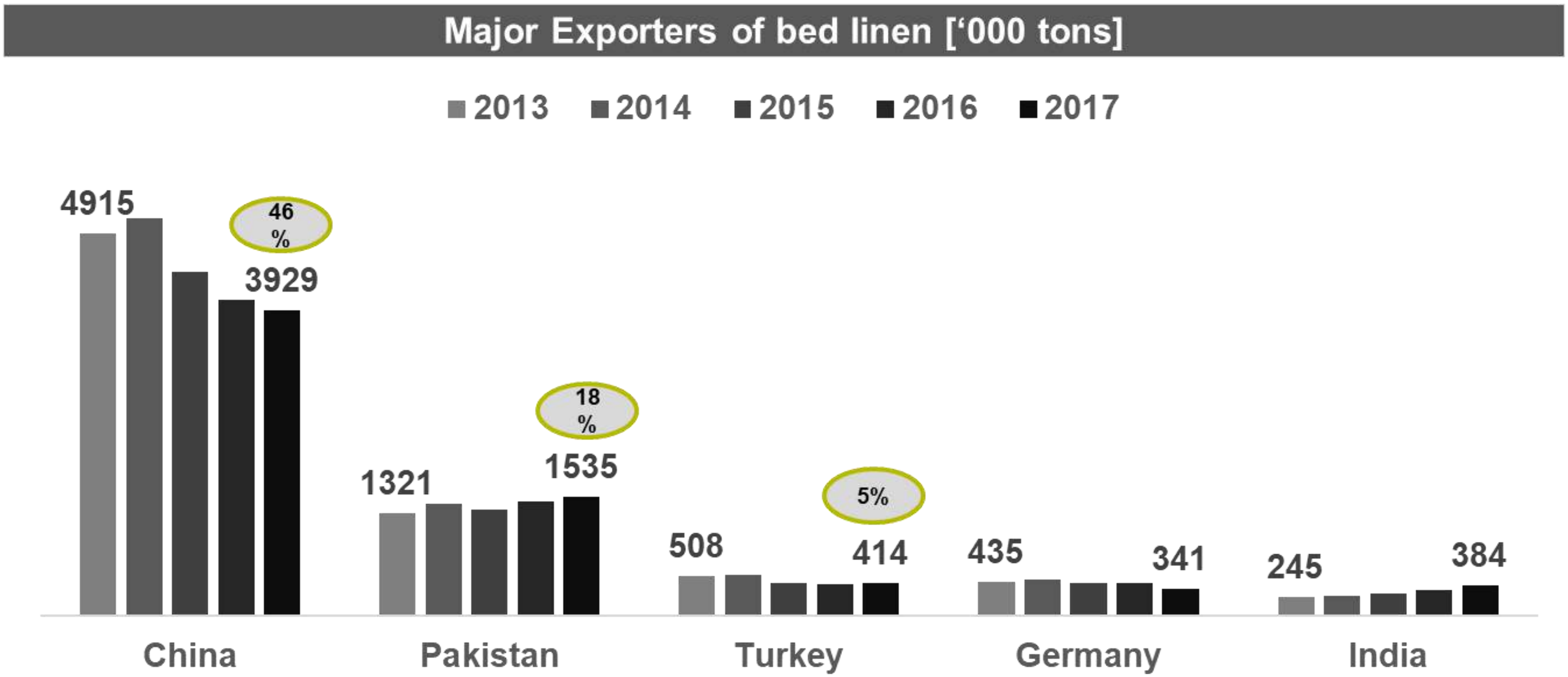


HS Code : 630221/31, 630222/32, 630229/39

Source : UN comtrade & Gherzi estimates

Made-ups: Bed Linen Segment

Top five Exporting countries of bed linen have 77% share in total exports, to world, China is the major exporter with 46% followed by Pakistan 18%



HS Code : 630221/31, 630222/32, 630229/39

Source : UN comtrade & Gherzi estimates

Textiles - Key Segments

Made-ups: Major players

Major companies offering bed linen items in retail sector in USA

Sl no	*Company name*	*Revenue in 2016*	*Company*
1	**Amazon**	$250 Mn	amazon
2	**Casper**	$175 Mn	Casper
3	**Saatva**	$146 Mn	saatva
4	**Tuft & Needle**	$120 Mn	&
5	**1800Mattress. com**	$80 Mn	1800mattress

Made-ups: Emerging challenges facing suppliers

- **MACRO - LEVEL**
  - Increasing intensity of Technical and Social compliance standards
  - Increasing emphasis on Environment Sustainability
  - Preference for large buyers for Vertically Integrated Suppliers
  - Digitalization of Retail Trade and Shift from Brick & Mortar stores to On-line

- **MICRO - LEVEL**
  - Quick style changes, higher SKU counts and sharper lead times
  - Growing resistance to prices increases in standard products
  - Increasing complexity in Logistics and Deliveries

Made-ups: India’s strength

- **Raw material availability – Cotton and MMF**
  - India is the worlds largest producer of cotton fibres and second largest producer of MMF
  - We grow our own ELS cotton, which gives us a cost effective base for finer yarn counts and the ability to meet the demand for high thread count cotton sheets in USA, EU markets at the upper levels of the value chain
- **Availability of Skilled labour and Supervisory manpower**
  - Well trained manpower is available at all the major textile hubs
  - Adaptation of IT skills opens
- **Presence of large capacities with modern state-of-art manufacturing equipment**
- **Growing Design and Innovation capabilities**
  - Our strength is enhanced by the large base of diverse textile heritage
- **Active Government Support**
  - Financial and technical assistance through ATUF
  - Established SEZ’s Textile parks & cluster Zones
  - GST Implementation

What is the way forward?

let’s learn from success stories

CASE STUDIES

Examples: Denim City

Sponsor

DENIM CITY

Denim City / Netherlands

Focus

- Promoting ✓
- Supporting ✓
- Connecting ✓
- Learning ✓
- Producing ✓

Denim City

Comments

- Denim City is a center for craftsmanship and innovation in the denim industry
- Like its logo, Denim City consists of five elements:

  1. A denim craftsman's workshop;
  2. An institute for developing and sharing knowledge, with its own archive;
  3. The Blue Lab, a sustainable laundry innovation center;
  4. The Embassy, space for networking and enterprise;
  5. An education facility for Jean School and its international course

Examples: Denim City

3 Sponsor

HOUSE OF DENIM
A BRIGHTER BLUE

House of Denim / Netherlands

Focus

- Promoting
- Supporting
- Connecting
- Learning ✓
- Producing

Jean School

JEAN SCHOOL
HOUSE OF DENIM

Comments

- The Jean School is an initiative of James Veenhoff (former director and initiator of the Amsterdam Fashion Week) and Mariette Hoitink (owner HTNK Fashion recruitment & consultancy). In 2009, Veenhoff and Hoitink started the foundation House of Denim
- In addition to the Dutch education, the Jean School in cooperation with House of Denim, recently started a one-year English-speaking education that is especially developed for foreign students and Dutch students with a HAVO-diploma or who have a propaedeutic certificate.

Interest for NFA

Examples: Denim City

4

Sponsor

DENIM CITY

Denim City / Netherlands

Focus

- Promoting
- Supporting
- Connecting
- Learning
- **Producing** ✓

Blue Lab

Comments

- Blue Lab Amsterdam is powered by a consortium of denim industry leaders in order to develop new, cleaner and innovative recipes for denim industry
- Denim City is founded as a non-for-profit organisation by 'House of Denim Foundation' aiming to bring together brands, students, academics and industry to take the industry "towards a brighter blue'
- Denim City consist of education facilities, craftsman's workshop, an archive, an expertise center and a networking space with offices and workspaces

Interest for NFA

Examples: New York

27 Sponsor

MANUFACTURE NEW YORK

Manufacture New York / USA

Focus

- Promoting
- Supporting
- Connecting
- Learning
- **Producing** ✓

Designer co-working & Flex Space

Comments

- Shared Industrial Sewing Room (Lockstitch, Serger, Blind Hem, Heavy Duty machine great for leather and denim & other specialty machines PLUS pattern/cutting table, full length dress forms, iron & steamer)
- Shared Materials (printer paper, dotted pattern paper, oaktag, muslin)
- Fashion Co-Working Computer Lab (with Adobe Creative Cloud & Rhino)
- Conference/Fitting RoomPrivate Storage Space (small cubby + fabric storage)
- Front Desk Services (package and mail receiving, printing, fax, phone, guests)

Interest for NFA

Examples: New York

28 Sponsor

Manufacture New York / USA

Focus

- Promoting
- Supporting
- Connecting
- Learning
- **Producing** ✔

Product development

Comments

- Product development packages for emerging and independent designers and brands including :
  1. Consultations
  2. Pattern
  3. Pattern adjustment
  4. Muslin
  5. Fitting
  6. Initial sample
- Packages range in price based on complexity, type of fabric and trims
- Manage production, for a fee based on total order size, for a given line by matching barnds with the right manufacturer in New York City

Interest for NFA

DENIM
CITY
AMSTERDAM

THE BEGINNING

DENIM CITY

AMSTERDAM

THE CITY OF JEANS

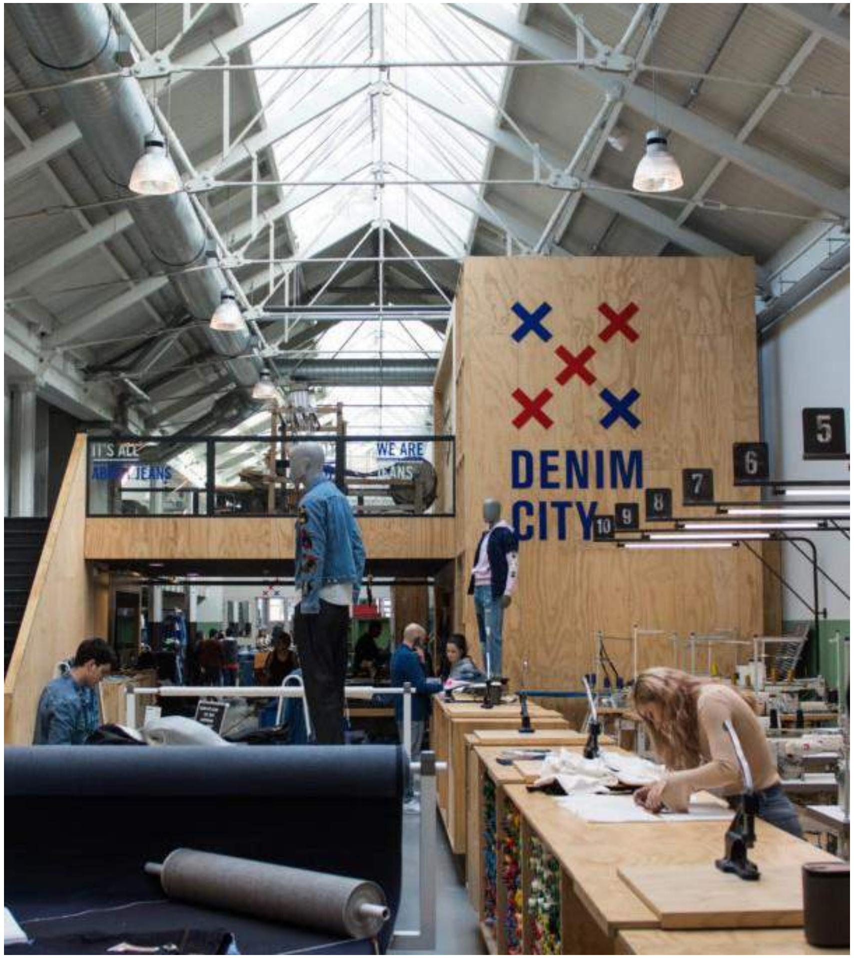
The Netherlands is the country with the most pants per capita because of its culture, but also because of the offer that was created by recognition. Due to the work of the Denim City, Amsterdam is known today as the "European Jeans Capital".

THE CITY OF JEANS

DENIM CITY

DENIM CITY

Denim City is a campus of innovation founded by the House of Denim with a clear mission: connecting and inspire stakeholders to bring an industry "Towards a brighter blue". Everything that we do is aimed at making a cleaner and more intelligent jeans wash through education and collaboration.



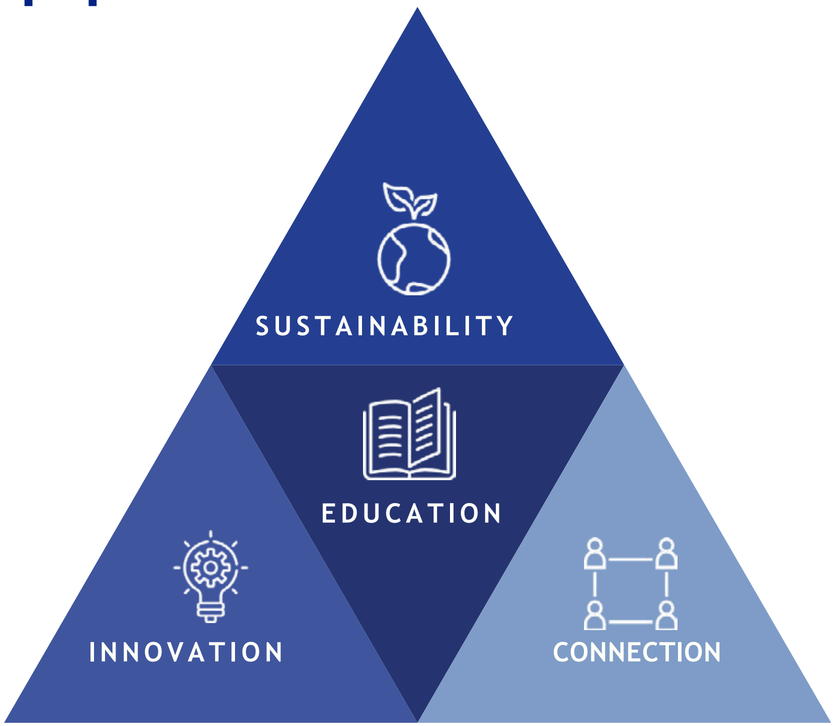
THE CITY OF JEANS

DENIM CITY

DENIM CITY

Denim City aims to raise the standard, reduce environmental impact, adoption of more and unite the global denim industry under a same ceiling.

VALORES DENIM CITY



Case Studies

Brazilian textile and clothing from the perspective of the global value chain - present and future possibilities

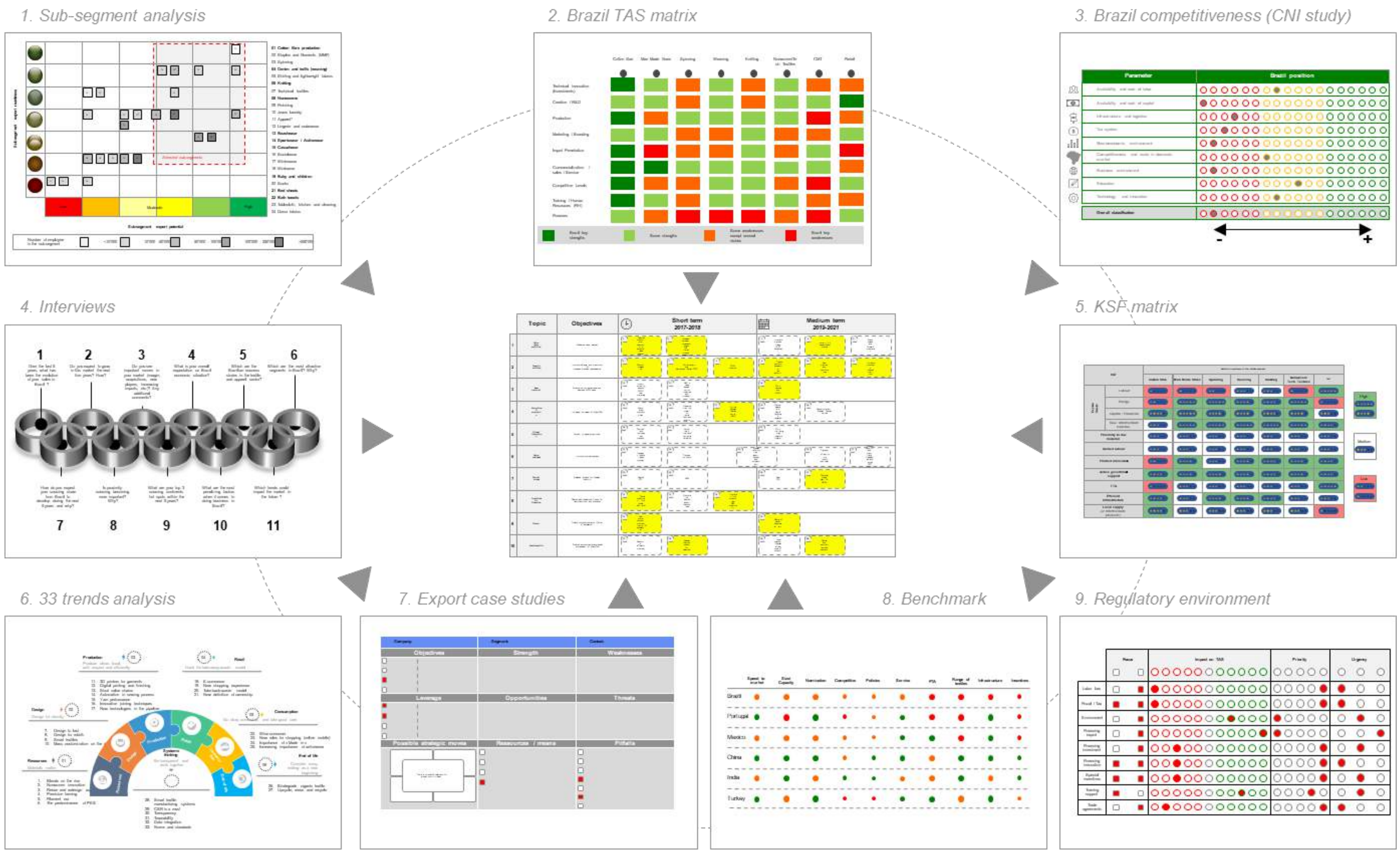
Textile and Clothing – Brazil Project

Launch of the TASKING program

- 9 tools have been used to identify strategic projects
- 10 strategic topics have been addressed
- 40 projects to give a new boost to the Brazil TAS
- Creation of 5 dedicated task forces to organise, coordinate and monitor the 40 identified projects

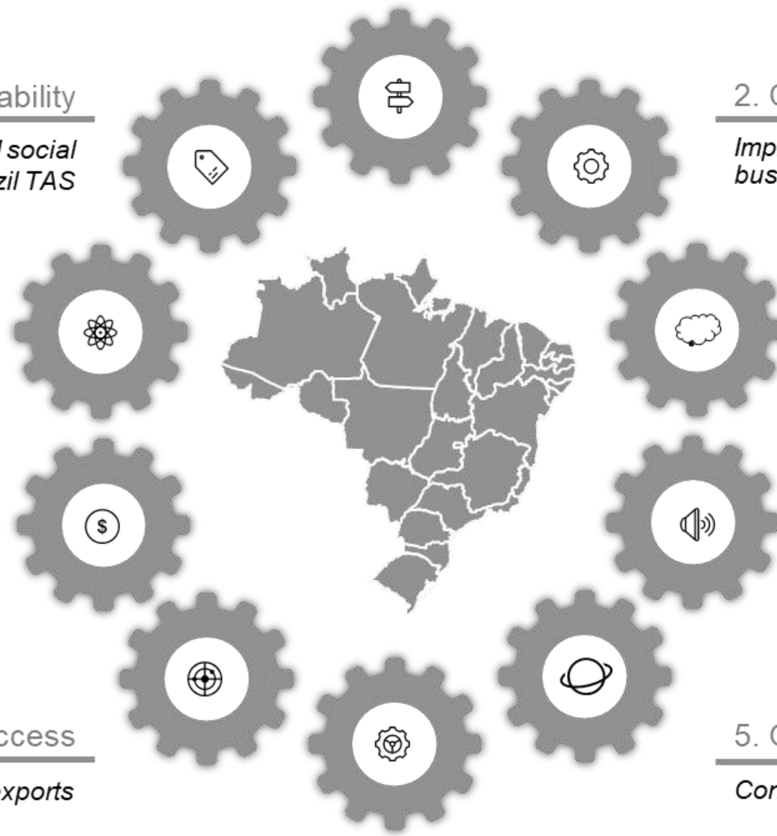
Textile and Clothing – Brazil Project

9 tools have been used to identify strategic projects



Textile and Clothing – Brazil Project

10 strategic topics have been addressed



1. Value chain evolution

Maximize value addition

2. Capacity building

Improve HR skills and productivity & business process reengineering

3. Raw material

Enhance cotton advantage and address MMF gaps

4. Marketing & promotion

Increase the visibility of Brazil TAS

5. Global integration

Connect to global supply chain

6. Doing business

Improve competitiveness

7. Market access

Privileged access for Brazilian exports

8. Incentives for financing

Guaranteed competitive funding for new investment and innovation

9. Cluster

Create mini eco-systems (Center of excellence)

10. Sustainability

Enhance environmental and social sustainability of Brazil TAS

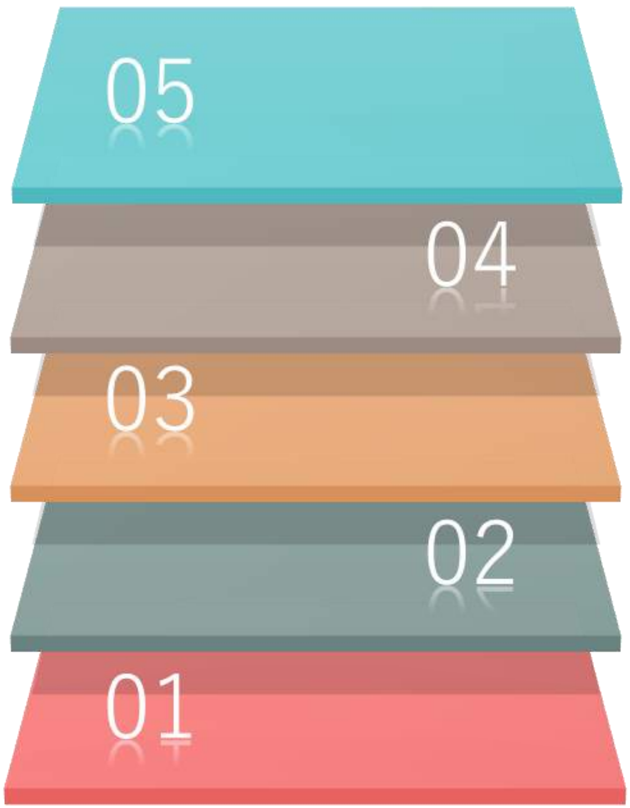
Textile and Clothing – Brazil Project

40 projects to give a new boost to the Brazil TAS

	Topic	Objectives	Short term 2017-2018			Medium term 2019-2021		
								New concepts
1	**Value chain evolution**	Maximize value addition	1 Selected product sub-segments to enhance value addition	2 Linkages between retail and Brazil TAS (retail organic growth)		3 Innovative supply chains (OPT Paraguay)	4 Industry 4.0 dissemination module	5 Brand building and forward integration
2	**Capacity building**	Improve HR skills and productivity & business process reengineering	6 Market intelligence	7 Entrepreneur-ship workshops (Small CMT)	8 TQM practice	9 Training centers / Academia (eg laundry)	10 Best practice and benchmarking	11 Incubator programs (fashion start-ups)
3	**Raw material**	Enhance cotton advantage and address MMF gaps	12 Import duties for specific MMF raw materials	13 R&D in value added cotton (coloured and organic)		14 FDI in viscose and MMF		
4	**Marketing & promotion**	Increase the visibility of Brazil TAS	15 Brand Brazil marketing plan	16 Presence in all the major int'l textile fairs and events	17 On-line Brazilian fashion portal (ABIT)	18 Market weeks (e.g. Santa Catarina in hometex)	19 Signature event: Brazilian fashion carnival	
5	**Global integration**	Connect to global supply chain	20 Technical and technological knowhow	21 Active role in international textile networks		22 FDI in the textile chain (inward/outward)		
6	**Doing business**	Improve competitiveness	23 Drawback regime training modules	24 Transaction costs	25 Brazilian reforms (tax, labour, political and bureaucracy)		26 Transport infrastructure (costs and time)	27 Shadow industry and piracy (highly fragmented and small CMT units)
7	**Market access**	Privileged access for Brazilian exports	28 Existing FTA	29 APEX		30 New FTA	31 Material «Mega Mart» for SMEs	
8	**Incentives for financing**	Guaranteed competitive funding for new investment and innovation	32 Textile investment fund (single digit rate)	33 Promote the existing export financing tools	34 Innovation fund scheme (low R&D investment)			
9	**Cluster**	Create mini eco-systems (Center of excellence)	35 New cluster concept program (center of excellence)			36 Mecca of denim, beachwear, etc.		
10	**Sustainability**	Enhance environmental and social sustainability of Brazil TAS	37 Resource efficiency program	38 Special financing window for cleantech		39 Label initiative: Brazilian ethical code of conduct	40 Textile and garment recycling solutions	

Textile and Clothing – Brazil Project

Gherzi created 5 dedicated task forces to organise, coordinate and monitor the 40 identified projects



#5 Promote

#4 Support

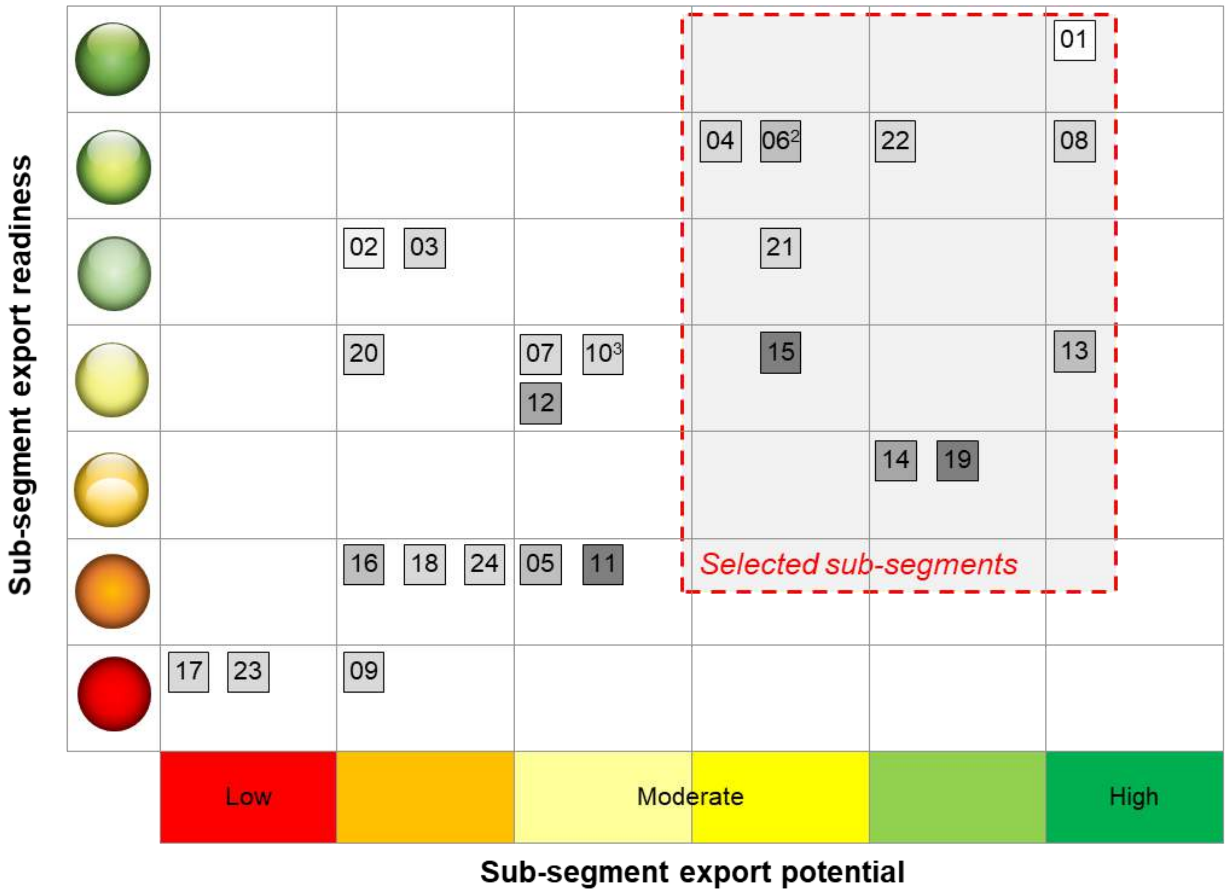
#3 Connect

#2 Learn

#1 Produce

Textile and Clothing – Brazil Project

23 sub-segments[1] of the Brazil TAS have been analyzed in order to identify their respective export readiness and potential



01 Cotton fibre production
02 Staples and filaments (MMF)
03 Spinning
04 Denim and twills (weaving)
05 Shirting and lightweight fabrics
06 Knitting
07 Technical textiles
08 Nonwovens
09 Finishing
10 Jeans laundry
11 Apparel[1]
12 Lingerie and underwear
13 Beachwear
14 Sportswear / Activewear
15 Casualwear
16 Socialwear
17 Winterwear
18 Workwear
19 Baby and children
20 Socks
21 Bed sheets
22 Bath towels
23 Tablecloth, kitchen and cleaning
24 Decor fabrics

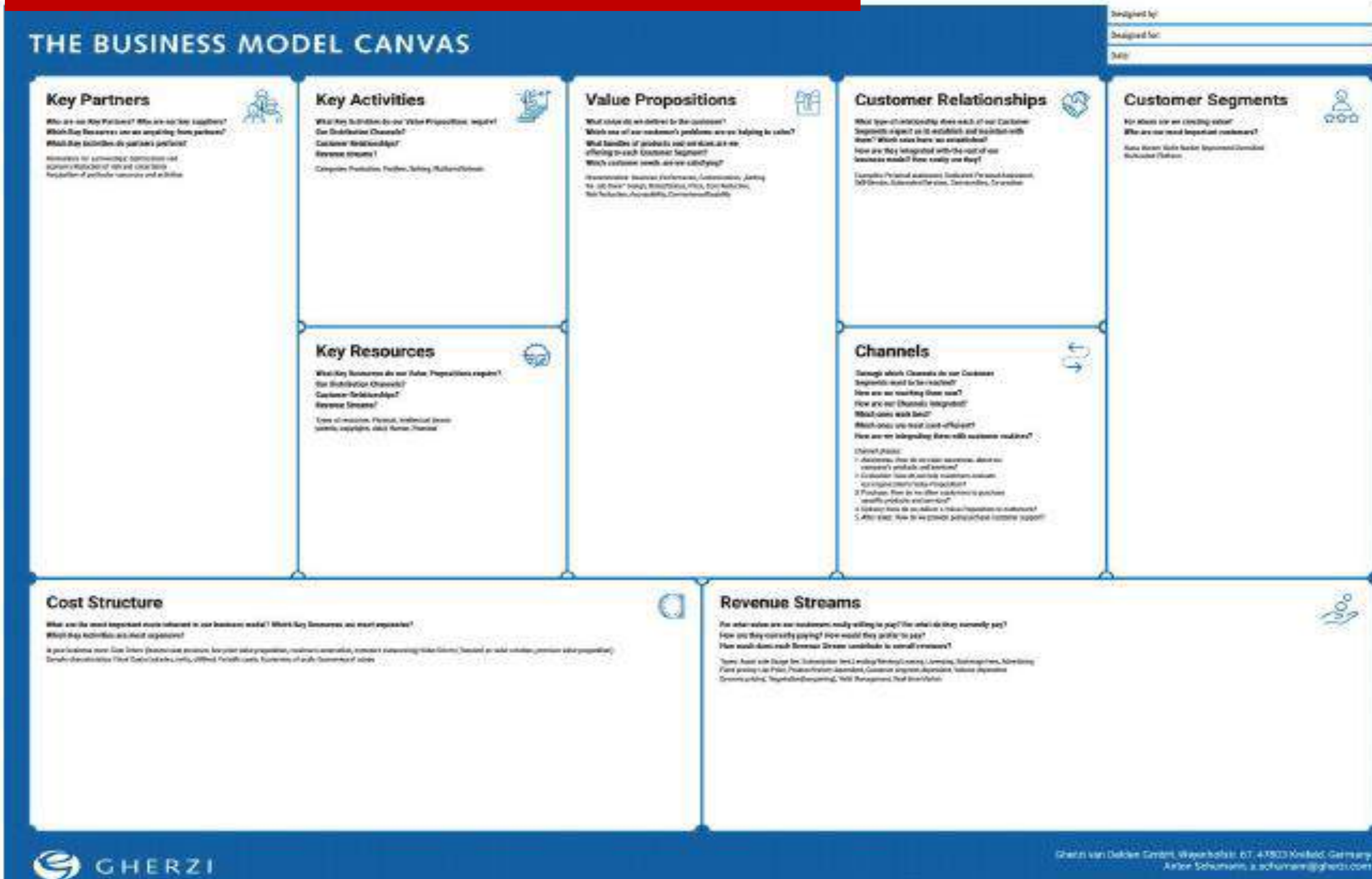
Number of employee in the sub-segment					
	<10'000	10'000 -50'000	50'000 - 100'000	100'000 - 250'000	>250'000

[1]*Apparel (#11) is not a sub-segment* / [2]cotton / [3]Complementary sub-segment related to sub-segment #4

Source: Gherzi analysis

any advice?

How to work with and on the business model?



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