

# DEVELOPMENTS IN COTTON & TEXTILE INDUSTRY IN PAKISTAN

PRESENTATION BY :

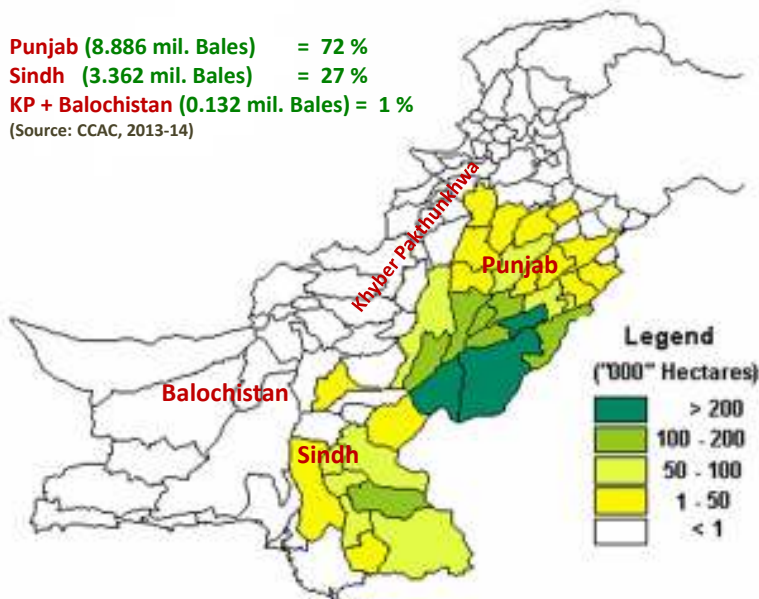
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## Cotton Map of Pakistan

**Punjab (8.886 mil. Bales) = 72 %**  
**Sindh (3.362 mil. Bales) = 27 %**  
**KP + Balochistan (0.132 mil. Bales) = 1 %**  
(Source: CCAC, 2013-14)



## History of Cotton Cultivation in Pakistan

- ❖ **5000 BC** Desi cotton (*Gossypium arboreum*).
- ❖ **1905** Research on American upland cotton (*Gossypium hirsutum*).
- ❖ **1914** Upland cotton cultivation started.
- ❖ **2015** Upland cotton grown on 99% area.

## Cotton and Textiles Growth Pattern

	1947-48	2014-15
Area (Ml. ha)	1.23	3.1
Production (Ml. bales)	1.16	13.9
Yield (Kgs/ha)	160	812
Ginneries	31	1200
Textile Mills	2	500
Mill Consumption (Ml. bales)	0.04	15.0
Yarn Production (Ml. Kgs)	6.2	1190
Cloth Production (Ml. Sq. Mtr)	29.5	8949

## Pakistan: Cotton-Based Economy

❖ Foreign Exchange Earnings	=	US\$ 14 billion (60%)
❖ Contribution to GDP	=	1.5 %
❖ Value Addition in Agri.	=	7.0 %
❖ Employment	=	> 40% of workforce
❖ Source of Edible Oil	=	60~70%
❖ Women engagement		

(seeding, weeding, inter-culturing, picking etc.)

Source: Economic Survey of Pakistan 2012

### Agencies Involved in Cotton R&D

#### FEDERAL

##### Ministry of Textile Industry

- i) Pakistan Central Cotton Committee
- ii) Pakistan Cotton Standards Institute

##### Ministry of National Food Security & Research

- i) Federal Seed Certification & Registration Department
- ii) Pakistan Agricultural Research Council
- iii) Agricultural Policy Institute
- iv) Plant Protection Department

##### Ministry of Climate Change

- i) Pakistan Environment Protection Agency

## Agencies Involved in Cotton

### Provincial

Agriculture Departments

Agriculture Universities

Seed Councils

Seed Corporations

### Private

APTMA, KCA, PCGA, PCPA/PAPA, Seed  
Companies, NGOs

## Agencies Involved in Cotton R&D

### FEDERAL

#### Cabinet Division

- i) Intellectual Property Organization

#### Atomic Energy Commission

- i) Nuclear Institute for Agriculture & Biology, Faisalabad
- ii) National Institute for Biotechnology & Genetic Engineering, Faisalabad
- iii) Nuclear Institute for Agriculture, Tandojam

#### Ministry of Commerce

- i) Trading Corporation of Pakistan

## Agencies Involved in Cotton R&D

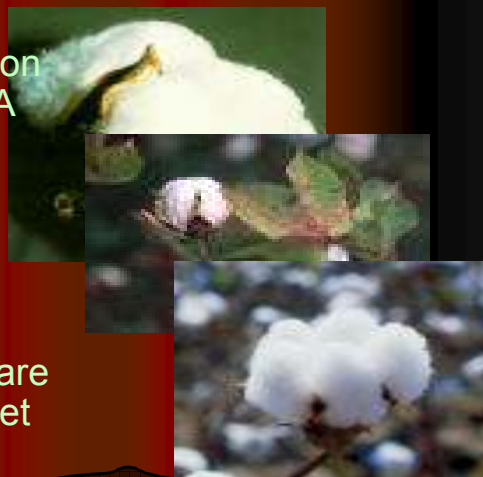
### INTERNATIONAL

- i) International Centre for Agriculture Development in Dry Land Areas (ICARDA)
- ii) Food & Agriculture Organization (FAO)
- iii) World Wide Fund for Nature (WWF)
- iv) Better Cotton Initiative (BCI)
- v) International Institute of Biological Control (IIBC)
- vi) Commonwealth Agricultural Bureau International (CABI)

## PAKISTAN

### The cotton country...

- 4<sup>th</sup> largest grower of cotton after China, India & USA
- 3<sup>rd</sup> largest consumer of cotton
- 3<sup>rd</sup> largest exporter of cotton textiles
- 2<sup>nd</sup> largest supplier of cotton yarn with 26% share of the international market



## Pakistan: Cotton Specifications

S. No	PCSI Grade	Equivalence with Pakistan Export Type	Equivalence with American Cotton Grade	Staple Length
1	Super	1544	Good Middling	1-1/8" to 1-1/32"
2	One	1505	Strict Middling	1-1/8" to 1-1/32"
3	Two	1467-1503	Middling	1-1/8" to 1-1/32"
4	Three	Afzal/Nemis/1414	Strict Low Middling	1-1/8" to 1"
5	Four	Alaka/1412/Nadan	Low Middling	1-3/32" to 1"
6	Five	1210	Strict Good Ordinary	1-1/32" to 15/16"

## Pakistan: Cotton Quality

- The micronaire range of Pakistan cotton is 3.8 to 4.9 NCL which is prime micronaire range
- Pakistan cotton is best suited for spinning of 20 to 40 counts
- It has good absorption i.e. 90,000 PSI and above
- It has good uniformity
- Pakistani cotton staple is between 2.38 c.m to 3.15 cm
- 12 million bales per annum
- New varieties introduced every year
- Excellent absorption capacity
- Good dyeing and printing capabilities
- Suitable for all kinds of cotton blends

## RECENT DEVELOPMENTS IN COTTON

### CLCuV RESISTANT GERMPLASM

- **Desi Cotton**
    - G. arboreum*      Pakistani
    - G. herbaceum*      Indian
  - **Wild Species**
    - G. anomalum*
    - G. gossypoides*
- 26 Chromosomes

Success has been achieved for transfer of resistant gene from Desi cotton and Wild species into Upland cotton for development of resistant varieties

## **Bed-furrow Planting Technique**



## **Weed Management**

- ❖ **Chemical weed control.**
- ❖ **Screening of weedicide (Pre- and Post-emergence).**
- ❖ **Method of application.**



## **Drip Irrigation**

- ❖ **Saving of irrigation water.**
- ❖ **Labour intensive for weed management.**
- ❖ **Not fit for silt loam and clay loam soils.**

## **Plant Protection**

- ❖ **Insecticide resistance management**
- ❖ **Integrated pest management**
  - ❖ **Pest scouting technique**
  - ❖ **Determination of ETLs**
  - ❖ **Biological control of pests (Mealybug)**
  - ❖ **Insecticide application (dose, time)**

## Physiological Studies

- ❖ **Screening of breeding material for heat tolerance on the basis of physiological parameters.**
- ❖ **Adaptability of genotypes to water stress conditions.**

PAKISTAN:

DEVELOPMENTS IN  
TEXTILE INDUSTRY

## Pakistan: Textile and Clothing range

- Cotton
- Yarn
- Grey fabric
- Bleached fabric
- Dyed fabric
- Printed fabric
- Knitted fabric
- Bed linen
- Home textiles



- Made ups
- Towels
- Industrial Uniforms
- Sportswear
- Baby wear
- Foundation Garments
- Woven apparel
- Knitwear
- Accessories

## Pakistan: National Policy - Initiatives

- Textile Cities
- Garment Cities
- Quality Management
- Brand acquisition support
- Industrial relocation support
- Joint Ventures support
- Skill Development Council
- Hiring of consultants from abroad

## Pakistan: Technology

- Vertically integrated units mean that there is full control on the production of the entire value chain, from fibre to garment
- The buyers are assured of consistent quality
- Short lead times and quick deliveries
- Versatility in product range
- Flexibility in designing
- In-house embroidery and accessories

## Pakistan: Social Compliance

- Formation of Pakistan Compliance Initiative (PCI) by the private sector
- All Textile related Associations imparting awareness and training in benchmarking
- Pakistani exporters have a very high level of social compliance compared to their competitors
- Most factories complying to ISO 9000, 14000 and SA 8000 standards
- No child labour or sexual harassment
- Provision of transport to women workers

## Pakistan: Environmental standards

- Environment Protection Agency
- Trade Policy emphasis on process management and environmental concerns
- EPB involved in setting up for waste water and effluent treatment plants in Karachi
- The Government subsidizing waste water treatment plants in all industrial clusters
- Imports of hazardous chemicals and dyes for textiles are either banned or strictly regulated

## Pakistan: Security and Standards

- All buying houses involved in improving security management in factories
- Acquisition of screening machines and sensors
- All ISO standards adopted as Pakistan Standards Specifications
- Pakistan Standards & Quality Control Authority  
Membership of ISO, TEC and IOML
- Pakistan National Accreditation Council
- PCSIR accreditation for ISO 17025
- PITAC accreditation for Quality Assurance and Benchmarking
- Qualified auditors for ISO 9000, ISO 14000, SA 8000 and OHSAS 18000
- TQM, ISM, CMM trainers

## WHY PAKISTAN ?

- We offer the best prices in the entire region
- We have a track record of excellent performance
- We are quality conscious
- We are not likely to out price ourselves in at least the next two decades
- Enhanced market access to the EU and USA
- Trade agreements with SAARC (SAFTA), ECO and OIC countries
- FTAs and PTAs with almost all countries of Asia and Africa

THANK YOU