Office of the Cotton Commissioner
Ministry of National Food Security & Research,
Government of Pakistan
Islamabad, Pakistan

ICA COUNTRY REPORT FOR THE 2024/25 SEASON

A. KEY CONTACTS: Name and contact details (email and/or phone number) of focal point(s) responsible for national cotton statistics:

1- **Dr. Tassawar Hussain Malik**, Cotton-Commissioner, Ministry of National Food Security & Research, Islamabad, Cell: +923005446888 dtmalik@gmail.com
2- **Dr. Khadim Hussain**, CEO, PCCC, Multan, Pakistan, Cell: +9233000046485 khnajam@gmail.com

B. OFFICIAL COTTON DATA WEBSITE/PORTAL:

Official websites or portals that publish Cotton production, consumption, and trade statistics and Textile-related data and indicators are given as under;

www.pccc.gov.pk
www.mnfsr.gov.pk
www.commerce.gov.pk
www.tco.com.pk

C. LIST AND DESPCRIPTION OF FARMING RELATED MOBILE APPS:

1) Bakhabar Kissan: Jazz Bakhabar Kissan is a dedicated app that helps farmers to increase their crop yield with updated information and technology. The information provided by this app covers everything from soil preparation to post-harvest, along with livestock and weather updates with audio, video and pictorial presentations. This app indicates how private organizations such as Jazz can contribute to revolutionizing the concept of agriculture in Pakistan.

2) Ricult Pakistan: Ricult Pakistan is another digital app that is working to increase the productivity & profitability of small farmers in the country by providing them agricultural information, solutions for their problems and providing access to credit and the marketplace. Through the easy application process, farmers can get access not only to free agricultural information but also to market for purchases and credit at flexible terms.

3) Kisan Zar Zameen: Kisan Zar Zameen is a health analysis app that provides multiple services to farmers which includes the use of multi-spectral imagery from satellites. Soil condition, crop health analysis, and weather updates all are provided through this app making it a one-stop digital solution for farmers. By using this app the user can detect crop stress at an early stage, benchmark crop performance, and monitor crop growth. They can also request drone spraying and mapping service which digitalizes the agriculture sector and helps the farmer to increase yield.

4) Kissan Bazaar: Kissan Bazaar is an online market place where a farmer can buy and sell agriculture items. The app includes separate sections for fruit, vegetable, poultry, and livestock. It provides an e-commerce facility to the farmer making it easy for the rural farmer to get access to the market directly through his smartphone.

5) Agri Smart: The Punjab Public Management Reform Program (PPMRP) launched an 'Agri Smart' app for extension workers with a wide range of services including farmer training sessions, pest warnings, monitoring agricultural inputs, soil sampling and receiving complaints. This app will digitalize the work of extension workers which means more easily, accessible and fast service for the farmers in Punjab.

6) SAWIE: SAWIE offers data-driven solutions to help farmers manage their farms more effectively and independently, especially smallholder farms. Using remote sensing tools such as Earth Observation and ground-based sensors, SAWIE improves crop productivity, yield, and return on investment. These tools provide real-time information on geophysical and biophysical parameters, enabling farmers to optimize crop management, including irrigation, targeted scouting, identifying troubled areas, scheduling watering, and applying nutrients and crop protection measures.

SAWIE's tested tools leverage global remote sensing data, including satellites, drones, sensors, and GIS, to cover small farms. This data is processed using advanced data mining techniques like AI and Machine Learning and is integrated with crop modeling tools such as Aqua Crops. By providing satellite-based precision agronomy, SAWIE supports sustainable farming practices, contributing to the social, economic, and environmental aspects of the UN's Sustainable Development Goals.

7) Khad Hisab: A project by Soil Fertility Research Institute, Punjab, Lahore (SFRI) Pakistan, App benefit farmer in multiple ways, including calculation of balanced Fertilizer dose based on soil analysis, helping farmers if he doesn't

possess any report, optimize fertilizers application doses in available price budget of farmer or with what the cash in hands, Farmer can change the prices of fertilizer any time or as per local rates.

D. PRODUCTION AND CONSUMPTION:

- Regional cotton area (ha) over the past 2–3 crop years:

2022-23		
Province	**Area**	**Production**
	(000) ha	**(000) MT**
Punjab	1485	546
Sindh	590	270
KPK	0.18	0.09
Balochistan	68.5	19
Total	**2144**	**835**
	2023-24	
Province	**Area**	**Production**
	(000) ha	**(000) MT**
Punjab	1680	1025
Sindh	610	660
KPK	0.18	0.02
Balochistan	76.8	54
Total	**2367**	**1738**
	2024-25	
Province	**Area**	**Production**
	(000) ha	**(000) MT**
Punjab	1304	**652**
Sindh	582	**480**
KPK	0.045	**0.612**
Balochistan	157	**72**
Total	**2043**	**1204**

- Key factors affecting yields (e.g., pests, diseases, climate impacts)

Impact of Factors on Yields (Pests, Diseases, Climate):

The cotton sector in Pakistan is under increasing pressure from multiple yield-reducing factors, particularly climate change, pest infestations, and crop diseases.

Climate-Related Challenges:

The ongoing challenge of temperature fluctuations and extreme weather events due to climate change is a significant concern. Unpredictable weather patterns disrupt the growing season, leading to droughts or excessive rainfall, both of which severely affect crop yields. Cotton productivity is highly sensitive to climatic stresses such as rising temperatures, heavy rainfall, floods, and prolonged water shortages. These conditions hinder the natural growth and development of cotton plants, resulting in substantial yield reductions. Variations in temperature and shifts in the timing of rainy seasons disrupt crop growth cycles, threatening both the consistency and quality of cotton production in Pakistan.

Pest Infestations:
Severe pest outbreaks pose an additional challenge to cotton cultivation. Whitefly and pink bollworm are particularly destructive, causing significant damage to plant growth and yields. Whiteflies not only feed directly on crops but also transmit the Cotton Leaf Curl Virus (CLCuV), amplifying losses especially in Punjab. Pink bollworms attack cotton bolls, damaging seeds and fibers, which reduces both yield and fiber quality. Other major insect pests include jassid, which causes “hopper burn” and stunted growth, and thrips, which damage young leaves and flowers, impairing overall plant development. Collectively, these pests create severe hurdles for cotton farmers and require vigilant, integrated pest management strategies.

Major Diseases:

Cotton in Pakistan is also highly vulnerable to several destructive diseases.

Cotton Leaf Curl Virus (CLCuV), spread by whiteflies, distorts leaves, reduces boll formation, and compromises fiber quality.

Wilting of Cotton: It is also a serious disease of cotton mainly caused by fusarium pathogen/ climatic stress (Parawilt).

These diseases, often occurring alongside pest attacks and climatic stresses, further aggravate production losses. Their combined impact poses serious challenges to maintaining stable cotton yields and highlights the urgent need for improved disease-resistant varieties, better crop management practices, and robust extension services.

E. Predominant cotton varieties or hybrids in use (past 2–3 years):

No.	Variety	Year of Release	GOT %	Staple length (mm)
1	Bt.CIM-663	2021	40.2	28.6
2	Bt.CIM-678	2021	40.0	28.6
3	Bt.CIM-785	2021	40.0	29.0
4	Bt.Cyto-535	2021	41.5	28.8
5	Cyto-226	2021	40.3	29.8
6	Bt.CIM-343	2023	40.0	28.2
7	Bt.Cyto-537	2023	41.0	28.3
8	Bt.Cyto-511	2023	38.5	28.8
9	Bt.CIM-775	2023	39.2	28.4
10	IR-NIBGE-13	2023	42.0	28.6
11	IR-NIBGE-16	2023	40.0	29.4
12	SAIM-32	2023	41.0	27.3
13	SAIM-102	2023	40.0	27.2
14	IR-NIBGE-17	2023	41.5	29.4
15	ICS-386	2023	42.1	30.8
16	FH-938	2023	42.2	28.0
17	Dimand-2	2023	41.5	27.9
18	Gahuri-2	2023	39.5	28.5
19	Bt. CRIS-674	2024	38.5	28.2
20	CRIS-682	2024	38.5	28.0
21	Bt. CIM-990	2025	38.2	28.9

E- EMPLOYMENT:

Number of cotton farmers (male and female): In Pakistan, there are approximately 1.3 million cotton farmers. While specific data on the gender of these farmers is not available, farming is predominantly done by males in the country. It is reasonable to estimate that around 95% of cotton farmers are male.

F. TRADE & MARKETING:

Export and import figures for cotton lint (past 2–3 crop years):

Years (July-June)	Exports (000 Metric Tons)	Imports (000 Metric Tons)
2022-23	12	684
2023-24	31	284
2024-25	0.4	685

Average local prices for cotton per kg (past 2–3 crop years). If applicable, note whether prices are fixed or market-based:

Year	Seed-Cotton Rs/kg (USD/ Kg)	Lint Rs/kg (USD/ Kg)
2021-22	154 (0.55)	475 (1.71)
2022-23	213 (0.77)	510 (1.83)
2023-24	196 (0.71)	508 (1.83)
2024-25	173 (0.62)	464 (1.66)

The prices of cotton and its commodities are market based:

Brief explanation of the pricing system used (e.g., fixed price, market-based formula, government intervention):

In Pakistan the prices of cotton commodities are decided by the market through demand and supply and without any intervention by government. Mostly free cotton market economy policy prevails. Farmers sell their products (seed cotton) to ginners and market. Almost all the import and export of cotton commodities is handled through Karachi Port.

G. GOVERNMENT SUPPORT & POLICY:

- Trade agreements or FTAs that include provisions on cotton or textiles
- Incentives and support schemes for textile production
- Government policies regulating the textile sector
- Ongoing or completed skills development programs relevant to the cotton/textile sector.

Export and import figures for cotton lint (past 3 crop years):

Years (July-June)	Exports (000 Metric Tons)	Imports (000 Metric Tons)
2022-23	12	684
2023-24	31	284
2024-25	0.4	685

Average local prices for cotton per kg (past 2–3 crop years). If applicable, note whether prices are fixed or market-based:

Year	Seed-Cotton Rs/kg (USD/ Kg)	Lint Rs/kg (USD/ Kg)
2021-22	154 (0.55)	475 (1.71)
2022-23	213 (0.77)	510 (1.83)
2023-24	196 (0.71)	508 (1.83)
2024-25	173 (0.62)	464 (1.66)

H. ELS COTTON & IDENTITY PROGRAMS:

- Almost all the cotton varieties grown within the country are Medium to long staple. Extra-long staple (ELS) cotton is not grown in the country
- Definition and characteristics of long staple cotton grown in the country is given as under;
- Extra Long Staple: 32mm and above
- Long Staple: 29mm to 31 mm
- Medium Staple: 26mm to 28mm

No.	Variety	Staple length (mm)	Classification
1	Bt.CIM-663	28.6	Medium Staple
2	Bt.CIM-678	28.6	Medium Staple
3	Bt.CIM-785	29.0	Long Staple
4	Bt.Cyto-535	28.8	Medium Staple
5	Cyto-226	29.8	Long Staple
6	Bt.CIM-343	28.2	Medium Staple
7	Bt.Cyto-537	28.3	Medium Staple
8	Bt.Cyto-511	28.8	Medium Staple
9	Bt.CIM-775	28.4	Medium Staple
10	IR-NIBGE-13	28.6	Medium Staple
11	IR-NIBGE-16	29.4	Long Staple
12	SAIM-32	27.3	Medium Staple

13	SAIM-102	27.2	Medium Staple
14	IR-NIBGE-17	29.4	Long Staple
15	ICS-386	30.8	Long Staple
16	FH-938	28.0	Medium Staple
17	Dimand-2	27.9	Medium Staple
18	Gahuri-2	28.5	Medium Staple
19	Bt. CRIS-674	28.2	Medium Staple
20	CRIS-682	28.0	Medium Staple
21	Bt. CIM-990	28.9	Medium Staple

Production, consumption, and trade figures for ELS cotton:

Pakistan doesn't locally produce ELS cotton. As per Pakistan Bureau of Statistics (PBS), Pakistan imported 4.01 million bales in Financial Year 2024-25, out of which 50% originated from the United States, Brazil, Türkiye, and Egypt, mainly consisting of long and extra-long staple varieties.

Identity cotton programs in place at national or regional level:

Country collaborative cotton programs in progress with Uzbekistan (cotton harvesting), Turkey (Cotton training through TIKA), USA (USDA/ICARDA program), etc.

I. TEXTILE INDUSTRY OVERVIEW:

1. Main issues/challenges in cotton processing and textile value chain:

Cotton and textile value chain in Pakistan is confronting the following key issues and challenges:

i. Low cotton crop yields due to limited access to advanced technology seed varieties.
ii. Reduced cotton output from pest and disease pressures (white fly, pink ball worm, cotton leaf curl virus) and climate change adversities.
iii. Limited mechanization in cotton cultivation
iv. Outdated ginning technology/machinery
v. Reliance of textiles and apparel value-chain on imported synthetic materials, machinery, dyes & chemicals and accessories.

2. Size and structure of the textile industry:

Textiles and apparel represent the most vital segment of Pakistan's manufacturing sector, featuring longest production chain with significant potential for value addition at

every stage from cotton cultivation through ginning,
spinning, weaving, dyeing, and finishing, to the production of garments, home- textiles, technical textiles and carpets. The sector accounts for nearly one-fourth of total industrial value-added and provides employment to approximately 40 percent of industrial labor force. Textiles and apparel products maintained a share of around 56 percent (US$ 17.9 billion) in Pakistan's total exports during FY 2024-25, reflecting the sector's strong and stable export performance. Pakistan is 5th largest producer of cotton; 3rd largest producer of better cotton; 3rd largest exporter of home textiles, denim and cotton cloth; 6th largest exporter of hosiery products; 7th largest exporter of cotton yarns; and 14th largest exporter of apparel products.

4. Domestic production of yarn and fabric, including domestic consumption figures:

According to PBS, textile industry manufactured approximately 2.67 million metric tons of cotton yarn and 877.33 million square meters of cotton fabric during the FY 2024-25.

5. Installed capacity: number of spindles, looms, and overall processing capability:

As per the PBS, there are 13.409 million Spindles, 198,800 rotors and 9,084 looms installed in Pakistan. There are more than 5,000 factories capable to transform raw material and intermediates into finished products like apparel, textile made-ups and technical textiles.

6. Major production hubs and key stakeholders across the textile value- chain:

The primary textiles and apparel production facilitates are located in Karachi, Lahore, Faisalabad, Sialkot, and Gujranwala. The key private sector stakeholders are Pakistan Hosiery Manufacturers and Exporters Association (PHMA), Pakistan Readymade Garments Manufacturers and Exporters Association (PRGMEA), Pakistan Textile Exporters Association (PTEA), All Pakistan Textile Mills Association (APTMA), Pakistan Textile Council (PTC), Towel Manufacturers Association (TMA), and All Pakistan Bedsheets and Upholstery Manufacturers Association (APBUMA).

7. **Prospects and growth areas anticipated over the next 5 years:**

Pakistan's textile and apparel sector has over time built on its strengths leading to a higher value-added product-mix, besides enhanced export volumes and labor

absorption. Over the past decade, there has been
a consistent increase in exports of apparel products from Pakistan in comparison to the products at the lower end of value chain. Further, all future policy interventions are being envisaged to enhance exports of high value-added textiles products such as apparel and technical textiles, while maximizing utilization of locally produced raw materials and intermediates.

SUSTAINABILITY:

- **Existing measures promoting sustainable cotton and textile production:**

Better Cotton Initiative (BCI) Pakistan is an independent legal entity established in June 2017. One-Third of total cotton production in Pakistan is being produced under sustainable cotton production practices and getting proper certification from Better Cotton. In addition to industry & global funding, the government of Pakistan also contributed for achieving the goal of sustainable cotton production. Following organizations are particularly working on sustainable aspect of cotton.

i. The Centre for Agriculture and Bioscience International Pakistan (CABI)
ii. The Central Cotton Research Institute (CCRI)
iii. Rural Business Development Center (RBDC)
iv. The Rural Education and Economic Development Society Pakistan (REEDS)
v. Research and Development Foundation (RDF)
vi. Sami Foundation
vii. Sangtani Women Rural Development Organization
viii. WWF Pakistan

The local textile industry is also supporting these initiatives in addition to global funding. In year 2022-23 the volume of Better Cotton produced in Pakistan is 305,620 MT. This volume was produced on 669,317 hectares from 351,062 licensed farmers. Moreover, the production of regenerative cotton and organic cotton in Pakistan has been introduced and being practiced on small scale.

- **Industry actions to address environmental challenges (e.g., wastewater treatment, water conservation, etc.):**

A mega cotton project amounting to PKR 990 million has been started to address the environmental and climate change issue. Some of the industrial units have installed waste water treatment units. PCCC, WWF and BCI sustainability program are supportive to address the water conservation issues particularly in the drought years.

------- the end ------