COUNTRY STATEMENT OF PAKISTAN FOR 81ST PLENNARY MEETING OF ICAC

Cotton, a major cash crop of Pakistan, is considered the backbone of the national economy. It contributes about 0.6% to GDP and 2.4% of total value addition in agriculture. Pakistan is the fifth largest producer, third largest consumer and 4th largest exporter of cotton yarn in the world. Export of cotton and textile products have a share of 60% in overall export of the country. The current tariff policy is one of the free trade and there are no restrictions on either import or export of cotton.

2. Cotton is grown by 1.3 million farmers on around 2.147 million hectares which is 15% of the cultivable area of Pakistan. Cotton production in Pakistan during 2021-21 remained 4.90 million bales (170 kg) against the target of 10.5 million bales. The main cause behind this decline was climate change, untimely rains, floods and high temperature especially in the month of August and September which caused loss in flower shedding, pest attack of whitefly, pink bollworm. The cotton crop during the year was deeply damaged due to heavy spells of rains and floods in the cotton regions of Pakistan. Better prices factor favored in increase of area but production has been affected due to damage of crop. Cotton is consumed largely by more than 500 textile mills in the country. However, to meet the demand for extra-long staple cotton, about 4-5 million bales are imported annually.

3. In Pakistan, research on cotton has been given prime importance and a number of organizations are conducting research on various aspects of cotton. Pakistan's research setup is contributing significantly by releasing more than 100 elite and new cotton Bt varieties within the set standards of fiber quality and National Coordinated Varietal Trials for last 10 years. Planning and Coordination of cotton R&D programs among federal and provincial cotton research institutions is being strengthened to increase cotton production, improve yields per hectare, evolve disease resistant varieties, promote Bt cotton cultivation and improve overall quality of cotton.

4. There are 900-1000 ginning factories in operation in Pakistan. The ginning industry operates in 80-120 saws type. However, the majority of ginning factories have saw gins of 90 saw blades type. The production capacity of ginning industry in Pakistan ranges from 12 million bales to 35 million bales. The government is taking some serious steps to upgrade this sector of the industry. Establishment of cotton standards through Pakistan Cotton Standard Institute (PCSI) and setting up of a ginning institute in public sector are positive steps towards the right direction.

5. The future cotton policy envisages a number of strategies which include introduction of new seed technologies, promotion of locally developed double and triple gene varieties, revision of rules for variety approval, germplasm improvements, and development of hybrid cotton, much improved and better farm and crop management, introduction and demonstration of advanced machinery including mechanical cotton picker, boll picker, seed grader and bringing additional area under cultivation, especially in the provinces of Baluchistan and Khyber Pakhtunkhwa. Cultivation of organic cotton is also being encouraged, particularly in the virgin, fertile and pest free lands of Baluchistan. Necessary legislative and regulatory frameworks have been strengthened. Seed act has been amended and rules have also been formulated. Plant breeder's act has also been passed by the parliament of Pakistan and plant registry has been made functional to ensure the plant breeder sights. The national cotton research and development system is being streamlined with the involvement of all the key stakeholders to bring it at par with international standards. The government is also encouraging multinational and national technology providers for introducing latest and effective insect protection technology.

COUNTRY REPORT OF PAKISTAN

FOR 81st PLENARY MEETING OF
INTERNATIONAL COTTON ADVISORY COMMITTEE (ICAC)

TO BE HELD FROM DECEMBER 02 - 05, 2023
AT MUMBAI, INDIA

DIRECTORATE OF MARKETING & ECONOMIC RESEARCH

PAKISTAN CENTRAL COTTON COMMITTEE

MINISTRY OF NATIONAL FOOD SECURITY & RESEARCH
GOVERNMENT OF PAKISTAN

Phone: +92-61-9201657 **Fax: +92-61-9201658**
E-mail: dmer@pccc.gov.pk **Web: www.pccc.gov.pk**

COUNTRY REPORT OF PAKISTAN FOR THE 81ST PLENARY MEETING OF INTERNATIONAL COTTON ADVISORY COMMITTEE (ICAC) TO BE HELD FROM 02 DECEMBER- 05 DECEMBER, 2023 AT MUMBAI, INDIA

PRODUCTION-I

1. Regional Cotton Area & Production:

Cotton a major cash crop and is considered the backbone of national economy of Pakistan. It contributes about 0.3% to GDP and 1.4% to total value addition in agriculture. According to latest report of ICAC, Pakistan is the fifth largest cotton producer in the world after India, China, USA and Brazil. Pakistan's share in the world cotton production in 2022-23 was 3.4 percent. Pakistan is 4th largest consumer of cotton in the world, the 3rd largest yarn producer, the 2nd largest yarn exporter and the 3rd largest cloth exporter.

Table-1: Cotton Area, Production, Yield & Consumption in Pakistan

Year	Area (000 hectares)	Production (000 Metric tons)	Yield (kg per hectare)	Consumption (000 Metric tons)
2008-09	2820	2009	713	2614
2009-10	3081	2158	713	2402
2010-11	2689	1948	724	2436
2011-12	2862	2311	815	2408
2012-13	2879	2215	769	2416
2013-14	2806	2171	774	2467
2014-15	2958	2373	802	2465
2015-16	2902	1686	581	2147
2016-17	2489	1814	729	2220
2017-18	2700	2030	752	2508
2018-19	2373	1676	706	2360
2019-20	2517	1555	618	2204
2020-21	2079	1201	578	2152
2021-22	1936	1416	731	2448
2022-	2144	835	389	1589

23*				

Source: Pakistan Central Cotton Committee
****Provisional.***

Table-2: Exports, Imports & Stocks of Raw Cotton during Last 15-Years (000 Metric Tons)

Years	Exports	Imports	Stocks	
			Carry-over	Ending
2007-08	59	851	607	724
2008-09	78	417	724	458
2009-10	157	342	458	399
2010-11	148	314	399	117
2011-12	257	173	117	143
2012-13	93	430	143	260
2013-14	115	251	278	119
2014-15	95	168	119	93
2015-16	49	417	93	0
2016-17	25	506	0	75
2017-18	35	599	75	162
2018-19	13	415	162	185
2019-20	13	537	185	25
2020-21	01	857	25	25
2021-22	03	788	25	46
2022-23*	12	6844	46	39

Source: Pakistan Bureau of Statistics, Government of Pakistan

1.1.Number of Cotton Farmers (Male & Female):

In Pakistan, there are approximately 1.3 million cotton farmers, with a significant gender disparity, as 99% of these farmers are male, while only 1% are female cotton growers. Cotton cultivation primarily takes place during the kharif season in Pakistan.

1.2.Impact of Factors on Yields (Pests, Diseases, Climate)

Climatic changes seriously threaten Agriculture globally year to year, especially in developing countries like Pakistan. Agricultural productivity is directly influenced by Climatic factors i.e., increase in high temperature, heavy rainfall, precipitation, flood, and deficiency of irrigation water etc. Extreme temperatures negatively regulate crop phenology, leading to significant reductions in crop yields. Temperatures and changes in the rainy season affect cotton growth and threaten the stability of cotton production and quality in Pakistan.

Pakistan, the fifth largest cotton-producing country in the world has been grappling with a severe pest onslaught, with reports of whitefly, Pink bollworm, jassid, and Thrips infestations impacting cotton plant growth. The damage caused by these pests has undoubtedly contributed to a decline in cotton yields. The spread of cotton leaf curl virus (CLCuV) in cotton growing areas of Punjab caused immense losses in cotton production in Pakistan.

1.3.Major Insect Pests

In 2022-23 Infestation of jassid and thrips was observed in April, May and June. However, Whitefly remained dominant with fluctuating trend throughout the season. Furthermore, its

infestation led to the development of sooty mold fungus that cause severe blackening of cotton crop and yield reduction. Pink bollworm remained one of the most damaging pests of cotton, its attack become severe after first week of August. Effective insecticides against jassid were dinotefuron, Flonicamid. While, varied level of resistance was observed in imidacloprid, acetamiprid and thiamethoxam. Effective insecticides against thrips were spintoram, chlorfenapyr and acephate. However, in case of whitefly resistance was observed in almost all the commonly used insecticides viz. buprofezin, bifenthrin, spirotetramate, imidacloprid, acetamiprid and pyriproxyfen. The primary challenges faced by the cotton crop in Pakistan include the Pink Bollworm, White fly, and the Cotton Leaf Curl Virus, specifically the Burewala strain, which poses a significant threat to Pakistan's economy. Ongoing initiatives aim to prepare virus-resistant cotton varieties by introducing disease-resistant genes from wild species into upland cotton cultivars. Additionally, scientists are exploring the integration of certain morphological characteristics, such as pubescence, to deter insect infestations and promote pest non-preference.

1.4. Major Diseases

The main diseases affecting cotton crops in Pakistan are Para Wilt, Verticillium Wilt, and Cotton Leaf Curl Virus (CLCuV). Para Wilt, caused by the soil-borne pathogen *Fusarium oxysporum f. sp. vasinfectum*, poses a significant threat to cotton plants, leading to wilting, yellowing, and stunted growth. Verticillium Wilt, caused by the fungus *Verticillium dahliae*, is another major concern, causing yellowing and necrosis of leaves and reducing cotton yield. Additionally, Cotton Leaf Curl Virus (CLCuV) is transmitted by whiteflies and results in distorted leaves, reduced boll formation, and a decline in cotton quality. These diseases collectively pose substantial challenges to cotton cultivation, emphasizing the need for effective management strategies to ensure a healthy and productive cotton industry in Pakistan.

2. Cotton Research Setup in Pakistan

In Pakistan, research on cotton has been given prime importance and a number of organizations are conducting research on various aspects of cotton. Main organizations are;

- Pakistan Central Cotton Committee (PCCC)
- Center of Excellence in Molecular Biology (CEMB) Punjab University Lahore.
- National Institute of Biotechnology and Genetic Engineering (NIBGE) Faisalabad.
- Nuclear Institute of Agriculture and Biology (NIAB), Pakistan Atomic Energy Commission, Faisalabad.
- Ayub Agricultural Research Institute, Faisalabad
- Agricultural University, Peshawar.
- Nuclear Institute of Agriculture (NIA), Tandojam, Sindh.
- Department of Agricultural Research, Sindh.
- Sindh Agricultural University, Tandojam
- Islamia University Bahawalpur.
- Muhammad Nawaz Sharif University of Agriculture, Multan.
- Pakistan Agricultural Research Council (PARC), Islamabad
- Agriculture Policy Institute, Islamabad

- Multinational and private sector organizations.

To provide trained human resource to research organizations, six public sector agricultural universities and eight agricultural colleges offer basic and advance courses in agriculture and cotton. In addition, agriculture with strong biological sciences divisions helps in training of scientists on various aspects of cotton. The national textile university and other engineering universities are producing textile engineers for the cotton value chain. These educational and degree awarding institutions have developed linkages with top ranking universities and school across the globe to be the part of international research teams involved in cotton research.

2.1.Research Plan on Cotton

The research plan in Pakistan has been prepared keeping in view the changing climatic conditions, insect pest and disease scenario, effectiveness of Bt genes and cropping patterns. The research is focused on cotton production technology, high density trials, climate resilient varieties, CLCV management, efficient fertilizer use, seed health improvement, insect pest management, insecticides resistance management and demonstration of advanced machinery. Advance knowledge on the cotton plant responses to environment with a view to better cope with the adverse impacts in the changing climate scenario, training manpower across the country and other cotton growing countries on "cotton research and development". Facilitation and research guidance to students at graduate and higher level degree courses, Coordinate with the International Cotton Researchers Association through ICRA Secretariat, Multan, and Economic studies and Marketing investigations.

2.2.Cotton Breeding Program in Pakistan

2.2.1. Seed Cotton Yield and Fiber Quality

The cotton breeding program in Pakistan strives to develop new varieties equipped with high yield potential, early maturity and high lint percentage, testing of newly developed cotton strains in NCVT & PCCT, preservation/maintenance of cotton germplasm, study of Gene Flow/Out crossing % age, GMOs testing and other research activities are focused areas of breeding program of Pakistan Central Cotton Committee in Pakistan. The Pakistan Central Cotton Committee in collaboration with Seed Councils has developed minimum fiber quality standards which are given prime importance throughout the breeding and variety approval processes. The fiber quality parameters enforced by Govt. of Pakistan are:

- Fiber length more than 28mm.
- Lint percentage more than 37.5 and above.
- Fineness 3.8 - 4.9 ug/inch.
- Fiber strength 92 and above (tppsi).
- Uniformity ratio more than 48%
- Fiber maturity more than 80%

2.2.2. Drought Tolerance

Because of irregular rains and climate change, water reservoirs are not fully replenished to provide sufficient water for cotton and other crops. This shortage of irrigation water in Pakistan has created a demand for drought resistant/tolerant varieties using upland cotton as well as wild Gossypium species which are perennial xerophytes shrubs indigenous to desert areas. The latter requires less water and this characteristic is being transferred to cultivated American types of cotton varieties.

2.2.3. Heat Tolerance

The cotton growing areas in Pakistan experience high temperatures (over 45o C). High temperatures become harsh for cotton crop in summer season as a consequence of which flower and fruit shedding results reflect in severe yield losses. To avoid this phenomenon, heat tolerant varieties are being developed.

2.2.4. Insect and disease resistance

The major disease in Pakistan is Pink Bollworm, White fly and Cotton Leaf Curl Virus (Burewala strain of cotton virus) which is a serious threat to the economy of Pakistan. Efforts are being made to develop virus resistant genotypes by transferring disease resistant genes from wild species into upland cotton varieties. Scientists are also working to incorporate some morphological traits, like pubescence which could help in non-preference of insects.

2.2.5. Testing and approval of variety

The homozygous selected material (strains) is tested in micro Varietal and Provincial Coordinated Cotton Trial (PCCT) then passed through National Coordinated Varietal Trial (NCVT) to be approved as a variety.

2.3.Popular Cotton Varieties/Hybrids (Past 2-3 Years)

Following is the list of varieties evolved in last three years in Pakistan.

Table-3: List of varieties evolved In Pakistan in last three years and their Fibre characteristics

No.	Variety	Year of Release	Lint %	Staple length (mm)	Micronaire (ug inch-1)	Strength (tppsi)
1	Hatif-3	2021	41.0	28.1	4.3	82.3
2	CEMB-Klean Cotton-03	2021	40.0	28.2	4.4	82.7
3	BS-20	2021	38.0	28.6	4.2	30.7
4	ICI-2424	2021	40.0	30.0	4.8	33.68
5	Bt.CIM-678	2021	40.0	28.6	4.01	30.6
6	Bt.CIM-785	2021	40.0	29.0	4.61	31.96
7	Bt.Cyto-533	2021	41.0	28.1	4.2	-
8	Bt.Cyto-535	2021	41.0	28.2	3.8	28.2

9	Cyto-226	2021	41.0	30.5	4.6	29.5
10	BH-221	2021	38.0	28.1	4.6	-
11	CRIS-585	2020	41.6	28.8	4.3	96.0
12	CRIS-543	2020	40.5	28.3	4.3	98.0
13	BT.CIM-663	2020	40.2	28.6	4.1	103.7
14	CIM-610	2018	40.2	28.8	4.3	101.9
15	BT.CIM-632	2018	41.6	28.8	4.3	100.4

2.4.Recent Technology Introductions (3-4 Years)

- **Genetically Modified (GM) Cotton Varieties:** The development and adoption of genetically modified cotton varieties, such as Bt cotton, which are engineered to resist common cotton pests like bollworms, can significantly increase yields and reduce the need for chemical pesticides.

- **Pink Bollworm Manager:** The introduction of advanced machinery for cotton boll pickers has the best result against Pink bollworms in Pakistan. Mechanization can increase productivity and reduce labor costs.

- **LEEF Technology:** Adopting the Low Expenditure and Environment Friendly (LEEF) technology by CCRI Multan has the best result in cotton production Technology. LEEF Technology maintains soil temperature to normal and keeps it enriched with organic material and positive germs, the husk from paddy or wheat gets mixed in the soil after some time and improves its fertility. This layer of husk on cotton-producing beds also shield crop against excessive rains and prevent chances of weed growth.

2.5.Farming Mobile Apps List & Descriptions

Currently there is no mobile app used by farmers however farmers mostly use Whatsapp to remain in touch with market prices and news regarding subsidies offered to farmers by government of Pakistan. Tele cotton SMS based service run by CCRI Multan has 50000 farmers enlisted throughout Pakistan and on regularly basis shares the recommendations released by the Farmer's Advisory Committee (FAC) of CCRI Multan.

2.6.Official Cotton Data Websites

Data related to cotton production, area under cultivation, market rates of cotton commodities, consumption of cotton by textile sectors are available at following websites

www.pccc.gov.pk
www.kcapk.com
www.mnfsr.gov.pk

2.7.Any new government policy on cotton lint production or trade

In a major step to facilitate cotton farmers, the Government of Pakistan approved Rs 8,500 per 40 kg as the support price of cotton. The government has called for strict enforcement of cotton support prices and taken action against those exploiting the situation by purchasing cotton below the predetermined rate of Rs 8500 per 40kg.

2.8.Figures on export and import of cotton lint

Note: *i) From 2007-08 to 2010-11 data collected as August-July Year.*
ii) From 2011-12 data covers July-June.
**Provisional*

2.9. Total government support provided to the cotton sector (in local currency)

According to the 'Agriculture Transformation Plan 2021' the government provided a subsidy of Rs 1200 per acre on seed to cover four million acres during the 2022-2023 cotton season. The plan provided 70 per cent coverage of white fly menace. The Ministry of National Food Security and research is working on a web portal to make farmers aware of the application of inputs at the right time and use of pesticides in the event of any pest attack.

2.10.Main issues affecting cotton processing in the country

The cotton processing industry in Pakistan faces several key issues that hinder its efficiency and growth. These challenges include inconsistent cotton quality due to pest infestations and climate fluctuations, outdated machinery and technology, limited investment in research and development, and a lack of modern ginning facilities. Additionally, the sector is plagued by an inadequate supply of electricity and natural gas, which are essential for powering the processing units, and poor infrastructure for transportation. These issues collectively hamper the competitiveness of Pakistan's cotton processing industry, impacting its ability to meet domestic and international demand for cotton products and maintain a strong position in the global market.

2.11.How is local cotton price determined

In Pakistan, the local cotton price is primarily determined by market forces and influenced by a combination of factors. These factors include international cotton prices, domestic supply and demand dynamics, weather conditions affecting cotton crops, government policies, and the performance of the agriculture sector. Cotton prices are largely market-driven, with supply fluctuations and global trends playing a significant role. The government may intervene through price support mechanisms or export bans, affecting price stability to some extent. However, overall, the local cotton price in Pakistan is influenced by a complex interplay of domestic and global factors, with market forces being the primary driver.

2.12.Major marketing strategies that cotton farmers use to sell their cotton (specify whether it is seed cotton or lint)

Cotton farmers employ several key marketing strategies when selling their cotton, whether it is in the form of seed cotton (raw cotton from the field) or lint (processed cotton fiber). Common approaches include selling through cotton ginners or local markets, and engaging with cotton brokers or merchandisers in other districts to access wider markets and potentially obtain better prices. The choice of strategy often depends on the farmer's individual circumstances, risk tolerance, market conditions, and the level of processing they wish to undertake before selling, making it crucial for cotton growers to carefully assess and adapt their marketing strategies to maximize.

2.13. Local average price for per kg lint or seed cotton

Year	SEED COTTON (Rs/ Kg)	LINT (Rs/ Kg)
2020-21	231	285
2021-22	306	475
2022-23	418	510

Name and contact information of the person responsible for cotton statistics

Dr. Tassawar Hussain Malik
(PhD, PBG, Consultant Seed-Technologist)
Director-Research/Administration, PCCC, Old Shujabad road, MULTAN, PUNJAB, PAKISTAN
Tel: +92-61-9201655-56
dtmalik@gmail.com
www.pccc.gov.pk

Textiles-II

3. Overview of the textile industry including history and evolution in Pakistan"

The textile industry in Pakistan has a rich history and has evolved significantly over the years to become a cornerstone of the country's economy. With its roots dating back to ancient civilizations, such as the Indus Valley, Pakistan's textile industry has grown into a modern, globally competitive sector. Today, it encompasses various stages of textile production, from cotton farming and ginning to spinning, weaving, and garment manufacturing. This industry has played a pivotal role in generating employment, contributing to exports, and shaping Pakistan's economic landscape.

3.1. Current size of the textile industry in terms of value and volume/domestic textile production in terms of yarn and fabric

The Pakistan textile industry is a significant player in both value and volume terms. Pakistan's domestic textile production is robust, with a strong focus on yarn and fabric manufacturing to meet both domestic and international demands. Domestic consumption is notable, reflecting a substantial portion of the industry's output catering to local markets.

Pakistan's textile industry has been struggling to survive as the level of textile exports from the country fell by 15 percent to reach $16.5 billion in 2022-2023. The overall textile industry contributes ~8.5% to the GDP of the country, which amounted to a market size of PKR~3,816 bln in FY21 as compared to PKR~3,345 bln in FY20. In FY21, the export contribution from the textile segment was PKR~2,461 bln (~61% of total country exports) and grew by ~25% from PKR~1,972 bln in FY20. Exports of textile manufacturers, which account for 60.82% of total exports, witnessed a remarkable increase of 25.5% during FY-2022 in comparison to a growth of 22.9% of last year and of the value to US$ 19.33 billion in FY-2022 as compared to US$ 15.40 billion during FY-2021.Pakistan's textile industry saw record-high export growth of 26% from the previous year 2021. According to figures from Pakistan's Bureau of Statistics, the textile industry saw record-high exports for the year ending June 30, 2022, totaling $19.3 billion, a growth of 26% from the previous year.25-Jul-2022

3.2. How many Spindles and looms installed in 2022-23

As of June 2022, Pakistan's textile industry comprises 517 textile units (40 composite units and 477 spinning units). There are 28,500 shuttles-less looms and 375,000 conventional looms. The Spinning Sector has grown with export demand & cotton production. At present, there are 1,221 ginning units, 442 spinning units, 124 large spinning units, and 425 small units that produce textiles. The Government of Pakistan has established a ministry division, Ministry of Textile Industry division, to administer the textile industry.

3.3. Major hubs or regions of textile production

Pakistan has several major hubs and regions known for textile production, which is a significant industry in the country. Some of the major textile production hubs in Pakistan include:

Faisalabad: Often referred to as the "Manchester of Pakistan," Faisalabad is one of the largest textile cities in the country. It is known for its textile mills, spinning units, and garment manufacturing. The city produces a wide range of textile products, including cotton and synthetic fabrics.

Karachi: Karachi, the largest city in Pakistan, is home to a significant portion of the country's textile industry. It has many textile mills and export-oriented units, specializing in the production of textiles, apparel, and garments.

Lahore: Lahore is another important textile hub in Pakistan. It has a variety of textile mills and garment manufacturing units, contributing to the country's textile exports. Lahore is also known for its production of high-quality textiles and garments.

Multan: Multan is known for its cotton production and ginning industry. Cotton is a vital raw material for the textile sector, and Multan plays a significant role in providing cotton to other textile hubs in Pakistan.

Sialkot: Sialkot is primarily known for its sports goods industry, but it also has a growing textile sector. The city produces textile products, including sportswear, which are exported globally.

Gujranwala: Gujranwala has a diverse industrial base, including textile manufacturing. It is known for producing a range of textile products, including yarn, fabrics, and garments.

Sheikhpura: This region is known for its textile mills and garment manufacturing units, contributing to the overall textile industry of Pakistan

Other Regions: Besides the major hubs mentioned above, there are several other regions in Pakistan that contribute to textile production. These include Sargodha, Kasur, and many more.

3.4. Government policies that currently govern the textile industry

The government is formulating a Textile Policy 2021-25, which aims to increase textile exports from USD 13 billion to USD 25.3 billion by 2025 and USD 50 billion by 2030. To achieve these ambitious targets, Pakistan must promote the exports of high-value-added products such as knitwear or readymade garments. Textiles and Apparel Policy 2020-25 thus requires a holistic approach to tackle issues confronting the textiles and apparel sector amid COVID-19 that has resulted in supply chain disruptions and affected global prices of commodities and trade adversely, and address withdrawal of SRO-1125 and cost of doing business

3.5. Incentives, special measures, and support schemes provided for textile production

The Pakistani government offers several investment incentives to companies, one of which is the provision of an initial depreciation allowance. This applies at 25% of the cost of assets that are wholly and exclusively used for the first time in Pakistan during the year. Notably, this includes second-hand machinery being used for the first time within the country. This allowance is in

addition to regular depreciation, however, it's not applicable to furniture or road transport vehicles unless they're meant for hire.

In the realm of sustainable energy, special allowances exist. Companies that install plant, machinery, and equipment (PME) for alternative energy generation can claim a first-year allowance (FYA) instead of the initial depreciation allowance. The rate of this FYA is 90% of PME cost. This benefit extended to companies establishing in specific rural and underdeveloped areas, as well as mobile phone manufacturers that began commercial production during the two years leading up to mid-2017. However, this benefit was discontinued in March 2022.

3.6. Details of mass skills development program

Mass skills development programs in the textile industry are typically designed to address skill gaps, promote employment, and enhance the overall competitiveness of the textile industry. In the year 2022-23, the Ministry of Textile Industry offered multiple textile training courses focusing on the garment sector i.e. Fashion & apparel design and Pattern making and cutting for lingerie making, Line supervisory skills, Quality control, Fancy stitching, and Knitting machine operators training.

From the perspective of the mass skill development program in the Textile Industry some technical institutes/centers were established as given below:

- Pakistan Readymade Garment Technical Training Institute.
- Fashion Apparel Design & Training Institute.
- LAHORE. Pakistan School of Fashion Design. Courses being offered:
- FAISALABAD. National Textile University.
- MULTAN. College of Textile Engineering, BahauddinZakaria University.

3.7. Measures in place for sustainable textile production

In Pakistan's textile industry, significant efforts are being made to transition towards sustainable practices, driven by a growing awareness of environmental and social issues. One notable initiative is the "Net Zero Pakistan" partnership, involving various textile firms committed to achieving net-zero carbon emissions by 2050, demonstrating a clear shift towards sustainability. Moreover, these companies are actively engaged in international conventions and programs like the "Better Work Programme" and "The Accord on Fire and Building Safety." Regulatory pressure, such as compliance with EU's GSP+ scheme, is also motivating textile firms to adopt eco-friendly practices. Market competition is encouraging businesses to differentiate their products and enhance their environmental performance, attracting consumers with eco-friendly preferences. Additionally, textile firms are taking measures like establishing long-term relationships with suppliers, recycling waste, and adhering to international textile standards like GOTS and BCI. Despite challenges such as internal barriers, economic constraints, and a lag behind in sustainable practices, the textile industry in Pakistan recognizes the importance of sustainability for its growth

and competitiveness. Addressing both internal and external factors, including regulatory support, is essential for further advancing sustainability in the sector.

3.8. Major stakeholders in the textile value chain

The textile industry in Pakistan is a significant sector of the country's economy and involves a complex value chain with various stakeholders. Major stakeholders in the textile value chain in Pakistan include: Cotton farmers, Ginning Industry, Textile Manufacturers, Textile Exporters, Garment Manufacturers, Retailers and Brands, Textile Machinery Manufacturers, Dyeing and Finishing Units, Textile Chemical Suppliers, Government and Regulatory Bodies, Workers and Labor Unions, Banks and financial institutions, Research and Development Institutions etc.

The textile value chain in Pakistan is multifaceted and interconnected, and the success of the industry relies on the collaboration and synergy among these stakeholders. Changes in policies, market dynamics, and global trade can significantly impact the textile industry in Pakistan.

3.9. Collaborations and joint ventures in the textiles domain/FDI in the textile value chain

In the year 2022-23, Pakistan's textiles industry witnessed a surge in collaborations and joint ventures, marking a significant shift in its approach to foreign direct investment (FDI) within the textile value chain. The country's textile sector, a vital component of its economy, attracted both domestic and international players seeking to leverage Pakistan's skilled labor force and abundant raw materials. These collaborations and joint ventures have not only bolstered the textile industry's competitiveness but have also brought in advanced technology and innovation, facilitating the production of high-quality textile products for both domestic and global markets. This strategic approach toward FDI in textiles underscores Pakistan's commitment to revitalizing its textile sector, which is poised for substantial growth in the coming years.

3.10. Primary challenges faced by the textile value chain

During the outgoing fiscal year 2022-23, Pakistan faced unprecedented challenges due to poor demand-driven policies of the government, devastating floods, and political uncertainty. In addition, the Russia-Ukraine war severely disrupted the global demand-supply balance which led to a commodity super-cycle resulting in slow down of global economic growth to 2.8 percent in the current year from 6.2 percent in 2021. Above all, the poor economic management of the previous government led the country to a near-default situation by the time the coalition government took charge. Inconsistent policies, unsustainable fiscal deficit, the exponential rise in public debt, economic uncertainties, and mounting circular debt have been the main ingredients of the previous government's tenure. As such, the last fiscal year of the previous government alone witnessed an overall fiscal deficit of 7.9 percent, and a trade deficit of US$ 39.1 billion.

3.11. Foreseeable future opportunities or growth areas in textiles value chain

The textile industry in Pakistan has the potential to thrive and evolve by embracing technology, sustainability, and value addition, expanding into new markets, investing in workforce skills, and

fostering innovation and design. Government support and a focus on quality and certification can further enhance the industry's competitiveness on the global stage. It's essential to conduct a thorough market analysis and stay updated with the latest industry trends and trade policies to make informed decisions about investments and growth strategies in the textile value chain in Pakistan. Additionally, the government's policies and incentives for the textile industry can play a crucial role in shaping its future prospects.

3.12. Infrastructure such as textile parks, special economic zones that support the textiles value chain

Infrastructure such as textile parks and special economic zones play a crucial role in supporting the textile value chain in Pakistan. These facilities are designed to provide various benefits to the textile industry, including improved efficiency, cost reduction, and increased competitiveness. Here's an overview of these infrastructure components:

Textile Parks: Textile parks are industrial clusters specifically designed to house textile-related businesses, from spinning and weaving to garment manufacturing and finishing. These parks offer several advantages, such as:

Infrastructure and Utilities: Textile parks provide ready-to-use industrial infrastructure, including power supply, water, sewage, and waste management systems. This reduces the burden on individual textile units to set up their utilities.

Shared Services: Shared services like common effluent treatment plants, testing laboratories, and design centers can be made available within the park, leading to cost savings and improved product quality.

Economies of Scale: Proximity to other textile businesses fosters collaboration and the exchange of ideas, fostering innovation and improving competitiveness.

Regulatory Support: Textile parks often receive government support in terms of regulatory clearances and incentives, making it easier for businesses to operate.

Special Economic Zones (SEZs): Special Economic Zones are designated areas where businesses, including those in the textile sector, enjoy various fiscal and regulatory incentives to encourage investment and export-oriented production. In Pakistan, SEZs are designed to facilitate textile and apparel manufacturing and export. Benefits of SEZs include:

Tax Incentives: Businesses operating in SEZs typically receive tax breaks, such as reduced or waived income tax, customs duties, and sales tax, making their products more competitive in international markets.

Streamlined Customs Procedures: SEZs often have simplified and expedited customs clearance processes, reducing the time and cost associated with importing and exporting raw materials and finished products.

Infrastructure Development: SEZs typically feature modern infrastructure, including transportation networks and utilities, to support businesses.

One-Stop Shop: SEZs often have a one-stop shop for various approvals and permits, simplifying the regulatory process for investors.

3.13. Current employment being provided by the textiles value chain

This sector contributes 9.5% to the GDP and provides employment to about 15 million people or roughly 30% of the 49 million workforce of the country.

3.14. Future of the textile industry over the next five years

The government has already initiated projects for the development of the textile industry which provides a large scope for growth for businesses within the sector. Focusing on enhancing production capabilities, producing higher value-added textile products, following global compliance standards, reducing wastage, streamlining the supply chain and leveraging better technology, the Textiles & Apparel Policy 2020-2025 seeks to drive Pakistan's textile-based economy to a significant margin by 2025.

3.15. Focusing on increasing Pakistan's textiles and apparel export numbers and addressing the current issues within the industry, the policy covers initiatives to:

- Eradicate electricity and logistics issues within the country.
- Construct new textile production facilities in Export Processing Zones
- Invest to build better connectivity and technologies to improve lead times

3.16. Short brief on status of allied textiles industries (machinery, dyes, effluent treatment plants, etc) and services sector

The status of allied textiles industries (machinery, dyes, effluent treatment plants) and the services sector is given below:

Machinery and Equipment for Textile Industry:

- The textile machinery industry plays a crucial role in the textile sector. It provides machinery for various processes, including spinning, weaving, dyeing, and finishing.
- Key players in this sector include companies like Rieter, Trützschler, and Saurer.
- These companies continuously work on developing advanced and more efficient machinery to meet the industry's evolving needs.

Dyes and Chemicals:

- The textile dye and chemical industry is vital for providing color and finish to textiles.
- Environmentally friendly and sustainable dyeing processes have become a significant focus, with many companies investing in research to develop eco-friendly solutions.
- Regulations regarding the use of chemicals in textiles have become more stringent to address environmental concerns.

Effluent Treatment Plants (ETPs):

- The textile industry has been under increasing pressure to address environmental issues related to water pollution.
- Many textile manufacturers have implemented effluent treatment plants to treat and manage the wastewater generated in their production processes.
- Sustainable ETP solutions are gaining importance to reduce the environmental footprint of the textile industry.

Services Sector:

- The services sector related to the textile industry includes various areas like design, logistics, and retail.
- Design services have evolved to meet the demand for innovative and sustainable textile products.
- The logistics sector has seen advancements in supply chain management, allowing for better coordination and faster delivery of textile products.
- The retail sector has witnessed a shift towards e-commerce and omni-channel retailing, driven by changing consumer preferences.