

COUNTRY REPORT : PAKISTAN

I. INTRODUCTION

Cotton crop occupies a unique position in the agrarian economy of Pakistan. It accounts for 8.2% of the value added in agriculture and about 2% to GDP. It is realized that an increment of one million bales in cotton production in turn translates into half a percent increase in GDP. As such, this cash crop is believed to be the life line of the national economy. The gross exports in 2005-06 are provisionally valued at about US\$ 16.5 billion, of which US\$ 9.934 billion or over 60% were accrued through the export of raw cotton and the textile manufactures.

Pakistan has made noticeable progress in cotton production over the years. An all time record cotton production of about 14.3 million bales in 2004-05 followed by the second largest crop of 13 million bales in 2005-06 depict a significant growth in cotton production when compared with an average 10 million bales production during the last decade. A still higher production in years to come seems much possible in view of the latent yield potential of the existing cotton varieties, growing awareness among farmers regarding scientific crop production and protection measures, a well thought research program and the suitable government policies. The cotton production by 2015 is, therefore, envisaged at about 21 million bales (170 kgs each).

The country has also made significant growth in the textile sector and emerged as the third largest cotton consuming country in the world. There is also growing emphasis on the export of more value added textile products instead of confining to the yarn and cloth. There is also growing realization in the country that future gains in cotton production would be possible more through qualitative improvement in raw cotton. Hence, special measures are being taken to ensure production of contamination free clean cotton.

II. COTTON PRODUCTION SCENARIO

1. Cotton Production in 2005-06

Being encouraged with the record crop of 14.3 million bales in 2004-05, a production target of 15 million bales was envisaged for 2005-06 season. But, the crop turned out to be 13 million bales. The envisaged targets and the achievements are detailed below :

Cotton Production Target and Achievement in 2005-06

	Area (MI. ha.)	Production (MI. bales)	Yield (Kgs/ha.)
Target	3.247	15.00	786
Achievement	3.100	13.00	713

The decline in production in 2005-06 is attributable to 4.5% less area brought under the crop against the envisaged target of 3.247 million hectares due to floods / rainfall in the early season. Besides, the weather conditions in general were not as conducive as in 2004-05 season.

2. Cotton Production Target for 2006-07

Farmers' planting intentions for a particular crop are usually influenced by the factors like the availability of irrigation water, prices availed during the past season and the comparative advantage over other crops. It was expected that due to better prices of seed cotton availed by the growers during 2005-06 they would bring more area under the crop, but at the same time sugarcane prices had also ruled much higher and, therefore, could influence the growers' planting intentions in favor of sugarcane crop in certain areas. Hence, the cotton area target for 2005-06 has been repeated this season (2006-07). Expecting some improvement in yield over that of 2005-06 under normal weather, the Federal Committee on Agriculture in its meeting held on 6th May, 2006 in consultation with the Provincial Agriculture Departments fixed the cotton production target for 2006-07 at 13.816 million bales through an average hectare yield of 723 kgs..

3. Current Cotton Crop Situation

According to preliminary estimates, the cotton crop was sown this season on over 3.16 million hectares as against the envisaged target of 3.247 million hectares, thus showing a shortfall of 87,000 hectares or by about 3%. Besides, the floods and heavy rains in the month of August 2006 have reportedly damaged the crop on about 142,000 hectares. . The crop on rest of the area has reportedly been progressing well. In the meantime, the seed cotton arrivals from the early sown areas have commenced. The first estimate of the possible crop size would however be made by the Cotton Crop Assessment Committee in early October 2006.

III. COTTON POLICY AT A GLANCE

The cotton policy being pursued in the country envisages all the possible measures to sustain the recent significant growth realized in production and to further increase cotton production to meet the growing needs of the domestic textile industry and to make it competitive under the post quota regime. The government is, therefore, also determined to bring about qualitative improvement in cotton production matching the spinners' requirements. At the same time, the government also intends to facilitate all the stakeholders and safeguard their interests. The cotton policy thus encircles the following main features :

- Vertical expansion in cotton production.
- Cotton research focusing high yield potential and long staple cotton varieties with virus resistance.
- Encourage cotton cultivation in new potential areas.
- Fixing intervention price for seed cotton to safeguard growers' interest.
- Government intervention for price stabilization through procurement of lint cotton if the market price of seed cotton falls below the intervention price.
- Qualitative improvement in cotton through standardization and grading at grass root level, also by involving the private sector.
- Promoting cotton pricing and marketing system based on grade and staple.
- Campaigns for producing contamination free cotton.
- Free trade in cotton in order to provide a level playing field to all the stakeholders.

1. Availability of Cotton Seed

- i. The Federal Seed Certification & Registration Department monitors the position with respect to the cotton seed procurement by the public and private sector agencies in order to ensure adequate availability of cotton seed.
- ii. The private sector is encouraged to play greater role by expanding their activities in all the four provinces.
- iii. Ministry of Food, Agriculture and Livestock, in consultation with relevant stakeholders has finalized strategy to regulate release of Genetically Modified (GM) plant varieties including Bt. cotton. Ministry of Environment has notified Bio-safety Rules, 2005 and bio-safety Guidelines, 2005 and all GM plant varieties intended for release will be required to get Environment Clearance prior to entering normal testing and release procedures under Seed Act, 1976.
- iv. The National Institute of Biotechnology and Genetic Engineering (NIBGE) is conducting research for the improvement of cotton crop through genetic engineering. The insect resistant cultivars (FH-901, CIM-448, CIM-443 & NIBGE-1) are developed and ready for release. These cultivars are resistant to bollworms (American, Spotted and Pink Bollworm). Other such cultivars (IR-NIBGE-2419, IR-NIBGE-2443, IR-NIBGE-2456) are in pipeline.

2. Integrated Pest Management

In order to minimize heavy reliance on costly and hazardous chemical pesticides, which also result in higher cost of production and insecticides resistance, the concept and practice of Integrated Pest Management is being encouraged through the following provisions :

- i. Develop a cadre of IPM facilitators through season long training of researchers and field staff.
- ii. Develop the capacity of farmers to implement IPM through farmer's schools.
- iii. Institute special studies on pesticides and IPM policy analysis.
- iv. Develop IPM awareness program for public through mass media.
- v. Develop a National IPM Information Network.

3. Technology Transfer

For transferring the cotton production and protection technologies as well as issuing timely warning to the growers on account of weather and insect-pests situation, the following approaches are being used :

- Electronic media
- Print media
- Extension programs
- Demonstrations
- Seminars / exhibitions.

The Federal Government through MINFAL have made special arrangements for wider propagation of the cotton production and protection technologies through electronic and print media among the growing community for undertaking timely measures to save the crop from the ravages of the insect pests complexes and the weather conditions. In order to minimize heavy reliance on costly and hazardous chemical pesticides, which in turn also result in higher cost of production and insecticides resistance, the concept and practice of Integrated Pest Management is being encouraged. These campaigns are meant to educate the farmers on various precautionary and remedial measures required at different stages of cotton crop growth and development as well as the ways and means for improving the quality of the produce. For the purpose, the government had allocated a sum of Rs.50 million in 2005-06 and a sum of Rs.52 million has also been approved for the season 2006-07.

4. Agricultural Credit Availability

Agricultural credit is considered as an important instrument for achieving production target and promotion of agriculture sector. Government policy with regard to agricultural credit is to safeguard the interest of small farmers by extending credit to them on easy terms and to recover the same in time as well as to protect them in case of any natural hazards and calamity. Credit requirements of the farming community have shown an increasing trend over the years. Therefore, the government has been increasing agricultural credit allocations from year to year.

5. Cotton Research and Development

In order to realize the latent yield potential of the varieties in vogue, improve the hectare yield particularly on the small farms and, therefore, enhance the cotton production in the country a well coordinated and collaborated approach is being pursued. Besides giving due attention to the timely and adequate availability of essential inputs such as irrigation water, seed, fertilizer and pesticides, focused attention on the cotton research and development is also being paid both by the Federal and Provincial institutions in collaboration with the other stakeholders. The cotton research programs being pursued in the country lay due emphasis on the following aspects :

- Control of Cotton Leaf Curl Virus through breeding and crop management.
- Development of commercial cotton hybrids.
- Development of Bt cotton.
- Development of heat, insect, salinity and drought resistant / tolerant and early maturing varieties.
- Evolution of long and extra long staple cotton varieties.
- Focus on Integrated Pest Management.

Cotton leaf curl virus (CLCV) is a major problem in the Punjab. However, by evolving CLCV resistant varieties and management strategy by the PCCC's research institutes, Pakistan cotton production was sustained to 10 million bales. While the CLCV management strategy has been developed and updated every year for the guidance of the growers, the evolution of early maturing varieties also enabled the growers to harvest more yield by escaping the high pest pressure. Moreover, these early maturing varieties are also vacating the fields earlier which enable the growers to plant the wheat in time which resulted in better production of wheat crop. Cotton scientists are also conducting research to evolve extra long staple cotton. So far cotton variety of 32 mm staple length (CIM-707) has been evolved and released for general cultivation.

Pakistan Central Cotton Committee is the apex cotton research body and generates funds for research purposes through a levy of cotton cess on the cotton consumed by the textile industry or exported. In order to supplement the efforts made by the Pakistan Central Cotton Committee, the Federal Government also provide funds for specific projects.

6. Promotion of Cotton in New Areas

In Pakistan, the cotton is traditionally produced in the two provinces, namely: Punjab and Sindh. However, in order to explore new areas for cotton cultivation, the efforts are being made to encourage the growing community of the other two provinces, namely: Balochistan and North West Frontier Province (NWFP) with visible success. The government has thus been providing support to the provincial governments by supplementing their seed requirements and providing technical support.

7. Cotton Pricing Policy

In order to encourage the growers to achieve still higher production of quality cotton during 2006-07 and also to safeguard the interest of the growing community, the government prior to the commencement of the cotton season decided the following :

- i. Intervention price of seed cotton for 2006-07 was increased to Rs.1,025/- per 40 kgs from Rs.975/- per 40 kgs. fixed for 2005-06.
- ii. The task of implementing the intervention price of seed cotton would remain with the Trading Corporation of Pakistan (TCP) through buying lint at the price to be based on the intervention price of seed cotton.
- iii. TCP would also enforce the premia and discounts for various grades and staple lengths.
- iv. The Inter-Ministerial Committee comprising Federal Ministers for Commerce, Food, Agriculture and Livestock, Industries and Production, Textile Industry and the representatives of the private sector stakeholders shall continue to regularly monitor the cotton market prices and the procurement operation of the Trading Corporation of Pakistan during the season.

IV. MILL CONSUMPTION OF COTTON

There has been a phenomenal growth in the mill consumption of cotton over the years which is attributable to both the setting up of new mills and their improved capacity. The number of textile mills in the country increased from 131 in 1971-72 to 210 in 1981-82, to 307 in 1991-92 and to 445 in 2001-02, which has now increased to 458. According to the Textile Commissioner's Organization, the industry's present capacity is as under :

Textile Industry's Capacity (As in January 2006)

	Installed	Working
Spindles	10,346,041	8,868,974
Rotors	156,976	77,292
Looms	8,641	4,280

Source: Textile Commissioner's Organization.

The raw cotton requirement of the industry has significantly increased in the past few years due mainly to the industry's growing capacity. The mill consumption of raw cotton in 2005-06 is estimated by the Textile Commissioner's Organization at about 13 million bales. The private sector, however, places the present level of cotton consumption in the country in the range of 14-15 million bales.

V. COTTON TRADE

According to the Federal Bureau of Statistics, a total of 1,691,206 bales (170 kgs each) of raw cotton were imported during August 2005 to April 2006 as against 1,674,559 bales imported during the corresponding period last season (2004-05). As for the exports, 347,641 bales were exported from August 2005 to June 2006 vis-à-vis 682,776 bales exported during the same period last season.

It is worth mentioning that the government has been pursuing a free trade policy in cotton. Hence, no quantitative restrictions or duty on import or export of cotton.

VI. QUALITY OF COTTON

In view of the significance of cotton and textile sector in the national economy, there has been increasing emphasis on quality control or the production of cleaner and contamination free cotton to enable the textile industry to expand the marketing base for Pakistan products and to realize their intrinsic values in the international market. The government has already taken the following measures to introduce and implement cotton standardization and grading system in the country, and also to overcome the contamination problem :

- i) Cotton Standardization Ordinance, 2002 has been promulgated.
- ii) Cotton Standards Institute has been established.
- iii) National Seed Cotton Grades and Lint Cotton Standards have been developed and approved.
- iv) Intervention price of seed cotton is fixed on grade basis.
- v) Raw cotton spot rates are now issued on the basis of grade and staple.
- vi) Contamination free cotton production programs were launched with visible success.
- vii) HVI equipped fibre testing labs in major cotton growing districts are being set up, also by the private sector.
- viii) Provincial Governments have amended the Cotton Control Act to eliminate contamination problem.
- ix) A mechanism to pass on the premium for producing high grade and cleaner cotton to the growers during the current season is under finalization.

In addition to above, some measures were taken in 2005-06 to provide premium direct to the growers and ginners for producing quality cotton. For the purpose, the Ministry of Textile Industry launched a clean cotton production program in some selected factories under the monitoring of Pakistan Cotton Standards Institute (PCSI) and in collaboration with Trading Corporation of Pakistan (TCP) and Provincial Agriculture Departments to pay premium for clean cotton directly to the grower / supplier of seed cotton by TCP for higher grade and better quality and to the ginners over and above the TCP's lint parity price. Local spinners who purchased the resulting bales expressed their satisfaction on the quality and had, therefore, demanded such clean cotton bales in a larger number. Such a program is, therefore, also being launched during the current season (2006-07) in still greater number of factories for creating the culture of clean and contamination free cotton production.

The Ministry of Textile Industry in collaboration with the Ministry of Food, Agriculture and Livestock, Ministry of Commerce and the Provincial Agriculture Departments as well as the private sector stakeholders is working to implement the Cotton Standardization and Grading System at the grass root level.

Pakistan Cotton Standards Institute (PCSI), an attached department of Ministry of Textile Industry, has been promoting the instrumental evaluation of cotton fibre. So far, PCSI has established five fiber testing labs in the major cotton growing districts, each equipped with a High Volume Instrument (HVI). Five more such laboratories in other districts will be established during the current season (2006-07). The private sector is also encouraged to develop a network of HVI equipped laboratories to facilitate the stakeholders at the grass root level. Presently, two private laboratories are set up and providing the services.

VII. COTTON VISION 2015

As for the future cotton production prospects, there is, however, still much scope for enhancing the cotton production to meet the future needs of the domestic textile sector as well as the international market. The government is, therefore, determined to accelerate the cotton research and development process necessarily required for a quantum jump in cotton production as well as the qualitative improvement matching the spinners' requirements. At the same time, it also intends to facilitate all the stakeholders, particularly the growing community through a package of fiscal, technological, administrative and legislative measures. Accordingly, the Ministry of Food, Agriculture and Livestock has prepared a long term Cotton Vision for sustained growth in cotton sector and the possible improvement in the quality of raw cotton with following envisaged targets by 2015 :

1. Cotton Production:	20.70 Million Bales
2. Cotton Yield / hectare.	1,060 kgs
3. Mill Consumption of Cotton:	20.10 Million Bales
4. Exportable Cotton Surplus:	0.60 Million Bales
5. Improved Yarn Recovery Rate through clean / contamination free cotton production :	92% (from current average of 84%).

The higher production of cleaner cotton would thus result in the following advantages:

1. Assured supply of cleaner, uniform, graded and contamination free cotton to the domestic textile industry.
2. Higher recovery rate, hence more yarn.
3. Improved reputation of Pakistan's cotton and its products in the world market.
4. Substantial additional foreign exchange earning through better unit values.

AREA, PRODUCTION AND YIELD IN PAKISTAN

Season	Area (Million hectares)	Production (Million bales)	Yield (Kgs/ha)
1994-95	2.653	8.697	558
1995-96	2.997	10.595	601
1996-97	3.149	9.374	506
1997-98	2.960	9.184	528
1998-99	2.923	8.790	512
1999-00	2.983	11.240	641
2000-01	2.927	10.732	624
2001-02	3.115	10.612	579
2002-03	2.794	10.211	622
2003-04	2.989	10.048	572
2004-05	3.192	14.265	760
2005-06*	3.100	13.000	713

Source: - Ministry of Agriculture.

* Provisional.

Annexure-II

RAW COTTON CONSUMPTION IN PAKISTAN

Season	Cotton consumption (Million bales)
1994-05	8.352
1995-96	8.975
1996-97	8.544
1997-98	8.616
1998-99	8.518
1999-00	9.443.
2000-01	9.882
2001-02	10.529
2002-03	11.439
2003-04	11.405
2004-05	12.633
2005-06*	13.000

Source: Textile Commissioner's Organization.

* Provisional.

Annexure-III

PAKISTAN'S RAW COTTON IMPORTS AND EXPORTS

Season	Imports	Exports
	(Million bales of 170 kgs.)	
1994-95	0.645	0.215
1995-96	0.156	1.807
1996-97	0.364	0.210
1997-98	0.301	0.442
1998-99	1.313	0.009
1999-00	0.421	0.586
2000-01	0.670	0.710
2001-02	1.080	0.268
2002-03	1.138	0.260
2003-04	2.312	0.218
2004-05	2.249	0.704
2005-06	2.255	0.379

Source: Federal Bureau of Statistics.

* Estimated

Annexure-IV

SPOT RATES (EX-GIN) OF RAW COTTON
(Rs. per 40 kgs)

Month/Season	2003-04	2004-05	2005-06
August	2722	2446	2441
September	2626	2377	2300
October	3225	2077	2470
November	3474	2064	2536
December	3400	1998	2538
January	3474	2177	2600
February	3406	2312	2714
March	3222	2435	2643
April	3069	2395	2593
May	3196	2374	2613
June	3276	2410	2717
July	2854	2508	2733
Annual Average	3162	2298	2575

Source: Karachi Cotton Association.

PAKISTAN'S MAJOR COTTON VARIETIES

Variety	Lint (%)	Staple Length (mm)	Mike	Strength (TPPSI)
CIM-446	36.2	27.0	4.7	97.4
CIM-473	39.8	29.6	4.3	95.2
CIM-499	40.0	29.6	4.4	96.0
CIM-506	38.5	28.8	4.5	98.9
CIM-496	41.0	29.6	4.6	94.0
CIM-707	38.1	32.2	4.2	97.5
FH-901	38.2	26.7	5.1	92.0
FH-1000	38.8	29.5	4.6	96.9
BH-160	35.5	29.0	4.2	95.1
NIAB-999	36.5	28.7	4.6	93.6
NIAB-111	37.5	30.5	4.4	90.5
Alseemi-151	38.0	32.5	4.6	100.3
CRIS- 134	37.7	28.2	4.6	96.8