

COUNTRY REPORT : PAKISTAN

I. Introduction

Cotton crop is believed to be the life line of the national economy. It accounts for 8.2% of the value added in agriculture and about 2% to GDP. The gross exports in 2006-07 were provisionally valued at about US\$ 17.011 billion, of which US\$ 9.978 billion or about 59% were accrued through raw cotton and the textile products made thereof.

Pakistan produced an all time record cotton crop of about 14.3 million bales* in 2004-05 followed by the second largest crop of 13 million bales* in 2005-06 and 2006-07. As commonly perceived, a much larger crop may be expected in years to come in view of the latent yield potential of the existing cotton varieties, growing awareness among farmers regarding scientific crop production and protection measures, new areas available for cotton cultivation and the suitable government policies.

There is, thus, much possibility to enhance cotton production matching 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 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. Hence, special measures are being taken to ensure production of contamination free clean cotton.

* Pakistani bale = 170 kgs.

II. Cotton Production Target (2007-08)

The Federal Committee on Agriculture in consultation with the Provincial Agriculture Departments fixed the cotton area and production targets for 2007-08 at 3.25 million hectares and 14.14 million bales, respectively with the following Province-wise breakup:

Cotton Area, Production and Yield Targets for 2007-08

Province	Area (Million Hectares)	Production (Million bales)	Yield (Kgs/ha)
Punjab	2.560	11.00	731
Sindh	0.640	3.00	797
N.W.F.P.	0.005	0.01	340
Balochistan	0.045	0.13	491
Total	3.250	14.14	740

III. Current Crop Situation

In the Punjab, cotton crop this season was sown on about 2.40 million hectares as against the target of 2.56 million hectares, or less by 6%. In Sindh, 0.59 million hectares were brought under cotton crop, or 92% of the target of 0.64 million hectares. On overall basis, cotton area sown remained short of target by about 6%.

The bulk of the crop both in the Punjab and Sindh was reportedly progressing well and a good crop was expected, due mainly to prevailing favorable weather, comparatively less insect pest pressure (except Mealy Bug) and larger number of bolls per plant, etc. Cotton arrivals into ginneries have started and 2,713,609 equivalent lint bales (170 kgs. each) had reached the ginneries till 15th October, 2007 as against 2,468,006 bales (170 kgs. each) reported on the same date last year, thus showing 0.245 million or about 10% more bales so far this season.

IV. Cotton Market Prices

In the backdrop of rising prices in the world market, seed cotton and lint prices in the domestic market also ruled high, as depicted by the following figures:

Seed Cotton Average Market Prices

Stations	(Rs. per 40 kgs.)		
	2007-08*	2006-07	2005-06
Hyderabad	1,371	1,174	1,003
Sanghar	1,397	1,166	1,006
Khairpur	1,350	1,137	1,060
R. Y Khan	1,296	1,215	1,107
Multan	--	1,160	1,092
Sahiwal	1,394	1,186	1,069

* Aug – Sept.

It is important to note that the government had previously been fixing the seed cotton intervention price and entering the market through Trading Corporation of Pakistan only when the seed cotton market price fell below the intervention price. Such a necessity was last felt in 2004-05 when the government had to purchase, but merely 1.6 million bales. The growers availed better prices in 2005-06 and 2006-07 seasons. For the current season (2007-08) the government did not fix any intervention price for seed cotton, but the market prices are record high so far.

Lint cotton market prices in August – September, 2007 were much higher than the previous seasons, as depicted by the Karachi Cotton Association's (KCA) spot rates, as under :

Raw Cotton Spot Rates (ex-gin price)

(Rs/40 kgs)			
Months	2007-08	2006-07	2005-06
August	3,223	2,661	2,441
September	3,014	2,755	2,300
October		2,572	2,470
November		2,566	2,536
December		2,705	2,538
January		2,702	2,600
February		2,707	2,714
March		2,749	2,643
April		2,894	2,593
May		2,865	2,613
June		2,794	2,717
July		3,019	2,733
Average	---	2,749	2,575

V. 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 461. According to the Textile Commissioner's Organization, the industry's present capacity is as under :

Textile Industry's Capacity
(As on 30th November, 2006)

	Installed	Working
Spindles	10,457,572	9,428,469
Rotors	156,448	75,687
Looms	8,917	4,290

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 14.225 million bales. The private sector, however, places the present level of cotton consumption in the country over 15 million bales.

VI. Raw Cotton Imports / Exports

During the first ten months of 2006-07, a total of 2.234 million bales (170 kgs. each) of raw cotton were imported in the country. Larger quantities were imported from India, United States, Brazil, CIS and Greece. As for the exports, a total of 0.251 million bales (170 kgs. each) were shipped in the first ten months of 2006-07. Major destinations were Bangladesh, Indonesia and Thailand.

VII. Cotton Policy—An overview

The cotton policy being pursued in the country envisages all the possible measures to attain and sustain a significant growth in 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.

i) Cotton Research and Development

Needless to say, research and development is an essential pre-requisite for sustained growth in the agriculture sector. It becomes all the more important when it is cotton, which is the main stay of the national economy. The government has thus been giving an exclusive attention to the cotton research and development pursuits. The government as a matter of policy is also determined to safeguard the interests of various stakeholders, particularly the growing community. In order to enable the growers to produce more cotton, while on the one hand the disbursement of the institutional production credit has been enhanced manifold, the government on the other hand is also providing subsidy on phosphate and potash fertilizers for encouraging balanced fertilization necessarily required for higher yield and economizing the cost of production. Besides, the Ministry of Food, Agriculture and Livestock and the Provincial Agriculture Departments have been using electronic media for quick and timely transfer of cotton production and protection technologies to the growers. The prevailing free trade policy in cotton also provides a level playing field.

Pakistan being the 4th largest producer of raw cotton is still far behind in productivity per unit of area when compared with the hectare yields being realized in some other major cotton growing countries, such as Australia, China, Greece, Turkey and Syria, etc. A critical analysis of the situation reveals that while the research has come out with high yield potential varieties and the technologies, our national average yield is almost stagnant perhaps due to implications of the vagaries of weather, absence of virus resistant varieties, emergence of new insect pests such as Mealy Bug and the limited adoption of the scientific cultivation methods. Cotton R&D related organizations are therefore concentrating on developing practical solutions to raise the yield level, particularly on small farms which are in bulk. Government's Cotton Vision envisages to enhance the average yield level to at least 1,060 kgs per hectare by 2015, or even earlier.

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.

Use of Biotechnology for raising the yields and saving the crop losses is the present day's requirement. The government is much in favour of introducing Bt. cotton cultivation in the country, but through formal means. In this regard, the Ministry of Food, Agriculture and Livestock in consultation with 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. The National Institute of Biology and Genetic Engineering (NIBGE) and the Centre of Excellence for Molecular Biology (CEMB) have reportedly been successful in incorporating the Bt. gene in already approved commercial varieties of cotton. These varieties will be released soon after the fulfillment of the necessary obligations required under the Bio-safety Rules, 2005 and Bio-safety Guidelines 2005. At the same time, the multi-national companies have also been approached to bring this technology to Pakistan to benefit the growers and enhancing the national cotton production. The measures being taken thus promise the availability of Bt. cotton seed to the growers in near future.

ii) Cotton in New Areas

In view of cotton production potential in Balochistan and NWFP, the government has been providing support to the provincial governments by supplementing their seed requirements and providing technical support. It is, however, apprehended that on account of setting up of sugar mills in NWFP (D.I. Khan district) the cotton cultivation

in the area may not expand on a larger acreage. Hence, new suitable areas for cotton cultivation in NWFP need to be explored, such as Lukki Marwat, Bannu and Karak, etc.

Organic cotton production is yet another important area being encouraged particularly in the province of Balochistan. Measures are being taken to provide appropriate varieties and the technology to the growers for the purpose. At the same time, the Provincial Governments are being encouraged to take the growers and buyers of organic cotton as well as the internationally acceptable certification agencies on board for a collaborative effort leading to successful intervention.

iii) 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 Pakistani products and to realize their intrinsic values in the international market. The government has already taken several measures to introduce and implement cotton standardization and grading system in the country, and also to overcome the contamination problem.

In order to ensure a premium price to the growers and ginners for producing quality cotton, the Ministry of Textile Industry launched a clean cotton production program in selected factories under the monitoring of Pakistan Cotton Standards Institute (PCSI) and in collaboration with Trading Corporation of Pakistan (TCP) and Provincial Agriculture Departments. 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 will, therefore, be launched during the current season (2007-08) in still greater number of factories for promoting 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 also working to implement the Cotton Standardization and Grading System at the grass roots level as early as possible. For the purpose, Pakistan Cotton Standards Institute (PCSI), an attached department of Ministry of Textile Industry, has also 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. Private sector is also encouraged to develop a network of HVI equipped laboratories to facilitate the stakeholders. A number of textile mills have already equipped themselves with HVI testing.

In the context of cotton quality improvement, the ginners also have to play an important role. As a matter of fact, the bulk of the existing ginneries have out dated machinery and observing primitive methods of drying and cleaning. Realizing that the whole of ginning industry can not be revamped in short time, the ginners are persuaded that instead of sharpening / re-sharpening of gin saws, they should replace these with new ones after ginning the prescribed number of bales. The government would also encourage joint ventures with foreign companies for local manufacturing of the quality gin saws and other ginning associated machinery.

Tail- piece

Pakistan's economy is heavily dependent on cotton and textile sector. Hence, growth in national economy is essentially linked with the volume and value of cotton produced in the country. Being cognizant of this fact, the government has been undertaking all possible administrative, technological, legislative and economic measures to enhance cotton production with visible results witnessed during the last three years, when the barrier of an average 10 million bales production was crossed in 2004-05. It is however generally realized that under the WTO post quota scenario a larger crop would pay the real dividends only when its quality matches the spinners' demand at home and abroad. All the stakeholders are, therefore, being motivated to play their due role in transforming the cotton pricing and marketing system from subjective assessment to objective valuation of seed cotton and lint through adoption of cotton standardization and grading mechanism already developed and introduced by the government.

The government is also upgrading its Central Cotton Research Institute located at Multan thereby enabling it to conduct international research and training programs.

Annexure-I**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	3.103	13.019	714
2006-07	3.075	13.000	719
2007-08*	3.250	14.140	740

Source: Ministry of Agriculture.

* Target.

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	14.225

Source: Textile Commissioner's Organization.

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	1.728	0.352
2006-07*	2.234	0.251

Source: Federal Bureau of Statistics.

* August to May

Annexure-V**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