

COTTON SECTOR

1. NATIONAL COTTON SCENARIO

1.1 Cotton is one of the most important cash crops and accounts for around 25% of the total global fibre production. Cotton is also one of the most important commercial crops cultivated in India. In the raw material consumption basket of the Indian textile industry, the proportion of cotton is around 59%. It plays a major role in sustaining the livelihood of an estimated 5.8 million cotton farmers and 40- 50 million people engaged in related activities such as cotton processing and trade. India also has the distinction of having the largest area under cotton cultivation in the world i.e. about 11 million hectares.

1.2 **Production & Consumption:** India is the country to grow all four species of cultivated cotton *Gossypium arboreum* and *herbaceum* (Asian cotton), *G.barbadense* (Egyptian cotton) and *G. hirsutum* (American Upland cotton). *Gossypium hirsutum* represents 88% of the hybrid cotton production in India and all the current Bt cotton hybrids are *G.hirsutumim*. In India, majority of the cotton production comes from nine major cotton growing states, which are grouped into three diverse agro-ecological zones, Northern zone comprising States of Punjab, Haryana and Rajasthan, Central zone comprising the States of Gujarat, Maharashtra and Madhya Pradesh and Southern zone comprising the States of Telangana, Andhra Pradesh and Karnataka. Besides this, cotton is also grown in the States of Tamil Nadu and Orissa. Cotton cultivation has also gained momentum in small areas of non-traditional States such as Uttar Pradesh, West Bengal, Tripura, etc. Production and productivity of cotton in India have improved significantly during the past decades. India is the largest producer cotton in the World. India is also leading consumer of cotton. The details of production and consumption of cotton during the last 10 years is given below:-

(in lakh bales of 170 Kg Each)

Year	Production	Consumption
2008-09	290	229.00
2009-10	305	259.00
2010-11	339	259.61
2011-12	367	375.28
2012-13	370	283.16
2013-14	398	299.55
2014-15	386	309.44
2015-16	332	315.28
2016-17(P)	345	306.36
2017-18(P)	377	334.00

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 12.12.2017

The details of state-wise area, production and yield is given below:-

(Area in lakh hectare/Yield in Kg /hectare)
(Prodn, Con, Imp & Exp in lakh bales of 170 Kg each)

State	Area		Production		Yield	
	2016-17	2017-18(P)	2016-17	2017-18(P)	2016-17	2017-18(P)
Punjab	2.85	3.85	9.00	12.00	536.84	529.87
Haryana	5.70	6.56	20.50	25.00	611.40	647.87
Rajasthan	4.71	5.03	16.50	22.00	595.54	743.54
North Zone	13.26	15.44	46.00	59.00	589.74	649.61
Gujarat	24.05	26.18	95.00	104.00	671.52	675.32
Maharashtra	38.00	41.98	88.50	85.00	395.92	344.21
Madhya Pradesh	5.99	5.99	20.50	20.00	581.80	567.61
Central Zone	68.04	74.15	204.00	209.00	509.70	479.16
Telangana	14.09	18.24	48.00	57.00	579.13	531.25
Andhra Pradesh	4.71	5.44	19.00	22.00	685.77	687.50
Karnataka	5.07	5.65	18.00	19.00	603.55	571.68
Tamil Nadu	1.42	1.48	5.00	6.00	598.59	689.19
South Zone	25.29	30.81	90.00	104.00	604.98	573.84
Odisha	1.36	1.45	3.00	3.00	375.00	351.72
Others	0.50	0.50	2.00	2.00	680.00	680.00
All-India	108.45	122.35	345.00	377.00	540.80	523.83

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 12.12.2017

1.3 **Acreage/Productivity:** India got 1st place in the world in cotton acreage with around 105 lakh hectares are under cotton cultivation i.e. around 35% of the World area of 296 lakh hectares. Approximately 62% of India's Cotton is produced on rain-fed areas and 38% on irrigated lands. In terms of productivity, India ranks poorly compared to USA & China. During 2017-18, India's Productivity is estimated at 523.83 kg/ha. The productivity of cotton for the last 10 years is as follows:-

(in Kg/Hectares)

Year	Acreage	Yield
2008-09	94.06	524.13
2009-10	103.10	502.91
2010-11	112.35	512.95
2011-12	121.78	512.32
2012-13	119.78	525.13
2013-14	119.60	565.72
2014-15	130.83	493.77
2015-16	122.92	459.16
2016-17(P)	108.45	540.80
2017-18 (P)	122.35	523.83

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 12.12.2017

1.4 **Import/Export:** Presently, Cotton is a freely exportable commodity from India. India exports Cotton mainly to Bangladesh, China, Vietnam, Pakistan, Indonesia, Taiwan, Thailand etc. Even though China was the largest importer of Indian cotton fibre till 2013-14, it became the third largest importer of Indian Cotton fibre in 2015-16 after Pakistan and Bangladesh. Although India is a major producer and exporter of cotton fibre, a small quantity of long fibre variety of cotton which is not available in the country, is imported. The following table gives the import and export figures for the last 10 years:-

(in lakh bales of 170 Kg each)

Year	Import	Export
2008-09	10.00	35.00
2009-10	6.00	83.00
2010-11	2.38	76.50
2011-12	7.51	129.57
2012-13	14.59	101.43
2013-14	11.51	116.96
2014-15	14.39	57.72
2015-16	22.79	69.07
2016-17(P)	30.94	58.21
2017-18(P)	17.00	67.00

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 12.12.2017

1.5 **Balance Sheet of cotton:** transaction for the cotton season 2014-15, 2015-16, 2016-17 (Provisional) & 2017-18(Provisional) is given below:-

(in lakh bales of 170 Kg each)

Item	2014-15	2015-16	2016-17(P)	2017-18(P)*
SUPPLY				
Opening stock	33.00	66.00	36.44	47.81
Crop size	386.00	332.00	345.00	377.00
Imports	14.39	22.79	30.94	17.00
Total Supply	433.39	420.79	412.38	441.81
DEMAND				
Mill consumption	278.06	270.20	262.66	288.00
SSI consumption	26.28	27.08	26.20	27.00
Non-textile consumption	5.00	18.00	17.50	19.00
Total consumption	309.44	315.28	306.36	334.00
Exports	57.72	69.07	58.21	67.00
Total Demand	367.16	384.35	364.57	401.00
Closing Stock	66.23	36.44	47.81	40.81

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 12.12.2017

2. INCENTIVES FOR PROMOTING COTTON PRODUCTION

2.1 Minimum Support Price (MSP) Operation

Every year before the commencement of the Cotton Season (Oct. to Sept.), the Ministry of Agriculture based on the recommendations of Advisory Board viz., Commission for Agricultural Costs and Prices (CACP) fixes the MSP with a view to give incentives to the Cotton farmers of the country. Accordingly, taking into consideration of the recommendation of CACP the Ministry of Agriculture is being fix MSP for two basic varieties of cotton viz. Medium Staple length cotton having staple length of 24.5 mm to 25.5 mm with micronaire value of 4.3 to 5.1 and long staple length having staple length of 29.5 to 30.5 mm with micronaire of 3.5 to 4.3 of new crop of seed cotton (kapas) of Fair Average Quality (FAQ). The MSP fixed by Ministry of Agriculture for the last few years is given below:-

(Rs. Per quintal)

Cotton Season	Medium Staple (Staple Length 24.5 to 25.5 mm with micronaire value 4.3 to 5.1)	Long Staple (Staple Length 29.5 to 30.5 mm with micronaire value 3.5 to 4.3)
2008-09	2500	3000
2009-10	2500	3000
2010-11	2500	3000
2011-12	2800	3300
2012-13	3600	3900
2013-14	3700	4000
2014-15	3750	4050
2015-16	3800	4100
2016-17	3860	4160
2017-18	4020	4320

Based on the Support Price of these two basic varieties of Seed cotton (Kapas) and taking into account the quality differential, normal price differential and other relevant factors, the MSP for other classes of Seed cotton (Kapas) of Fair Average Quality (FAQ) has been fixed by Textile Commissioner. The MSP for other varieties of cotton for Cotton Season 2017-18 (Oct.-Sept.) as fixed by the Textile Commissioner of India is given below:-

Sr.No.	Classes of cotton and name of indicative varieties used by the trade	Fibre Quality Parameters		Minimum Support Price (MSP) 2017-18 in Rs/Qntls
		Basic Staple Length (2.5% span length) in mm	Miconnaire value	
Short Staple (20.0 mm & below)				
1	Assam Comilla	--	7.0-8.0	3520
2	Bengal Deshi	--	6.8-7.2	3520
Medium Staple (20.5 mm-24.5 mm)				

3	Jayadhar	21.5-22.5	4.8-5.8	3770
4	V-797/ G.Cot.13/ G.Cot.21	21.5-23.5	4.2-6.0	3820
5	AK/Y-1(Mah&MP)/MCU-7 (TN)/ SVPR-2(TN)/ PCO-2 (AP& Kar)/K-11(TN)	23.5-24.5	3.4-5.5	3870
Medium Long Staple (25.0 mm-27.0 mm)				
6	J-34 (Raj)	24.5-25.5	4.3-5.1	4020
7	LRA-5166/ KC-2 (TN)	26.0-26.5	3.4-4.9	4120
8	F-414/ H-777/ J-34 Hybrid	26.5-27.0	3.8-4.8	4170
Long Staple (27.5 mm-32.0 mm)				
9	F-414/ H-777/ J-34 Hybrid	27.5-28.5	4.0-4.8	4220
10	H-4/ H-6/ MECH/ RCH-2	27.5-28.5	3.5-4.7	4220
11	Sankar-6 /10	27.5-29.0	3.6-4.8	4270
12	Bunny/ Brahma	29.5-30.5	3.5-4.3	4320
Extra Long Staple (32.5 mm & above)				
13	MCU-5 / Surabhi	32.5-33.5	3.2-4.3	4520
14	DCH-32	34.0-36.0	3.0-3.5	4720
15	Suvin	37.0-39.0	3.2-3.6	5520

Cotton Corporation of India(CCI) has been nominated by the Government of India for undertaking MSP operations in the event when prices of seed cotton (kapas) touch MSP level for procuring entire quantity of kapas offered by the cotton farmers in various APMC market yards at MSP rates without any quantitative limit.

Following initiatives are being taken for effecting smooth MSP operation for the benefit of farmers:-

- i) During current cotton season for the convenience of farmers, CCI has opened 348 procurement centres to ensure remunerative prices to the cotton farmers.
- ii) With a view to enable the cotton farmers to avail the full benefit of MSP, CCI has disseminated information about MSP through advertisements in newspapers, distribution of pamphlets to individual farmers and displaying banners in APACs in order to avoid distress sale of cotton by farmers.
- iii) All payments to farmers are made through Real-time Gross Settlement Systems (RTGS) to ensure that the benefit of MSP goes directly to the concerned farmers.
- iv) Awareness campaign has been taken up in a big way including display of Minimum Support Price (MSP) rate and quality parameters in local languages.
- v) Purchases under MSP operation are monitored daily through ERP system of the CCI. In addition, video conference – twice a week is also conducted by

the corporate office with the various branch heads of the Corporation, to ensure that all issues are sorted out without delay and to keep the MSP operation smooth.

- vi) To address the grievances of farmers, Grievance Cell has also been opened at Zonal and Headquarter Offices.

In order that the MSP operations are carried out in a transparent and efficient manner in the cotton season 2017-18, Secretary (Textiles) chaired a meeting with all the cotton growing states on 2.8.2017. Further, Minister of Textiles has also written letters to Chief Minister of all cotton growing states viz., Punjab, Haryana, Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Andhra Pradesh, Telangana, Karnataka, Odisha and Tamil Nadu for their support on the following suggestions:-

- i) The purchase system at the APMC should seamlessly link weighment, identification of farmer through instant photograph and payment into their account. In e-NAM implemented APMCs, these facilities are available. In order APMCs similar functionalities may be provided to facilitate electronic processing of transaction.
- ii) For identification of genuine farmers, some state governments have introduced bar coded identity cards. In case, this has not been done, a system may be set up in the purchase centres whereby the sellers are clearly identified based on an electronic database of farmers containing inter alia their photographs, Aadhar details, land holding, area in which cotton grown and bank account numbers. At the time of purchase, i.e. generation of takpattis, the farmers may be photographed through a webcam and the information retained in a digital database for further verification, if required.
- iii) CCI has tentatively identified a total of 348 procurement centres based on past need for MSP operations. These centres are mostly located at APMC Market Yards. It may, however, be convenient to the farmers, if the purchase centres are relocated to Ginning & Pressing factories by providing necessary infrastructure there. This will require advance notification of the Ginning & Pressing factories as Market Yards under APMC Act indicating clearly the villages attached to them for MSP purchases and establishment of requisite facilities.

- iv) Awareness campaigns amongst farmers may be launched exhorting them to bring contamination free, good quality cotton with nominal moisture content of 8% at the notified Market Yards which will fetch the best price. Although, the CCI will purchase cotton with 8-12 percent moisture at proportionately reduced price.
- v) Most of the other States have exempted CCI from paying 2% commission to the APMC during the MSP operations because the purchase is done directly by the CCI to avoid distress sale by the farmers. In such operation, actually, no bidding takes place. Therefore, the APMCs need to be advised to allow CCI to purchase directly from cotton farmers without the involvement of any commission agents. This would ensure uniform system in MSP purchases across the country and also reduce losses arising out of MSP operations.

Statement showing state-wise procurements under MSP operations during last three years and current year is as under:

(Quantity in bales of 170 kgs each)

State	2014-15	2015-16	2016-17	2017-18*
Punjab	1,27,722	-	-	-
Haryana	79,903	-	-	-
Rajasthan	87,870	-	-	-
Gujarat	6,66,457	51,501	-	94,038
Maharashtra	17,63,192	1,16,799	-	14,647
Madhya Pradesh	2,81,875	29,104	-	7,797
Telangana	36,90,948	5,95,159	-	2,63,491
Andhra Pradesh	17,55,559	39,967	-	6,497
Karnataka	1,39,280	-	-	297
Orissa	1,02,987	11,633	-	1,991
Others	266	368	-	-
Total	86,96,059	8,44,531	-	3,88,758

*Position upto 16th April, 2018

Note: During cotton season 2016-17, since beginning average seed cotton prices were ruling above MSP level. Hence, there were no offers of cotton at MSP from farmers, though CCI remained present in the market yards throughout the cotton season for procuring cotton at MSP.

2.2 Use of Space Technology based tools for Cotton Crop Information System

In order to strengthen the cotton crop information system in the country, the Government has advised Indian Space Research Organisation (ISRO) to use the space technology based tool for cotton crop information system for better estimation of cotton crop

both qualitatively and quantitatively. Indian Space Research Organization (ISRO) through its technology centres i.e. National Remote Sensing Centre (NRSC), Regional Remote Sensing Centre-Central along with Mahalanobis National Crop Forecasting Centre (MNCFC) and Cotton Corporation of India (CCI) under Ministry of Textile has developed a Cotton Crop Information System based on Space and Ground based information of all the cotton growing States randomly captured by CCI officials at its 300 procurement centres through mobile app developed by NRSC (ISRO). After various inputs and meetings, NRSC (ISRO) is completely prepared to assess entire cotton belt through their Cotton Crop Information System. The real time data and scientific assessment through satellite based cotton crop assessment system of ISRO will be beneficial to give impetus to present system to arrive at realistic crop conditions and assessment of cotton availability in the Country.

2.3 Government's Policy on Cotton Distribution:

Ministry of Textiles endeavors to ensure adequate availability of cotton for the consumption of domestic spinning industry keeping in view accelerated investment which has gone into this sector, while the imports and exports of cotton remain free. In order to monitor this, availability and requirement of cotton for domestic consumption is assessed by the Ministry of Textiles on regular basis. The Cotton Advisory Board (CAB) assesses the production, consumption, imports and exports of cotton at regular intervals. It estimates the supply and demand of cotton in a cotton season (1st October to 30th September) and draws up the Annual Cotton Balance Sheet on the basis on the inputs received from Ministry of Agriculture, DGFT, industry association etc. This Balance Sheet defines the estimated production, consumption and carryover to the next cotton season.

2.4 Scheme to promote cotton cultivation in the country

Department of Agriculture, Cooperation and Farmers Welfare is implementing Cotton Development Programme with a focus on cropping system approach under National Food Security Mission (NFSM) in 15 major cotton growing states including Maharashtra from 2014-15 with an aim for enhancing production and productivity. Under the scheme, thrust is given for transfer of latest technology to cotton growers through Front Line Demonstration (FLD) on Integrated Crop Management (ICM), Intercropping & Desi/Extra Long Staple Cotton and trials on High Density Planting System. The scheme is being implemented through State Department of Agriculture (SDA), Indian Council of Agricultural Research (ICAR) etc., From 2015-16, NFSM is being implemented on sharing basis between Government of India and States on 60:40 basis for general category states & 90:10 basis for North East & Hilly states. However, the Central Agencies are funded 100% by Government of India. Besides, States can support cotton development programme under

Rashtriya Krishi Vikas Yojana (RKVY) with the approval of State Level Sanctioning Committee (SLSC) under the Chairmanship of Chief Secretary of the State.

(Updated by Cotton Section on 20.04.2018)