

# 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 126.07 lakh hectares.

1.2 **Production & Consumption:** India is the country to grow all four species of cultivated cotton *Gossypiumarboreum* and *herbaceum* (Asian cotton), *G.barbadense* (Egyptian cotton) and *G. hirsutum* (American Upland cotton). *Gossypiumhirsutum* 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, as under:-

- |      |               |   |  |
|------|---------------|---|--|
| i)   | Northern Zone | - | Punjab, Haryana and Rajasthan            |
| ii)  | Central Zone  | - | Gujarat, Maharashtra and Madhya Pradesh  |
| iii) | Southern Zone | - | Telangana, Andhra Pradesh and Karnataka. |

Besides, cotton is also grown in the States of Tamil Nadu and Odisha. Cotton cultivation has also gained momentum in small areas of non-traditional States such as Uttar Pradesh, West Bengal, Tripura, etc. India is the largest producer of 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
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	345	310.41
2017-18	370	319.06
2018-19 (P)	337	311.50

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 18.6.2019

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

State	Area (In Lakh hectare)		Production (In Lakh bales)		Yield (In Kgs/hectare)	
	2017-18	2018-19(P)	2017-18	2018-19(P)	2017-18	2018-19(P)
Punjab	2.91	2.68	11.76	11.50	687.01	729.48
Haryana	6.65	7.08	21.48	23.00	549.11	552.26
Rajasthan	5.84	6.29	23.26	25.00	677.09	675.68
Gujarat	26.24	26.59	103.84	87.00	672.74	556.22
Maharashtra	43.51	42.54	83.35	77.00	325.66	307.71

Madhya Pradesh	6.03	6.14	22.14	24.00	624.18	664.50
Telangana	18.97	18.27	54.44	47.00	487.87	437.33
Andhra Pradesh	6.46	6.21	21.26	15.00	559.47	410.63
Karnataka	5.47	6.88	17.32	15.00	538.28	370.64
Tamil Nadu	1.83	1.31	5.50	6.00	510.93	778.63
Odisha	1.45	1.58	3.65	4.50	427.93	484.18
Others	0.50	0.50	2.00	2.00	680.00	680.00
<b>All-India</b>	<b>125.86</b>	<b>126.07</b>	<b>370.00</b>	<b>337.00</b>	<b>499.76</b>	<b>454.43</b>

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 18.6.2019

1.3 **Acreage/Productivity:** India got 1<sup>st</sup> place in the world in cotton acreage with around 126.07 lakh hectares under cotton cultivation i.e. around 37% of the World area of 336.3 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 (955 kgs/ha) & China (1764 Kgs/ha). During 2018-19, India's Productivity is estimated at 454.43 kg/ha. The productivity of cotton for the last 10 years is as follows:-

<b>Year</b>	<b>Acreage ( In lakh hectare)</b>	<b>Yield (In Kg /hectare)</b>
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	108.26	541.75
2017-18	125.86	499.76
2018-19 (P)	126.07	454.43

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 18.6.2019

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 extra 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)

<b>Year</b>	<b>Import</b>	<b>Export</b>
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	30.94	58.21
2017-18	15.80	67.59
2018-19(P)	22.00	50.00

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 18.6.2019

1.5 **Balance Sheet of cotton:** transaction for the cotton season 2015-16, 2016-17, 2017-18 & 2018-19 is given below:-

(In lakh bales of 170 Kg each)

Item	2015-16	2016-17	2017-18	2018-19(P)
<b>SUPPLY</b>				
Opening stock	66.00	36.44	43.76	42.91
Crop size	332.00	345.00	370.00	337.00
Imports	22.79	30.94	15.80	22.00
<b>Total Supply</b>	<b>420.79</b>	<b>412.38</b>	<b>429.56</b>	<b>401.91</b>
<b>DEMAND</b>				
Mill consumption	270.20	262.70	280.11	274.50
SSI consumption	27.08	26.21	26.18	25.00
Non-textile consumption	18.00	21.50	12.77	12.00
<b>Total consumption</b>	<b>315.28</b>	<b>310.41</b>	<b>319.06</b>	<b>311.50</b>
Exports	69.07	58.21	67.59	50.00
<b>Total Demand</b>	<b>384.35</b>	<b>368.62</b>	<b>386.65</b>	<b>361.50</b>
Closing Stock	36.44	43.76	42.91	40.41

Source: Cotton Advisory Board (CAB) P-Provisional as estimated by CAB on 18.6.2019

## 2. INTERNATIONAL COTTON SCENARIO

2.1 As per ICAC publication ‘Cotton This Month – August 2019’, Global production for 2019/20 is currently forecasted to increase 6% from the previous season, while global cotton consumption is estimated at 26.9 million tonnes, representing a 1.7% increase. Production for the 2019/20 season will continue to be revised and adjusted as the season progresses, however, global production appears to be outpacing consumption at a time when forecasts for global consumption growth are slowing and global stocks are growing.

2.2 Monsoon rains have fallen below normal in India where 2019/20 projection has been lowered to 5.75 million tonnes. While at this level, this would still reflect a 6% increase from the 2018/19 season, this would allow China to retake the top position in global production with a forecasted 5.9 million tonnes. In India, most impacted areas include Gujarat, Saurashtra, and Kutch, where rainfall has been extremely limited. Drought conditions are due to a record dry period prior to the monsoon that depleted water supplies.

2.3 As per ICAC publication ‘Cotton This Month – August 2019’, details of major country-wise area & productivity, production, consumption, export and import are as under:-

### Area & Productivity (Yield)

(Area in Thousand Hectare and Productivity in Kgs/Hactare)

	2017-18		2018-19		2019-20 (Projected)	
	Area	Yield	Area	Yield	Area	Yield
<b>World Total</b>	<b>33,199</b>	<b>806</b>	<b>32,937</b>	<b>782</b>	<b>34,675</b>	<b>786</b>
<b>India</b>	<b>12,235</b>	<b>519</b>	<b>12,200</b>	<b>451</b>	<b>12,200</b>	<b>471</b>
USA	4,492	1014	4,130	968	5,059	947
China	3,350	1758	3,367	1794	3,300	1794
Pakistan	2,665	674	2,682	623	2,900	679
Brazil	1175	1707	1600	1673	1600	1666

## Production

(Quantity in Million Metric Tonnes)

	2015-16	2016-17	2017-18 (Estimate)	2018-19 (Estimate)	2019-20 (Proj)
<b>World Total</b>	<b>21.48</b>	<b>23.08</b>	<b>26.68</b>	<b>25.69</b>	<b>27.24</b>
China	5.20	4.90	5.89	6.04	5.92
<b>India</b>	<b>5.75</b>	<b>5.87</b>	<b>6.35</b>	<b>5.45</b>	<b>5.75</b>
USA	2.81	3.74	4.56	4.00	4.79
Pakistan	1.54	1.66	1.80	1.67	1.97
Brazil	1.29	1.53	2.01	2.67	2.67

## Consumption

(Quantity in Million Metric Tonnes)

	2015-16	2016-17	2017-18 (Estimate)	2018-19 (Estimate)	2019-20 (Proj)
<b>World Total</b>	<b>24.13</b>	<b>24.78</b>	<b>26.35</b>	<b>26.66</b>	<b>26.89</b>
China	7.60	8.28	8.50	8.45	8.25
<b>India</b>	<b>5.30</b>	<b>5.15</b>	<b>5.42</b>	<b>5.40</b>	<b>5.54</b>
Pakistan	2.15	2.15	2.35	2.36	2.42
Europe & Turkey	1.68	1.61	1.63	1.70	1.73
Bangladesh	1.32	1.41	1.66	1.69	1.75

## Exports

(Quantity in Million Metric Tonnes)

	2015-16	2016-17	2017-18 (Estimate)	2018-19 (Estimate)	2019-20 (Proj)
<b>World Total</b>	<b>7.54</b>	<b>8.19</b>	<b>9.04</b>	<b>9.40</b>	<b>9.56</b>
USA	1.99	3.25	3.45	3.16	3.63
<b>India</b>	<b>1.26</b>	<b>0.99</b>	<b>1.13</b>	<b>0.80</b>	<b>0.90</b>
CFA Zone	0.98	0.99	1.06	1.17	1.24
Brazil	0.94	0.61	0.91	1.61	1.58
Uzbekistan	0.50	0.40	0.34	0.13	0.00

## Imports

(Quantity in Million Metric Tonnes)

	2015-16	2016-17	2017-18 (Estimate)	2018-19 (Estimate)	2019-20 (Proj)
<b>World Total</b>	<b>7.58</b>	<b>8.08</b>	<b>9.01</b>	<b>9.40</b>	<b>9.56</b>
Bangladesh	1.38	1.41	1.67	1.65	1.82
Vietnam	1.00	1.20	1.57	1.58	1.69
China	0.96	1.10	1.32	1.94	2.07
Turkey	0.92	0.80	0.88	0.68	0.58
Indonesia	0.64	0.74	0.76	0.81	0.88

### 3. INCENTIVES FOR PROMOTING COTTON PRODUCTION

#### 3.1 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 fixed 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	Long Staple
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
2018-19	5150	5450
2019-20	5255	5550

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. Textile Commissioner has also requested that while fixing the Minimum Support Price (MSP) of Extra Long Staple (ELS) cotton for ensuing cotton season 2018-19, Market and import prices of this variety of cotton may be kept in view to encourage the farmers for cultivation of ELS cotton. The MSP for other varieties of cotton for Cotton Season 2018-19 (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) 2018-19 in Rs/Qntls
		Basic Staple Length (2.5% span length) in mm	Miconnaire value	
<b>Short Staple (20.0 mm &amp; below)</b>				
1	Assam Comilla	--	7.0-8.0	4650
2	Bengal Deshi	--	6.8-7.2	4650
<b>Medium Staple (20.5 mm-24.5 mm)</b>				
3	Jayadhar	21.5-22.5	4.8-5.8	4900
4	V-797/ G.Cot.13/ G.Cot.21	21.5-23.5	4.2-6.0	4950
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	5000
<b>Medium Long Staple (25.0 mm-27.0 mm)</b>				
6	J-34 (Raj)	24.5-25.5	4.3-5.1	5150
7	LRA-5166/ KC-2 (TN)	26.0-26.5	3.4-4.9	5250
8	F-414/ H-777/ J-34 Hybrid	26.5-27.0	3.8-4.8	5300

Long Staple (27.5 mm-32.0 mm)				
9	F-414/ H-777/ J-34 Hybrid	27.5-28.5	4.0-4.8	5350
10	H-4/ H-6/ MECH/ RCH-2	27.5-28.5	3.5-4.7	5350
11	Sankar-6 /10	27.5-29.0	3.6-4.8	5400
12	Bunny/ Brahma	29.5-30.5	3.5-4.3	5450
Extra Long Staple (32.5 mm & above)				
13	MCU-5 / Surabhi	32.5-33.5	3.2-4.3	5650
14	DCH-32	34.0-36.0	3.0-3.5	5850
15	Suvin	37.0-39.0	3.2-3.6	6650

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 have been taken for effective & smooth MSP operation for the benefit of farmers:-

- Around 350 procurement centres have been opened in all the cotton growing States.
- CCI Procurement Officials remain present at procurement centres right from the beginning of the current cotton season to ensure minimum support prices to the cotton farmers wherever the prevailing kapas prices fall below MSP from 1<sup>st</sup> October 2018.
- Disseminating the necessary information regarding MSP rates to cotton farmers by displaying banners in APMCs, advertisements in newspapers, distribution of pamphlets to individual farmers etc.
- Initiated electronic generation of purchase bill/ takpatti against the cotton procured from farmers in APMCs to avoid delay in releasing the payments to the cotton farmers.
- Developed ERP based programme wherein all the farmers who are selling their kapas to CCI are being registered.
- Wherever, the State Government are not providing the setup for electronic generation of purchase bill/ takpatti, CCI is doing the same on the basis of necessary inputs/farmers data from concerned APMCs.
- Implemented 100% payment of kapas purchased under MSP to the cotton farmers directly in their bank account through online.
- Launched a farmer friendly mobile app, “Cott-Ally” to have direct interaction and outreach with the cotton farmers and to keep the cotton farmers informed about various information related to Minimum Support Price operations, tracking of payments status etc.

Statement showing state-wise procurements under MSP operations during last four years is as under:

(Quantity in lakh bales of 170 kgs each)

State	2014-15	2015-16	2016-17	2017-18
Punjab	1.28	-	-	-
Haryana	0.80	-	-	-
Rajasthan	0.88	-	-	-
Gujarat	6.66	0.52	-	0.95
Maharashtra	17.63	1.17	-	0.15
Madhya Pradesh	2.82	0.29	-	0.08
Telangana	36.91	5.95	-	2.63
Andhra Pradesh	17.56	0.40	-	0.06
Karnataka	1.39	-	-	0.003

Odisha	1.03	0.12	-	0.02
Others	0.003	0.003	-	0.003
<b>Total</b>	<b>86.96</b>	<b>8.45</b>	-	<b>3.90</b>

*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.*

**MSP Operation during Cotton Season 2018-19:-** The cotton season 2018-19 commenced with a carryover stock of 42.91 lakh bales and CCI made arrangements for operating 350 procurement centres across the 11 cotton growing states. In order that the MSP operations are carried out in a transparent and efficient manner in the current cotton season, the Ministry had appointed State Government agencies viz., Maharashtra State Co-op. Cotton Growers Marketing Federation Ltd.(MSCCGMFL) and MARKFED Odisha, as sub agent of CCI for conducting MSP operations in Maharashtra and Odisha respectively. However, at the time of signing agreement with CCI, MARKFED-ODISHA intimated that it was not possible for them to carryout cotton procurement immediately in the state independently as they had no experience in cotton procurement.

During the current cotton season 2018-19 (as on 10.9.2019), 325.30 lakh bales have arrived so far as against 360.60 lakh bales during the corresponding period of last season. Out of which, 10.70 lakh bales of seed cotton have been procured by Cotton Corporation of India under Minimum Support Price (MSP) operation. As kapas price is ruling more then support price, there has been no procurement under MSP in the state of Rajasthan, Haryana and Punjab. Statement showing state-wise procurements under MSP operations during current year is as under:-

(Quantity in lakh bales of 170 kgs each)

State	Production as per CAB meeting (Lakh Bales)	Kapas Arrival as on 10.9.2019	CCI Purchase under MSP
Punjab	11.50	1002795	-
Haryana	23.00	2300000	-
Rajasthan	25.00	2664865	-
Gujarat	87.00	8674278	7983
Maharashtra	77.00	7359400	195751
Madhya Pradesh	24.00	2370000	50923
Andhra Pradesh	15.00	1320742	4718
Telangana	47.00	4250137	777026
Karnataka	15.00	1500000	8117
Orissa	4.50	405000	25454
Tamil Nadu	6.00	482719	253
West Bengal	-	164	164
Others	2.00	200000	-
<b>Total</b>	<b>337.00</b>	<b>325,30,100</b>	<b>10,70,389</b>

**Preparedness for MSP Operation during Cotton Season 2019-20:-** In order that the MSP operations are carried out in a transparent and efficient manner in the ensuing cotton season, Additional Secretary & Financial Advisor chaired a meeting with the officers of all the cotton growing states on 19.8.2019. Thereafter, it was decided to direct all cotton growing states to ensure that the following key measures are taken:-

- i) Bonafide cotton farmers have access to MSP, without any involvement of Commission Agents, Middlemen or Traders;
- ii) Identification of cotton farmers as per their land & revenue record, integration of land records with annual cropping data;
- iii) Generate all the documents electronically in market yards and transfer to CCI server without manual intervention, to facilitate faster payment directly in the account of cotton farmers;
- iv) Regulate arrivals of kapas in APMC yards or alternatively, Ginning & Pressing factories engaged by the CCI be declared as notified sub-market yards of APMC to reduce transportation costs for the farmers;
- v) Provision of CCTVs in APMCs and State owned godowns hired by CCI for storage of cotton procured by them; and
- vi) Suitable intervention may be made to prevent any cartelization by ginners in participating the tender process of CCI;

## **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 endeavours 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 (1<sup>st</sup> October to 30<sup>th</sup> 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 VikasYojana (RKVY) with the approval of State Level Sanctioning Committee (SLSC) under the Chairmanship of Chief Secretary of the State.

**(Updated by Fibre-I Section on 12.9.2019)**