

# The Growth of Cotton and the Potential for Exports in India

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**Abstract:-** Cotton is one of the important fiber and cash crops in India and the world, and it plays a significant role in the Indian economy. Cotton is known as the 'King of Fiber' crop due to its global importance in agriculture and the industrial economy. Hence, the present paper analyzes the growth and instability in cotton area, production, consumption, and yield during the period 2017-18 to 2022-23. The study was based on secondary data on area, production, and productivity of cotton crops collected from various government publications. Performance of cotton was judged on 4 important parameters, i.e., cotton production area and cotton production yield, production and consumption of cotton, imports and exports of cotton, and evaluation of cotton stock of inventory growth performance. The result revealed that, the growth rate of cotton cultivation area was 0.22 percent to 5.58 percent and yield of cotton registered a negative growth rate of 10.20 percent to a positive growth rate of 4.44 percent over the study period. In regards to production and consumption, it was negative growth of 10 percent to a positive growth rate of 10.38 percent, and the usage of cotton consumption had a negative growth rate of 2.46 percent to a negative growth rate of 3.54 percent. Therefore, it is necessary to increase the sustainable cotton production in India and to take up productivity-enhancing measures in cotton crops, such as varietal improvement and appropriate technologies.

**Keywords:-** Cotton Cultivation Area, Production and Yield, Consumption, Exports, and Imports.

## I. INTRODUCTION

Cotton is one of the important fiber and cash crops in India and the world, and it plays a significant role in the Indian economy. Cotton is known as a 'King of Fiber' crop due to its global importance in agriculture and industrial economy. Hence, the present paper analyzes the growth and instability in cotton area, production, consumption, and yield during the period 2017-18 to 2022-23. The study was based on secondary data on the area, production, and productivity of cotton crop collected from various government publications. India's cotton production accounts for around 23% of the total global cotton production, making it one of the most important commercial crops

cultivated. It plays a major role in sustaining the livelihood of an estimated 6 million cotton farmers and 40-50 million people engaged in related activities such as cotton processing and trade. The Indian Textile Industry consumes a diverse range of fibers and yarns and the ratio of use of cotton to non - cotton fibers in India is around 60:40 whereas it is 30:70 in the rest of the world.

Apart from being the provider of a basic necessity of life i.e. clothing which is next only to food, cotton is also one of the largest contributor to India's net foreign exchange by way of exports in the form of raw cotton, intermediate products such as yarn and fabrics to ultimate finished products in the form of garments, made ups and knitwear. Due to its economic importance in India, it is also known as 'White Gold'.

### ➤ Objectives

- To study the cotton cultivation area and cotton production yield in India.
- To discuss the production and consumption of cotton in India.
- To enumerate the imports and exports of cotton in India
- To examine the inventory's opening and closing stock.

## II. COTTON CULTIVATION AREA IN INDIA

India took first place in the world in cotton acreage with 130.61 lakh hectares area used under cotton cultivation, which is around 40 per cent of the total world area of 324.16 lakh hectares during the year 2022-23. Indian cotton production is approximately 67 per cent on rain-fed areas and 33 per cent on irrigated lands. India is on 39th rank in terms of productivity, with yield of 447 kg/ha during year 2022-23. The cotton production cultivation area and production yield are presented in table-1.

As could be seen from the table, the land used for cotton was 125.86 acres, while the cotton production was 500 kg per hectares during the years 2017-18. The growth rate increased to 0.22 percent generated in the cotton production area, but the cotton production yield was reduced to 10.20 percent during the year 2018-19.

Table 1 Usage of Cotton Cultivation Area and Yield of Cotton Production during 2017-18 to 2022-23

Year	Cotton Acreage (in lakh hectares)	Growth percentage	Cotton Yield (Lint in Kg/ha)	Growth percentage
2017-18	125.86	--	500	--
2018-19	126.14	0.22	449	-10.20
2019-20	134.77	6.84	460	2.45
2020-21	132.85	-1.42	451	-1.96
2021-22	123.71	-6.88	428	-5.10
2022-23	130.61	5.58	447	4.44

Source: <https://dashboard.msme.gov.in/dashboard.aspx> or the Committee on Cotton Production and Consumption (COCPC) held on 01.06.2023 & 2022-23-Provisional.

During 2019-20, the cottage acreage was 134.77 lakh hectares and the growth of the land was 6.84 percent, whereas the cotton production increased to 460kg hectares and a growth of 2.45 percent. The cotton acreage usage was reduced to 132.85 hectares in 2020–21 and 123.85 hectares in 2021-22, and the negative growth rates are registered. The cotton production yield negative values were also registered during the same period.

#### ➤ Production and Consumption of Cotton

In India, the majority of cotton production comes from 9 major cotton-growing states, which are grouped into three diverse agro-ecological zones, as (a) the Northern Zone (Punjab, Haryana, and Rajasthan). (b) Central Zone-Gujarat, Maharashtra, and Madhya Pradesh (c) Southern Zone-Telangana, Andhra Pradesh and Karnataka.

Cotton production in lakh bales and consumption, including MSME, non-MSME, and textiles presented in table-2. Apart from the above, the cotton is also grown in the states of Odisha and Tamil Nadu. India is in second place in the world with an estimated production of 343.47 lakh bales (5.84 million metric tonnes) but the growth rate is 10.38 percent during cotton season 2022-23 i.e. 23.83 percent of world cotton production of 1441 lakh bales (24.51 million metric tonnes). India is also the second largest consumer of cotton in the world, with an estimated consumption of 311 lakh bales (5.29 million metric tonnes i.e. 22.24 percent of world cotton consumption of 1399 lakh bales (23.79 million metric tonnes) but a negative growth rate registered at 3.54 percent during the same period.

Table 2 Year-wise Production and Consumption of Cotton Bales

Year	Production (in lakh bales)	Growth	Consumption (including MSME,non-MSME and Non Textile) (in lakh bales)	Growth
2017-18	370.00	--	319.06	--
2018-19	333.00	-10.00	311.21	-2.46
2019-20	365.00	9.61	269.19	-13.50
2020-21	352.48	-3.43	334.87	24.40
2021-22	311.17	-11.72	322.41	-3.72
2022-23	343.47	10.38	311.00	-3.54

Source: <https://dashboard.msme.gov.in/dashboard.aspx> or the Committee on Cotton Production and Consumption (COCPC) held on 01.06.2023 & 2022-23-Provisional.

The production of cotton was 370 lakh bales, whereas the consumption of cotton was 319.06 bales, while surplus cotton was exported during the year 2017-18. The production of cotton was 333 lakh bales, while the negative growth rate registered at 10.00 percent and the consumption of cotton was 311.21 lakh bales, but the negative growth rate registered at 2.46 percent during the cotton season 2018-19.

The production of cotton was 365 lakh bales, while the growth rate was 9.61 percent, and the consumption of cotton was 369.19 lakh bales, but the negative growth rate registered at 13.50 percent during the period 2019-20.

The production of cotton was 352.48 lakh bales and 311.17 lakh bales, while the negative growth rates registered 3.43 percent and 11.72 percent, and the consumption of cotton was 334.87 lakh bales and 322.41 lakh bales, but the abnormal growth rate was 24.40 percent and the negative

growth rate was 3.72 percent during the periods of 2020-21 and 2021-22 respectively.

#### ➤ Imports and Exports of Cotton

In view of the impressive performance of cotton bales with regard to export and import analysis, it was attempted to probe the aspect in detail in Table-3, which provides the additional information on imports and exports. As could be seen from the table, exports of the cotton bales gradually decreased from 67.59 lakh bales to 42.25 lakh bales during 2017-18 to 2021-22. The negative growth rate registered 35.57 percent to 45.55 percent except 2020-21, when 77.59 lakh bales were exported, with a growth rate of 64.94 percent during the same period.

India is one of the largest exporters of cotton, with an estimated export of 30 lakh bales (0.51 million metric tonnes) i.e. 6 percent of world exports of 528 lakh bales (8.98 million metric tonnes) in 2022-23. Although India is a leading producer and exporter of cotton, some quantity, i.e.

less than 10 percent of the total consumption of cotton in India, is imported by the textile industry to meet their

specific requirement.

Table 3 Import and Export of Cotton Bales during 2017-18 to 2022-23

Year	Import (in lakh bales)	Growth	Export (in lakh bales)	Growth
2017-18	15.80	--	67.59	--
2018-19	35.37	123.86	43.55	-35.57
2019-20	15.50	-56.18	47.04	8.01
2020-21	11.03	-28.84	77.59	64.94
2021-22	21.13	91.57	42.25	-45.55
2022-23*	5.75	-72.79	7.59	-82.04

Source: <https://dashboard.msme.gov.in/dashboard.aspx> or DGCIS, Kolkata & 2022-23 upto 31<sup>st</sup> March 2023

It should be noted that the imports of cotton bales gradually increased from 15.80 lakh bales to 21.13 lakh bales while the growth rate reduced from 123.86 percent to 91.57 percent during 2017-18 to 2021-22 and the negative growth rate registered 56.18 percent, 28.84 percent and 72.79 percent (except 91.57 percent in 2021-22) during the period 2019-20 and 2020-21.

#### ➤ Stock of Cotton

The opening stock of inventory, supply and demand, and closing stock of inventory of cotton production,

consumption, imports, and exports of lakhs of bales are presented in Table-4. As could be seen from the table, the opening stock of 43.76 lakh bales and total production of this year of 370 lakh bales and imports of this cotton bale of 15.80 lakh bales, the total available cotton bales of 429.56 lakh bales, whereas the total consumption, including MSME and non-MSME and non-textile, of 319.06 lakh bales and exports of 67.59 lakh bales, the total demand of 319.06 lakh bales, and finally the closing cotton stock of 42.91 lakh bales during 2017-18.

Table 4 Year-wise Supply, Demand and Closing Stock of Cotton Bales (Balance Sheet) from 2017-18 to 2022-23  
(Quantity in Lakh Bales of 170kgs)

Particulars	17-18	18-19	19-20	20-21	21-22	22-23
<b>SUPPLY</b>						
Opening stock	43.76	42.91	56.52	120.79	71.84	39.48
Crop (Production)	370.00	333.00	365.00	352.48	311.17	343.47
Imports	15.80	35.37	15.50	11.03	21.13	10.00
<b>Total Supply</b>	429.56	411.28	437.02	484.30	404.14	392.95
<b>DEMAND</b>						
<b>Total consumption (including MSME, non-MSME &amp; Non-textile)</b>	319.06	311.21	269.19	334.87	322.41	311.00
Exports	67.59	43.55	47.04	77.59	42.25	30.00
<b>Total Demand</b>	386.65	354.76	316.23	412.46	364.66	341.00
<b>Closing Stock</b>	42.91	56.52	120.79	71.84	39.48	51.95

Source: <https://dashboard.msme.gov.in/dashboard.aspx> or the Committee on Cotton Production and Consumption (COCP) held on 01.06.2023 & 2022-23-Provisional.

A close perusal of the table indicates that the opening stock of 56.52 lakh bales represents the production of this year of 365 lakh bales and imports of this cotton bale of 15.50 lakh bales, the total available cotton bales of 437.02 lakh bales, whereas the total consumption, including MSME and non MSME and non-textile, of 269.19 lakh bales and exports of 47.04 lakh bales, the total demand of 316.23 lakh bales, and finally the closing cotton stock of 120.79 lakh bales during 2019-20.

The total available cotton bales are 404.14 lakh bales, out of which 71.84 lakh bales of opening stock of inventory, 311.17 lakh of bales of production this year, and 21.13 lakh bales of imports. Total demand of cotton bales was 364.66, out of which 322.41 lakh of bales were the total consumption, including MSME and non-MSME and non-

textile and 42.25 lakh of bales to exports, while the closing cotton stock was 39.48 lakh bales during 2021-22.

Out of 392.95 lakh bales, 39.48 lakh bales of opening stock of inventory, 343.47 lakh of bales of production this year, and 10 lakh bales of imports. Total demand of the cotton bales was 341, out of which 311 lakh of bales were the total consumption, including MSME or non-MSME and non-textile, and 30 lakh of bales were exported, while the closing cotton stock of inventory was 51.95 lakh bales during 2022-23.

### III. CONCLUSION

The cotton industry plays a vital role in the development of the Indian economy. Cotton production area increased from 125.86 lakh hectares to 130.61 lakh hectares during the study period. Cotton production yield reduced from 500 kg per hectare to 447 kg per hectare. Cotton production also decreased trend registered from 370 lakh bales to 343.47 lakh bales, while consumption of cotton also decreased trend registered from 319.06 lakh bales to 311 lakh bales during the period. The cotton exports in India are overall increasing, and they are registered from 67.59 lakh bales to 7.59 lakh (2022-23 only for 3 months only), while the cotton imports also fluctuated from 15.80 lakh bales to 5.75 lakh (2022-23 only for 3 months only). The total stock inventory is calculated to be 392.95 lakh bales, out of which the opening stock of 39.48 lakh bales plus current year production of 343.47 lakh bales and imports of cotton of 10 lakh bales less total consumption of cotton of 311 lakh bales and export of cotton of 30 lakh bales and the balance of the closing stock of cotton of 51.95 lakh bales during the period 2022-23.

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