

Commercialisation And Economic Indicators Of Cotton Cultivation: A Case Of Tamil Nadu

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Abstract: Cotton is called as a crop of rich farmers as it requires huge investment the constant ensuring of water supply which is actually impossible to quite large number of small and marginal formers, and adequate attention has not been bestowed on its marketing. There is long chain of dependents on it such as farmers, banks, traders, commission agents, wholesalers, retailers and various other market machineries, substantial amount of farmers income is either wasted in the form of commission agent's shares with low price for the product. Unlike the cultivation of many other commercial crops like sugar cane, cotton, sun flower etc., the cultivation of cotton generally done in medium scale and large scale holdings with minimum capital investments owing to farmer's urgent need for money for the purpose of re-investment. So they are generally more anxious to disperse their produce soon after the harvest with the existing low price. This study analyses the economic indicators of cotton cultivation in Tamil Nadu.

Keywords:Commercialisation, Cotton Cultivation, Economic Indicators, Cost and return.

Introduction

In India, agricultural sector has undergone major structural changes. More than two third of our population is directly and indirectly engaged in agriculture and its allied activities. Cotton, one of the principal cash crops of the country, plays a key role in the Indian economy and it is of vital importance to the nation, providing employment to millions of farmers. It is to be noted particularly that the cotton textiles industry in India provides the highest percentage of employment opportunities to both rural and urban masses. The millennium goal of our country India is to provide the basic necessities like food, clothes and shelter to the needy in time. In this context, it is important to study the cotton cultivation of our country in order to understand the nature of occupational pattern, its share of GDP to the economy and growth related factors. The main aim of the present study is to examine the cost of cultivation of cotton in Tamil Nadu.

Cotton, often referred as the white gold is an important cash crop of India and it plays a key role in the Indian economy. India is the largest cotton cultivating country in terms of acreage and second largest in terms of cotton production in the world. India has the distinction of growing cotton of all biological types – the Asiatic, American and Egyptian – and all staple classes from the shortest (comical) to the largest (savalam). In the International arena, India accounts for 34 per cent of the cotton cultivation area and the share of production of cotton accounts for 20 per cent in the world. In terms of productivity, India puts in a poor show, ranking 46th place in the world. The yield per hectare has been recorded at one tonne. The yield of cotton is one of the lowest among the leading cotton producing countries in the world. The other major cotton producing countries are China, the USA and Pakistan. The world cotton production was estimated about 102.7 million bales and world cotton yield registered as 735/kg/lint/hectare in 2009-2010. During the same period the production of cotton in India had touched 24.02 million bales and the yield was estimated as 403/kg/lint/hectare. But, nowadays the quantum leap in cotton production is attributed in India during the last one decade only because of the introduction of Bt. Cotton in 2002.

Table 1: Top Ten largest cotton producing state in India

State	Quantity
Gujarat	125 lakh bales
Maharashtra	85 lakh bales
Telangana	50 lakh bales
Karnataka	28 lakh bales
Andhra Pradesh	27 lakh bales
Haryana	25 lakh bales
Madhya Pradesh	18 lakh bales
Rajasthan	17 lakh bales
Punjab	14 lakh bales
Tamilnadu	5 lakh bales

On an average, cotton in India is cultivated on 9 million hectares in the nine states namely, Andhra Pradesh, Gujarat, Haryana, Maharashtra, Punjab, Karnataka, Rajasthan, Madhya Pradesh, and Tamil Nadu are the major cotton growing states in the country and account for 99.3 per cent of the total production of cotton in the country. Around 40 million farmers are involved in it.

Of the total cotton area under cultivation, the two states Maharashtra and Gujarat alone account for nearly 58 per cent of the cotton cultivation in the country. In terms of production, Gujarat alone shares nearly 32 per cent of the cotton production of the country, even though it has only 25 per cent of the cotton cultivated

area. Gujarat ranks third in terms of productivity in the country after Punjab and Haryana. On the other hand, Maharashtra with around 34 per cent of the Cotton cultivated area accounts for only 21 per cent of the cotton production of India in the year 2007-08 and 2008-09. The productivity of Maharashtra is one among the lowest in the country. Tamil Nadu has a comparatively lower share in the area of cotton cultivation. In terms of productivity Tamil Nadu ranks fourth in India.

Cotton is predominantly grown as a rain fed crop in India. About 64 per cent of the cotton crop in the country is grown without irrigation. The remaining 36 per cent of the cotton crop in the country is grown with irrigation facility. The extent of irrigation varies widely across states. In Punjab, the entire cotton crop is under irrigated conditions. In Maharashtra, nearly 95 per cent of the cotton crop is under rain fed conditions

Methodology

The study entirely based on secondary data which were collected from the website of Source: Directorate of Economics and Statistics, Department of agriculture, co-operation and farmer welfare, Ministry of agriculture and farmer's welfare, Government of India. The data for the period of 2004-05 to 2014-15 were used in the analysis. Graphical method was used to represent the data in a simple manner. In addition, the study makes the use of numerous articles, books and reports for background information.

Result and Discussion

This study deals with the analysis of cost of cotton production in Tamil Nadu during 2004-05 to 2015-16. Cotton is a principle in the state. Cotton production in this province is a source of income and employment for many rural families especially in the areas where saline soils restrict the production of some other crops. The cotton cultivated area which was 1.93 lakh hectares of production was 5.5 lakh bales of 170 kgs and yield was 484 kgs per hectare in 2000-01, 2 lakh hectares of production was 5 lakh bales of 170 kgs and yield was 425 kgs per hectare in 2001-02, 0.85 lakh hectares of production was 3 lakh bales of 170 kgs and yield was 600 kgs per hectare in 2002-03, 1.03 lakh hectares of production was 3.75 lakh bales of 170 kgs and yield was 619 kgs per hectare in 2003-04, 1.29 lakh hectares of production was 5.5 lakh bales of 170 kgs and yield was 725 kgs per hectare in 2004-05, 1.4 lakh hectares of production was 5 lakh bales of 170 kgs and yield was 607 kgs per hectare in 2005-06.

One lakh hectares of production was around five lakh bales of 170 kgs and yield was 850 kgs per hectare in 2006-07, About 0.99 lakh hectares of production was 4 lakh bales of 170 kgs and yield was 687 kgs per hectare in 2007-08, 1.09 lakh hectares of production was five lakh bales of 170 kgs and yield was around 780 kgs

per hectare in 2008-09, 1.04 lakh hectares of production was around 5 lakh bales of 170 kgs and yield was around 817 kgs per hectare in 2009-10, 1.22 lakh hectares of production was around 7.2 lakh bales of 170 kgs and yield was around 1003 kgs per hectare in 2010-11, 1.33 lakh hectares of production was around 6.5 lakh bales of 170 kgs and yield was around 831 kgs per hectare in 2011-12, 1.28 lakh hectares of production was around 6 lakh bales of 170 kgs and yield was around 797 kgs per hectare in 2012-13 and 1.17 lakh hectares of production was around 5 lakh bales of 170 kgs and yield was around 726 kgs per hectare in 2013-14. The average cotton cultivated area was around 1.26 lakh hectares and the production was around 5.10 lakh bales of 170 kgs and the yield was around 710.79 kgs per hectares in the period of 2000-01 to 2013-14.

Table 1: Cost of cultivation of Cotton in Tamil Nadu (Rs/hectare)

S. N o	Cost of Cultivation (Rs./Hectare)	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
1	A 1	1581 8.79	1691 1.34	1525 3.26	1458 7.34	2115 6.14	2751 4.25	3337 8.43	3005 8.21	3220 0.74	3633 0.54	4826 6.07	5819 0.84
2	A 2	1617 8.23	1691 1.34	1525 3.26	1458 7.34	2115 6.14	2765 9.43	3345 4.44	3005 8.21	3223 6.80	3636 7.90	4826 6.07	5819 0.84
3	B 1	1720 0.70	1853 0.71	1583 2.13	1553 5.68	2302 1.57	2962 2.03	3539 3.88	3356 7.73	3618 5.30	3898 8.82	5299 2.11	6303 4.42
4	B 2	2314 3.16	2519 5.88	2275 1.22	2073 0.11	2917 2.39	3876 9.46	4781 1.11	4349 6.36	4887 5.93	5287 9.22	6734 6.14	7792 6.47
5	C 1	2161 7.49	2214 9.92	2250 2.58	2168 7.05	3599 4.39	3881 2.20	4433 0.28	5139 0.28	6022 9.93	6064 3.57	7463 8.67	8286 2.09
6	C 2	2755 9.95	2881 5.10	2942 1.67	2688 1.47	4214 5.21	4795 9.62	5674 7.52	6131 8.90	7292 0.55	7453 3.96	8899 2.70	9775 4.15

Source: Directorate of Economics and Statistics, Department of agriculture, co-operation and farmer welfare, Ministry of agriculture and farmer's welfare, GoI.

Table 1 shows the cost of cultivation of cotton in Tamil nadu during 2004-05 to 2015-16. The cost of cultivation of A1 cotton per hectare has increased from Rs. 15818.79 to Rs. 58190.84 during the study period. In case of A2 cotton, the cost has increased from Rs. 16178.23 per hectare to Rs. 58190.84 per hectare in the same period. The cost of cultivation of B1 cotton has goes up from Rs. 17200.70 to Rs. 63034.42 per hectare during 2004-05 - 2015-16 respectively. The cost per hector of B2 cotton has continuously increased from 23143.16 in 2004-05 to 779226.47 per hectare in 2015-

16. The cost of cultivation of C1 cotton was continuously increased from 21617.49 to 82862.09 in the period of study. The cost of production of C2 cotton has increased from Rs. 27559.95 in 2004-05 to 97754.15 in 2015-16. It is observed that the cost of production of all varieties of cotton has been increasing over the years.

Figure 1:Cost of cultivation of Cotton in Tamil Nadu (Rs/hectare)

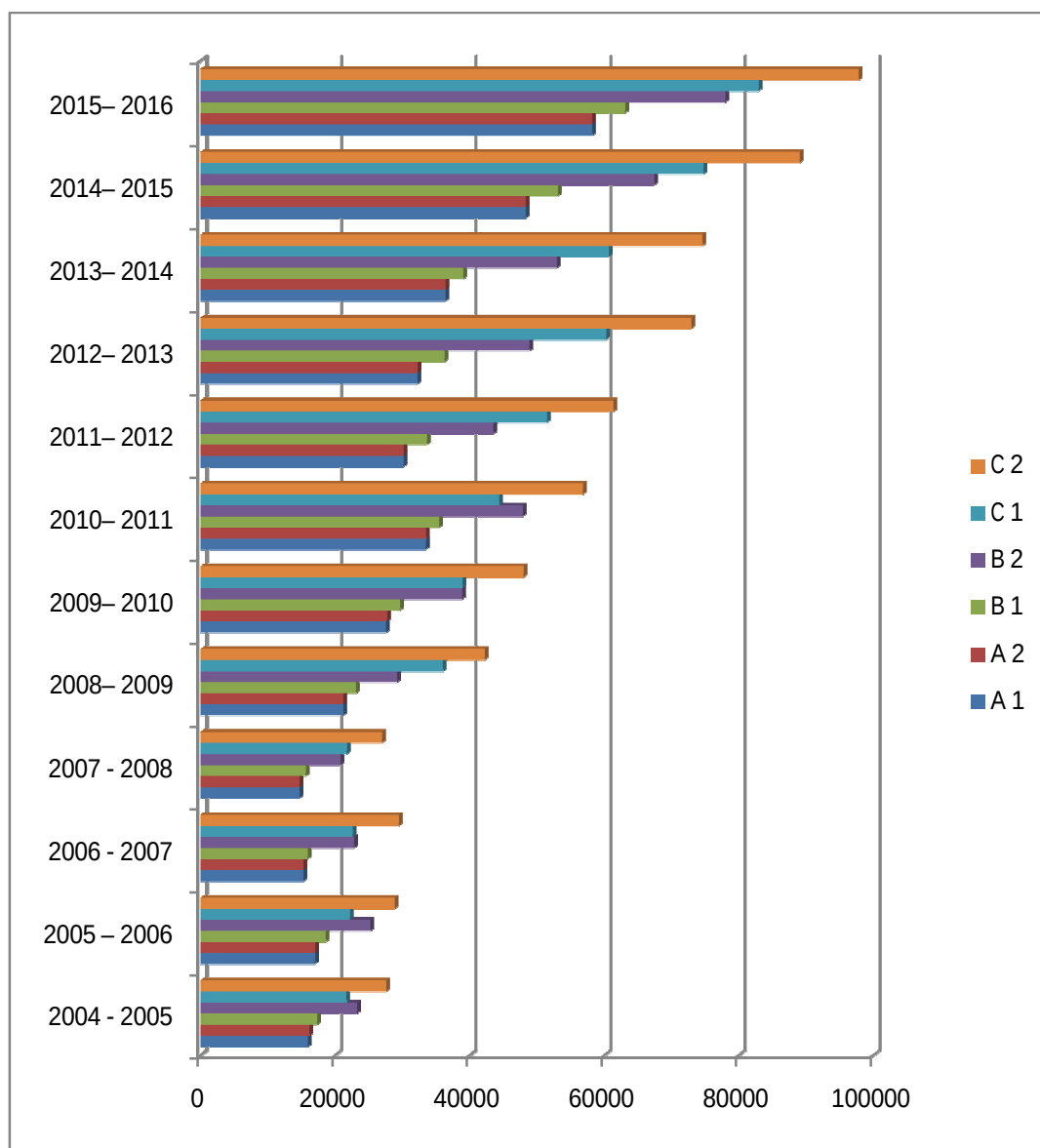


Table 2: Cost of production of cotton in Tamil Nadu (Rs / Qtl)

S. No	Cost of Production (Rs / Qtl)	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
1	A 1	1266.12	1595.30	985.49	1228.38	994.38	1453.81	1684.42	2082.84	1963.42	2889.18	2029.91	2346.41
2	A 2	1294.30	1595.30	985.49	1228.38	994.38	1461.04	1686.89	2082.84	1965.71	2907.42	2029.91	2346.41
3	B 1	1371.83	1724.37	1022.79	1299.06	1082.62	1571.49	1785.73	2319.06	2198.10	2984.46	2226.32	2546.17
4	B 2	1894.21	2332.11	1503.96	1726.19	1364.58	2034.56	2412.72	3030.88	2994.82	3984.15	2841.07	3158.19
5	C 1	1751.90	2100.90	1477.31	1804.05	1733.41	2112.20	2412.72	3507.40	3697.10	3525.94	3155.47	3334.13
6	C 2	2274.28	2717.84	1958.48	2231.17	2015.38	2575.26	2853.51	4219.21	4493.82	4525.64	3770.22	3946.15
7	C 3	2501.71	2989.63	2154.33	2454.29	2216.92	2832.79	3138.86	4641.13	4943.20	4978.20	4147.24	4340.77

Source: Directorate of economics and statistics, department of agriculture, co-operation and farmer welfare, ministry of agriculture and farmers welfare, GoI .

Table 2 explains the cost of production of cotton in Tamilnadu. The cost production was A1 cotton has increased from Rs 1266.12 to 2346.41 during 2004-05 to 2015-16. The rate of cost production of A2 cotton has raised from the 1294.30 to 2346.41 rupees. B1 and B2 more the cost of cotton production of has increased from Rs 1371.83 and 1894.21 to 2546.17 and 3158.19 during 2004-05 to 2015-16 respectively. Finally C1 and C2 and C3 rate of cost of cotton cultivation was rapidly increased from 1751.9, 2274.28 and 2501.71 to 3334.13, 3946.15 and 4340.77 during the above mentioned period respectively and also C2 were revised such amount was a past from above rate of cost of cultivation was 2274.28 to 3946.15 for that period. It is observed from this context the cost of cotton cultivation rate totally increased from that cultivation for aggregately.

Figure 2: Cost of production of cotton in Tamil Nad

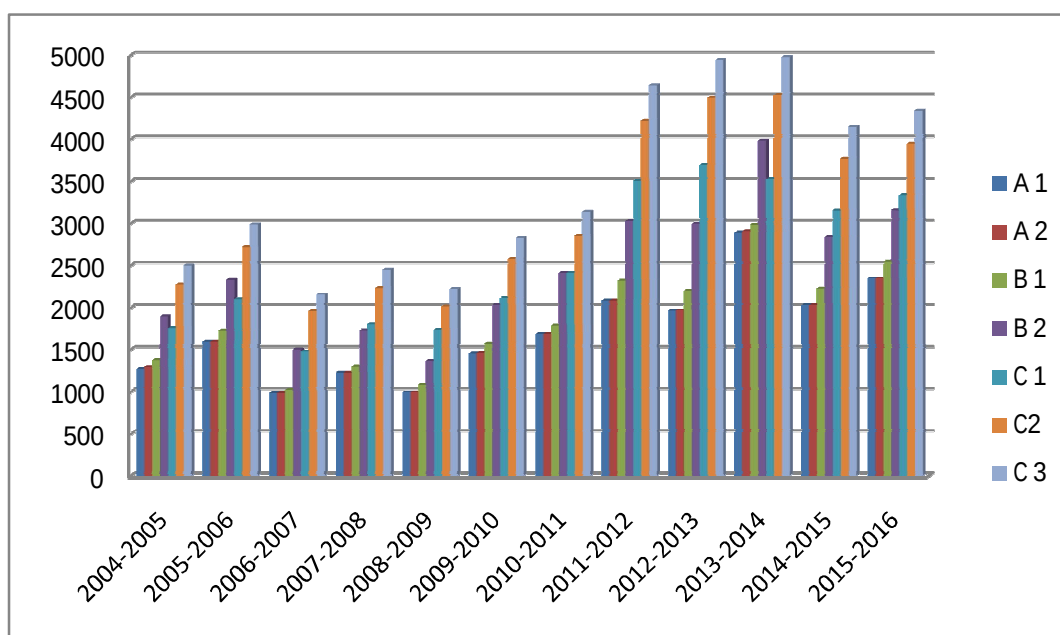


Table 3: Value of Main Product and Value of By- Product (Rs./Hectare)

YEAR	Value of Main Product (Rs./Hectare)	Value of By- Product (Rs./Hectare)
2004 – 2005	20888.16	268.12
2005 – 2006	22278.99	189.13
2006 – 2007	30659.06	461.14
2007 – 2008	29429.35	396.48
2008 – 2009	47136.21	653.33
2009 – 2010	56196.95	576.94
2010 – 2011	79735.18	154.87
2011 – 2012	52014.40	469.10
2012 – 2013	34732.43	6496.80
2013 – 2014	34574.22	325.11
2014 – 2015	95407.08	369.63
2015 – 2016	101800.40	416.33

Source: Directorate of economics and statistics , department of agriculture, co-operation and farmer welfare ministry of agriculture and farmers welfare, GoI .

Table 3 reveals the value of main product and value of by product in 2004-07 to 2015-16 according to this information was cleared mentioned that value of main product was increased 2088.16 hectare to 101800.60 hectare in above was rate mentioned period. Beyond this the value of by product was rate of growth was 268.12 in 2004-05 to 416.33 hectare in 416.33. For same table 4 has cleared explain that both are which value of main is as well as value of by product has increased rapidly for the same duration.

Table 4: Derived Yield (Qtl./Hectare)

Year	Derived Yield (Qtl./Hectare)
2004 – 2005	11.95
2005 – 2006	10.55
2006 – 2007	14.79
2007 – 2008	11.89
2008 – 2009	20.62
2009 – 2010	18.45
2010 – 2011	19.85
2011 – 2012	14.41
2012 – 2013	16.19
2013 – 2014	13.93
2014 – 2015	23.51
2015 – 2016	24.68

Source: Directorate of economics and statistics , department of agriculture, co-operation and farmer welfare ministry of agriculture and farmers welfare, GoI .

The cotton was much needed around the world. Every decade, the production of cotton was decline due to various reasons. The above table shows that the level of cotton yield in 11.95 hectare in 2004-05 and it increased to 24.68 hectare in 2015-16.respectilly, but 2013-14 the yield level 13.93 and it certainly increased to end of the study period in the rate of 24.68 hectare for the consideration.

Conclusion

The cost of cotton cultivation is increasing drastically in Tamil Nadu. The growing costs of factors are the main contributory factor. The costs of cotton production need to be controlled to enhance the income of the farmers. Therefore, a policy initiative on the part of the government is need of the hour. The policy for doubling farmers income by providing efficient strategies for marketing, harvesting and storage will be essential to overcome the situation.

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