



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Efficiency of State Intervention in Cotton Marketing in India

Sangeeta Shroff*

INTRODUCTION

The two main state agencies operating in the cotton markets are the Cotton Corporation of India (CCI) and the Maharashtra State Co-operative Cotton Growers' Marketing Federation (henceforth referred to as the Maharashtra Federation). The CCI was set up in 1970 as a public sector agency, to be responsible for import of all cotton as indigenous cotton was insufficient to meet the requirements of the textile industry after partition. Later, when the country became self-sufficient, its role was confined mainly to the domestic markets and it competed with the private traders in open auctions. The Maharashtra Federation, however, since 1972, operated as a monopolist in the cotton markets within the state, banning all private traders and fixing the price of cotton to be paid to the producers. Thus in Maharashtra, by legislation, there exists only one channel, i.e., the Maharashtra Federation (which is the agent of the State Government) through which the growers can sell their produce. The notable feature of the Monopoly Purchase Scheme of cotton in Maharashtra was that it assured a guaranteed price to the growers. Further, at the end of the season, if the final price (at which the cotton bales and seeds are sold) turned out to be higher than the guaranteed price, the growers received 75 per cent of this difference in price (i.e., profits) as bonus, while 25 per cent was credited to the Price Fluctuation Fund which was created to tide over the losses. Much later, another fund, namely, the Capital Formation Fund was established from the 1980-81 season, towards which the growers contributed 1 to 3 per cent of the guaranteed price. In 1974-75, one per cent contribution to Capital Formation Fund was made as per Reserve Bank of India stipulation.

The assumption behind creating these state agencies was that agricultural markets are not well integrated and there are instances of collusion among traders in open auctions, who prevent the price from going up as it would reduce their trade margins. Also due to seasonal nature of agricultural produce, private traders take advantage of the situation and exploit the farmers.

OBJECTIVE AND METHODOLOGY

The main objective of the study is to examine the efficiency of the Maharashtra Federation and the CCI in terms of their marketing costs and the farmers' share in their gross sale receipts. This has been studied for every year since their inception, till 1994-95. We have further compared their marketing costs with those incurred by private traders (as indicated by the review of literature based on a number of micro level studies) and also co-operative marketing organisations.

The data used in this study have been collected chiefly from the concerned primary

* Research Associate, Gokhale Institute of Politics and Economics, Pune-411 004.

The paper is based on the author's Ph.D. thesis entitled "State Intervention in Cotton Marketing in India: Role and Efficiency of the Maharashtra State Co-operative Growers' Marketing Federation and the Cotton Corporation of India", conducted at the Gokhale Institute of Politics and Economics (April 1989) under the supervision of Nilakantha Rath. The author is grateful to an anonymous referee of the Journal and to Rath for their useful suggestions.

marketing organisations, namely, the Maharashtra Federation and the CCI.

A simple logical tabular analysis is attempted to examine the marketing costs of the Maharashtra Federation and the CCI. The gross receipts of these agencies, their marketing costs and the price paid to the farmer for each year of their operation were noted. The marketing costs and the share of the farmer as a percentage of the mill/export price (which is the terminal price for cotton) were calculated. These percentages were then compared with those prevailing in the case of marketing by private trade as well as by co-operative marketing societies which are popular in Gujarat.

FINDINGS OF THE STUDY

Marketing of Cotton by the Maharashtra Federation

Table 1 indicates the marketing costs incurred by the Federation, the price received by the cultivators, their share in the Maharashtra Federation's sale receipts and finally the balance in the Price Fluctuation Fund.

It can be observed from Table 1 that the total marketing costs as a percentage of gross sale receipts showed an increasing trend over the years. During the period 1972-73 to 1979-80, the marketing costs averaged 13.13 per cent of the gross sale receipts of the Federation and increased to 16.60 per cent during the decade of the 1980s, the maximum cost being 25.58 per cent of gross sale receipts during the period 1985-86. There was a marginal decline in these costs during the period 1990-91 to 1994-95.

However, all the items of cost did not seem to show an increase over the years. The ginning and pressing charges were generally 2 to 3 per cent and 1 to 2 per cent respectively of the receipts of the Federation. The main item of expenditure that was showing a rapid rise was the interest paid to the bank. While the interest paid to the bank formed 17 per cent of the total marketing costs in 1972-73, it increased to about 28 per cent of the total cost during the period 1978-79 to 1980-81 and was as high as 39 per cent of the total cost in 1985-86. This high interest cost was incurred by the Federation despite the fact that it received concessional credit upto the year 1985-86 at 13.5 per cent as against the market rate of 16 to 18 per cent. After 1985-86, however, although the rate at which the Maharashtra Federation was borrowing increased to 18 per cent, the share of interest in the total cost showed some decline. But again in 1994-95 we observe that the interest cost shot up to 40 per cent of the total cost.

The main reason for the high interest cost, particularly in the years 1985-86 and 1994-95 was that the scheme was holding large amounts of unsold stocks of cotton. In 1985-86, out of a procurement of 29.88 lakh bales, it had unsold stocks of 16 lakh bales while in 1994-95, it procured 11 lakh bales but sold only 3.5 lakh bales and was holding 7.5 lakh bales at the end of the season. These bales took a long time to be disposed off and thus the Federation had to incur interest costs on the amount blocked in these stocks.

The share of the farmer in the mill/export price varied from 71.9 per cent to 115 per cent of the gross sale receipts of the Federation and averaged at 83.9 per cent over the 23-year period. It must, however, be pointed out that in certain years such as 1984-85 and 1985-86, when the farmers received very high share in the terminal price, it was mainly due to government contributions received by the Federation, on account of its losses which it could

TABLE I. MARKETING OF COTTON BY MAHARASHTRA FEDERATION

(Rs. crores)

Item (1)	1972-73 (2)	1973-74 (3)	1974-75 (4)	1975-76 (5)	1976-77 (6)	1977-78 (7)	1978-79 (8)	1979-80 (9)	1980-81 (10)	1981-82 (11)	1982-83 (12)	1983-84 (13)
Bales pressed(lakhs)	11.48	1.88	17.66	8.20	8.14	1.54	9.74	17.36	12.61	14.84	18.18	7.69
I. Gross total receipts	173.71	40.62	329.18	174.32	231.72	37.54	201.14	402.29	403.11	408.20	503.58	285.93
II. Total marketing costs	19.73	4.90	57.54	21.32	20.94	4.79	31.49	58.34	57.08	69.22	81.72	44.00
(a) Ginning charges	3.99	0.83	8.82	4.55	4.63	1.00	6.13	11.01	9.11	11.36	15.06	7.39
(b) Pressing charges	3.13	0.56	5.88	2.70	2.68	0.55	3.49	7.17	5.58	6.75	8.88	4.21
(c) Bank interest	3.32	0.68	13.34	2.01	2.19	1.02	8.98	16.32	16.36	23.13	21.91	10.63
(d) Insurance	1.95	0.71	5.26	1.49	1.64	0.38	2.65	4.65	4.25	4.83	5.64	2.51
(e) Chief agent's commission	4.00	0.89	7.25	3.78	5.19	0.84	4.80	6.28	7.03	8.09	7.94	9.78
(f) Other expenses*	3.34	1.23	16.99	6.79	4.61	1.00	5.44	12.91	14.75	15.06	22.29	9.48
III(a) Payments to cultivators	148.92	32.93	292.28	143.00	185.76	32.30	173.95	347.19	343.44	382.16	430.38	230.90
(1) At Guaranteed price	133.67	24.95	291.63	113.10	110.75	25.64	171.24	339.56	326.96	385.26	438.82	224.14
(2) As Bonus	15.25	7.98	3.28	29.90	75.01	6.66	2.71	7.63	19.72	0.73	4.53	13.33
(3) Less contribution to Capital Formation Fund	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	3.24	3.83	12.97	6.57
III(b) Payments to cultivators net of government contribution	148.92	32.93	279.43	143.00	185.76	32.30	173.95	347.19	343.44	371.88	421.75	230.90
IV(a) Payments to cultivators as per cent of gross receipts (per cent)	85.73	81.07	88.79	82.03	80.17	86.04	86.48	86.30	85.20	93.62	85.46	80.75
IV(b) Government contributions	0.00	0.00	12.85	0.00	0.00	0.00	0.00	0.00	0.00	10.28	8.63	0.00
IV(c) Net payments to cultivators as per cent of gross receipts (per cent)	85.73	81.07	84.89	82.03	80.17	86.04	86.48	86.30	85.20	91.10	83.75	80.75
V(a) Amount credited to Price Fluctuation Fund	5.05	2.75	-19.98	9.97	25.00	0.39	-4.96	-3.20	-0.10	-47.08	-21.60	4.44
V(b) Balance in Price Fluctuation Fund	5.05	7.80	-12.18	-2.21	22.79	23.18	18.22	15.02	14.92	-32.16	-53.76	-49.32
VI. Kapas value at final price	153.98	35.72	271.64	153.00	210.78	32.75	169.65	343.95	346.63	339.00	423.86	241.93
Marketing cost as per cent of gross total receipts	11.36	12.06	17.48	12.23	9.04	12.76	15.66	14.50	14.16	16.96	16.23	15.39

(Contd.)

TABLE I (Concl.d.)

(Rs. crores)

Item (1)	1984-85 (14)	1985-86 (15)	1986-87 (16)	1987-88 (17)	1988-89 (18)	1989-90 (19)	1990-91 (20)	1991-92 (21)	1992-93 (22)	1993-94 (23)	1994-95 (24)
Bales pressed(lakhs)	17.85	29.88	12.48	12.58	11.77	20.92	13.55	10.69	19.94	13.36	10.99
I. Gross total receipts	512.29	682.26	493.70	605.87	519.73	949.86	766.35	712.84	1,101.22	1,104.48	1,054.09
II. Total marketing costs	97.08	174.50	69.26	73.40	77.92	145.70	97.18	115.15	200.17	139.23	212.43
(a) Ginning charges	16.34	31.53	14.38	13.88	13.81	28.27	20.72	18.17	39.62	28.16	25.37
(b) Pressing charges	11.76	18.06	7.43	7.35	7.50	16.09	12.01	11.07	22.47	16.57	15.84
(c) Bank interest	33.27	68.53	16.19	12.74	13.72	44.26	14.63	24.42	48.70	17.94	84.75
(d) Insurance	5.88	11.36	3.55	5.54	4.40	8.61	4.99	5.27	9.80	6.43	8.61
(e) Chief agent's commission	9.84	11.83	11.50	15.90	17.10	18.46	20.86	30.19	34.08	32.29	30.49
(f) Other expenses*	19.99	33.19	16.21	17.99	21.39	30.01	23.97	26.03	45.50	37.84	47.37
III(a) Payments to cultivators	477.61	790.22	388.89	468.30	402.97	747.32	603.95	537.50	860.53	917.18	757.85
(1) At Guaranteed price	492.38	814.65	323.15	318.03	325.66	659.36	463.49	405.30	839.95	651.84	575.46
(2) As Bonus	0.00	0.00	75.43	159.77	87.01	107.76	154.36	144.31	45.78	284.84	199.65
(3) Less contribution to Capital Formation Fund	14.77	24.43	9.69	9.50	9.70	19.80	13.90	12.10	25.20	19.50	17.26
III(b) Payments to cultivators net of government contribution	426.21	506.55	388.89	468.30	402.97	747.32	603.90	537.50	860.53	917.18	757.85
IV(a) Payments to cultivators as per cent of gross receipts (per cent)	93.23	115.82	78.77	77.29	77.53	78.68	78.80	75.40	78.14	83.04	71.90
IV(b) Government contributions	51.40	283.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV(c) Net payments to cultivators as per cent of gross receipts (per cent)	83.20	74.25	78.77	77.29	77.53	78.68	78.80	75.40	78.14	83.04	71.90
V(a) Amount credited to Price Fluctuation Fund	-77.17	-308.10	25.21	53.62	29.00	35.20	51.45	48.10	15.26	31.65	66.54
V(b) Balance in Price Fluctuation Fund	-126.49	-434.59	-409.19	-355.56	-326.56	-290.60	-239.18	-191.08	-175.82	-144.17	-77.63
VI. Kapas value at final price	415.21	507.76	424.44	532.47	441.81	804.26	669.17	597.69	901.00	968.20	841.66
Marketing cost as per cent of gross total receipts	18.95	25.58	14.03	12.11	14.99	15.34	12.68	16.15	18.18	12.61	20.15

Note: Gross total receipts include proceeds from sale of cotton seeds.

* Other expenses include mandi fee, purchase overheads, selling and distribution expenses, brokerage, storage and transport.

not meet from the Price Fluctuation Fund. However, if we exclude these contributions by the government, we find the share of the farmer to be considerably less. From the 1978-79 to 1985-86 season, the scheme made continuous losses (except in the year 1983-84, when production was low due to drought condition and prices rose considerably). The magnitude of these losses was very high especially in 1981-82, 1984-85 and 1985-86. In the year 1984-85, the scheme incurred a heavy loss of Rs. 77.17 crores, of which Rs. 51.4 crores had to be borne by the State Government. The share of the farmer, which was 93 per cent of the terminal price due to government contributions, would have been only 83 per cent (i.e., 10 per cent less) had there been no subventions by the government. The magnitude of these subventions was even much higher in the year 1985-86 when the scheme incurred a loss of Rs. 308 crores. A sum of Rs. 283.67 crores had to be transferred from the state exchequer to the cotton growers to meet this huge loss. Thus while the share of the farmer in the Federation's gross receipts was 115.8 per cent due to generous government contributions, their share would have been only 74 per cent, if they had to bear the losses themselves. The subventions have thus increased their share by 41.6 per cent in the sale price.

From the 1986-87 season, the Federation followed a policy of fixing guaranteed price at support level. If the prices prevailing in the other states were substantially higher than the support price, an advance additional price was paid to the cotton growers which was adjusted in the bonus. As a result of guaranteed prices being equated to support level, the scheme did not make losses as prices hardly ever fell to support level. The growers had to therefore contribute towards the Price Fluctuation Fund which reduced their share in the receipts of the Federation. In post-1985-86, the share of the farmer averaged 77.7 per cent of the Federation's receipts. It was slightly higher (83.04 per cent) in 1993-94 because in this season the growers received 90 per cent of profits, while only 10 per cent was credited to the Price Fluctuation Fund.

After evaluating the marketing operations of the Maharashtra Federation, it can be observed that the huge losses incurred by the Federation in the mid-1980s have not been settled even after a decade of the functioning of the scheme. The Price Fluctuation Fund still has a negative balance of Rs. 77.63 crores. A number of factors have been responsible for these losses. First of all, there was improper grading of cotton by the Federation and 'inferior quality' cotton was graded as 'superior quality'. The dispute relating to grading of cotton between the farmers and the Federation, which was settled by the Wandha Committee,¹ favoured the farmers. As a result, the Federation had to pay to the farmers high guaranteed prices for 'superior quality' cotton, but could not recover it while selling it in the market. Secondly, as mentioned earlier, the Monopoly Scheme was holding large amounts of unsold stocks which attracted carrying costs mainly in the form of interest, besides insurance and storage. Finally, because of its 'monopoly' character, the financial problems of the Maharashtra Federation were aggravated resulting in heavy losses. In the event of the guaranteed price in Maharashtra being higher than the border price, there was illegal movement of cotton into the state. This was especially observed in the year 1985-86 when the Federation procured 29.88 lakh bales while the production in Maharashtra was only 19.88 lakh bales. The high guaranteed prices paid to the farmers were naturally subsidised by the State Government and hence the state exchequer ended up subsidising not only the farmers in Maharashtra but also those in the border areas. In 1993-94 while the estimated production in Maharashtra was 26.25 lakh bales, the Maharashtra Federation

procured only 13.25 lakh bales (i.e., 50 per cent) while in 1994-95 the estimated production was 23.61 lakh bales, but the Federation procured only 11 lakh bales (i.e., 46.6 per cent). This outflow is due to the fact that the farmers besides getting better price also get lumpsum payment (whereas in Maharashtra they are paid in instalments). The farmers thus avoid repaying their dues to co-operative credit societies and also avoid making contributions to the Price Fluctuation Fund and Capital Formation Fund, the proceeds of which are used to balance losses.

It can also be noted that these losses incurred by the Federation are somewhat underestimated as the Federation received concessional credit till 1985-86 on its borrowings. Further, when export quotas are allocated by the government, the Federation receives preferential treatment. As international prices are higher than domestic prices, export of cotton by the Federation and the subsequent profits on exports have helped it to tide over its losses.

Marketing of Cotton by the CCI

Table 2 indicates the marketing costs, receipts and share of the farmers in the terminal price in the case of the CCI. The data indicate that the marketing costs which were as low as 4.58 per cent of the gross sale receipts of the CCI in 1970-71 showed a gradual increase over the years. The increase was more marked during the late 1970s and higher almost throughout the 1980s and peaked at 18.54 per cent of the gross sale receipts of the CCI in 1984-85. The costs again showed a somewhat declining trend since 1988-89 season and were as low as 6.3 per cent of the sale receipts in 1994-95, despite the fact that the CCI provided Rs.25.75 crores for tax on profits.

The data in Table 2 clearly indicate that among all elements of cost, interest cost was most dominant. The CCI was borrowing funds at the rate of 16 to 18 per cent and received no concessional treatment on its borrowing, unlike the Maharashtra Federation. The interest cost was especially high during the decade 1977-78 to 1986-87, when the CCI was incurring heavy losses, and these costs ranged between 44 and 66 per cent of the total cost. It very gradually reduced since then from 37.67 per cent of the total cost in 1987-88 to 9.8 per cent of the total cost in 1994-95.

There have been several factors which explain this high interest cost which dragged the CCI into heavy losses during the decade 1977-78 to 1987-88.

First of all, when the CCI was set up in July 1970, its main role was to import cotton, while in its domestic operations its purchases were confined primarily to price support operations and also to act as a purchasing agent for mills under National Textile Corporation (NTC) on the basis of indents placed by them. There were, however, several instances, when the NTC did not honour its commitments and hence the CCI had to entail heavy carrying costs. The CCI also imported cotton in the absence of any reliable estimates of the cotton crop. But, if the domestic production turned out to be satisfactory, imported cotton was difficult to unload on profitable basis, as domestic prices were lower than import parity prices. Hence, the CCI was again saddled with unsold stocks leading to its increased interest burden.

In 1978-79, the role of the CCI underwent a change. With the introduction of high-yielding varieties of cotton in the late 1970s, the country became self-sufficient in the production of

TABLE 2. MARKETING OF COTTON BY COTTON CORPORATION OF INDIA

Item (1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)	1981-82 (13)
Bales purchased (lakhs)	0.11	5.17	3.86	3.10	0.33	1.46	5.35	6.67	10.36	11.14	11.83	10.55
Value of purchases (Rs. crores)	1.03	48.28	48.16	55.13	4.81	26.82	119.89	136.58	189.90	216.38	316.73	258.25
Opening stock (lakh bales)	0.00	0.06	4.34	2.51	1.78	0.95	0.05	1.58	2.76	7.76	5.13	3.12
Value of opening stock (Rs. crores)	0.00	0.45	40.32	26.02	22.73	9.71	2.32	27.66	44.06	127.31	94.58	92.68
Bales purchased + opening stock (lakhs)	0.11	5.23	8.20	5.61	2.11	2.41	5.40	8.25	13.12	18.90	16.96	13.67
I. Value of purchases + opening stock (Rs. crores)	1.03	48.73	88.48	81.15	27.54	36.53	122.21	164.24	234.05	343.69	411.31	350.93
II. Total marketing costs (Rs. crores)	0.05	3.22	6.90	5.96	1.41	3.32	12.65	25.24	35.47	61.92	66.87	67.37
(a) Ginning and pressing (Rs. crores)	0.00	1.65	1.87	1.60	0.13	0.88	3.56	5.13	7.76	9.35	11.94	12.40
(b) Salaries + other benefits (Rs. crores)	0.01	0.09	0.25	0.52	0.31	0.36	0.24	0.70	1.00	1.33	1.81	1.84
(c) Interest (Rs. crores)	0.01	0.60	2.73	1.79	0.43	0.82	5.27	14.27	20.04	34.62	40.77	43.09
(d) Rent, insurance and bank charges (Rs. crores)	0.01	0.34	0.85	0.85	0.36	0.38	2.06	2.04	2.87	4.07	4.28	4.38
(e) Other costs (Rs. crores)	0.02	0.54	1.20	1.20	0.18	0.88	1.52	3.10	3.80	12.55	8.07	5.66
III. Gross total receipts (Rs. crores)	1.09	51.13	101.90	90.58	31.24	44.01	136.74	182.88	259.93	390.24	478.78	383.35
Purchases + expenses + opening stock (I+II) (Rs. crores)	1.08	51.95	95.38	87.11	28.95	39.85	134.86	189.48	269.52	405.61	478.68	418.30
Profits (Rs. crores)	0.01	-0.82	6.52	3.47	2.29	4.16	1.88	-6.60	-9.59	-15.37	0.10	-34.95
Share of farmer in CCI's gross receipts (per cent)	94.50	95.00	86.80	89.50	88.00	83.00	89.00	89.80	90.00	88.00	86.00	91.00
Total marketing costs as per cent of gross total receipts (per cent)	4.58	6.30	6.77	6.58	4.51	7.54	9.25	13.8	13.64	15.86	13.97	17.57

(Contd.)

TABLE 2 (Concl'd.)

Item	1982-83 (14)	1983-84 (15)	1984-85 (16)	1985-86 (17)	1986-87 (18)	1987-88 (19)	1988-89 (20)	1989-90 (21)	1990-91 (22)	1991-92 (23)	1992-93 (24)	1993-94 (25)	1994-95 (26)
Bales purchased (lakhs)	9.71	5.25	6.69	15.74	8.23	6.48	4.36	10.10	12.11	11.23	9.62	9.39	7.61
Value of purchases (Rs. crores)	218.09	161.37	187.27	378.96	213.37	297.81	192.30	450.41	540.29	764.89	555.58	643.27	966.85
Opening stock (lakh bales)	6.30	3.90	0.39	1.79	6.96	0.31	0.28	1.88	4.30	3.24	4.28	5.73	2.41
Value of opening stock (Rs. crores)	142.49	53.10	14.68	43.70	111.35	7.20	12.35	89.43	230.54	165.82	254.14	282.72	165.69
Bales purchased + opening stock (lakhs)	16.01	9.15	7.08	17.53	15.19	6.79	4.64	11.98	16.41	14.47	13.90	15.12	10.02
I. Value of purchases + opening stock (Rs. crores)	360.58	244.47	201.95	422.60	324.72	315.01	204.65	539.84	770.83	930.71	809.72	925.99	1,132.54
II. Total marketing costs (Rs. crores)	72.20	48.91	43.35	78.63	65.77	57.55	25.06	61.72	94.52	104.40	116.40	150.81	78.17
a) Ginning and pressing (Rs. crores)	10.90	6.28	8.22	24.32	11.68	9.87	6.46	17.54	23.53	27.07	24.46	28.02	23.54
b) Salaries + other benefits (Rs. crores)	2.00	2.47	2.55	2.59	3.36	3.35	2.17	5.60	5.24	6.00	6.77	7.94	13.12
c) Interest (Rs. crores)	45.82	32.36	24.83	35.69	30.99	21.68	9.67	18.73	22.40	23.47	30.02	22.59	7.70
d) Rent, insurance and bank charges (Rs. crores)	4.73	2.56	2.79	6.38	4.55	4.18	2.03	5.35	8.48	8.12	5.94	7.31	5.73
e) Other costs (Rs. crores)	8.75	5.24	4.96	9.65	15.19	18.47	4.73	14.50	34.87	39.74	49.21	84.95	28.08
III. Gross total receipts (Rs. crores)	400.95	281.76	233.78	482.56	390.29	359.96	237.96	625.61	923.70	1,061.00	955.97	1,113.01	1,239.10
Purchases + expenses + opening stock (I+II) (Rs. crores)	432.78	293.38	245.30	501.23	390.49	362.56	229.71	601.56	865.35	1,034.47	926.12	1,076.80	1,210.77
Profits (Rs. crores)	-31.83	-11.62	-11.52	-18.67	-0.20	-2.60	8.25	24.05	58.35	26.53	29.85	36.21	28.33
Share of farmer in CCI's gross receipts (per cent)	90.00	86.70	86.30	87.50	83.00	82.20	86.00	86.00	83.40	87.70	84.70	83.20	91.40
Total marketing costs as per cent of gross total receipts (per cent)	18.00	17.35	18.54	16.29	16.85	15.98	10.53	9.86	10.23	9.84	12.20	13.55	6.30

Note: Item III includes seed and other income.

Item II(e) includes purchase tax (1 per cent of purchase), selling and distribution expenses, rates and taxes, legal and professional fees, tax on profits.

cotton and the need to import cotton was no longer felt. Hence, the CCI had no role on this front. The Textile Policy announced in the Parliament on August 7, 1978, however, assigned an expanded role to the CCI - commercial purchases of cotton so that cotton prices do not fall below the prescribed minimum and also maintenance of buffer stocks of cotton.

As a result of the expanded role assigned to the CCI, the scale of its operation increased considerably and from the 1978-79 to 1982-83 season, it purchased 15 to 20 per cent of the crop in the country (excluding Maharashtra). However, a Technical Committee set up in June 1978 to look into the proposal of undertaking buffer stock operations rejected it on the ground that the operating costs of maintaining such stocks would be very high and as ruling prices were well above support level there was no need for such a policy. It can be noted here that since the CCI had to support the market in the event of the prices falling below the support price fixed by the Agricultural Prices Commission (APC), its role in maintaining a buffer stock was implicit in its role of performing price support operations.

In the years 1978-79 to 1982-83, approximately 23 per cent of the total purchases of the CCI were of extra-long staple varieties. These varieties, in view of their higher intrinsic spinning quality and higher per unit price fetched as compared to short or medium staple varieties, became popular and the cotton growers went in a big way to cultivate these varieties. However, this rapid increase in indigenous cotton production also brought along with it certain problems. The industry's offtake of extra-long staple varieties had not picked up because of the very high excise duties at that time on yarn and cloth made from it. The excise duty structure for yarn and cloth was as follows:

Category of cloth (1)	Rate of excise duty on mill made cloth (per cent ad valorem) (2)
Cloth below the average counts of 41s	2 to 4 per cent
Cloth with an average of 41s and above	15 per cent

Source : *ICMF Journal*, Vol. 17, May 1980.

Thus under the excise duty structure, the excise duty rises sharply from a range of 2 to 4 per cent for counts below 41s to 15 per cent as the average count crosses 40s. This acts as a damper on the consumption of long and extra-long staple cotton which can spin much above 40 counts.

The CCI was thus unable to dispose off a substantial portion of its purchases of extra-long staple varieties in the absence of adequate demand in the local market. Holding large stocks of cotton attracted carrying costs, mainly interest on the amounts blocked on these stocks, besides insurance and storage.

The CCI followed a policy of simultaneous sales to purchases from the 1983-84 season. This policy was followed so that it could avoid carrying stocks of cotton. From the 1988-89 season, it has been making profits and in the season 1991-92, the CCI succeeded in wiping out its accumulated losses. The CCI has thus turned the corner and is also in fact paying taxes on profits, in certain years to the tune of Rs. 20 to Rs. 25 crores. These taxes are included in 'other costs' indicated in Table 2. In this context, however, it can be pointed out that when export quotas were allocated by the Government, the CCI received preferential treatment. Since Indian cotton prices were normally below international prices, exports by

the CCI naturally resulted in profits. Thus preferential treatment in the allocation of export quotas and subsequent profits on these exports did help to contain the overall losses of the CCI.

The share of the farmers in the CCI's receipts ranged from 82 to 95 per cent and averaged 87.5 per cent over the 25 years of its functioning. However, in the years when the CCI incurred heavy losses, it had to not only draw down its share capital, but also borrow from commercial banks and depend upon Government loans for meeting these losses. If it were not for these borrowings, the share of the farmers in the CCI's total receipts would have been lower.

*Comparison of Marketing Operations of State Agencies
with Private Trade and Co-operatives*

A detailed analysis of the marketing operations of the two state agencies indicates that both state agencies incurred heavy losses during the late 1970s and the first half or more of the 1980s. Thereafter, the CCI improved its performance. It reduced its marketing costs substantially despite it paying tax on profits, and the interest component which formed 51 per cent of the total cost during the 1980s came down drastically to 19 per cent during 1990-91 to 1994-95. Also, its marketing costs as a percentage of gross sale receipts, which were 15.5 per cent during the decade of the 1980s, came down to 10.4 per cent during the period 1990-91 to 1994-95. The Maharashtra Federation, however, continued to show dismal performance. The total marketing costs which were as high as 16.6 per cent during the 1980s remained at almost the same level (15.5 per cent) during the period 1990-91 to 1994-95. The average share received by the farmers in the sale receipts of the Federation was 83.9 per cent. This share is also an over-estimate, because as mentioned earlier, in a number of years this guaranteed price was ensured to the growers with the help of Government contributions. During the period 1990-91 to 1994-95, when there have been no government contributions, the share of the farmers in the gross sale receipts of the Federation was barely 77.5 per cent.

The marketing costs and margins of private traders were broadly assessed with the support of various micro level studies conducted on the marketing of cotton, over time, in different parts of the country.

Dantwala's study (1937) was probably one of the first systematic efforts to study the marketing of cotton. He concluded that competition in the upcountry markets like Dhulia was fierce and traders made hardly any undue profits. Much later, Pavaskar and Radhakrishnan (1970) conducted a study on the marketing of cotton in the Khandesh region for the period 1962-63 and 1967-68 and concluded that the farmer's share in the mill price of cotton lint and seed was around 90 per cent and marketing costs formed 7 to 10 per cent of the terminal price. The conclusions were thus similar to those of Dantwala's study.

The high share of 88 to 89 per cent in terminal price was also observed in studies conducted by Rao (1986) in Guntur (Andhra Pradesh), for the period 1975-76 and by Singh *et al.* (1979) in Haryana, for the period 1976-77. However, other studies such as Khandevale (1971) and Shroff (1989), dealing with Vidarbha and Amravati markets respectively observed contradictory findings. While Khandevale's study indicated that there was collusion among traders to prevent the price from going up, Shroff's study which collected

data for five years (1967-68 to 1971-72, i.e., prior to the introduction of the Monopoly Procurement Scheme in Maharashtra) in Amravati market indicated that the trader's margins were by and large excessive, sometimes ranging from 20 to 27 per cent of terminal price.

Ranade *et al.* (1982), and Hosmani and Hiremath (1984) studied cotton marketing in Gujarat and North Karnataka respectively. They concluded that in the case of sales to private traders the farmers at times received below 80 per cent of the terminal price but gained a higher share when they sold through co-operatives.

The overall conclusion that emerged from the studies was that the marketing costs of private traders varied from 6 to 11 per cent of the terminal price. Most of the studies did not, however, specify the interest component of total marketing costs. In certain studies it was included in the trader's net returns which therefore would be an over-estimate. While some studies, especially those conducted by Dantwala (1937) and Pavaskar and Radhakrishnan (1970) indicated that the traders worked on very narrow margins, others indicated that the farmers' share in the terminal market could be increased in the case of sales to co-operative marketing societies.

It would therefore be useful to examine the cost of marketing of cotton by co-operatives and compare these costs with those incurred by the state agencies.

Among the cotton growing states in India, Gujarat has been in the forefront with respect to co-operative marketing of cotton. We have therefore selected the Gujarat State Co-operative Cotton Marketing Federation (henceforth referred to as Gujarat Federation), which was set up in 1975. The Gujarat Federation operates along with the private trade in the state in the marketing of cotton. From the point of view of our exercise, it would be useful to study the marketing operations of the Gujarat Federation.

The Annual Reports of the Gujarat Federation for the years 1983-84 to 1994-95 indicated that the share of the farmer in the sale receipts of the Gujarat Federation was always above 90 per cent, which was higher than that which the state agencies as well as private traders were normally offering. The interest cost, which was very high in the case of CCI and Maharashtra Federation, in several years, averaged 3.2 per cent of gross sale receipts in the case of Gujarat Federation. It may be noted that this interest cost of Gujarat Federation was lower than that of Maharashtra Federation which was 4 per cent of sale receipts, despite the fact that the Maharashtra Federation received concessional credit on its borrowings, at least till 1985-86. The CCI and the Gujarat Federation, however, never received any concessional credit and borrowed at the market rate of 16 to 18 per cent. The CCI which also incurred very high interest costs during the late 1970s and 1980s, substantially reduced it to a mere 0.62 per cent of its sale receipts in 1994-95. In the case of Maharashtra Federation, however, in the year 1994-95 the interest cost formed 8 per cent of the gross sale receipts of the Federation. The Gujarat Federation has been regular in the repayment of loan with interest and has established its credibility amongst the apex co-operative institutions of the state. In fact, it pays 6 per cent dividend to the government on its share capital. Of late, even the Cotton Corporation of India pays tax on its profits. The Maharashtra Federation, however, has to depend upon Government contributions for its survival, while the growers often receive delayed payments for their produce.

The Gujarat Federation also economises in all other elements of costs. The ginning charges fixed by the Gujarat Federation are lower than those fixed by the Directorate of Agriculture in other states. Further, it also saves on its brokerage and transport charges. It

does not incur brokerage on full pressed bales, as brokers charge their commission from buyers only. Also, since most of its sales are in the local terminal markets of Surat and Ahmedabad, its transport costs are lower. Finally the Annual Reports of the Gujarat Federation indicate that it has also economised on salaries which are barely less than half per cent of its sale receipts. In the case of CCI, the salaries and other benefits ranged between one half to one per cent of its gross sale receipts but the Maharashtra Federation which is the chief agent for operating the scheme, charges a commission of 2 to 3 per cent of its receipts. A High Level Committee on Monopoly Cotton Procurement Scheme (Government of Maharashtra, 1987) pointed out that claiming a commission on turnover is often excessive, because the overhead expenditure does not vary in direct proportion to the volume of purchases or turnover. The Maharashtra Federation, besides its fixed expenditure on salaries of regular staff, also incurs expenditure on seasonal staff, (clerks, watchmen, graders) which is borne from the Chief Agent's Commission and on which it can economise. For example, in 1983-84 season, with a low procurement of 7.69 lakh bales, the Federation recruited 191 graders, whereas in 1985-86 with a record procurement of almost 30 lakh bales, it recruited relatively less, i.e., 146 graders. Even the number of clerks was more in 1983-84 than in 1985-86. The Federation thus has scope to reduce seasonal staff.

In the case of returns to traders, as mentioned earlier, while the study of Pavaskar and Radhakrishnan (1970) in Khandesh and Rao's study (1986) in Guntur showed that the trader's margins were 4 per cent of terminal price (their net returns after meeting establishment expenses, interest on borrowed funds were still lower), other studies reviewed such as the study of Ranade *et al.* (1982) in Gujarat, Hosmani and Hiremath's study (1984) in North Karnataka and further the study in Amravati (Shroff, 1989), were all indicative of excessive margins earned by the traders. Thus although the marketing costs incurred by the private trade were reasonable, their own returns were at times so high as to deprive the farmers of a part of their due share in the sale price.

CONCLUSIONS

The study on state intervention in cotton marketing in India reveals that the two state agencies are no better placed in terms of giving a higher share of their receipts to the farmers than the private trade or Gujarat Federation. In years when they succeeded in giving the farmer a higher share, they incurred heavy losses. This was especially so with the Monopoly Scheme which due to its heavy losses in the mid-1980s began fixing guaranteed price at par with support price. As prices hardly ever fall below support level, the scheme has not incurred a loss since then, but its Price Fluctuation Fund still has a negative balance, even a decade after the functioning of the scheme. Also, in post-1985-86 (when there were no contributions from the State Government) the share of the farmer in the sales realisation of the Federation was barely 77.7 per cent. This share could be ensured even by the private trade. The Cotton Corporation, however, ensures a higher return to the farmer and from a loss making agency, it is now making profits. Of course, preferential treatment in export quotas announced by the Government have helped it to cover its losses.

The co-operatives in Gujarat have been more successful in getting a better share to the farmers in the final produce. This was also observed in a study conducted by the Indian Merchants Chamber (1978), which observed marketing costs and margins of four co-operative societies around Surat for the period 1971-72 to 1975-76. The study showed that

the marketing costs varied from 4 to 7 per cent and the farmer's share was as high as 93 to 96 per cent. The study of Ranade *et al.* (1982) also indicated that the farmers greatly benefited in the case of sales to the co-operatives. Further, the farmers also gained in the case of sales to the private traders who operate in an area where co-operative marketing societies are present. Due to the competition created by the co-operatives, the private traders have to offer better prices to the farmers.

Hence, co-operative marketing societies are more beneficial to the farmers than a closed monopoly. The closed monopoly has higher costs which are aggravated due to illegal movement of cotton across border areas. These problems would not arise if the Federation were to buy in the open competitive markets within the state, like the Cotton Corporation of India does elsewhere. Hence, the Maharashtra Federation should give up the 'monopoly' character of its scheme as it appears inefficient in serving the farmers' interests. The scheme should run in competition with the private trade while the CCI's role should be to act as a marketing agency on commercial lines. Its role as a canalising agent for the import of cotton for which it was initially set up is now redundant, as the country often has surplus production of cotton, and imports if required are under Open General License Scheme. In the domestic markets, however, the CCI is required to undertake price support operations in the event of prices falling below support level. In this way the state agencies can help to bring about greater discipline into the trader's operations.

Received April 1996.

Revision accepted April 1997.

NOTE

1. Known also as Disputes Committee constituted under Rule 98 of the Agricultural Produce Markets Act, 1963 to settle disputes that arise in the course of grading between cultivators and graders.

REFERENCES

- Committee on Public Undertakings (1984), "Something Inherently Wrong with CCI", *ICMF Journal*, Vol. 21, June-July.
- Cotton Corporation of India, *Annual Reports* (various issues).
- Dantwala, M.L. (1937), *Marketing and Trade in Raw Cotton in India*, Longmans Green and Co. Ltd., Bombay.
- Government of Maharashtra (1987), *Report of High Level Committee on Monopoly Cotton Procurement Scheme in Maharashtra* (Chairman M.V. Hate), Bombay, April.
- Gujarat State Co-operative Cotton Marketing Federation, *Annual Reports* (various issues).
- Hosmani, S.B. and K.C.Hiremath (1984), *An Economic Analysis of Production and Marketing of Cotton - A Case Study of Small Farmers in Karnataka*, Department of Agricultural Economics, Dharwad, June.
- Indian Merchants Chamber (1978), *A Comparative Study of Cotton Marketing Systems in India*, Research Publication, Series 14, Bombay.
- Khandevale, S.V. (1971), *Economics of Cultivation and Marketing of Cotton in Vidarbha*, Nagpur.
- Maharashtra State Co-operative Cotton Growers' Marketing Federation (unpublished material).
- National Co-operative Development Corporation (NCDC) (1977), *Co-operative Marketing by Co-operatives in Gujarat State*, New Delhi.
- Pavaskar, M.G. and V. Radhakrishnan (1970), *Cost of Marketing Cotton*, University of Bombay, Bombay.
- Ranade, C.G.; R.B.Singh and K.H. Rao (1982), *Marketing Channels and Price Spread in Cotton*, CMA Monograph No.83, Indian Institute of Management, Ahmedabad.
- Rao, Prabhakara (1986), *Marketing Efficiency in Agricultural Products in Guntur District in Andhra Pradesh*, Himalaya Publishing House, Bombay.
- Shroff, S. (1989), *State Intervention in Cotton Marketing in India: Role and Efficiency of the Maharashtra State Co-operative Cotton Growers' Marketing Federation and the Cotton Corporation of India*, Unpublished Ph.D. Thesis, Gokhale Institute of Politics and Economics, Pune.
- Singh, I.J.; K. Chaudhry and R.C. Goel (1979), *Dynamics of Cotton Production and Marketing in Haryana*, Haryana Agricultural University, Hisar.