

## **Costs, margins and price spread of cotton in Nimar valley agro-climatic zone of Madhya Pradesh**

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**ABSTRACT :** The study was undertaken in Khargone district of Madhya Pradesh with the objectives to identify marketing channels and examine the price spread and marketing efficiency, identify the constraints in the marketing of cotton. It was found that there are two major marketing channels present in the study area. In the first channel producer is selling his cotton to the commission agent in the market yard who in turn selling it to the miller. In the second channel producer is selling his product to the village merchant in the village itself. Village merchant is selling it to the miller through commission agent. Channel I was found to be more efficient due to less marketing costs and margins. Major constraints in the study area were lack of proper storage facilities, improper grading, disorganized marketing, malpractices in the market. These problems need to be rectified to make the cotton marketing more efficient.

**Key Words :** Constraints, cotton, marketing, marketing efficiency, price spread

Cotton is an important agricultural commodity, traded all over the World. About 70 per cent of the global cotton production comes from 4 countries, which include China (27%), India (22%), USA (13%) and Pakistan (8%). Cotton is cultivated in about 11.24 million ha in the country during 2010-11, which accounts for 30 per cent of the global cotton area and contributes to 22 per cent of the global cotton produce. Cotton has around 59 per cent share in the raw material consumption basket of the Indian textile industry. Agricultural marketing is costly with commission charges, traders profit margins, wastage and mal practices. There are only few prominent studies, which are covered the marketing aspects *viz.*, Krishnaiah (1998), Verma *et al.*, (2002) and Verma (2004) analyzed various factors affecting its profitability to the producer intermediaries in the sale of cotton.

Madhya Pradesh is the important cotton growing state in India. Out of total cotton area in India [11.24 M ha], nearly 5.78 per cent shared by Madhya Pradesh during the year 2010-2011. In cotton production, Madhya Pradesh shared 2.00 million bales of lint of cotton from 0.65 million ha land. The average yield of cotton in the state was 523 kg lint/ha during 2010-2011. The average yield of cotton is poor due to unfavorable

climatic conditions particularly erratic rainfall. The major cotton growing districts in the state are Khargone, Khandwa, Dhar and Dewas. Khargone is one of the important cotton growing districts of the state. The main agro based industry of the district is that of cotton processing units and its other products. The cotton growers in the Khargone district are adopting different marketing channels for disposal of the produce. The study of various marketing channels would provide an idea about the marketing system and practices followed in the sale of cotton in the district. Efficient marketing of cotton plays an important role in increasing the producer's share in consumer's rupee and maintains the tempo of increased production. Cotton marketing in particular is mainly in the hands of middleman like village merchants and commission agents. Hence, the producer is only a price receiver. In the process of marketing the producer has to incur various marketing costs. The costs are determined by the performance and efficiency of different market functionaries in different channels which in turn influence the return to the producer. In this context, there is need to study the efficiency of marketing channels in the marketing of cotton that is cultivated and marketed extensively in the study area. The

present study has been taken up to analyses the economics of marketing of cotton grown in Khargone district of Madhya Pradesh. Keeping in view, the present study was undertaken with the following objectives *i.e.* to identify marketing channels involved in the marketing of cotton, to examine price spreads, marketing costs, marketing margin and marketing efficiency of cotton, to identify constraints in the marketing of cotton.

### MATERIALS AND METHODS

The study was conducted in Khargone district of Madhya Pradesh of Nimar Valley agro climatic zone of Madhya Pradesh, where cotton is an important crop. A multistage stratified random sampling was used to select the block, cluster of villages and the respondent *i.e.* cotton growers. A random sample of 60 growers was selected from the universe of 6 villages of Khargone block of district Khargone. There were 2 marketing channels for marketing of cotton in the study area. The cotton growers were divided into 3 groups *viz.*, small farmers (< 2 ha) medium farmers (2-4 ha) and large farmers (> 4 ha). Thus, 30 small farmers, 20 medium farmers and 10 large farmers were finally selected. Khargone Krishi Upaj Mandi through which majority of the cotton growers marketed their produce was selected purposively for analyzing the pattern of marketing. The actual marketing

costs incurred by the sample cotton producers through different channels were considered. The primary data regarding on area under cotton, volume of production, marketing cost, marketing channels, price-spread, marketing efficiency and constraints in marketing and channels used were collected from the sample farmers as well as from different market functionaries by interviewing them with the help of specifically designed and pre tested schedules during the agricultural year 2011-2012.

#### Producer's share in consumer's (Miller)

**Rupee** : Producer's share in consumer's rupee was worked out by this method (Acharya and Agrawal, 2004)

$$Ps = (P_f/P_r) 100$$

Where,

Ps=producer's share in consumer's rupee (Rs./qt)

$P_f$  = producer's price (Rs./qt)

$P_r$  = price paid by the consumers (Rs./qt)

**Marketing efficiency** : The marketing efficiency of different channels of marketing was estimated by using Acharya's formula as mentioned below : (Acharya and Agrawal, 2004)

$$ME = FP / MC + MM$$

Where,

ME = Index of marketing efficiency

FP = Price received by the farmer (Rs/q)

MC = Total marketing costs (Rs/q)

**Table 1.** Marketing cost, margin and price spread of cotton in the identified channel (Rs/q)

Particulars	Channel I	Channel II
Price received by the producer	3685.00(87.54)	3545.00(84.05)
Marketing cost incurred by the producer	223.00(5.30)	-
Producer sale price/commission agent purchase price	3908.00(92.84)	-
Marketing cost incurred by village merchant	-	256.00(6.07)
Village merchant margin	-	115.50(2.74)
Village merchant sale price/commission agent purchase price	-	3916.50(92.86)
Marketing cost incurred by the commission agent	153.00(3.63)	153.00(3.63)
Commission agent margin	148.30(3.52)	148.3(3.52)
Millers purchase price	4209.3(100.00)	4217.50(100.00)
Total marketing cost (Rs/q)	376.00(8.93)	409.00(11.53)
Total marketing margin (Rs/q)	148.30(3.52)	263.8(7.44)
Producer's share in consumer's rupee (%)	<b>87.54</b>	<b>84.05</b>
Index of marketing efficiency	<b>7.02</b>	<b>5.27</b>

MM = Net marketing margins (Rs/q)

### RESULTS AND DISCUSSION

In the first channel producer is selling his cotton to the commission agent in the market yard who in turn selling it to the miller. In the second channel producer is selling his product to the village merchant in the village itself. Village merchant is selling it to the miller through commission agent.

It was found that 76.35 per cent of the cotton growers marketed their produce through Channel I, whereas 23.65 per cent sold cotton through Channel II.

**Marketing cost and margins :** It have been observed from table 1 producer got Rs 3685/q of seed cotton in the channel I and in the channel II he got Rs 3545/q of seed cotton. In the first channel where producer is selling the cotton to the commission agent, he is incurring Rs. 223.00/q as the cost of marketing which is mainly composed of transportation cost. In this channel he needs to bring his produce to the market to sell to the commission agent. In the second channel producer is not incurring any marketing cost as he is selling the produce in the village itself to the village merchant. In this channel village merchant is incurring a

marketing cost of Rs 256/q and his sale price was Rs 3916.50/q. Commission agent is present in both the channels. Marketing cost incurred by the commission agent in the first channel is Rs 153/q in both channel. Commission agent is earning a margin of Rs 148.30/q is also in both channel. Millers purchase price in first channel was Rs 4209.30/q while in second channel it is Rs 4217.50/q. Total marketing cost in channel I is less when compared with channel II. In channel I total marketing costs amounted to Rs 376/q while it was Rs 409/q in channel II. Similarly marketing margin was also comparatively less in channel I. In channel I only Rs 148.30/q was incurred as marketing margin while it was Rs 263.80/q in channel II. The producer share in consumer's rupee was also comparatively high in channel I. Producer is getting 87.54 percent of the consumer's price in channel I. It was only 85.05 percent in channel II.

**Marketing efficiency :** The marketing efficiency is directly related to the cost involved to move the goods from producer to consumer and quantum of service provided or desired by the consumers. If the cost compared with the services involved is low, then it will be termed an efficient marketing and *vice versa*. An improvement that reduces the cost of a particular

**Table: 2.** Constraints in marketing of cotton in the study area

Constraints	Number of sample farmers expressed the problem	Per cent to the total (N=60)	Score
Forced to sell their produce to intermediaries under financial obligations	34	56.67	XI
Unable to store their produce owing lack of proper storage facilities	55	91.67	I
Disorganized marketing and low price received as a consequence	53	88.33	III
Prevalence of malpractices in the market	43	71.67	IX
Improper grading	54	90.00	II
Day to day fluctuation in the price of cotton	50	81.67	VII
Lack of storage in market yard	52	86.67	IV
High cost of transportation	47	78.33	VIII
Lack of cotton processing units	50	83.33	VI
Lack of market information	42	70.00	X
Improper weighing	51	85.00	V

function without reducing consumer's satisfaction indicates an improvement in the marketing efficiency. Analysis revealed that marketing efficiency in channel is comparatively high due to less marketing cost and margins. Marketing efficiency of channel I was worked out to be 7.02 while it was 5.27 in channel II.

**Constraints :** Constraints analysis indicated that lack of proper storage facilities with the cotton produces is major constraint which faced by the producers which is forcing them to sale the produce immediately after the harvest at the prevailing market price. About 92 per cent of the respondents felt this as a major problem. Improper grading is another problem faced by the 90 per cent of the respondents, due to which they are not getting proper price to their produce. Disorganized marketing and lack of storage facilities in the market yard ranked second and third place. Other problems include improper weighing, lack of cotton processing units, fluctuation in the price of cotton, high cost

of transportation etc.

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