

# A study on marketing of chillies in Thoothukudi district of Tamil Nadu

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## ABSTRACT

India is the largest producer and consumer of chillies in the world. In Tamil Nadu, Thoothukudi district occupied the major area and production. Efficient marketing of chillies plays an important role in increasing the production. Forty sample farmers were selected at random from Kovilpatti block of Thoothukudi district. The data were collected by personal interview method during the year 2011-12. Price spread, Acharya and Shepherd's marketing efficiency index were worked out. The results of the study revealed that all the sample farmers stored chillies in gunny bags. Three marketing channels were identified for chillies. The maximum producers share in consumer rupee (71.05%) was found in channel I. The Shepherd's index and Acharya marketing efficiency index also indicated that channel I was the efficient one. The major sources of market information were traders, neighbours, and friends. It was learnt that the farmers' decision on cropping pattern, time of sale and place of sale were influenced by the market information. Intermediaries' margin, low price, high marketing cost and forced sale were found as the important constraints in marketing of chillies.

**KEY WORDS :** Chillies, Price spread, Marketing efficiency index

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Chillies (*Capicum annum L.*) is a tropical and sub-tropical spice crop. Chillies are valued for its flavours and pungency. India is the largest producer and consumer of chillies in the world. Efficient marketing of chillies plays an important role in increasing the producer's share in the consumer's rupee and maintains the tempo of increased production. Market information plays an important role in agricultural marketing. The importance of sound agricultural marketing policies for ensuring fair returns to

the farmers can hardly be over-emphasized. Therefore, it becomes necessary on the part of regulatory agencies to ensure the remunerative prices to the farmers for the sale of their produce, to boost up their efforts for increasing and sustaining the agricultural production. A number of measures have been taken by the Government to protect and safeguard the interests of farmers, like regulation of markets, grading of agricultural produce, cooperative marketing etc. Still the benefits are not percolating down to the farmers, as they are unable to plan their strategies for sale of their produce at remunerative prices, in the absence of correct and timely market information and advice about arrivals, prices, market trend, etc.

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 a need for the study of farmers selling behaviour and efficiency level of the

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marketing channel in the marketing of chillies. This paper examines the price spread and relative efficiency of different marketing channels and source of market information for marketing of chillies.

### Objectives:

The specific objectives of the study were:

- To analyze the price spread and marketing efficiency of various channels in chillies.
- To identify the sources of market information.
- To identify the constraints faced by the farmers in selling of agricultural commodities.

### METHODOLOGY

The study was conducted in Thoothukudi district of Tamil Nadu where chillies are an important crop. Forty sample farmers were selected at random from Kovilpatti block of Thoothukudi district. The data were collected by personal interview method. Data relating to production, retention, marketing and selling places at different levels such as farm gate, wholesaler, commission agent and retailer, opinion regarding the needed infrastructure, sources of market information such as price, arrivals, demand and supply etc., storage and post harvest practices, cost and constraints of marketing channel were collected from the sample farmers and market intermediaries. The primary data were collected from the farmers through the pre-tested structured interview schedules.

The data were collected and used for estimation of price spread. The Acharya market efficiency analysis and Shepherd's marketing efficiency index methods were used to examine the efficiency of different marketing channels. The percentage analysis was used to estimate the sources of market information and problems in marketing of chillies.

#### Shepherd's formula:

Shepherd (1972) estimated marketing efficiency as the ratio of consumer's price to the total marketing costs and margins. Higher the ratio, higher would be the efficiency and *vice versa*. This can be expressed in the following form:

$$ME = \frac{CP}{MC + MM}$$

ME = Marketing efficiency

CP = Consumers' purchase price

MC = Marketing costs

MM = Marketing margins.

where,

#### Acharya's approach:

According to Acharya (2003), an ideal measure of

marketing efficiency, particularly for comparing the efficiency of alternate market channels should take into account all of the following:

- Total marketing costs (MC)
- Net marketing margins (MM)
- Prices received by the farmer (FP)
- Prices paid by the consumer (RP).

Further, the measure should reflect the following relationships between each of these variables and the marketing efficiency:

- Higher the (a), the lower the efficiency
- Higher the (b), the lower the efficiency
- Higher the (c), the higher the efficiency
- Higher the (d), the lower the efficiency.

As there is an exact relationship among the four variables, *i.e.*  $a + b + c = d$ , any three of these could be used to arrive at a measure for comparing the marketing efficiency.

The following measure is suggested by Acharya (2003):

$$ME = FP \div (MC + MM)$$

### ANALYSIS AND DISCUSSION

The findings of the present study as well as relevant discussion have been presented under following heads :

#### Farm size and type of land used for chillies:

In this study area, chillies crop is being raised both under the garden and dry land condition. It could be seen from the Table 1, that out of 40 sample farmers, 35 farmers accounted for 87.5 per cent raised crop in the garden land and the remaining 12.5 per cent raised the crop in dry land condition.

**Table 1: Farm size and type of land used for chillies cultivation**

Sr. No.	Farm size	Garden land	Dry land	Total
1.	Less than 1 ha	19 (47.50)	3 (7.50)	22 (55.0)
2.	1 – 2 ha	12 (30.00)	2 (5.00)	14 (35.00)
3.	More than 2 ha	4 (10.00)	-	4 (10.00)
	Total	35 (87.50)	5 (12.5)	40(100.00)

Figures in parenthesis indicate percentages to total

Regarding the size of the farm, less than one hectare accounted for 55 per cent, 1 to 2 ha accounted for 35 per cent and more than 2 ha accounted for 10 per cent. The results clearly indicated that the chillies crops are raised in small holdings.

#### Storage practices followed:

All the sample farmers stored the chillies in gunny bags. Storage in gunny bag is easy for them to load, unload and for transport of the commodities.

**Marketing channels:**

The following three channels were identified with reference to chillies marketing in the study area:

- Producer → Wholesalers → Retailers → Consumer
- Producer → Local village merchant → Wholesalers → Retailers → Consumer
- Producer → Village merchant → Trader → Wholesaler → Retailer → Consumer.

It was observed that some intermediaries were involved in - inter district and inter-state trade. They procured chillies

from sample farmers and sold outside the district. Because of time constraints, the price spread was worked for the channels within the district.

**Price spread of chillies:**

The marketing costs, profit margins of producer – seller as well as market functionaries were worked out and the details about the price spread for one quintal of dried chillies marketed through different channels are presented in Table 2 and 3. Among the three channels, the producer’s share in

**Table 2: Price spread of chillies**

Sr. No.	Particulars	Marketing channels (in Rs.)		
		I	II	III
<b>I</b>	<b>Producer</b>			
	Net price received by the producer	6750.00 (71.05)	5900.00(68.20)	5900.00 (59.30)
<b>II</b>	<b>Local village merchant</b>			
	Price paid	-	5900.00(68.20)	5900.00(59.30)
	Marketing cost	-	683.33 (6.97)	683.33(6.87)
	Profit margin	-	566.67 (5.78)	566.67(5.70)
	Marketing margin	-	1250.00 (12.76)	1250.00(12.56)
	Price received	-	7150.00 (72.96)	7150.00(71.86)
<b>III</b>	<b>Licensed trader</b>			
	Price paid	-	-	7150.00 (71.86)
	Marketing cost	-	-	156.92(1.58)
	Profit margin	-	-	976.42(9.81)
	Marketing margin	-	-	1133.34(11.39)
	Price received	-	-	8283.34(83.25)
<b>IV</b>	<b>Wholesalers</b>			
	Price paid by the wholesaler	6750.00 (71.05)	7150.00 (72.96)	8283.34(83.25)
	Marketing cost	387.08 (4.07)	217.33 (2.22)	195.83(1.97)
	Profit margin	1279.58 (13.47)	1232.67 (12.58)	620.83 (6.24)
	Marketing margin	1666.66(17.54)	1450.00 (14.80)	816.66(8.21)
	Price received by the wholesaler	8416.66(88.60)	8600.00(87.76)	9100.00(91.46)
<b>V</b>	<b>Retailers</b>			
	Price paid	8416.66 (88.60)	8600.00 (87.76)	9100.00 (91.46)
	Marketing cost	190.00 (2.0)	457.50 (4.67)	365.25(3.67)
	Profit margin	893.34 (9.40)	742.50 (7.58)	484.75(4.87)
	Marketing margin	1083.34 (11.40)	1200.00 (12.24)	850.00(8.54)
	Price received by the retailer	9500.00	9800.00	9950.00
	Price spread	2750.00	3900.00	4050.00

Figures in parenthesis indicate percentages to consumer price

**Table 3: Marketing channel**

Sr.No.	Market channels	Price received by the farmer (Rs./qtl)	Price paid by the consumer (Rs./qtl)	Price spread (Rs./qtl)
1.	Channel - I	6750(71.05)	9500(100.00)	2750(28.95)
2.	Channel – II	5900(60.20)	9800(100.00)	3900(39.80)
3.	Channel - III	5900(59.30)	9950(100.00)	4050(40.70)

consumer's rupees was maximum in channel I compared with other channels. The net price received by the producer was high in channel I followed by channel II and channel III.

The farmers got maximum price when they sold chillies to wholesalers (channel I) because of commission charges. The share of the marketing cost of village merchant (channel II) was 6.97 per cent of the consumer's rupee while their margin was 5.78 per cent. For the channel III marketing cost was 6.87 per cent and the profit margin was 5.70 per cent.

The total marketing cost of the wholesaler ranged from 1.97 per cent (channel III) to 4.07 per cent (channel I) of the consumers' rupee. However, the total marketing margin wholesalers ranged from 8.31 per cent (channel III) to 17.54 per cent (channel I) of the consumers' rupee. Therefore, it could be concluded that linking farm to agro processing unit directly without any intermediaries would be beneficial to farmers followed by sales through government agencies.

#### Marketing efficiency:

The efficiency of the different marketing channels was analysed by estimating the Acharya and Shepherds' Index. The results of the same are presented in Table 4a and b.

**Table 4(a): Marketing efficiency of chillies – Acharya approach**

Sr.No.	Market channels	Net price received by the farmer (Rs.)	Marketing cost + marketing margin (Rs.)	Marketing efficiency
1.	Channel-I	6750	2750	2.45
2.	Channel-II	5900	3900	1.51
3.	Channel-III	5900	4050	1.46

**Table 4(b): Marketing efficiency of chillies – Shepherd's formula**

Sr.No.	Market channels	Value of goods sold (Rs.)	Total marketing cost (Rs.)	Marketing efficiency
1.	Channel-I	9500	577.08	16.46
2.	Channel-II	9800	1358.16	7.22
3.	Channel-III	9950	1401.33	7.10

Comparison of price spread of different channels indicated that the price spread was lowest in channel I (28.95%) followed by channel II and channel III. Comparison of Shepherd's index indicated that channel I was most efficient followed by channel II and channel III. Comparison of Acharya market efficiency of different channels revealed that channel I was most efficient since it reflects that linking chillies producer directly to wholesalers. From the results it is concluded that channel I was the most efficient one.

#### Sources of marketing information

The source of marketing information is presented in

the Table 5. Farmers received information from more than one source. The major source of market information was neighbours, friends and traders.

**Table 5: Sources of market information**

Sr. No.	Particulars	No. of farmers expressed	Per cent to total (40)
1.	Traders	22	55.00
2.	Neighbors	32	80.00
3.	Friends	30	75.00
4.	Agency	16	40.00
5.	Mass media	22	55.00
6.	News paper	18	45.00

The other sources of information were mass media, agency and newspaper. The farmers decision on cropping pattern, time of sale and place of sale were influenced by the market information. Since chillies are semi-perishable commodity, farmers had used the information to get higher profit. Besides commission agents, village merchants, there were large number of wholesalers available in the market. All the villages were connected with the roads and there were private transports. So this helps to the farmers to sell the produce in the desired market.

#### Problems in marketing:

The problems expressed by the farmers in marketing are furnished in Table 6. The table shows the multiple responses from the respondents.

**Table 6: Problems faced by the farmers in marketing of chillies (n=40)**

Sr.No.	Problems faced	No. of farmers expressed	Per cent to total
1.	High commission	38	95.00
2.	Low price	26	65.00
3.	In adequate transport facility	24	60.00
4.	In adequate storage	20	50.00
5.	Long distance to travel	33	82.00
6.	High marketing cost	32	80.00
7.	Forced sale	15	37.00
8.	Non-availability of labourers for works relating to marketing	18	45.00

It could be seen from Table 6 that majority of the farmers expressed problems with respect to high commission charges followed by long distance to travel, high marketing cost, low price, forced sale (because of family commitments, education expenses and sudden unwanted happenings), inadequate transport facility and inadequate storage facilities.

**Conclusion and recommendations:**

From the results of the study, it was found that all the sample farmers stored the chillies in gunny bags. Three channels were identified with reference to chillies marketing in the study area. The producers share in consumer rupee was maximum. The total marketing cost and the total marketing margin percentage were minimum in channel I followed by channel II and III. The Shepherd's index and Acharya index also indicated that channel I was the most efficient followed by channel II and III. The major sources of market information were neighbours, friends and traders. It was learnt that the farmers' decision on cropping pattern, time of sale and place of sale were influenced by the market information. Low price, high marketing cost and forced sale were found as the important constraints in marketing of chillies.

From the policy point of view, channel I which links farm produce to wholesalers or regulated market would benefit the producers. Further, appropriate measures may be taken to reduce the marketing cost and marketing margin to intermediaries in channel II and III. The farmers expressed year to year high price fluctuations for chillies. Hence, efforts may be taken for ensuring the remunerative price in all the years.

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