Research Article

A STUDY OF MARKETING OF GREEN CHILLI IN KOLHAPUR DISTRICT OF MAHARASHTRA

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Abstract- The present study was conducted on the 90 farmers during 2013-14 in Shirol and Hatkanangale tahsils of Kolhapur district in Maharashtra state. The present study was examined marketing costs, margins and price spread of Green Chilli. The Producer-Wholesaler-Retailer- Consumer was the major marketing channel and the producer's share in consumer's rupee was found to be 64.83% in Channel-I, 67.43% in Channel-II and 80.32% in Channel-III. Per quintal cost of marketing of green chilli was highly incurred by retailer followed by wholesaler/commission agent and village trader. The major marketing problems were high commission charges (86.67%), high transport charges (86.67%), and price fluctuations (84.44%), in market. The study, suggested that government should fix support price as well as ceiling prices level fair to both producers and consumers and formation of co-operative marketing societies for better sale.

Keywords- Green Chilli, Marketing Cost, Marketing Channel.

Introduction

Chilli is one of the important spice crop known for its fascinating natural colour throughout the world and it is originated from South Central America. It was introduced in India by the Portuguese in Goa in the middle of 17th century [1]. The chilli is having more than 100 species and varieties. Oleoresin from Capsicum use in medicine, internally as powerful stimulant and calmative, externally as counter irritant in treatment of rheumatism, Purse glove and long term capsicum treatment strengthen the defense mechanism of stomach. The capsaicin extracted from ripe dried fruits is used in pharmaceutical preparations and medicines related to heart diseases. India is the leading country in production, consumption and export of chilies and chilli based products. India is not only the major producer and consumer of chilies but also major exporter of chilies and chilli based products. The major chilli producing countries are India having 7.94 lakh ha, China 7.32 lakh ha, Morocco 5.22 lakh ha area [2]. India ranks first with 21 per cent share in the total world export trade. In the world import trade, USA is the main importing country of chilli followed by Germany, UK, Canada, Netherlands and China. Chilli is cultivated in almost all the states and the Union territories of India. It is reported that our country produced 13.04 MT of chilies from an area of 7.94 lakh hectares with productivity of 1600 kgs per hectare in the 2012-13. In Maharashtra area under chilli cultivation was 99500 ha with production 45600 tons, having productivity 460 kg/ha [3]. Kolhapur district covers area of 4381.06 hectare, of which Hatkanagale (489 ha) and Shirol (421ha) tehsils contribute major share in area and production of chilli. The present study is an attempt to throw light on marketing cost, margin price spread and problems in marketing of green chilli in Kolhapur district of Maharashtra.

Materials and Methods

This study was conducted in Hatkanagale and Shirol tahsils of Kolhapur district of Maharashtra. A total sample of 90 farmers were drawn comprising of 30 small farmers (below 0.40 ha.), medium farmers (0.41 to 0.80 ha) and large farmers (above 0.81 ha.). The primary data were collected with the help of pre-tested schedule by interviewing farmers and traders personally for the year 2012-13.

Analytical Tools
Estimation of marketing cost
Marketing cost of chilli was calculated by estimating the cost involved in the process of marketing such as packing charges (wages paid to labours and cost of material), transport charges (loading and unloading charges) and market cost. The marketing cost at various stages was calculated and total cost was estimated.

Marketing margins
Market margin at different stages of marketing of green chilli was calculated as follows (Acharya and Agrawal, 2005) [4].

$MM_i = SP_i - (PP_i + MC_i)$

MM_i = Marketing margin of i-th middlemen
SP_i = selling price of i-th middlemen
PP_i = purchase price of i-th middlemen
MC_i = marketing cost of i-th middlemen

Producers shares in consumers rupee
The difference between price paid by consumer and price received by the producer was calculated by using this formula (Acharya and Agrawal, 2005) [4].

Producers shares in consumers rupees = Producer price / Consumer's price x 100

Results and Discussions
[Table-1] reveals that at overall level, 0.66 qtls of the produce was retained for home consumption, 0.21 qtls of produce was given as gifts to relatives, 0.14 qtls of produce was given as wages in kind. It was observed that the majority of the produce (99.80 per cent) was available as marketable surplus for selling in

market at overall level. The farm use mainly required for home consumption it depends upon family size. Farm family consumption of chilli is hardly 86 to 119

kgs per annum and hence rest is marketable surplus (99.80 %).

Table-1 *Disposal pattern of green chilli on sample farms (qtls).*

Sr. No.	Particulars	Size groups (qtls)			
		Small	Medium	Large	Overall
1.	Production	517.3(100)	495(100)	532.5(100)	514.9(100)
2.	Quantity consumed on farm				
	a. Home consumption	0.52	0.68	0.78	0.66
	b. Gift to relatives	0.21	0.15	0.27	0.21
	c. Wages in kinds	0.13	0.16	0.14	0.14
	Sub total	0.86(0.17)	0.99(0.20)	1.19(0.22)	1.01(0.20)
3.	Marketable surplus	516.44 (99.83)	494.01 (99.80)	531.3 (99.78)	513.9 (99.80)

(Figures in parentheses indicate the percentage to the total production).

It was observed that home consumption increased with size groups. This is because family composition of sample farm was also increased from small to large size groups. It was highest (0.78 qtls) in large followed by medium (0.68 qtls) and small (0.52 qtls).

Marketing channels

The marketing channel plays a vital role in marketing process. As we know that the net return over the cost is maximum in direct sale. The return is decrease when large number of intermediaries increases in marketing process. In case of green chilli there are three major channels seen in Kolhapur market. These channels were namely.

Channel-I → Producer → Wholesaler/commission agent → Retailer →

Consumer

Channel-II → Producer → Village trader → Wholesaler → Retailer → Consumer

Channel-III → Producer → Retailer → Consumer

The first channel *i.e.,* P – W – R – C was most popular in Kolhapur market as most of the farmers sold their green chilli through this channel.

Green chilli sold to different agencies by the sample farms

It is observed from the [Table-2] that about 68.06 per cent of the marketable surplus was passed through the hands of wholesaler/commission agent i.e. through channel-I and around 21.36 per cent of the marketable surplus was marketed through village traders i.e. channel-II.

Table-2 *Green chilli sold to different agencies by the sample Farmers.*

Sr. No.	Channel	Agencies	Small		Medium		Large		Overall	
			Qty.	(%)	Qty.	(%)	Qty.	(%)	Qty.	(%)
1.	I	Wholesaler/ commission agent	17.06	16.49	183.50	74.11	335.49	76.84	178.68	68.06
2.	II	Village trader	51.40	49.68	46.63	18.83	70.22	16.08	56.08	21.36
3.	III	Retailer	35.00	33.83	17.47	7.06	30.90	7.08	27.79	10.58
C.		Marketed surplus	103.46	100.00	247.60	100.00	436.61	100.00	262.56	100.00

And in channel-III, around 10.58 per cent marketable surplus was marketed through retailers. It was seen that channel-I was most familiar than channel-II and III among the sample grower.

Marketing cost

Per quintal cost for sale of green chilli was ₹176.29 at overall level, while the

channel-II was highest (₹270.43) followed by channel-I (₹218.82) and channel-III (₹49.63). At overall level large proportion of expenditure incurred on commission/market charge (55.07 per cent). While channel-III large proportion of expenditure incurred on transportation charges (81.01%) followed by packaging charges (13.34%), hamali (5.64%) and no commission/market charge charges in this channel.

Table-3 *Channel wise average cost of marketing of chilli (₹/qtls).*

Particulars	Channel I	Channel-II	Channel-III	Overall
Packing charges	7.05(3.22)	7.12(2.63)	6.62(13.34)	6.93(3.93)
Transport (%)	65.45(29.93)	92.81(34.31)	40.21(81.01)	62.82(35.63)
Hamali	8.5(3.88)	9.4(3.48)	2.8(5.64)	6.9(3.91)
Tolai	3.57(1.63)	4.1(1.51)	-	2.56(1.45)
Commission/market charge	134.25(61.35)	157(58.05)	-	97.08(55.07)
Total marketing cost	218.82(100)	270.43(100)	49.63(100)	176.29(100)

(Figures in the parentheses indicate the percentage of their respective total).

Channel-I maximum expenditure on commission/market charge (61.35%) followed by transportation (29.93 %). While in channel-II maximum expenditure incurred on Commission/market charge (58.05%) followed by transportation (34.31%), hamali (3.48%), packaging charges (3.63%).

Price spread and marketing margin

Channel-wise price spread and marketing margin

[Table-4] reveals that the channel-I, where producer sold his produce to commission agent -retailer and finally to consumer. The net price received by the producer was ₹ 895.04, whereas the price paid by the consumer was ₹

1380.64, it means producer share in consumer rupee in channel-I was 64.83. Among the different intermediaries in the channel, retailer received the maximum net profit of (₹83.28) followed by commission agent (₹53.39).

Highest cost of marketing was incurred retailer (₹30.67) followed by commission agent (₹23.28). In the Channel-II, the producer sold his produce to village trader-commission agent-Retailer and finally to consumer. The net price received by the producer was ₹933.22, whereas the price paid by the consumer was ₹ 1383.99, it means producer share in consumer rupee in channel was 67.43.

Among the different intermediaries in the channel, retailer received the maximum net profit of (₹94.22) followed by village traders (₹83.19) and wholesaler/

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Table-4 *Channel-wise price spread and marketing margin of green chilli.*

Sr. No	Particulars	Channel-I ₹ /qtl	Channel-II ₹ /qtl	Channel-III ₹ /qtl
1.	Net price received by the producers	895.04	933.22	709.84
2.	Market expenses incurred by the producers	295.28	147.15	89.65
3.	Gross price received by the producers	1190.32	1080.37	799.49
4.	Expenses incurred by the village traders	0	26.85	0
5.	Margin of the village traders	0	83.19	0
6.	Expenses incurred by the commission agents	23.28	19.18	0
7.	Margin of the commission agents	53.39	48.02	0
8.	Expenses incurred by the retailers	30.37	32.16	20.36
9.	Margin of the retailers	83.28	94.22	63.88
10.	Price paid by consumers in the market	1380.64	1383.99	883.73
11.	Producer share in consumer rupee (%)	64.83	67.43	80.32

(Figures in the parentheses indicate the percentage of their respective total).

commission agent (₹48.02). Highest cost of marketing was incurred retailer (₹ 32.16) followed by village traders (₹26.85) and wholesaler/ commission agent (₹19.18). In the Channel-III, the producer sold his produce directly to retailer instead of wholesaler/commission agent and village trader. It is observed from the table that, the producer's share in consumer rupee was 80.32, which was maximum that in channel-III, under study in green chilli marketing and the producer's share in consumer rupee was maximum in channel-III than the other channels mainly because of less number of market intermediaries.

Constraints in marketing of green chilli
[Table-5] reveals that the transportation was major bottle neck in efficient marketing of green chilli about 86.67 per cent farmers were complained about high transportation charges and the price variation was also emerge as important problem, about 84.44 per cent of the farmers expressed their concern over this.

Table-5 *Constraints in marketing of green chilli.*

Sr. No.	Particulars	Size groups			
		Small	Medium	Large	Overall
1	High transport charges	26(86.67)	27(90.00)	25(83.33)	78(86.67)
2	High market charges	23(76.67)	24(80.00)	28(93.33)	75(83.33)
3	Malpractices followed in market	26(86.67)	18(60.00)	22(73.33)	66(73.33)
4	High Commission/market charge charges	27(90)	26(86.67)	25(83.33)	78(86.67)
5	Lack of market intelligence	22(73.33)	28(93.33)	23(76.67)	73(81.11)
6	Problems of price variation in the market	23(76.67)	26(86.67)	27(90.00)	76(84.44)
	Total	30(100)	30(100)	30(100)	90(100)

(Figures in the parentheses indicate the percentages of their respective total).

High commission/market charge was major problem for farmers about 86.67 per cent of sample farmers expressed their concern over this along with market charges in the markets to an extent of 83.33 per cent. About 81.11 per cent of the farmers were facing problem about the lack of marketing intelligence.

Conclusion
Among the three marketing channels the channel-I was found more popular in marketing of green chilli. Marketing cost of green chilli was highly incurred by retailers followed by wholesaler/commission agents and village traders. Producers share in consumer rupee was recorded ₹64.83, ₹67.43 and ₹80.32 in channel-I, channel-II and channel-III, respectively. The major problems faced in marketing of green chilli were high rate of transportation charges and high commission/market charges. The study recommends that the steps should be taken at the government level to regularize the transport charges for this purpose. The monopoly of the transport agencies should be broken and controlled by government by fixing the support price as well as sealing prices and it should be fair for both producer and consumer.

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Abbreviations
%	= Percent
ha	= Hectare
kg/ha	= Kilogram per hectare
MT	= Million tone
qtl	= Quintal
qty	= Quantity
UK	= United Kingdom
USA	= United States of America

Ethical approval
This article does not contain any studies with human participants or animals performed by any of the authors. This is the original research work of post-graduation.

Conflict of Interest: None declared

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