

# Marketing of Green Chilli in Kaushambi District of Uttar Pradesh, India

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**Abstract:** *The present study has been conducted in order to access the marketing of Green Chilli in Kaushambi District of Uttar Pradesh, India. . Primary data was collected from various stakeholders constitute forty growers and two and three mediators operating at each level of marketing channels. The study examined marketing costs, market margins, price spread and problems involved in the marketing of green chilli. Chilli cultivated in Kaushambi district was predominantly sold in the form of green chilli. Manjhanpur Block of Kaushambi district having largest area under green chilli were purposively selected for the present investigation and seven villages from Manjhanpur Block were selected randomly. The total sample consists of 120 green chilli growers comprising 60, 36 and 24 from small, medium and large group. Data collected pertained to the year 2014- 2015. Different marketing channels were followed by the sample farmers. However, Producer-Wholesaler/ Commission agent/Retailer-Consumer was the major marketing channel. The major items of cost were transport charges, Commission charges, spoilage etc. The producer's share in consumer's rupee was found to be 94.07 per cent in Channel-I, 51.03 per cent in Channel-II and 49.58 per cent in Channel-III. The post-harvest losses of green chilli were highest at retailer level which was 5-8 kg. The study suggests that the researchers should evolve disease and pest resistant varieties of chilli, formation of co-operative marketing societies for better sale. Extension education programmes have to be strengthened for the spread of the awareness of improved production technologies, processing industries in the Study area and modern cultivation of chilli among the farmers.*

**Keywords:** Green Chilli, Marketing efficiency, Marketing Cost, Marketing margins, Price spread

## 1. Introduction

Chilli is one of the most important commercial vegetable crops of India. It is grown all most throughout the country. There are more than 400 different varieties of chillies found all over the world. It is also called as hot pepper, cayenne pepper, sweet pepper, bell pepper, etc. Its botanical name is "Capsicum annum". The world's hottest chilli "Naga Jolokia" is cultivated in hilly terrain of Assam in a small town Tezpur, India. Chilli is raised over an area of 1832 thousand hectares in the World, with a production of 2959 thousand tons.

India is the largest producer and contributes 25 per cent to total world production. It is also largest consumer and exporter of chilli. Chilli is the most common spice cultivated in the country. India has produced about 1605.01million tons of chilli during 2014-15 up by 2 per cent. As per trade sources, chilli production for year 2014-15, is estimated down by 20-25 per cent to around 9.95-10.5 lakh tons as 30-40 per cent crop has been damaged due to unseasonal rains during November to December in major growing regions.

## 2. Objectives

- To find out the disposal pattern of Green Chilli through different marketing channel in the study area.
- To compute marketing costs, margins, price spread and marketing efficiency of chilli marketing.

## 3. Methodology

Multistage sampling techniques were used for selection of samples. In the first stage Kaushambi district was selected purposively in Uttar Pradesh. Seven villages (Bazaha Khurampur, Dharampur, Faridpur, Hasanpur, Pindra Sahawanpur, Pawara, Ghasipur) form Manjhanpur block of Kaushambi district were selected randomly as it had the highest area under green chilli production. A sample size of around one twenty growers were selected randomly. To study the various aspects of marketing, 2 and 3 intermediaries are operating at each level of marketing channel were identified and contacted.

### 3.1 Analytical frameworks

#### 3.1.1 Marketing cost

The total cost incurred on marketing by various intermediaries involved in the sale and purchase of the commodity till it reaches the ultimate consumer was computed as follow.

$$C=Cf+Cm1+Cm2+Cm3+\dots\dots\dots+Cmn$$

Where,

C= Total cost of marketing

Cf= Cost borne by the producer farmer from the produce leaves the farm till the sale of the produce, and

Cmn= Cost incurred by the i<sup>th</sup> middlemen in the process of buying and selling

**3.1.2 Marketable surplus**

$$MS=P-C$$

Where,

MS= Marketable surplus

P= Total Production

C= total requirements (family and farm)

**3.1.3 Producer’s share in Consumer’s Rupee:**

$$P_s = \frac{P_f}{P_c} \times 100$$

Where,

P<sub>s</sub> = Producer’s share in Consumer’s Rupee

P<sub>f</sub> = Price of the produce received by the farmer

P<sub>c</sub> = price of the produce paid by the consumer

**3.1.4 Marketing Margin of Middlemen:**

(a) Absolute margin = P<sub>Ri</sub> – (P<sub>pi</sub> + C<sub>mi</sub>)

(b) Per cent margin =  $\frac{P_{Ri} - (P_{pi} + C_{mi})}{P_{Ri}} \times 100$

Where,

P<sub>Ri</sub>= Total value of receipts

P<sub>pi</sub>=Total purchase value of goods (purchase price) and

C<sub>mi</sub>=Cost incurred in Marketing

**3.1.5 Marketing Efficiency:**

Consumer price

$$= \frac{\text{Marketing efficiency}}{\text{Total marketing cost + marketing margin}}$$

**3.1.6 Price spread**

Price spread = Consumer price – Producer price

**3.1.7 Price spread Ps=Pp/Pc X 100**

Where, Ps: Producer’s share in consumer’s rupee

Pp: Producer’s price for his vegetables produce

Pc: Price paid by consumer

**4. Results and Discussion**

The category wise producers’ surplus of green chilli is presented in Table 1. The Table depicts that quantity of green chilli produced by small, medium and large green chilli grower was estimated as 15.60 qtl, 30.55 qtl and 68.25 qtl, respectively. The overall its production was estimated as 30.61 across the category. The production of green chilli was found to be highest on large green chilli farm and obviously its depend on size of land holding and the production will increase with the increase in size of land holding of the green chilli grower. The quantity retained for various purposes by small, medium and large category of green chilli grower was estimated of 0.90 qtl, 0.92qtl, 1.02, respectively. Whereas, overall it was accounted to be 0.93 qtl. The quantity retained for various purposes at household was found to be increased with the increase of size of farm more quantity is required to fulfill the requirement, wage relative and religious required for social obligations *etc.* On small category of green chilli grower the quantity retained for various purposes has been estimated 5.76 per cent of total production of green chilli out of which the quantity for home consumption (0.96%) was found and followed by wages (3.07), relative and religious (1.73) . Similarly, on medium category of green chilli grower kept 3.01 per cent of

quantity of green chilli at their home for various obligations, out of that the highest share of quantity retained in wages was (1.83%) followed by home consumption (0.65), relative and religious (0.26). On large category of green chilli growers kept lesser (1.49 %) share of the total produce of green chilli comparative to other two categories *viz*, small and medium. The main purpose of the large green chilli grower was wages (0.86 %), followed by home consumption (0.36), relative and religious (0.26). The share of home consumption was higher on small and medium green chilli farm because of big size of family than the large category. The overall, quantity of main produce being kept by the green chilli grower in the study area has been estimated as 3.03 per cent of total produce for the various purposes. Out of that the highest share was accounted to be for wages (1.71 %) followed by home consumption (0.60), relative and religious (0.71). After deducting the quantity made at household level for different purposes meager amount of marketable surpluses was observed for all category of green chilli grower. The amount of marketable surplus found to be increased with the increase of size of green chilli farm. On small category of green chilli grower the marketable (94.23%) accounted to be more or less equal. Whereas, the marketable surplus was accounted higher than small growers on medium category of green chilli grower and it was accounted to be 96.98 per cent respectively. Similarly, marketable surplus was higher than medium on large category of green chilli grower and it was estimated as 98.50 per cent respectively. Hence, study found that there was no distress sale of the produce and green chilli is being produced mainly for the sale purpose, hence, commercial green chilli farming should be encouraged through awareness in the study area to increase the marketable surplus which will help to open the marketing avenues in the state as well as in the study area.

**Table-1: Marketable surplus of Green chilli**

Sl. No	Particulars	Size of Farms Groups			Sample Average
		Small	Medium	Large	
1	Area under green Chilli cultivation per hectare	0.24	0.47	1.05	0.47
2	Total production of green Chilli in quintals Per Farms level	15.60 (100.00)	30.55 (100.00)	68.25 (100.00)	30.61 (100.00)
3	Retained for green Chilli (in quintals)				
I	Home Consumption	0.15 (0.96)	0.20 (0.65)	0.25 (0.36)	0.18 (0.60)
II	Kind Payment as wages	0.48 (3.07)	0.56 (1.83)	0.59 (0.86)	0.53 (1.71)
III	Relatives and Religious person	0.27 (1.73)	0.16 (0.52)	0.18 (0.26)	0.22 (0.71)
4	Total retention for green chilli	0.90 (5.76)	0.92 (3.01)	1.02 (1.49)	0.93 (3.03)
5	Marketable surplus	14.70 (94.23)	29.63 (96.98)	67.23 (98.50)	29.68 (96.96)

**Disposal Pattern of Chilli**

Disposal pattern of green chilli in Kaushambi district of Uttar Pradesh during 2014-15 is shown in Table 2. In the marketing of green chilli channels *viz*, Channel-I: Producer-Consumer, Channel-II: Producer-Retailer -Consumer and Channel-III: Producer-Retailer -Commission agent-

Consumer were identified. On small category of green chilli farm the highest quantity was disposed through channel-III and it was accounted as 82.90 per cent respectively. On medium category of green chilli grower the channel-II through which more than 11.87 per cent of the quantity of green chilli was disposed. The large green chilli grower used channel-III as major channel to dispose the quantity for sale through that more than 89.58 per cent of quantity of green chilli was disposed and followed by channel-II through

which more than 5.22 per cent of was disposed. The overall, the channel-III (82.90%) found to be more popular to sale green chilli and followed by Channel-II (11.87%) and Channel-I (5.22%). Hence, channel wise analysis concludes that the Channel-III (Producer\_ Commission Agent \_ Retailer -Consumer) was the major channel in respect to dispose-off quantity of green chilli (Table 2). Hence, channel-III must be popularized among the green chilli growers of the state.

**Table 2:** Disposal pattern of green chilli in Kaushambi district of Uttar Pradesh during 2014-2015

Sl. No	Particulars	Size of Farms Groups			Sample Average
		Small	Medium	Large	
1	Marketable surplus from own Farm	14.70	29.63	67.23	29.68
2	Quantity Purchased from Other Farms	-	-	-	-
3	Actual Marketable Surplus (in quintals)	14.70 (100)	29.63 (100)	67.23 (100)	29.68 (100)
4	Disposal of actual Marketed Surplus of Chilli in Different Marketing Channels				
i	Producer → Consumer	1.25 (8.50)	1.75 (5.90)	2.00 (2.97)	1.55 (5.22)
ii	Producer → Retailers → Consumer	2.50 (17.00)	4.25 (14.34)	5.00 (7.43)	3.52 (11.87)
iii	Producer → Commission Agents → Retailer → Consumer	10.95 (74.48)	23.63 (79.75)	60.23 (89.58)	24.61 (82.90)

Channel I: [Producer -Consumer] (5.22%)

Channel II: [Producer- Local retailer - Consumer] (11.87%)

Channel III: [Producer- Commission Agents – Retailer- Consumer] (82.90)

**Table 3:** Total Estimation Marketing Cost and Marketing Margin in different Size of Farms Group

Sl. No	Particulars	Channel I	Channel II	Channel III
1	Total marketing cost	160.00	655.00	855.00
2	Total marketing margins	00.00	2000.00	1925.00
3	Price spread	160.00	2495.00	2542.50
4	Producer share in consumer rupee in per cent	94.07	51.03	49.58
5	Marketing efficiency in per cent	16.87	7.78	5.90

Table 4.19 reveals that total marketing cost, marketing margin, price spread, Producers share in consumer rupee and marketing efficiency in the marketing channels. The total market cost was higher in channel III (Rs 855.00) compared to channel II (Rs.655.00) and channel-I (160.00). And the total marketing margin and price spread was also seen higher in channel III (Rs.760.00 and Rs.1519.50) because in the channel II there are one intermediates where as in the channel I there is no intermediate. The producer share in consumer rupee was higher in channel I, 94.07 per cent. The marketing efficiency was higher in channel I, 16.87 per cent respectively. Since the cultivation of green chilli in the study area at subsistence level and it needs to make it commercial for benefit of green chilli growers. The marketing is being performed in unorganized market. Therefore study recommends establishing the market and sub-yards for marketing of green chilli in the study area to make market aspect as an organized which would help to the green chilli growers to get their remunerative prices as well a for the market middlemen to earn their income . Same time it will encourage the farmer of the state to raise the production and yield of the green chilli.

## 5. Constraints in Green Chilli Marketing

Major problems faced by farmers and traders dealing with the marketing of green chilli were lack of processing units, need of timely disposal of the produce because of perishable nature, monopoly of few middlemen in market, lack of marketing information, lack of transport facilities *etc.* The numbers of commission agent working for green chilli in market are in small numbers as compared to the large numbers of producers in district. These problems need attention to policy makers in order to improve the efficiency of marketing of green chilli in Naveen market

## 6. Conclusions and Policy Implications

The study revealed that the green chilli crop cultivation in the study area of Green chilli production at subsistence level is one of the reasons of more retention of marketable surplus and non availability of organized market is another reason. Therefore, establishing a regulated market at block level in the study area is the need of hours. The disposal of green chilli through growers to consumer is the dominant channel in the area and it must be strengthened with new technology of processing. The strengthening of processing units in the area will encourage the farmers to produce more green chilli and further it help in development of organized market.

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