

# Study on Marketing of Chilli Fruits in Mirzapur District of Uttar Pradesh

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**Abstract:-** India is the largest producer (1.75 million tonnes), consumer (80% of production), and exporter (15-20% of production) of chili in the world, and contributes to around 40% of world chili production. In total spices, export chili alone contributes around 42% of total export. Chilies are grown in almost all the states in India. But Uttar Pradesh is the largest producer, accounting for more than 43% (8.05 lakh tonnes) of total chili production in our country during 2019-2020. Major chili grower districts in Uttar Pradesh are Mirzapur, Kaushambi, Prayagraj, Pratapgarh which account for 96.07% of total state production. India is exporting to the USA, UAE, China, Malaysia, and many more. In the present study it was found that largest no of farmer based on land holding is small farmer, followed by medium farmer, semi medium farmer, marginal farmer and lastly large farmer. It was found that in age category middle age farmer was found in large number followed by young age farmer and lastly old age farmer. The Marketing Efficiency of chilli 1 quintal bag was seen to be 4.26% per 1 quintal bag of chilli through channel 1, total market margin in selling 1 quintal chilli bag to consumer through channel 1 is Rs. 630, total marketing cost incurred in selling of 1 quintal of chilli bag through channel 1 is Rs. 29 and the price spread seen in marketing of 1 quintal chilli bag through channel 1 is Rs 234. Total marketing cost incurred in marketing of 1 quintal chilli bag through channel 2 is Rs 49. Total market margin in marketing of 1 quintal chilli bag through channel 2 is Rs 882. Eventually, the Marketing Efficiency of 1 quintal chilli bag was seen to be 3.27% 1 quintal chilli bag through channel 2 and price spread seen while marketing of 1 quintal chilli bag is Rs.530 from channel 2. Eventually Total marketing cost incurred in marketing of 1 quintal chilli bag through channel 2 is Rs 49. Total market margin in marketing of 1 quintal chilli bag through channel 2 is Rs 882. Eventually, the Marketing Efficiency of 1 quintal chilli bag was seen to be 3.27% 1 quintal chilli bag through channel 2 and price spread seen while marketing of 1 quintal chilli bag is Rs.530 from channel 2.

**Keyword:-** Socio economic profile, Price spread, Marketing efficiency, Marketing margin.

## I. INTRODUCTION

Agriculture is the practice of cultivating plants and livestock in order to provide facilities the human beings. In the rise of the sedentary human lifestyle agriculture was the key development. The cultivation of plant and food grains began years ago in order to provide food to the city population. Agriculture is the main need for the people to live in the society. Agriculture is the main source of livelihood; it provides a source for the people to earn. Most of the population in the rural areas is dependent on agriculture as their main source of income. Agriculture contributes significantly to a country's GDP that is the Gross Domestic Production of a country. By the passing of time, there are a number of revolutions that take place in order to improve agriculture throughout the world or a country. If we talk about agriculture, India has witnessed a number of revolutions, that is, the green revolution, yellow revolution, blue revolution, agriculture. Agriculture affects the biodiversity of a country depending upon agricultural activities. Chilli is considered as one of the commercial spice crops. It is the most widely used universal spice, named as wonder spice. Different varieties are cultivated for various uses like vegetable, pickles, spice and condiments. In daily life, chillies are the most important ingredient in many different cuisines around the world as it adds pungency, taste, flavour and colour to the dishes. Indian chilli is considered to be world famous for two important commercial qualities namely, its colour and pungency levels. Some varieties are famous for the red colour because of the pigment and other quality parameters in chilli are length, width and skin thickness. The world production of chilli crop to around 7 million tonnes, which is cultivated on 1.5 million hectares of land. India is the world leader in chilli production followed by China and Pakistan. This shows that the bulk share of chilli production is held by the Asian countries, though it is produced throughout the world. A large demand for chilli comes from several chilli-consuming countries such as India, China, Mexico, Thailand, USA, UK, Germany and Sweden. Indian share in global production ranges between from 50 to 60 per cent.

## II. RESEARCH METHODOLOGY

### A. Selection of District:

There are 75 District and 18 division in Uttar Pradesh state. Out of this Mirzapur district of Uttar Pradesh was selected and in which there are four subdivision (Chunar, Marihan, Sadar, Lalganj) for the present study because this area has maximum chilli cultivation.

### B. Selection of Block

There are 12 blocks in the district. Out of these Chunar block was selected for the study. The agro condition of the block is suitable for the Chilli Cultivation. The Farmer of this block are habitual of growing chilli from many years.

### C. Selection of Villages

There are total 210 village in Chunar block obtained from the block development office. Thereafter these villages was arranged in order of area of land holding. Thus out of 210 villages 5% villages were selected randomly for the study.

### D. Selection of Respondents:

From the selected village list of all chilli cultivating farmers was obtained from the block development office in each selected village. Ascending order based on size of their landholding the selection of cultivators from families was listed and 120 farmers was randomly selected from all of the village.

## III. ANALYTICAL TOOLS

### A. \*Chi Square:

$$\chi^2 = \sum_i \frac{(O_i - E_i)^2}{E_i}$$

### B. Marketing efficiency & Market margin:

$$\text{Marketing Efficiency} = \frac{\text{Output Produced}}{\text{Input Used}}$$

$$\text{Marketing Margin} = \text{Product price} - \text{raw material}$$

### C. \*Garrett Ranking:

$$\text{Percent position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

## RESULTS AND DISCUSSION

Table 1: Distribution of farmer according to farm size

$$(M + S + SM + M + L) = 120$$

$$(15 + 38 + 25 + 30 + 12) = 120$$

S. No.	Categories(members)	Respondent	
		Number	Percentage
1.	Marginal (< 1 hectare)	15	12.5%
2.	Small Farmers (1-2 hectare)	38	31.67%
3.	Semi Medium Farmer(2-4 hectares)	25	20.83%
4.	Medium Farmers (410hectares)	30	25%
5.	Large Farmers (Above 10 hectares)	12	10%
<b>Total</b>		<b>120</b>	<b>100%</b>

Table 1 reveals Farm size is one of the prime socio-demographic variables in this study. As farm size affects the buying decision, it has an essential association in market-related research. Due to the distinction in their perception and socialization, farm size tend to have distinct conclusions

while buying. Out of the total, 120 respondents 15 respondents were having marginal size farm, 38 were having small size farm, 25 were having semi medium size farm, 30 were having medium size farm and remaining 12 were having large size farm.

Table 2: Distribution of respondents based on their age

$$(M + S + S + M + L) = 120$$

$$(15 + 38 + 25 + 30 + 12) = 120$$

S. No.	Categories	Respondent Number	Respondents					Percentage
			Marginal	Small	Semi medium	Medium	Large	
1.	Young age group (20-35 years)	30	7	15	3	3	2	25%
2.	Middle age group (36-50 years)	75	5	21	20	24	5	62.5%
3.	Old age group (above 50 years)	15	3	2	5	3	2	12.5%
	<b>Total</b>	<b>120</b>	<b>15</b>	<b>38</b>	<b>25</b>	<b>30</b>	<b>12</b>	<b>100%</b>

**Table 2** reveals that One of the critical socio-demographic factors in this study is Age. Age is given such importance in market-related research, because it affects the physical and psychological aspect of the consumer, which, in turn, affects his/her buying behaviour. From this Table it

can be concluded that 30 (25 %) respondents are in the young age group of 20-35, 75 (62.50%) respondents are in the middle age group of 36-50, 15 (12.50 %) respondent are in old age of above 50. Therefore, the majority of respondents are in the middle age group of 36-50.

Table 3: Price spread, marketing efficiency, marketing margin of chilli marketing through channel 1.

CHANNEL 1: PRODUCER → RETAILER → CONSUMER

Serial no.	Particulars	Chilli
		Price in Rs. /Quintal
1.	Producer sell price to retailer	2600
2.	Cost added by the producer	
i	Packaging cost	2
ii	Packing material cost	8
iii	Transportation cost	4
iv	Market cost	5
v	Labour cost	4
vi	Loading and Unloading cost	3
vii	Miscellaneous charges	3
	<b>Total cost (i-vii)</b>	<b>29</b>
4	<b>Margin of Producer</b>	<b>422</b>
	<b>Retailer sale price to Consumer</b>	<b>2808</b>
5	<b>Margin of Retailer</b>	<b>208</b>
6	Net price received by producer	2571
8	<b>Total Marketing cost</b>	<b>29</b>
9	<b>Total Market margin</b>	<b>630</b>
10	<b>Marketing Efficiency</b>	<b>4.26%</b>
11	<b>Price Spread</b>	<b>237</b>

**Table 3** reveals that the marketing price chilli 1 quintal from producer to Retailer is Rs 2600. The marketing cost incurred by the producer in marketing of 1 quintal of chilli to retailer is Rs 29, with profit margin of producer on 1 quintal bag of chilli is Rs 422. Net price received by producer is Rs. 2571. Price at which retailer sell 1 quintal bag of chilli to consumer is Rs. 2808, with profit margin of Rs 208 per 1 quintal bag of chilli. Eventually, the

Marketing Efficiency of chilli 1 quintal bag was seen to be 4.26% per 1 quintal bag of chilli through channel 1, total market margin in selling 1 quintal chilli bag to consumer through channel 1 is Rs. 630, total marketing cost incurred in selling of 1 quintal of chilli bag through channel 1 is Rs. 29 and the price spread seen in marketing of 1 quintal chilli bag through channel 1 is Rs 237.

Table 4: Price spread, marketing efficiency, marketing margin of chilli marketing through channel 2.

S. No	Particulars	Chilli
		Value in Rs. / Quintal
1.	Producer sale price to Wholesaler	2550
	Marketing cost incurred by producer	29
	<b>Margin of Producer</b>	<b>401</b>
2.	Cost added by the wholeseller	
	<b>i</b> Loading and unloading charges	2
	<b>ii</b> Carriage up to shop	3
	<b>iii</b> Weighing charges	2
	<b>iv</b> Transportation charges	5
	<b>v</b> Labour cost	4
	<b>vi</b> Miscellaneous charges	4
<b>#</b>	<b>Total cost (i-vii)</b>	<b>20</b>
	<b>Wholesaler price to Retailer</b>	<b>2825</b>
<b>4</b>	<b>Margin of Wholesaler</b>	<b>255</b>
<b>5</b>	<b>Retailer price to Consumer</b>	<b>3051</b>
<b>6</b>	<b>Margin of Retailer</b>	<b>226</b>
<b>7</b>	Net price received by producer	2521
<b>9</b>	<b>Total Marketing cost</b>	<b>49</b>
<b>10</b>	<b>Total Market margin</b>	<b>882</b>
<b>11</b>	<b>Marketing efficiency</b>	<b>3.27%</b>
<b>12</b>	<b>Price Spread</b>	<b>530</b>

**Table 4** reveals that the marketing price of 1 quintal bag of chilli supplied by the wholesaler was Rs. 2550 the cost of marketing incurred by chilli producer is Rs 33, with Rs.460 as profit per 1quintal cucumber bag. Wholesaler selling price of 1 quintal cucumber bag to retailer is Rs.2385, cost of marketing incurred by wholesaler in marketing of 1 quintal cucumber bag is Rs. 29, with the profit margin of Rs. 401 per 1 quintal chilli bag. Wholesaler selling price of 1 quintal chilli bag to retailer is Rs.2825, cost of marketing incurred by wholesaler in marketing of 1 quintal chilli bag is Rs. 20, with the profit margin of Rs. 255 per 1 quintal chilli bag. Finally the retailer sells 1 quintal chilli bag to consumer which is Rs. 3051, with the profit margin of Rs. 226 per 1 quintal bag of chilli. Total marketing cost incurred in marketing of 1 quintal chilli bag through channel 2 is Rs 49. Total market margin in marketing of 1 quintal chilli bag through channel 2 is Rs 882. Eventually, the Marketing Efficiency of 1 quintal chilli bag was seen to be 3.27% 1 quintal chilli bag through channel 2 and price spread seen while marketing of 1 quintal chilli bag is Rs.530 from channel 2.

#### IV. CONCLUSION

In the present study it was found that largest no of farmer on the basis of land holding is small farmer , followed by medium farmer, semi medium farmer, marginal farmer and lastly large farmer. It was found that in age category middle age farmer was found in large number followed by young age farmer and lastly old age farmer. In preference of channel in marketing majorly respondents chooses channel 2 to buy and sell chilli followed by channel 1 with 45 respondents response. Eventually, the Marketing

Efficiency of chilli 1 quintal bag was seen to be 4.26% per 1 quintal bag of chilli through channel 1, total market margin in selling 1 quintal chilli bag to consumer through channel 1 is Rs. 630, total marketing cost incurred in selling of 1 quintal of chilli bag through channel 1 is Rs. 29 and the price spread seen in marketing of 1 quintal chilli bag through channel 1 is Rs 234. Total marketing cost incurred in marketing of 1 quintal chilli bag through channel 2 is Rs 49. Total market margin in marketing of 1 quintal chilli bag through channel 2 is Rs 882. Eventually, the Marketing Efficiency of 1 quintal chilli bag was seen to be 3.27% 1 quintal chilli bag through channel 2 and price spread seen while marketing of 1 quintal chilli bag is Rs.530 from channel 2. Eventually Total marketing cost incurred in marketing of 1 quintal chilli bag through channel 2 is Rs 49. Total market margin in marketing of 1 quintal chilli bag through channel 2 is Rs 882. Eventually, the Marketing Efficiency of 1 quintal chilli bag was seen to be 3.27% 1 quintal chilli bag through channel 2 and price spread seen while marketing of 1 quintal chilli bag is Rs.530 from channel 2.

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