

# Marketing of Cucumber in Kaushambi District of Uttar Pradesh

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**Abstract:-** Cucurbits are used both as vegetables and fruits. They are highly rich in vitamins A, which helps in wound healing by promoting the body's natural inflammatory response and activating collagen synthesis. Cucurbitacin's, triterpenes, sterols, and alkaloids are common bioactive compounds present in cucurbit fruits (including seeds). Cucurbitacin's are a group of bitter triterpenes found mostly in Cucurbitaceae seeds. During the present study confined in Kaushambi District of Uttar Pradesh on marketing of Cucumber under objective 1<sup>st</sup> it was revealed that there are majorly marginal farmer followed by small, semi-medium-medium and large farmer on the basis of their land holding. In Age category it was found that majority of the respondents were belonging to middle age group followed by young age group and lastly old age group among the total sample. In education category 30 respondents were found illiterate and 90 respondents were in literate category. In gender classification majority of respondents were male followed by female. In family type it was revealed that majority of respondents were living in joint family followed by respondents living in nuclear family. In objective two In channel preference of buying and selling of cucumber it was revealed that among three channel majority of respondents were preferring channel -3 followed by channel 2 and channel 1. In objective 3 it was revealed that, total marketing margin is Rs520, and marketing efficiency of 1 quintal bag of cucumber is 4.48% and price spread seen in marketing of cucumber from channel 1 is Rs.15. In Channel 2 it was revealed that eventually, the Marketing Efficiency of cucumber 1 quintal bag was seen to be 2.75% per 1 quintal bag of cucumber through channel 2, total market margin in selling 1 quintal bag to consumer through channel 2 is Rs. 813, total marketing cost incurred in selling of 1 quintal of cucumber bag through channel 2 is Rs. 33 and the price spread seen in marketing of 1 quintal bag through channel 2 is Rs 366. In Channel 3 it was revealed that Total marketing cost incurred in marketing of 1 quintal cucumber bag through channel 3 is Rs 58 Total market margin in marketing of 1 quintal cucumber bag through channel 3 is Rs 650. Eventually, the Marketing Efficiency of 1 quintal cucumber bag was seen to be 3.73% 1 quintal cucumber bag through channel 3 and price spread seen while marketing of 1 quintal cucumber bag is Rs.708 from channel 3.

**Keywords:-** Price Spread, Marketing Efficiency, Marketing Margin.

## I. INTRODUCTION

Agriculture and its allied sectors have been the backbone of the Indian economy. Its contribution to GDP has decreased from 54.19 per cent in 1950-51 to 15.4 per cent in 2022-23. Fiscal policy statements highlighted that Indian agriculture sector is projected to grow by 3.5 per cent in FY 2022-23. Apart from meeting domestic requirements, India has also rapidly emerged as the net exporter of agricultural products in recent years. With the agriculture exports touching \$50.2 Bn in FY 2022-23. Horticulture production in India has risen dramatically in recent years. The area under horticulture has increased by 2.6 per cent per year over the last decade, while annual production has increased by 4.8 per cent. Cucurbits are a large and major vegetable family that is widely grown in India and other tropical and subtropical regions throughout the world. For the cultivated species of the Cucurbitaceae family, the term "cucurbits" was coined by Liberty Hyde Bailey, although this term is now used for all species in the family. A number of cucurbits can be grown in river beds at a minimal cost. As per the survey, 60% of total area under cucurbits cultivation is under riverbed cultivation. During the summer season, about 75-80% of total cucurbits production is grown on dry land that is available in the market between February and June. The Ganga, Yamuna, Saraswathi, Narmada, Sutlej, Krishna, Kaveri, Godavari, Mahanadi, Sabarmati, Gomati and Brahmaputra are some of the major river belts suitable for cucurbit cultivation. Cucumber and bitter gourd are commonly grown by farmers in 10 km radius of Kaushambi district.

## II. RESEARCH METHODOLOGY:

### A. Selection of the District:

There are 75 District and 18 division in Uttar Pradesh state .Out of these Kaushambi district of Uttar Pradesh was selected purposively and in which there are three subdivision (Chail, Manjhanpur, Sirathu) for the present study on the basis of maximum area under Cucumber cultivation.

**B. Selection of Block:-**

There are 8 block in the district. Out of these Kaushambi was selected purposively for the study. The agro condition of the block is suitable for the Cucumber Cultivation. The Farmer of this block have been growing the Cucumber for several years.

**C. Selection of Village:**

There are total 111 village in Kaushambi block obtained from the block development office. Thereafter these villages was arranged in order on the basis of area of land holding. Thus out of total villages 5% villages was selected randomly for the present study.

**D. Selection of Respondents**

From the selected village list of all cucumber cultivating farmers was obtained from the block development office in each selected village. Ascending order on the basis of size of their landholding the selection of cultivators from families was listed and 120 farmers was randomly selected from all of the village and then the selected farmers was classified into five sizes of groups.

**III. ANALYTICAL TOOLS**

➤ *Chi Square:*

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

➤ *Marketing Efficiency*

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

➤ *Marketing Margin:*

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

**IV. RESULT AND DISCUSSION**

**Table 1** Distribution of farmer according to farm size

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

$$(34 + 28 + 24 + 27 + 7) = 120$$

S. No.	Categories(members)	Respondent	
		Number	Percentage
1.	Marginal (< 1 hectare)	34	28.33%
2.	Small Farmers (1-2 hectare)	28	23.33%
3.	Semi Medium Farmer(2-4)	24	20%
4.	Medium Farmers (410hectare)	27	22.5%
5.	Large Farmers (Above 10 hectare)	7	5.84%
<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 34 respondents were having marginal size farm, 28 were having small size farm, 24 were having semi medium size farm, 27 were having medium size farm and remaining 7 were having large size farm.

**Table 2:** Distribution of respondents according to their gender.

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

$$(34 + 28 + 24 + 27 + 7) = 120$$

S. No.	Category	Respon dents number	Respondents					Percentage
			marginal	small	Semi medium	medium	large	
1	Male	95	32	22	17	21	3	79.16%
2	Female	25	2	6	7	6	4	20.83%
<b>Total</b>		<b>120</b>	<b>34</b>	<b>28</b>	<b>24</b>	<b>27</b>	<b>7</b>	<b>100%</b>

**Table 2** represents Gender is one of the prime socio-demographic variables in this study. As gender affects the buying decision, it has an essential association in market-related research. Due to the distinction in their perception and socialization, men and females tend to have distinct conclusions while buying. Out of the total, 120 respondents 95 respondents were male, that is 79.16% while the remaining 25 were female that is 20.83% of total sample.

**Table 3 To find out the price spread, marketing efficiency, marketing margin of cucumber marketing in study area.  
CHANNEL – 1 : PRODUCER à CONSUMER.**

Sr. No	Particulars	Cucumber
		Value in Rs. /quintal.
1.	Produce sale price to Consumer	2400
A	Marketing cost incurred by producer	
i.	Loading and Unloading charge	4
ii.	Weighing charge	2
iii.	Labour Cost	3
iv.	Miscellaneous charges	6
	<b>Total Marketing Cost</b>	<b>15</b>
	<b>Net price received by producer</b>	<b>2385</b>
B	<b>Margin of the producer</b>	<b>520</b>
C	Marketing efficiency	4.48%
D	Price Spread	15

**Table 3** Reveals the marketing cost, marketing margin , marketing efficiency and price spread in channel- 1. Table reveals that in marketing price of 1 quintal bag of cucumber to consumer through channel 1 is Rs2400, the marketing cost incurred by the producer of cucumber in marketing of cucumber in selling of 1 quintal cucumber bag is Rs.15, total marketing margin is Rs520, and marketing efficiency of 1 quintal bag of cucumber is 4.48% and price spread seen in marketing of cucumber from channel 1 is Rs.15.

**Table 4:** Marketing cost, marketing margin, marketing efficiency and price spread in channel- 2  
**CHANNEL 2: PRODUCER àRETAILER àCONSUMER.**

S. No	Particulars	Cucumber
		Value in Rs. / Quintal
1.	Producer sale price to retailer	2000
2.	Cost incurred by the producer	
i	Packing cost	2
ii	Packing material cost	8
iii	Transportation cost	7
iv	Market cost	4
v	Labour cost	3
vi	Loading and Unloading cost	4
vii	Miscellaneous charges	5
	<b>Total cost (i-vii)</b>	<b>33</b>
4	<b>Margin of Producer</b>	<b>480</b>
	<b>Retailer sale price to Consumer</b>	<b>2333</b>
5	<b>Margin of Retailer</b>	<b>333</b>
6	Net price received by producer	1967
8	<b>Total Marketing cost</b>	<b>33</b>
9	<b>Total Market margin</b>	<b>813</b>
10	<b>Marketing Efficiency</b>	<b>2.75%</b>
11	<b>Price Spread</b>	<b>366</b>

**Table 4.** reveals that the marketing price Cucumber 1 quintal from producer to Retailer is Rs 2000. The marketing cost incurred by the producer in marketing of 1 quintal of cucumber to retailer is Rs 33, with profit margin of producer on 1 quintal bag of cucumber is Rs 480. Net price received by producer is Rs. 1967. Price at which retailer sell 1 quintal bag of cucumber to consumer is RS 2333, with profit margin of Rs 333 per 1 quintal bag of cucumber. Eventually, the Marketing Efficiency of cucumber 1 quintal bag was seen to be 2.75% per 1 quintal bag of cucumber through channel 2, total market margin in selling 1 quintal bag to consumer through channel 2 is Rs. 813, total marketing cost incurred in selling of 1 quintal of cucumber bag through channel 2 is Rs. 33 and the price spread seen in marketing of 1 quintal bag through channel 2 is Rs 366.

**Table 5** Marketing cost, marketing margin, marketing efficiency and price spread in channel- 3  
**CHANNEL -3: PRODUCER à WHOLESALER à RETAILER à CONSUMER.**

S. No	Particulars	Cucumber	
		Value	in Rs. /Quintal
1.	Producer sale price to Wholesaler		1970
	Marketing cost incurred by producer		33
	<b>Margin of Producer</b>		<b>460</b>
2.	Cost incurred by the Wholesaler		
i	Loading and unloading charges		3
ii	Carriage up to shop		4
iii	Weighing charges		3
iv	Transportation charges		6
v	Labour cost		3
vi	Miscellaneous charges		7
#	<b>Total cost (i-vii)</b>		<b>25</b>
	<b>Wholesaler price to Retailer</b>		<b>2385</b>
4	<b>Margin of Wholesaler</b>		<b>390</b>
5	<b>Retailer price to Consumer</b>		<b>2645</b>
6	<b>Margin of Retailer</b>		<b>260</b>
7	Net price received by producer		1937
9	<b>Total Marketing cost</b>		<b>58</b>
10	<b>Total Market margin</b>		<b>650</b>
11	<b>Marketing efficiency</b>		<b>3.73%</b>
12	<b>Price Spread</b>		<b>708</b>

**Table 5** reveals that the marketing price of 1 quintal bag of cucumber supplied by the wholesaler was Rs. 1970 the cost of marketing incurred by cucumber 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. 25, with the profit margin of Rs. 380 per 1 quintal cucumber bag. Finally, the retailer sells 1 quintal cucumber bag to consumer which is Rs. 2645, with the profit margin of Rs. 260 per 1 quintal bag of cucumber. Total marketing cost incurred in marketing of 1 quintal cucumber bag through channel 3 is Rs 58 Total market margin in marketing of 1 quintal cucumber bag through channel 3 is Rs 650. Eventually, the Marketing Efficiency of 1 quintal cucumber bag was seen to be 3.73% 1 quintal cucumber bag through channel 3 and price spread seen while marketing of 1 quintal cucumber bag is Rs.708 from channel 3.

## V. CONCLUSION

During the present study confined in Kaushambi District of Uttar Pradesh on marketing of Cucumber under objective 1<sup>st</sup> it was revealed that there is majorly marginal farmer followed by small, semi-medium-medium and large farmer on the basis of their land holding. During study it was revealed that, total marketing margin is Rs 520, and marketing efficiency of 1 quintal bag of cucumber is 4.48% and price spread seen in marketing of cucumber from channel 1 is Rs.15. In Channel 2 it was revealed that

eventually, the Marketing Efficiency of cucumber 1 quintal bag was seen to be 2.75% per 1 quintal bag of cucumber through channel 2, total market margin in selling 1 quintal bag to consumer through channel 2 is Rs. 813, total marketing cost incurred in selling of 1 quintal of cucumber bag through channel 2 is Rs. 33 and the price spread seen in marketing of 1 quintal bag through channel 2 is Rs.366.

In Channel 3 it was revealed that Total marketing cost incurred in marketing of 1 quintal cucumber bag through channel 3 is Rs 58 Total market margin in marketing of 1 quintal cucumber bag through channel 3 is Rs 650. Eventually, the Marketing Efficiency of 1 quintal cucumber bag was seen to be 3.73% 1 quintal cucumber bag through channel 3 and price spread seen while marketing of 1 quintal cucumber bag is Rs.708 from channel 3.

## REFERENCES

- [1]. **Chand et. al., (2020)** conducted a study to identify the marketing channels, the relative profitability, and marketing efficiency of vegetables in a developing country, India, and identify points for critical intervention. Development, *Food and Agricultural Organization, Rome, Italy.*
- [2]. **Dukpa and Eg (2020)** carried out a study in Phek district, Nagaland, where the production and marketing of vegetables are well recognized. Three primary vegetables, cabbage, beans, and potato, were selected for the study from twelve villages from the sample

population of 300 farmers in 2019-2020. *Publishing co., PVT, Ltd., New Delhi, India pp. 134*

- [3]. **Kumar Bhatia Jitender \***, **Kumar Bishnoi Dalip, Karwasra J.C., Singh VK (2016)** Marketing of Cucumber Cultivated under Poly House in Haryana *Indian Journal of Economics and Development Year : 2016, Volume : 12, Issue : 1a*
- [4]. **Kumar Parveen, Chauhan R. S and Grover R. K. (2017)** An economic analysis of cucumber (*Cucumis sativus* L.) cultivation in eastern zone of Haryana (India) under polyhouse and open field condition *Journal of Applied and Natural Science 9 (1): 402 405 (2017)*