ORGANISED RETAILING VERSES TRADITIONAL RETAILING OF VEGETABLES

 Aarti Garg[*]

Dr. Jaskiron Kaur[**]

Abstract

Our country is rewarded with a wide range of agro-climatic conditions which allow the production of vegetables and fruits throughout the year. The demand for agricultural products is increasing due to awareness about the benefits of vegetables and fruits for maintenance of health and prevention of diseases. In India the development of organised retail chains has deeply influenced fruit and vegetable marketing system. The present study was done to analyse the effect of the upcoming organised retail chains on farmers, consumers and different marketing channels. Farmers are the areas under study which are selling their produce to retail outlets. The study observed that the cost incurred to sell the produce to organised retail chains was less and the net price received by the grower in organised retail channel was more for all the two vegetables when compared to traditional marketing channels. The farmer's share in consumer's rupee was higher through organised retail channel. The organised retail outlets help in reducing transaction costs and increasing farm profits. Government has to play a positive role in regulation of prices, open and operate retail outlets and should assess the production and consumption level and announce the minimum support prices of the vegetables.

Key words: Organized retailing, Vegetables, Farmers, Retailers, Traditional channels

[*] **PhD Research Scholar, I.K. Gujral Punjab Technical University, Kapurthala**

[**] **Principal, Ludhiana Group of Colleges, Chaukimann**

1.   Introduction

India is observing growth in organized retailing through the participation of large corporate houses. Retail industry in India is expected to grow to US$ 1.3 trillion by 2020, registering a Compound Annual Growth Rate (CAGR) of 16.7 per cent over 2015-20. India is the fifth largest preferred retail destination globally. The country is among the highest in the world in terms of per capita retail store availability. India's retail sector is experiencing exponential growth, with retail development taking place not just in major cities and metros, but also in Tier-II and Tier-III cities. This trend can be closely related with growing urbanization, expanding consumerism and growing number of upper middleclass and high-income households.

The spur in income levels and health awareness has led to growth in demand for fruits and vegetables. These supermarkets are participating in procurement arrangements lacking any contract or commitment, although they give a reasonable price to the farmers (Sulaiman et al., 2011). The problems of vegetable growers are numerous; however lack of market infrastructure and price fluctuation seems to be major bottleneck in the sustained development of vegetable production. Retail chains can be termed as new venture in agribusiness sector as they provide a new link for marketing the produce to the primary producers of F&Vs which is using Information and Communication Technology (ICT) (mobile phones) ,cash and credit transactions and new quality standards besides direct sale of produce. Thus, retail chains bring in instant demands and supply, quality culture and more commercial nature of production and marketing at the producer level.

2.   Review of Literature

Several studies on fresh fruit and vegetable retail chains in India have established the relative benefits to farmers connected with organized retail outlets. The following broad headings helped to find out the guide line for our study in Block II of Ludhiana district of Punjab.

1)   Marketable & marketed surplus

2)   Disposal pattern of the produce

3)   Marketing margins of producers (Price Spread)

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2.1 Marketable and marketed surplus

Baba et al. (2010) concluded that on an average, 92 percent of the total produce is marketed of selected vegetables. They further revealed that demographic features like education level, production area under improved varieties, net price received by the producers contributed to increased marketed surplus were the significant and positive determinant of marketed surplus, while consumption and spoilage at the farm level have shown a deterioration in marketed surplus. The net price received by the producers was relatively higher when the producers directly sell through consumer or retailer.

Rupali et al. (2010) revealed that marketable surplus of tomato, potato, cauliflower were observed to be 90%, 89%, 95.50% respectively. Number of market intermediaries and perishable nature of the commodities affect marketing efficiency.

Aparna et al. (2011) observed a study on producers supplying to modern retail outlets compared to traditional marketing in Hyderabad city and discussed the problems in marketing of vegetables. There is more efficiency in modern retail outlet management than traditional system of marketing as it improves transparency, higher prices to the vegetable producers and comparatively lesser price to consumer.

2.2 Disposal pattern of the produce

Subralunanyam et al(1982,1987,1989) (IIHR,1989) have reported in their studies on marketing of different vegetable in different states that commission agent is the most important intermediary for selling more than 60 % of their crop. A study conducted in Karataka, Andhra Pradesh and Tamil nadu also showed the dominance of commission agent .

Kiresur, V.R and Kumar, G.N (1988) studied on four major vegetables, like tomato, onion, potato to estimate the producer's share and price spread in consumer 's rupee and different market intermediaries share in the consumer 's price in different vegetable marketing channels in Hubuli market, Dharwad district of Karnataka , in regulated and non regulated markets.

Dey and Bhukta (1993-1994) also studied marketing costs, marketing margins, price spread and the channels of marketing of tomatoes to determine the producer's share in consumer's rupee in

the district of Hooghly. They found that distress sale by small and marginal farmers was one of the major problems in tomato marketing .They observed marketing margins are increased as the no. of intermediaries is increasing.

Mishra et al, (1995) revealed that there is high productivity in Odisha, but majority of onions producers are not getting reasonable share of consumer price. They reported that the efficiency of market can be improved by providing credit facilities, establishing proper storage facilities, and Govt.'s role in regulation of sale price of onion.

Pandey et al (2008) conducted his study on marketing and post harvest losses in two vegetables cabbage and cauliflower in west Bengal. They reported that farmers sell vegetables mainly in the local market and rest at the farm itself after harvesting. The most important channel for marketing of vegetables is Producer-forward agent cum wholesaler-secondary wholesaler – retailer- consumer.

 Singh et al (2010) found in their study on economics of production and marketing of tomato in kanke block of ranchi district that , channel I is mainly used by marginal farmer , while Channel III is used by 40% of small farmers, 25% through channel-II and 35% through channel-I.

 Channel-I: producer-consumer
Channel-II: producer-wholesaler-consumer
 Channel-III: producer-wholesaler-Retailer-consumer

2.3 Price spread

Singh et al. (1979) analysed the price spread of vegetables (potatoes) in Punjab state. They have observed variations in storage and transportation cost of potato in Jalandhar district.

Tayode et al. (1981) observed the price spread in marketing of selected vegetables in Mahatma phule market, pune and. They reported that Retailer's margin was very high for onion, green chillies, potato, brinjals, tomatoes and garlic. The retailer's share ranged from 33% to 60% as compared to producers share ranged from 32% to 57% of consumer's rupee.

Hugar et al. (1984) revealed in his study of price spread and producer's share in consumer's rupee in different marketing channels that there is positive relationship among the number of bidders and wholesale prices.

Panda et al (1984) reported on price spread of agricultural produce in kurukshetra district, Haryana, that growers receive 80% 49%, 58%, of the price spread by the ultimate consumer in and wheat, paddy, potato respectively.

Kainth et al. (1988) conducted a study on the trends and seasonal fluctuation in the price of potatoes in Amritsar district of Punjab. They reported that income is uncertain due to price variations which depends on pattern of market arrivals.

Selvaraj et al (1991) observed Chanel-I (producer-NCMS-wholesaler-retailer- consumer)was more efficient than Channel-II (producer- mandi- wholesalers- retailer-consumer). They also observed annual and seasonal fluctuations in price of potato through price behaviour analysis.

Prasad (1993) studied to identify the pattern disposal methods and prices received by the vegetables growers in Jamsedpur and Ranchi markets of Bihar. He found that vegetables are mainly transacted through co-operative marketing institution. Various suggestions are given for transport and storage facilities for more efficient vegetable marketing.

Singh et al (1994) conducted a study on the production and marketing of hill vegetables is Himachal Pradesh and found that the producer's share was very less in case of tomato (43.15%) and pea (49.96%) in the consumers' rupee. It is also observed that marketing margins of retailers' were more than the wholesalers' margins, due to quality deterioration and burden of losses.

3. Objectives

1. To assess the Marketable and marketed surplus of selected farmers growing tomato and okra.

2. To study the disposal pattern of selected vegetables by the sample farmers.

3. To find out the price spread and marketing margins of selected growers of selected vegetables.

4. To study about the different problems faced by farmers in marketing of produce.

4. Research methodology

4.1 Materials and Methods

The study is conducted in the Ludhiana district of Punjab. Farmers are involved in supplying of vegetables to traditional markets as well as modern retail outlets like 'Reliance fresh', 'More', 'Spencers, Best Price and Easy-day by setting-up of collection centres in the production regions. General information regarding the sample villages was collected from secondary sources like Panchayat office, Block office and census report etc. Seven villages viz. *Bajara, Allowal, Chaunta, Harrian, Jiwanpur, Khasi Kalan and Kokowal of Block II of Ludhiana district of Punjab* are selected following the criteria of highest area under vegetables. From these 7 villages, a total of 150 vegetable cultivators were selected based on the operational landholding. These farmers were divided into three groups of small, medium and large farmers consisting 43, 51 and 56 farmers in each group respectively; all the three groups of farmers are linked to the retail sector . Two vegetables, viz. Tomato and okra were selected for the study and sample of150 farmers were selected covering all the three categories of farmers, viz. small, medium and large. A sample of 20 intermediaries comprising wholesalers, and retailers (10 each) was selected randomly from the local markets. A pre-tested questionnaire was designed to collect the data related to marketing practices. Personal interview method was used to maintain the reliability of the data during the year 2015-16. Household was taken as the unit of investigation and the head of the family was the respondent. The collected data were tabulated and analyzed to find the total marketing cost, price spread, marketing margin of a middleman and producer's share in consumer's rupee were calculated by using tabular analysis.

4.2 Demographic Profile

Farmers are divided into different categories depending upon area occupied by them. Small farmers are put into the category of having up to 2 hectares of land. The farmers having 2-5 hectare of land are put into the category of medium farmers. Larger farmers have approximately more than 5 hectares of land.

Table-1 Different categories of farmers on the basis of area occupied

Type of farmers on the basis of land holding	Area in ha.	No. of farmars
Small	<2	41
Medium	2-5	53
Large	>5	56

4.3 Marketing Channels prevailing in the study area

Four channels are studied in the disposal of vegetables. These are

1.   Channel-I Producer -Consumer

2.   Channel- II Producer - Retailer - Consumer

3.   Channel- III Producer - Organised Retail Outlets -Consumer

4.   Channel- IV Producer - Wholesaler - Retailer –Consumer

4.4 Marketed Surplus:

In this study, the term marketable surplus was used to denote the quantity available for sale from surplus after meeting the consumption, wastage and other requirements of the grower. It was computed by the formula,

$M = P - C$ Where MS = marketable surplus P = gross production C = total requirement

4.5 Producer's Share in Consumer's Rupee

It is the price received by the farmer (Pf) expressed as a percentage of the price paid by the consumer Pr. If Pr is the retail price, the producer's share in the consumer's rupee (Ps) may be expressed as follows:

$Ps = (Pf / Pr) \times 100$

4.6 Marketing margin of the intermediaries

It is the difference between the total payments (PP) (marketing cost (Cm) + purchase price(Pp) and receipts (sale price)(Pr) of the intermediary.

Marketing Margin= (Pmi) = Pri - (Ppi + Cmi)

Percentage margin (Pm) of the intermediary,

(Pmi) = Pri - (Ppi + Cmi) / Pri X 100

4.7 Total cost of marketing

The total cost incurred on selling the produce, either in' cash or in kind by the producer-seller and various middleman involved in the marketing of the commodity till it reaches the consumers, may be computed as follows:

C=Cf+Cm1+Cm2+………………..+Cmn

Where C = Total cost of the marketing of the commodity

Cf= Total cost paid by the producer from the time of the produce leaves the farm till he sells it.

Cm1, Cm2,….. ,Cmn denote the cost incurred by different intermediaries in the process of marketing the product; and n is the number of middlemen involved in marketing.

4.8 Price spread (PS) or Marketing Margin (MM)

Price spread or Marketing Margin is referred to the difference between producer's net price (PNP) and retailer's selling price (RP).

MM=RP-PNP

5. Results and Analysis

A systematic study of costs and margins of different intermediaries involved in marketing of different vegetables would help to know the various services rendered by these functionaries and their economic performance in the marketing of selected vegetables and fruits. The marketing margin is one of the factors to measure marketing efficiency as it indicates the increase in price of a commodity as it changes hands from one intermediary to another in the marketing set up. Marketing margins measure the gap between the net price received by producer and the price paid by the consumer. From the point of view of marketing efficiency, this gap has to be reduced to the minimum. Broadly, two factors contributed towards widening of the gap- cost incurred by the producer and the margin of profit taken over by different intermediaries such as organised retail outlet, wholesaler, commission agents and retailers. Firstly land structure of selected vegetables tomato and okra is studied and presented in tabular form.

Table -2 Land structure on selected vegetables (ha)

Type of Land	Small		Medium		Large		Total	
Vegetable Growers	No.	%age	No.	%age	No.	%age	No.	%age
Owned	1.52		3.67		7.31		4.44	
Leased-out	0.00		0.56		1.08		0.60	
Owned Operational	1.52	100.00	3.11	87.85	6.23	83.07	3.84	85.98
Leased-in	0.00	0.00	0.43	12.15	1.27	16.93	0.63	14.02
Total Operational	1.52	100.00	3.54	100.00	7.50	100.00	4.47	100.00

Analysis of the data shows that farmers work on his occupied land irrespective of categories. There are negligible changes related to their total operational area while leasing out and leasing in of land, so main target of the respondent is to work on his own land. On an average small farmer operates on 1.52 ha medium farmer on 3.54 ha and large farmer on 7.50 ha of land respectively.

Table 3 Area under selected vegetables on the sampled farmers (ha)

Crop	Small		Medium		Large		Total	
Vegetables	No.	%age	No.	%age	No.	%age	No.	%age
Tomato	0.16	10.53	0.31	8.76	0.64	8.53	0.39	8.68
Okra	0.10	6.58	0.22	6.21	0.49	6.53	0.29	6.37
Total Vegetables	0.26	17.11	0.53	14.97	1.13	15.07	0.68	15.05

Out of total land occupied by farmers as operational area (1.52ha), two different kind of vegetables are selected as a sample. The vegetables under selected sample are Tomato and Okra About 17% of operational land is used for growing these two vegetables, whereas rest of the

operational land is used for other vegetables, fruits and crops such as wheat, paddy etc. Medium and Large farmer uses 15% of operational land for growing vegetables. From the above study it can be concluded that approx 15% of the occupied area is used for selected vegetables irrespective of categories and the rest of land is used for other crops. The reason for less area of production of vegetables is due to lesser share of producer in prices of vegetables in the market and their perishable nature.

Table -4 Production of selected vegetables on the selected farms (qtl)

Crop	Small		Medium		Large		Total	
Vegetables	Per Farm	Per ha	Per Farm	Per ha	Per Farm	Per ha	Per Farm	Per ha
Tomato	90.58	566.12	177.55	572.741	356.47	556.98	220.57	562.40
Okra	11.66	116.6	24.72	112.36	49.14	100.28	30.26	105.09

Small farmer grows on an average 90.58 qtl tomatoes on 0.16 ha of land, okra 11.66 qtl on 0.10 ha of land Medium farmer grows 177.55 qtl tomatoes on 0.31 ha of land, okra 24.72 qtl on 0.22 ha of land. Large farmer grows 356.47 qtl tomatoes on 0.64 ha of land, okra 49.14 qtl on 0.49 ha Overall yield per hectare of tomato, chilli, okra, is 562.40, 105.09, respectively. From the above table it can be concluded that overall yield per farm and per hectare in case of tomato is more than okra.

Table -5 Production and marketed surplus of tomato on sampled farms (qtl/farm)

Particulars	Small		Medium		Large		Overall	
	Quantity	%age	Quantity	%age	Quantity	%age	Quantity	%age
Production	90.58	100.00	177.57	100.00	356.47	100.00	222.98	100.00
Spoilage	2.13	2.35	4.21	2.37	8.34	2.34	5.24	2.35
Kind wages	0.96	1.06	1.79	1.01	3.16	0.89	2.09	0.94

Home Consumption	0.39	0.43	0.44	0.25	0.52	0.15	0.46	0.21
Marketed surplus	87.10	96.16	171.13	96.37	344.45	96.63	215.19	96.51

The study has been taken to find out how much produce grown by farmer is spoiled, used in the form of kind wages and for his personal consumption. The rest quantity of produce is available for marketing. Marketed surplus in case of small farmer (96.16%) Medium farmer's (96.37%) Large farmer's produce of tomatoes is (96.63%) It is observed that nearly 3.5% of total production is used for spoilage, kind wages and home consumption whereas maximum production (96.5%) is ready to sell in the market. So it can be concluded that most of the production of tomato is used for commercial purpose.

Table -6 Production and marketed surplus of okra on sampled farms (qtl/farm)

Particulars	Small		Medium		Large		Overall	
	Quantity	%age	Quantity	%age	Quantity	%age	Quantity	%age
Production	11.66	100.00	24.72	100.00	49.14	100.00	30.59	100.00
Spoilage	0.57	4.89	0.98	3.96	1.78	3.62	1.18	3.85
Kind wages	0.48	4.12	0.87	3.52	1.47	2.99	1.00	3.25
Home Consumption	0.19	1.63	0.24	0.97	0.33	0.67	0.26	0.85
Marketed surplus	10.42	89.36	22.63	91.55	45.56	92.71	28.16	92.05

While studying production of okra in case of small farmer marketed surplus out of total production is (89.36%) Medium farmers production of okra is 24.72 (qtl/farm).Out of which (91.55%) is marketed. Large farmer production of okra is 49.14 (qtl/farm). Out of total surplus 45.56 (qtl/farm) is marketed. (92.71%)

Percentage of the okra sold in the market is case of small, medium and large farmer ranges from (89% to 93%). Overall percentage of marketed surplus of okra is 92%.

Table -7 Disposal pattern of tomato by the selected farmers

Agency	Small		Medium		Large		Overall	
Tomato	Quantity	%	Quantity	%	Quantity	%	Quantity	%
Consumer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retailer	5.34	6.13	0.00	0.00	0.00	0.00	1.48	0.69
Wholesaler	3.30	3.79	0.00	0.00	0.00	0.00	0.92	0.43
Retail outlet	78.46	90.08	171.13	100.00	344.45	100.00	212.79	98.88
Total	87.10	100.00	171.13	100.00	344.45	100.00	215.19	100.00

Total marketed surplus of tomato in case of small farmer is 87.10 (qtl/farm) out of which maximum part (90%) is disposed off through organised retail outlets (78.46 qtl) followed by only 5.34 qtl to retailer and 3.30 qtl to wholesaler. Tomato produce is not sold directly to consumer. Medium and large farmer sells 100% of his marketed surplus to organised retail outlets Overall average quantity of marketed surplus is 215.19 qtl of all the three categories out of which 98.88 % is sold to organised retail outlets. The main interesting fact is that nothing is sold directly to consumer by the farmer means middleman plays a major role for selling the product to end user. Negligible part is sold through wholesaler (4%) and through retailer (6%) by small farmer.

Table -8 Disposal pattern of okra by the selected farmers

Agency	Small		Medium		Large		Overall	
Okra	Quantity	%	Quantity	%	Quantity	%	Quantity	%
Consumer	0.37	3.55	0.00	0.00	0.00	0.00	0.10	0.37
Retailer	0.49	4.70	1.61	7.11	0.00	0.00	0.67	2.39
Wholesaler	0.56	5.37	0.89	3.93	0.00	0.00	0.46	1.62
Retail Outlet	9.00	86.37	20.13	88.95	45.56	100.00	26.93	95.62
Total	10.42	100.00	22.63	100.00	45.56	100.00	28.16	100.00

Small farmer's total marketed surplus of okra is 10.42qtl/farm out of which 86.37 % is sold to organised retail outlets. 4.70 % to retailers, 5.37% to wholesalers and 3.55% s sold directly to consumers. Medium farmer's total marketed surplus of okra is 22.63qtl/farm out of which 88.95% is sold to organised retail outlets. Only 7.11% of surplus is sold to retailers. 3.93% of surplus is sold to wholesalers and no quantity is directly sold to consumers. Whole of the marketed surplus of large farmer is sold to organised retail outlet 45.56 qtl/farm. Overall marketed surplus of okra of all the three categories is28.16 qtl/farm out of which 95.62% is sold to organised retail outlets, 2.39% to retailers and 1.62% to wholesalers, 0.37% directly to consumer. Medium and large farmers are more interested in selling through retail chains.

Table – 9 Percentage share of Producer in consumers price in marketing of Tomato

Particulars	Channel I		Channel II		Channel III		Channel IV	
	Amount	%age	Amount	%age	Amount	%age	Amount	%age
Net Price received by the producer	-	-	29.22	87.75	31.53	89.57	28.67	70.49
Consumers Purchase price	-	-	33.30	100	35.20	100	40.67	100

While studying Table – 9 It is observed that tomato is not sold through Channel-I(Directly to Consumer). Producers share in total price received is maximum (89.57%) through the channel III (Organised retail outlets) followed by channel II (Retailer) (87.75%), and IV (Wholesalers) (70.49%). So it can be analysed that producer is taking maximum share in consumers price through Channel III.

Table -10 Price spread in disposal of tomato through different channels by the selected farmers Rs./kg)

Channels	Channel-I		Channel-II		Channel-III		Channel-IV	
Particulars	Consumer		Retailer		FDI Outlet		Wholesaler	
	Amount	%	Amou	%	Amount	%	Amoun	%

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Net Price received by the producer	-	-	29.22	87.75	31.53	89.57	28.67	70.49
Cost incurred by producer	-	-	1.64	4.92	1.52	4.32	4.61	11.34
Producer's sale price	-	-	30.86	92.67	33.05	93.89	33.28	81.83
Wholesaler's purchase price	-	-	-	-	-	-	33.28	81.83
Wholesaler's cost	-	-	-	-	-	-	3.56	8.75
Wholesaler's margin	-	-	-	-	-	-	1.16	2.85
Wholesaler's sale price	-	-	-	-	-	-	38	93.43
Retailer's purchase price	-	-	30.86	92.67	-	-	38	93.43
Retailer's cost	-	-	1.43	4.29	-	-	1.58	3.88
Retailer's margin	-	-	1.01	3.03	-	-	1.09	2.68
Retailer's sale price	-	-	33.3	100	-	-	40.67	100
Retail Outlet's purchase price	-	-	-	-	33.05	93.89	-	-
Retail Outlet's cost	-	-	-	-	1.28	3.64	-	-
Retail Outlet's margin	-	-	-	-	0.87	2.47	-	-
Retail Outlet's sale price	-	-	-	-	35.2	100	-	-
Consumer's purchase price	-	-	33.3	100	35.2	100	40.67	100

Table-10 revealed that price received by producer from disposal of tomatoes through channel III is highest (Rs 31.53) followed by channel II (Rs 30.86) and channel IV (Rs. 28.67), whereas cost incurred to sell the produce is minimum in channel III (Rs 1.52) as compared to channel II and channel IV. Net price received by producer is highest in channel III and lowest in channel IV.

Additional cost incurred to sell the produce by channel III is minimum (3.64%) as compared to channel II (4.29%)and channel IV (8.75%) plus (3.88%) cost of both wholesaler and retailer. Margin of intermediary in selling tomatoes in channel IV is highest (2.85%+2.68%) as compared to channel II (3.03%) and channel III (2.47%)

Margin of Organised Retail Outlets in selling Tomatoes

Organised Retail Outlet's cost price of tomatoes is Rs 33.05. It incurred further cost of Rs 1.28 per kg. Its margin is Rs 0.87per kg. So Organised Retail Outlet's sale price is Rs 35.20 Consumer's purchase price is also 35.20 through this channel. It is observed that margin of organised retail outlets are lowest among other channels.

Results show that consumer has to pay different prices through different channels.

Through channel II - Rs 33.30

Through channel III - Rs 35.20

Through channel IV- Rs 40.67

In these channels maximum price received by producer (Rs/Kg) is from organised retail outlets. Maximum price paid by consumer is through following the route of wholesaler, organised retail outlet and retailer respectively because of more cost and entry of middleman. Channel of organised retail is preferred by producer as it is more convenient and gives good share in total price paid by consumer. If the channel of distribution is longer the product price for the consumer is bound to be higher. Consumer has to pay a little higher price through organised retail outlets because producer has a large share through this source and consumer is having more facilities and convenience.

Table – 11 Percentage and Rupee Share of Producer in Consumers Price in Marketing of Okra Rs/Kg)

Particulars	Channel I		Channel II		Channel III		channel IV	
	Amount	%age	Amount	%age	Amount	%age	Amount	%age
Net Price received by the producer	29.16	96.27	29.54	89.11	31.38	88.97	24.29	64.91
Consumers Purchase price	30.29	100	33.15	100	35.27	100	37.42	100

Producers share in total price received is maximum (96.27%) through Channel I followed by Channel II (89.11%), Channel III (88.97%), and IV (64.91%). So it is analysed maximum share in consumer price is through direct selling to consumer. Channel II and Channel III are preferred as compared to Channel IV.

Table – 12 Price spread in disposal of okra through different channels by the selected farmers (Rs./kg)

Channels	Channel – I		Channel – II		Channel - III		Channel – IV	
Particulars	Consumer		Retailer		FDI Outlet		Wholesaler	
	Amount	%age	Amount	%age	Amount	%age	Amount	%age
Net Price received by the producer	29.16	96.27	29.54	89.11	31.38	88.97	24.29	64.91
Cost incurred by producer	1.13	3.73	1.47	4.43	1.35	3.83	4.84	12.93
Producer's sale price	30.29	100.00	31.01	93.54	32.73	92.80	29.13	77.85
Wholesaler's purchase price	-	-	-	-	-	-	29.13	77.85
Wholesaler's cost	-	-	-	-	-	-	4.59	12.27
Wholesaler's margin	-	-	-	-	-	-	1.18	3.15
Wholesaler's sale price	-	-	-	-	-	-	34.90	93.27
Retailer's purchase price	-	-	31.01	93.54	-	-	34.90	93.27
Retailer's cost	-	-	1.18	3.56	-	-	1.63	4.36

Retailer's margin	-	-	0.96	2.90	-	-	0.89	2.38
Retailer's sale price	-	-	33.15	100.00	-	-	37.42	100.00
Retail Outlet's purchase price	-	-			32.73	92.80	-	-
Retail Outlet's cost	-	-			1.67	4.73	-	-
Retail Outlet's margin	-	-			0.87	2.47	-	-
Retail Outlet's sale price	-	-			35.27	100.00	-	-
Consumer's purchase price	30.29	100.00	33.15	100.00	35.27	100.00	37.42	100.00

Table-10 revealed that price received by producer from disposal of okra through channel III is highest (Rs 31.38) followed by channel II (Rs 29.54), channel I (Rs 29.16) and channel IV(Rs 24.29), whereas cost incurred by producer to sell the produce is minimum in channel I (Rs 1.13) followed by channel III (Rs 1.35) as compared to channel II (Rs 1.47)and channel IV (Rs 4.84). Net price received by producer is highest in channel III and lowest in channel IV.

Additional cost incurred to sell the produce by channel II is minimum (3.56%) as compared to channel III (4.73%) and channel IV (12.27%) plus (4.36%) cost of both wholesaler and retailer. Margin of intermediary in selling okra in channel IV is highest (3.15% + 2.38%) as compared to channel II (2.90%) and channel III (2.47%)

Margin of Organised Retail Outlets in selling Okra

Organised Retail Outlet's cost price of okra is Rs 32.73 per/kg. It incurred further cost of Rs 1.67 per kg. Their margin is Rs 0.87per kg. So Organised Retail Outlet's sale price is Rs 35.27 per/kg. Consumer's purchase price is also 35.27 per/kg through this channel.

Results show that consumer has to pay different prices per/kg for different channels.

Through channel-I – Rs 30.29

Through channel II -Rs 33.15

Through channel III - Rs 35.27

Through channel IV-Rs 37.42

It is observed that margin of producer in selling the produce to organised retail outlets is more than, the product sold through retailer and wholesaler. Even cost incurred by producer in selling the produce to wholesaler is more than cost spent through medium of retailing and organised retail outlets. Maximum price received by producer is Rs 32.73 per/kg from organised retail outlets and margin is also maximum in this case. Consumer has to pay different prices through different channels. Channel-I is preferred by consumer as he has to pay minimum price through this channel.

6. Constraints Perceived by Vegetable growers selling vegetables to Organised retail outlets

While conducted study it was observed that vegetable and fruit growers perceive some constraints specific to organised retail market as well as related to traditional market. At the collection centre, farmers have to face a large percentage of rejection because the farmers were not in a practice to produce a quality product in a scientific manner and this has led to changing of their cultivation practices. and this leads The farmers have to depend on the local traders and wholesalers to dispose of their major produce as the collection centre procures limited quantities according to their indent. In the case of traditional marketing, farmers have to rely on intermediaries who charge high commission rates for disposing of their produce, travel long distances to market their produce, and have limited access to credit. The FAO (2005) study on food retailing in Asia observed that income of farmers is directly related to factors such as procurement methods, quality standards and the use of logistics. It also revealed that farmers face a no. of problems in supplying to organised retail chains, including: delisting of farmers and rejection of their produce by retailers for not meeting fixed standards of quality and delivery and price competitions between chains that keep prices low, thus it becomes difficult for farmers to earn enough profit to pay for on-farm investments. The Indian Government, however, can take initiative to promote retail sector by setting up more supply chains, give better prices to farmers and facilitate agro-processing (GoI, 2006). Organised Retail chains are supporting their farmers by supplying necessary requirements.

7.   **Findings and Conclusion**

8.   The study has revealed that the net price received by vegetable farmers associated with supermarket is high for the two selected vegetables (tomato and okra) and the marketing cost incurred at the producer's level is higher in the traditional channels than in supermarket channel. It is supported by many studies such as The farmers contracted by retail chains receive higher prices (Alam and Verma, 2007; Dhananjaya and Rao, 2009), higher net profits (Birthal et al., 2005; Mangala and Chengappa, 2008) and incur lower transaction costs (Joseph et al., 2008)

It could be inferred from the study that the perishable nature of the vegetables, lack of proper storage facilities and disorganized marketing system in the traditional channels take away a lion's share of retailer's margin and higher proportion of marketing cost. The marketing efficiency has been found to be higher in supermarket channel-I than in the traditional channels which implies that super marketing system works with a higher efficiency in view of the perishable nature of the crop. Efforts should be made to explore cheaper and efficient transportation facilities including establishment of collection centres at different convenient places so as to minimize the transportation cost which would indirectly help the ultimate consumer also.

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