Original Research Article

Analysis of Marketing Channels and Marketing Efficiency of Apple Growers in Kashmir (J&K)

Abstract

Analysis of marketing channel and marketing efficiency is an important tool through which one can understand the how different marketing channels and marketing intermediaries can influence the returns received by producers and price paid by consumers. The present paper discusses the marketing channels, marketing efficiency, marketing cost and marketing margin in Jammu & Kashmir through which the apple move from producer to consumer. Study reveals that channel-I in Baramulla, Channel-II in Kupwara and Shopian is popular among the farmers because most of the sample apple growers sell their produce through these channels. It has been observed that larger the number of intermediaries between producers and consumers lead to higher marketing cost and vice-versa. The analyses reveal that Channel-II has the highest marketing cost. Lower the marketing cost, higher will be the marketing efficiency and vice-versa. Further results observes that in Jammu & Kashmir Channel-V is more efficient than any other channel because of absence of middlemen between producer and consumer.

Keywords: Apple growers, Jammu & Kashmir, Farmer, Marketing Efficiency, Marketing Margin, Marketing Cost.

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1. INTRODUCTION

There are two main routes through which agricultural commodities reach the consumers. These are Direct Route and Indirect route. The marketing route of apple is different from the marketing route of the other agricultural produce. In the marketing process of apple, a large number of middlemen are involved in the channels of trade between the apple producers located on the hills and the consumers around the distant markets in the plains (Kalita.2017). Marketing efficiency is required for speedy delivery of goods. Fast delivery of good at a reasonable price is possible only if the market works in a competitive way. Competitive mechanism is possible only when the market agents are free to exercise their actions. An efficient marketing system implies that price spread or

marketing margin is fairly less. In market integration terminology, prices in spatially separated markets will get differed only by transaction costs among markets. Lower price spread also implies that both consumers and producers are gaining from affordable price and reasonable profit (Hegde & Madhuri, 2013). Hence, an efficient marketing system implies the existence of market integration. Since Jammu and Kashmir is the largest apple producing region in India followed by Himachal Pradesh. It is quite essential to study its marketing efficiency of the crop so that better returns are realized by the growers. In the present paper, marketing cost, marketing margin, marketing efficiency and different marketing channels are investigated through which the apple move from producer to consumer.

1.1 LITERATURE REVIEW

There are number of studies that are conducted on marketing efficiency of different agriculture crops in India. Hegde, R.N, & Madhuri, N.V. (2013) highlights that there is under development of marketing system in the Indian economy and also describes the role of marketing in the Indian agriculture. It explains the traditional value chain and the activities involved on the part of manufacturers, wholesalers and retailers. It reveals the various weaknesses which are present in the marketing system. A study by Bhat (2012), states that the marketing of Apple is a complex phenomenon. The marketing pattern of apple is different from other agriculture commodities. They are first brought to the wholesale markets near the production area and then supplied from there to the terminal markets. The produce is first sent to the terminal market from the producing area and then distributed to the primary and secondary markets. Consequently, a large number of middlemen are involved in the channels of trade between the apple producers and the consumers. On the other hand, Bhat and Yasmeen (2018), in their study discussed the marketing efficiency of Kashmir apple. According to the study, marketing efficiency is important for increasing production opportunities and fair returns to apple growers. Marketing efficiency is measured in terms of price spread in the study. Lesser price spread means more marketing efficiency and vice versa. Guleria, A. et.al (2022) study also tried to investigate marketing efficiency of apple in Kulu district of Himachal Pradesh. According to their study producer- retailer-consumer is the most efficient marketing channel of Kullu district. E- marketing is the best way to remove marketing inefficiencies present in different channels. In the similar lines, Ali and Kachroo (2020)

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study on commercial cultivators of Apple in mountainous and inaccessible area of Chenab valley concluded that net price received by producer tend to decrease with the increasing number of intermediaries

1.2 OBJECTIVES OF THE STUDY

To analyze marketing efficiency, marketing Channels and marketing margins in the study area.

1.3 SOURCES OF DATA

The present study is based on the primary data to analyze marketing efficiency, marketing Channels and marketing margins in the study area.

1.4 AREA COVERED UNDER THE STUDY

The universe for conducting the present study is Baramulla, Kupwara and Shopian districts from Jammu and Kashmir. The reason behind this is that these districts cover highest area and production of apple cultivation. Therefore, finally three districts are considered for study. In Baramulla, two tehsils, Baramulla and Sopore are selected. In Kupwara, Hindwara and Kupwara tehsils are selected and in Shopian district there is only one tehsil Shopian, selected for the study purpose.

1.5 SAMPLE SIZE

A total number of 120 sample apple growers, 40 from each district, 20 from each tehsil are selected purposively as sample for collecting the primary data.

2.1 Methods

TOOL USED FOR THE STUDY

The marketing efficiency is computed by using the formula given by Acharya, 2011. This is one of the most widely used method as depicted in literature. Since it eliminates the problem of measuring the value addition and is appropriate for the areas where marketing is a complex phenomenon and middle men are playing multiple roles within the channel (see Alice.,et.al. 2021).The formulation is as under:

MME=FP/ (MC+MM).

Where,

MME = Modified measure of Marketing Efficiency.

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FP = Net price received by Producer.

MC = Total Marketing Cost.

MM = Total Marketing Margin.

3. RESULTS AND DISCUSSION

3.1 Marketing Channel in Jammu & Kashmir

Marketing channels are the routes of movement of agricultural produce from producer to consumer. It is a chain in which intermediaries play their role to pass agricultural output from producer to consumer. There are five different marketing channels through which apple moves from producer to consumer as shown in the following table.

Table-1

Marketing Channels in Jammu & Kashmir

Channel-I	Producer-Commission Agents-Retailer-Consumer.
Channel-II	Producer-JKHPMC-Wholesaler-Retailer-Consumer.
Channel-III	Producer-Village Trader-Wholesaler-Retailer-Consumer.
Channel-IV	Producer-Pre-Harvest Contractor-Commission Agent-Wholesaler-Retailer-Consumer.
Channel-V	Producer-Consumer.

Source: Field Survey (2018).

Producer

The key function of the producer is grading of the apple, standardization and brings produce to the market.

JKHPMC

Jammu and Kashmir Horticulture Planning and Marketing commission (JKHPMC) sells planting material to the farmers associations. Farmers association also purchases fertilizers and pesticides from the wholesaler in bulk while Regional Rural Bank (RRB) provides the credit. The cooperatives then provide these inputs to the farmers at reasonable rates and the produce, when ready for harvest, is sold to Jammu and Kashmir Horticulture Promotion and Marketing Corporation (JKHPMC).

Pre-harvest contractor

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The persons who agree to buy the produce generally even before the actual harvesting takes place as per the terms and conditions prevailing in the market. In a way, they are forward traders.

Wholesaler

Wholesalers are the merchants/middlemen who buy and sell agricultural commodities in large quantity. They may either buy from farmers or from other pre-harvest contractors.

Commission agent

The commission agents are the one who act as an agent between farmer-producer or pre-harvest contractors and wholesaler in arranging the sales of apple. In regulated agricultural markets, any business man registered with market committee can act as commission agent.

Retailer

Retailers buy goods from wholesaler and sell them to consumers in small quantities. Retailers are closest to consumers.

3.2 Channel wise distribution of sample apple growers in Jammu & Kashmir

The Table-2 states the channel wise distribution of sample Apple growers in Baramulla, Kupwara and Shopian. There are 40 Apple Growers selected from each District. In Baramulla 40 per cent of the sample apple growers sell their produce through Channel-I followed by 27.5 per cent through channel-III, 15 per cent through channel-II,12.5 per cent through channel-IV and only 5 per cent sample apple growers sell their produce through Channel-V. In Kupwara, 40 per cent of the sample apple growers sell their produce through Channel-II followed by 35 per cent through Channel-I, 15 per cent through Channel-IV and 10 per cent sample apple growers sell their produce through Channel-III. According to a study by Parrey, et.al (2015), the selection of the channel by the apple growers are based on information received from friends, relatives and brokers.

Table-2

Channel wise distribution of sample apple growers in Jammu & Kashmir

	Baramulla		Kupwara		Shopian		Total	
	No of farmers	Per cent	No of farmers	Per cent	No of farmers	Per cent	No of farmers	Per cent
Channel-I	16	40	14	35	11	27.5	41	34.17
Channel-II	6	15	16	40	21	52.5	43	35.83

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Channel-III	11	27.5	4	10	4	10	19	15.83
Channel-IV	5	12.5	6	15	3	7.5	14	11.67
Channel-V	2	5	0	0	1	2.5	3	2.5
Total	40	100	40	100	40	100	120	100

Source: Field Survey (2018).

Similarly, in Shopian 52.5 per cent sample apple growers sell their produce through Channel-II followed by 27.5 per cent through Channel-I, 10 per cent through Channel-III, 7.5 per cent through Channel-IV and 2.5 per cent sample apple growers sell their produce through Channel-V. In Jammu & Kashmir it is found that 35.83 per cent sample apple growers sell their produce through Channel-II, which is followed by 34.17 per cent through Channel –I, 15.83 per cent through Channel-III, 11.67 per cent through Channel- IV and 2.5 per cent sample apple growers in Jammu & Kashmir sell their produce through Channel-V.

3.3 Marketing Cost

Marketing cost varies from commodity to commodity and changes overtime and space. Marketing cost depends on the perishability and durability of the commodity, need for cold storage facilities, need for processing before consumption, necessity of storage and transportation, distance for transportation and nature of packages needed. Marketing cost has been incurred by producers and market intermediaries that included packing, transport, weighing, market fees, loading and unloading etc. This section tries to estimate the Channel wise marketing cost in Jammu and Kashmir.

Marketing Cost in Channel-I

The total marketing cost in Channel-I is about Rs 6282.94 per Quintal which includes the cost incurred by commission agents i.e., Rs 3452.94 per quintal and cost incurred by retailer i.e., Rs 2830 per quintal respectively. Cost incurred by commission agents in Channel-I includes the container cost Rs 210, transportation Cost Rs 352.94, loading/unloading cost Rs 30 and miscellaneous cost Rs 2860. Similarly, cost incurred by retailer includes the transportation cost Rs 120, Market fee Rs 200, Spoilage cost Rs 600, commission Rs 960 and miscellaneous Cost Rs 950.

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Marketing Cost in Channel-II

The total marketing cost in channel-II is about Rs 9525.52 which includes the cost incurred by JKHPMC i.e., Rs 3044.88, cost incurred by wholesaler i.e., Rs 4054.64 and the cost incurred by retailer i.e., Rs 2426.Cost incurred by JKHPMC includes the picking and grading cost Rs 166, container cost Rs 192, loading/ unloading cost Rs 60, transportation cost Rs 705.88 and Miscellaneous cost Rs 1921. Similarly, cost incurred by wholesaler includes transportation cost Rs 617.64, spoilage cost Rs 875, commission Rs 960 & miscellaneous cost Rs 1602 and cost incurred by retailer includes the transportation cost Rs 120, Market fee Rs 250, spoilage cost Rs 530 commission Rs 960 and miscellaneous cost Rs 566.

Marketing Cost in Channel-III

The total marketing cost in Channel-III is the sum of the cost incurred by Village traders i.e., Rs 3212, cost incurred by wholesaler i.e., Rs 1525 and the cost incurred by the retailer i.e., Rs 3805. The total marketing cost incurred by these intermediaries is about Rs 8542. Cost incurred by village traders includes watch & ward cost Rs 22, picking & grading cost Rs 80, Commission Rs 960 and miscellaneous cost Rs 2150. Cost incurred by wholesaler includes transportation cost Rs 140, spoilage cost Rs 150, commission Rs 960 and miscellaneous cost Rs 275. Cost incurred by retailer includes transportation cost Rs 120, market fee Rs 300, Spoilage cost Rs 600, Commission Rs 900 and miscellaneous cost Rs 1825.

Marketing Cost in Channel-IV

Marketing cost in channel-IV is included the cost incurred by Pre-Harvest contract i.e., 2120.88, cost incurred by commission agents i.e., Rs 2057.05, cost incurred by wholesaler i.e., Rs 2525 and the cost incurred by the retailers i.e., Rs 2530. The total marketing cost in Channel-IV is about Rs 9232.93. Cost incurred by Pre-Harvest contractor includes watch & ward cost Rs 50, Picking & Grading cost Rs 165, container cost Rs 15, loading/Unloading cost Rs 25, Commission Rs 960, Transportation Cost Rs 705.88 and Miscellaneous Cost Rs 200. Cost incurred by commission agents includes container cost Rs 180, transportation cost 647.05, loading/unloading cost Rs 30 and miscellaneous cost Rs 1200. Cost incurred by wholesaler includes transportation cost Rs 140, spoilage cost Rs 150, commission Rs 960 and miscellaneous cost 1275. Cost

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incurred by retailers includes the Transportation cost Rs 50, market fee Rs 160, spoilage cost Rs 800, commission Rs 960 & miscellaneous cost Rs 560.

Marketing Cost in Channel-V

In Channel-V there is not any intermediary found between producer and consumer. Cost incurred by producer is Rs 916. In this channel producer directly sell their produce to consumer and hence the total marketing cost is also Rs 916 only. Cost incurred by producer includes the watch and ward cost Rs 70, picking & grading cost Rs 250, Transportation cost Rs 90, Container cost Rs 150 and miscellaneous cost Rs 356.

3.4 Marketing Margins

Marketing margin in Jammu & Kashmir is shown in the following table. The total Marketing Margin in Channel-I is about Rs 1932 which includes the margin of the commission agents i.e., Rs 929 and margin of the Retailers i.e., 1003. In Channel-II the total marketing margin is about Rs 1849 which includes the margin of the JKHPMC i.e., Rs 530, margin of the wholesaler i.e., Rs 689 and margin of the retailer i.e., Rs 630. In Channel-III the total Marketing Margin observed about Rs 1224 which includes the Margin of the village traders i.e., Rs 313, margin of the wholesaler i.e., Rs 456 and margin of the retailer i.e., Rs 455. In channel-IV the total marketing Margin is about 1859 which includes the margin of the Pre- harvest contractor i.e., Rs 256, margin of the commission agents i.e., Rs 450, margin of the wholesaler i.e., Rs 665 and margin of the retailer i.e., Rs 488. Similarly, in Channel-V the total marketing margin is about Rs 5345 which includes the margin of the producer only i.e., Rs 5345.

3.5 Price Spread

In the marketing of agricultural commodities, the difference between the price paid by the consumer and the price received by the producer for an equivalent quantity of farm produce is known as price spread or gross marketing margin. Channel wise Price spread in Jammu & Kashmir is clearly shown in the Table-3. The Table-3 clearly indicates the price spread in channel-I is Rs 8214.94, in Channel-II, it Rs 11374.52, in Channel-III, it is Rs 9766, in Channel-IV, it is Rs 11091.93 and in Channel-V, it is about Rs 6261.Thus, Channel -II and Channel -IV has highest price spread between producer and consumer respectively.

3.6 Marketing Efficiency

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Table-3 also shows the channel wise marketing efficiency of sample apple growers in Jammu & Kashmir. The most efficient channel was Channel-V where the marketing efficiency was found to be 1.28 followed by Channel-I (0.97) Channel-III (0.82) Channel-IV (0.72) and Channel-II (0.70). Channel-V is the most efficient channel but only 2.5 per cent sample apple growers sell their produce through this channel. Mostly, farmers sell their produce through Channel-1 and Channel-II, even though Channel- II is least efficient channel in terms of marketing. While the most efficient channel (Channel-II) is least preferred or not so popular channel among the farmers. E-marketing could be an option to remove marketing inefficiencies present in different channels (Guleria, A. et.al ,2022)

Table-3 : Channel wise Marketing Cost, Marketing Margin, Price Spread and Marketing Efficiency of Apple growers in Jammu & Kashmir (In Rupees per Quintal)

S.no	*Particular*	*Channel-I (P-CA-R-C)*	*Channel-II (P-JKHPMC-W-R-C)*	*Channel-III (P-VT-W-R-C)*	*Channel-IV (P-PHC-CA-W-R-C)*	*Channel-V (P-C)*
A.	Net Price Received by Producer	8000	8000	8000	8000	8000
1.	Cost incurred by Producer	0	0	0	0	916
I	Watch & Ward	0	0	0	0	70
II	Picking and Grading	0	0	0	0	250
III	Transportation cost	0	0	0	0	90
IV	Container cost	0	0	0	0	150
V	Miscellaneous Cost	0	0	0	0	356
VI	Margin of the Producer	0	0	0	0	5345
VII	Producer's Sale Price	8000	8000	8000	8000	14261
2.	Cost incurred by pre-harvest contractor	0	0	0	2120.88	0
I	Watch & ward	0	0	0	50	0
II	Picking and grading	0	0	0	165	0
III	Container cost	0	0	0	15	0
IV	Loading/Unloading	0	0	0	25	0
V	Commission	0	0	0	960	0

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Vi	Transportation Cost	0	0	0	705.88	0
VII	Miscellaneous Cost	0	0	0	200	0
VIII	Margin of the pre-harvest contractor	0	0	0	256	0
IX	Pre-Harvest Contractor's Sale Price	0	0	0	10376.88	0
3.	Cost incurred by Village Traders	0	0	3212	0	0
I	Watch & ward	0	0	22	0	0
II	Picking and Grading	0	0	80	0	0
III	Commission	0	0	960	0	0
IV	Miscellaneous Cost	0	0	2150	0	0
V	Margin of the Village Traders	0	0	313	0	0
VI	Village Trader's Sale Price	0	0	11525	0	0
4.	Cost incurred by JKHPMC	0	3044.88	0	0	0
I	Picking and grading	0	166	0	0	0
II	Container cost	0	192	0	0	0
III	Loading/Unloading	0	60	0	0	0
IV	Transportation Cost	0	705.88	0	0	0
V	Miscellaneous Cost	0	1921	0	0	0
VI	Margin of the JKHPMC	0	530	0	0	0
VII	Sale Price of JKHPMC	0	11574.88	0	0	0
5.	Cost incurred by commission agents	3452.94	0	0	2057.05	0
I	Container cost	210	0	0	180	0
II	Transportation Cost	352.94	0	0	647.05	0
III	Loading/Unloading	30	0	0	30	0
IV	Miscellaneous Cost	2860	0	0	1200	0
V	Margin of the CA	929	0	0	450	0
VI	Sale Price of Commission Agents	12381.94	0	0	12883.93	0
6.	Cost incurred by wholesaler	0	4054.64	1525	2525	0
I	Transportation Cost	0	617.64	140	140	0
II	Spoilage cost	0	875	150	150	0
III	Commission	0	960	960	960	0
IV	Miscellaneous Cost	0	1602	275	1275	0
V	Margin of the wholesaler	0	689	456	665	0

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VI	Sale price of Wholesaler	0	16318.52	13506	16073.93	0
7.	Cost incurred by retailer	2830	2426	3805	2530	0
I	Transportation Cost	120	120	120	50	0
II	Market fee	200	250	300	160	0
III	Spoilage cost	600	530	600	800	0
IV	Commission	960	960	960	960	0
V	Miscellaneous Cost	950	566	1825	560	0
VI	Margin of the Retailer	1003	630	455	488	0
VII	Sale Price of Retailer	16214.94	19374.52	17766	19091.93	0
VIII	Consumer's purchase price	16214.94	19374.52	17766	19091.93	14261
Total Marketing Cost		6282.94	9525.52	8542	9232.93	916
Total Marketing Margin		1932	1849	1224	1859	5345
Price Spread		8214.94	11374.52	9766	11091.93	6261
Marketing Efficiency		**0.97**	**0.70**	**0.82**	**0.72**	**1.28**

Source: Field Survey (2018).

CONCLUSION

From the above, it has been observed that most of the sample apple growers in Baramulla sell their produce through channel-I. In Kupwara and Shopian most of the sample apple growers sell their produce through channel-II. On the whole, nearly 35 percent of sample apple growers in Jammu & Kashmir sell their produce through channel-II. Total marketing cost incurred by channel-II is highest among all the channels. The reason behind this is presence of large number of intermediaries in these channels. This shows that larger the number of middlemen higher will be the marketing cost which reduces the marketing efficiency of the farmers. Hence, there is an inverse relation between marketing cost and marketing efficiency. In Jammu & Kashmir the total marketing margin is highest in channel-V. While total price spread is highest in channel-II. Channel wise marketing efficiency in Jammu & Kashmir states that there is inverse relationship between marketing efficiency and marketing cost. Marketing cost depends on the number of middlemen. Larger the number of middlemen larger will be the marketing cost and hence, less the marketing efficiency ratio and vice versa. It is observed that in Jammu & Kashmir marketing efficiency ratio is highest in channel-V which is due to

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non- existence middlemen between producer and consumer. In this channel producer directly sells their produce to consumer. Since most of the farmers resort to channel -II which has the highest marketing cost among all channels therefore proper marketing management skill and information regarding prices should be given to apple growers through trainings and workshops for improving their marketing efficiency and reducing their marketing cost. Finally, in the era of globalization, E- marketing should be promoted to provide better prices to producers.

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