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Varun C
Research Scholar, Department of
Agricultural Extension, College of
Agriculture, KSNUAHS,
Shivamogga, Karnataka, India

Gulshan Ekram
Research Scholar, Department of
Agricultural Extension, College of
Agriculture, KSNUAHS,
Shivamogga, Karnataka, India

Renuka AB
Research Scholar, Department of
Agricultural Extension, College of
Agriculture, KSNUAHS,
Shivamogga, Karnataka, India

Amrutha Basavaraju
Research Scholar, Department of
Agricultural Extension, University
of Agricultural Sciences,
Bangalore, Karnataka, India

Varsha SC
Research Scholar, Department of
Agricultural Extension, University
of Agricultural Sciences,
Bangalore, Karnataka, India

Corresponding Author:
Varun C
Research Scholar, Department of
Agricultural Extension, College of
Agriculture, KSNUAHS,
Shivamogga, Karnataka, India

Marketing channels and price spread for onion in Chitradurga district of Karnataka

Varun C, Gulshan Ekram, Renuka AB, Amrutha Basavaraju and Varsha SC

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Abstract

The present investigation has been carried out with a view to study the marketing channels and price spread for onion in Chitradurga district. A sample of ten respondents from each of the different market functionaries like local traders, wholesaler cum commission agent and retailers were randomly selected from Challakere and Chitradurga markets to study marketing channels and price spread. Wholesaler cum commission agent and retailers were randomly selected from both the selected markets to study marketing channels and price spread. The results of the study revealed that among the four identified marketing channels, Channel – IV was the most efficient and profitable channel with highest price for the produce i.e., Producer → Retailer → Consumer (Rs. 2145/q) with lowest marketing costs and margin (Rs. 400/q) compared to the other three marketing channels. Channel-IV, i.e., direct selling in the market, had no involvement of any local functionaries and agents of marketing. Hence, there was fair dealing between retailers and producers in the market. Producers' share in consumers' rupee was highest in Channel – IV (84.29%) and also had least price spread (15.71%). Due to insufficient storage facilities and financial constraints, onion growers typically send their produce to market for sale shortly after harvest. As a result, there is an excessive supply of onions in the market, resulting in a drop in onion market prices.

Keywords: Local traders, marketing channel, producers, price spread and retailer

Introduction

Onion is a widely grown commercial vegetable. Onion was cultivated on 5.04 million hectares worldwide, yielding 96.77 metric tonnes with a productivity of 19.20 quintals per hectare. With a production of 26 million tonnes on 1.43 million hectares and a productivity of 13.66 tonnes per hectare, India is the world's second-largest onion grower following China. Maharashtra is the leading producer in India, with 7.105 million tonnes produced in 2019-20, accounting for 43.31 percent of overall Indian production.

Dharwad district in Karnataka is the leading producer of onion with 22,010 hectares under onion production, production of 3,84,207 tonnes, and a productivity of 17.46 tonnes per hectare. Chitradurga is the second leading producer next to Dharwad and has an area of 12,368 hectares with a total production of 3,33,888 tonnes. The Onion productivity is 19.89 tonnes per hectare. Diversification from grain crops to high-value crops like onion vegetables has evolved as an essential strategy for agricultural growth to boost revenue, create gainful employment, and protect natural resources from further deterioration (Sekhon and Kaur, 2004) ^[4]. The efficient marketing of onion is one of the important factors determining the profitability of the crop due to perishability, bulkiness and seasonal nature of onion. Though the state produces more onion than its annual requirement, a large amount goes waste or farmers are forced to resort to distress sale due to lack of storage facilities (Gulati, 1994) ^[3]. Due to insufficient storage facilities and financial constraints, onion growers typically send their produce to market for sale shortly after harvest. As a result, there is an excessive supply of onions in the market, resulting in a drop in onion market prices (Asmatoddin *et al.*, 2009) ^[2]. Therefore, considering the crucial role of marketing channels and its efficiency, the present investigation was carried out to identify different marketing channels along with price spread in the study area.

Marketing of onion involves several stages between the producer and the ultimate consumer. Depending upon the prevailing market structure, onion may pass through local traders, wholesalers, commission agents and retailers before reaching the consumer. Each participant performs specific marketing functions such as assembling, transportation, handling, grading, storage and distribution. The involvement of different market functionaries may influence the marketing cost, marketing margin and the final price received by the producer. Thereby, identification of the existing marketing channels is important for understanding the distribution of returns among different participants in the onion marketing system (Meena *et al.*, 2016; Kantariya *et al.*, 2018) ^[7, 6].

Marketing cost and marketing margin are important components of the difference between the price received by the producer and the price paid by the consumer. Marketing costs may arise at different stages due to transportation, handling, loading and unloading and other marketing operations. Marketing margins represent the returns retained by the different market functionaries involved in the marketing process. The combined effect of these costs and margins determines the price spread between the producer and the consumer. Hence, estimation of marketing costs, margins and price spread provides a useful basis for comparing alternative marketing channels (Acharya and Agarwal, 2003; Thilagavathi *et al.*, 2014) ^[1, 10].

Producer's share in consumer's rupee is another important measure of marketing performance. It indicates the proportion of the price paid by the consumer that accrues to the producer as the net price. A higher producer's share and lower price spread indicate a comparatively greater share of the consumer's expenditure accruing to the producer. Studies conducted on onion marketing in different parts of India have reported variations in producer's share, marketing cost, marketing margin and price spread according to the marketing channel followed (Meena *et al.*, 2016; Kantariya *et al.*, 2018; Kanakaraja *et al.*, 2022) ^[7, 6, 5].

The marketing channel selected by farmers may depend upon the availability of buyers, quantity of produce marketed, accessibility to regulated markets, transportation facilities and the prevailing market price. Onion growers may sell their produce to local traders at the farm or village level, or may transport the produce to regulated markets and sell it through wholesalers, commission agents or retailers. Differences in the number of intermediaries involved in these channels can result in differences in marketing costs and margins and consequently in the producer's share in the consumer's rupee (Meena *et al.*, 2016; Vikas and Ramchandra, 2020) ^[7, 11].

Meena *et al.* (2016) ^[7] analysed onion marketing channels in Rajasthan and reported variations in marketing efficiency and price spread among different channels. Kantariya *et al.* (2018) ^[6] studied different marketing channels of onion in Bhavnagar district of Gujarat and estimated marketing costs, marketing margins and producer's share in consumer's rupee. Thilagavathi *et al.* (2014) ^[10] analysed the production and marketing of onion in Perambalur district of Tamil Nadu. Kanakaraja *et al.* (2022) ^[5] examined the marketing of Bangalore Red Rose onion in Chikkaballapura district of Karnataka. These studies demonstrate the importance of analysing the marketing structure and price spread of onion at the regional level.

Methodology

The study was conducted during 2020-2021 in Chitradurga

district of Karnataka state and 120 onion growers who had grown onion for the last five years were selected randomly. Chitradurga, Challakere and Hiriyur taluks were selected for the study as they had the highest onion production in the district. Four villages from each taluk with the highest area under onion cultivation were selected for the study from these taluks. For the study of marketing channels and price spread, Chitradurga and Challakere regulated markets were selected on the basis of quantity of onion arrived in the market. A sample of ten respondents from each of the different market functionaries like local traders, wholesaler cum commission agent and retailers were randomly selected from Challakere and Chitradurga markets to study the marketing channels and price spread. The necessary information was collected by consulting market functionaries in respective markets. The primary data on various aspects of marketing was collected through interview schedule from the selected respondents.

Price spread analysis

Price spread refers to the difference between the price paid by the ultimate consumer and price received by the producer for an equivalent quantity of the farm produce i.e.

Price spread = Price paid by the consumer - Price received by the producer farmer

$$Psd = Pc - Pf$$

Where,

Psd = Price spread

Pc = Price paid by the consumer

Pf = Price received by farmers for equivalent quantity of farm produce

Producer's share in consumer's rupee

The producer's share in consumer's rupee in marketing of onion is worked out by using the formula given by Acharya and Agarwal (2003) ^[1].

$$PS (\%) = \frac{PF}{PC} \times 100$$

Where,

PS = Producer's share in consumer's rupee,

PF = Net price of the produce received by the farmer, and

PC = Price of the produce paid by the consumer.

Results and Discussion

A marketing channel is the people, organizations and activities that make goods and services available for use by consumer. Price spread refers to difference between price paid by the consumer and price paid by the farmer. It involves various costs incurred by various intermediaries and their margins. In this context, results regarding marketing channels and price spread have been presented below.

Marketing Channels

Four marketing channels which were prevalent in the study area have been identified and are listed below:

Channel 1: Producer → Local Trader → Wholesaler cum commission agent → Retailer

→ Consumer

Channel 2: Producer → Local Trader → Retailer → Consumer

Channel 3: Producer → Wholesaler cum commission agent → Retailer → Consumer

Channel 4: Producer → Retailer → Consumer

The four marketing channels differed in the number and type of intermediaries involved in the movement of onion from producers to consumers. Channel-I involved three categories of intermediaries, namely local traders, wholesaler-cum-commission agents and retailers. Channel-II involved local traders and retailers, whereas Channel-III involved wholesaler-cum-commission agents and retailers. Channel-IV was the shortest channel and involved only retailers between producers and consumers. The variation in channel structure is important because as each additional stage of marketing may involve expenditure on marketing operations as well as a margin for the intermediary concerned.

The existence of different marketing channels provides onion growers with alternative avenues for disposing of their produce. However, the relative advantage of a channel depends on the price obtained by the producer and the costs and margins incurred during subsequent stages of marketing. Studies on onion marketing have also identified multiple marketing channels and observed differences in price spread and marketing efficiency among the channels (Meena *et al.*, 2016; Kantariya *et al.*, 2018) ^[7, 6]. The present study therefore compares the identified channels on the basis of marketing costs, marketing margins and producer's share in consumer's rupee.

Marketing costs and margins of different marketing channels

The distribution of marketing costs and margins at different marketing channels of Onion has been shown in Table 1. From Table 1, it is revealed that among all the channels, on average, the producer received the maximum price in Channel - IV (Rs.2145/q.) followed by Channel III (Rs. 1850/q), Channel II

and I (Rs. 1695/q), the marketing cost and margin were found to be the lowest (Rs. 400/q) in Channel-IV. The highest marketing cost and the margin were observed at Rs. 850 per quintal in Channel-I and Channel-II (sale in the village through local traders). Hence, it can be concluded that Channel - IV (sale in the market) was found that more remunerative compared to other channels in which the producers receive a net amount of Rs. 2145 per quintal of onion as net saving and the marketing cost and margin expenses was Rs. 400 per quintal only, it indicates least margin compared to all the identified marketing channels.

The observed variation in producer realization across the marketing channels is closely associated with the structure of the respective channels. Channel-I and Channel-II recorded the net amount received by the producer, although the intermediaries involved in the two channels were different. Channel-III resulted in a higher net realization to the producer than Channels I and II, while Channel-IV recorded the highest net realization. The results indicate that the reduction in intermediary stages was associated with a reduction in the total amount retained as marketing cost and margin under the conditions of the present study.

Similar differences in marketing costs and margins across onion marketing channels have been reported by Meena *et al.* (2016) ^[7] in Rajasthan and Kantariya *et al.* (2018) ^[6] in Gujarat. Thilagavathi *et al.* (2014) ^[10] also highlighted the importance of marketing arrangements in determining the economic returns associated with onion marketing. Thus, the results of the present study are broadly comparable with earlier findings that marketing channel structure influences the distribution of returns between producers and market functionaries.

Table 1: Marketing costs and margins of different marketing channels (Figures in Rs. / Q)

Sl. No.	Particulars	Channels			
		I*	II*	III*	IV*
1.	Producers' sale price	1695	1695	1925	2220
2.	Producers' marketing cost	-	-	75	75
3.	Net amount received by the producer	1695	1695	1850	2145
4.	Marketing cost born by local trader	65	65	-	-
5.	Market margin of local trader	165	460	-	-
6.	Sale price of local trader	1925	2220	-	-
7.	Wholesaler cum commission agent purchase price	1925	-	1925	-
8.	Wholesaler cum commission agent marketing cost	110	-	110	-
9.	Wholesaler cum commission agent margin	185	-	185	-
10.	Wholesaler cum commission agent sale price	2220	-	2220	-
11.	Retailer purchase price	2220	2220	2220	2220
12.	Retailer marketing cost	60	60	60	60
13.	Retailer margins	265	265	265	265
14.	Retailer sale price	2545	2545	2545	2545
15.	Consumer purchase price	2545	2545	2545	2545

Channel 1*: Producer → Local Trader → Wholesaler cum commission agent → Retailer → Consumer,

Channel 2*: Producer → Local Trader → Retailer → Consumer,

Channel 3*: Producer → Wholesaler cum commission agent → Retailer → Consumer,

Channel 4*: Producer → Retailer → Consumer

Price spread of onion in different marketing channels

Price spread of different marketing channels has been represented in the Table 16 which reveals that producer's share in consumer's rupee was highest in Channel-IV (84.29%) which

indicates that producer receives 84.29 per cent of money from 100 per cent of the money that the consumer pays to the market functionaries. The notable reason for this may be due to less involvement of market functionaries, low marketing costs

incurred and low marketing margin of the retailer which gives producers a maximum share in the consumer's rupee. The price spread in Channel-IV is 15.71 per cent which is lowest compared to other marketing channels which infer that no unnecessary costs were involved in marketing and there was transparent transactions between producers, retailers and consumers. These are the reasons which prove that Channel-IV of marketing with highest producer's share in consumer's rupee and lowest price spread was more efficient and profitable to producers compared to other channels of marketing.

The results of the present study show that the producer's share in consumer's rupee increased as the marketing channel became shorter. The producer's share was 66.60 per cent in Channels I and II, increased to 72.70 per cent in Channel-III and reached 84.29 per cent in Channel-IV. Correspondingly, the price spread declined from 33.40 per cent in Channels I and II to 27.30 per cent in Channel-III and 15.71 per cent in Channel-IV. This indicates that the distribution of the consumer's expenditure differed according to the marketing route through which onion reached the consumer.

The findings are comparable with earlier studies on onion

marketing. Meena *et al.* (2016) ^[7] reported differences in producer's share and price spread among alternative onion marketing channels in Rajasthan. Kantariya *et al.* (2018) ^[6] also observed variation in producer's share, marketing cost and marketing margin among different onion marketing channels in Bhavnagar district of Gujarat. Kanakaraja *et al.* (2022) ^[5], while studying Bangalore Red Rose onion marketing in Chikkaballapura district of Karnataka, also examined the differences in marketing efficiency and price spread among alternative channels. The similarity of these findings indicates the importance of channel structure in determining the distribution of returns in onion marketing.

The lower price spread observed in Channel-IV in the present study was associated with the lower number of intermediary stages and the lower combined marketing cost and marketing margin. The selection of a particular marketing channel by farmers may also depend upon market accessibility, transportation facilities, quantity of produce marketed and availability of buyers. The results are considered in relation to the marketing conditions prevailing in the study area.

Table 2: Price spread in the marketing of onion through different channels

Sl. No.	Particulars	Marketing channels			
		I	II	III	IV
	Marketing costs				
1	Producers	-	-	75 (2.94)	75 (2.94)
2	Local traders	65 (2.55)	65 (2.55)	-	-
3	Wholesaler cum commission agents	110 (4.32)	-	110 (4.32)	-
4	Retailers	60 (2.36)	60 (2.36)	60 (2.36)	60 (2.36)
5	Total marketing cost	235 (9.23)	125 (4.91)	245 (9.62)	135 (5.30)
	Marketing margins				
1	Local traders	165 (6.49)	460 (18.08)	-	-
2	Wholesaler cum commission agents	185 (7.27)	-	185 (7.27)	-
3	Retailers	265 (10.41)	265 (10.41)	265 (10.41)	265 (10.41)
4	Total marketing margin	615 (24.17)	725 (28.49)	450 (17.68)	265 (10.41)
5	Total cost + Total margin	850 (33.40)	850 (33.40)	695 (27.30)	400 (15.71)
6	Producers Rupees	1695 (66.60)	1695 (66.60)	1850 (72.70)	2145 (84.29)
7	Consumers Rupees	(100)	(100)	(100)	(100)
8	Price spread (%)	(33.40)	(33.40)	(27.30)	(15.71)

Conclusion

Marketing channels are the medium through which movement of goods takes place from point of production to point of consumption. Selections of effective marketing channels are essential for the farmers to procure good price for their produce and avoid losses in marketing of produce. It is evident from the results that among the identified marketing channels, Channel-IV was the most efficient and profitable channel for the producers as they were able to get maximum share in consumers' rupee and also cost involved in the channel was least compared to other channels of marketing. This was due to transparent transactions between farmers and market functionaries. There was also less involvement of marketing functionaries in Channel-IV compared to other marketing channel. Hence, it fetched the farmer good price for their produce with less cost of marketing.

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