



Comparative Study of Marketing of *Kharif* vis-a-vis *Rabi* Onion in Ahmednagar District of Maharashtra State.

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ABSTRACT

The study examined of marketing of kharif and rabi onion in Ahmednagar district of Maharashtra state. In present study cost incurred by producer, village merchant, wholesaler and retailer in onion marketing shows that in kharif onion was Rs. 75.5, Rs. 72.33, Rs. 64.28 and Rs. 32.46 respectively whereas in rabi onion cost incurred by producer, village merchant, wholesaler and retailer in onion marketing shows that in kharif onion was Rs. 90.00, Rs. 102.01, Rs. 70.60 and Rs. 43.45 respectively. per quintal marketing cost of kharif onion observed in channel-I, channel-II, channel- III was Rs.75.5, Rs. 254.57, Rs 237.81 whereas in rabi onion observed in channel-I, channel-II, channel- III was Rs.193.34, Rs. 364.66, Rs 262.22. While per quintal marketing margin enjoyed by middleman in kharif onion was Rs. 231.26 in channel-II and Rs. 186.44 in channel-III. Price spread of kharif onion in different channel was Rs. 75.5 in channel-I, Rs. 485.83 in channel- II and Rs. 424.25 in channel- III whereas in rabi onion was Rs. 193.34 in channel-I, Rs. 590.69 in channel- II and Rs. 422.59 in channel- III.

Keyword : Marketing Channel, Marketing Cost, Market margin and Price spread.

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INTRODUCTION

Onion is extremely important commercial vegetable crop not only for internal consumption, but also for highest foreign exchange. It is grown in different parts of the country mainly by small and marginal farmers. Onion is valued for its bulbs having characteristic odour, flavor and pungency. Value addition in onion is done by marketing dehydrated onions and onion flakes. Onion is grown in three seasons *kharif* / rainy i.e. June to September, late *kharif* (*rangda*) from September to December and *rabi*/winter (*pol/unhali*) from December to March. India is world's second largest producer of onions, likely to have 13.06 lakh hectare under crop in 2016-17 producing 122.42 lakh million tonnes of onion with the productivity 17.32 tonnes per hectare, after China. Maharashtra contributes nearly 31.19 per cent of the total production and 39.56 per cent area of onion in India with area under onion cultivation around 481.05 thousand hectare giving the production of 6734.74 thousand MT, therefore the productivity is 14 tonnes per hectare. Total area under onion in Ahmednagar district was 69.98 thousand hectare in 2015-2016 [1-5]. To Identify marketing channel and estimate marketing cost, market margins and price spread in onion marketing.

MATERIAL AND METHODS

Multistage sampling design was adopted in selection of district, tehsils and villages. In all, 60 onion growers both *kharif* and *rabi* season growing onion crop were selected for the study. Out of which 60 were *kharif* onion growers and 60 were *rabi* onion growers, total sample size of *kharif* and *rabi* onion grower was 120. Tabular analysis, frequency and percentage methods were used to analyze and compare the data in present study. Marketing cost and market margin of different functionaries were estimated from the data collected from them. The data were collected during the year 2017-18.

RESULT AND DISCUSSION

Marketing Cost, Margin and Price Spread in *Kharif* and *Rabi* onion Marketing

Marketing channels reveal that how produce passes through different agencies from producer to final consumer. In the study area following prominent channels were observed in the marketing,

1. Producer-- Consumer
2. Producer--Village merchant-- Commission agent cum wholesaler--Retailer-- Consumer
3. Producer-- Wholesaler-- Retailer-- Consumer

Production, retention and marketed surplus of graded onion

Production, retention and marketed surplus of *kharif* and *rabi* onion sold through different channels were calculated and are presented in Table 1. The results revealed that production on *kharif* onion was 226.01 quintals on 0.73 hectare and *rabi* onion was 426.37 quintals on 0.97 hectares. It was observed that retention for home consumption *kharif* onion was 1.21 and *rabi* onion was 2.05 quintals, thus, it is concluded that *rabi* onion retention for home consumption most preferred than *kharif* onion because perishable life of *rabi* onion is more than *kharif* onion. The results revealed that in *kharif* onion 0.97 quintals of produce marketed through channel-I followed by 54.72 quintals and 169.13 quintals in channel-II and channel-III respectively and *rabi* onion was 5.47 quintals of produce marketed through channel-I followed by 97.39 quintals and 321.46 quintals in channel-II and channel-III respectively. In channel-III marketed surplus of *Kharif* and *rabi* onion was higher i.e 169.13 and 321.46 respectively and channel II marketed surplus of *kharif* and *rabi* onion grower is lower than channel-III, channel-I marketed surplus was very low i.e 0.97 and 5.47 *kharif* and *rabi* onion grower respectively. It is concluded that *kharif* and *rabi* onion grower sold their highest quantity through channel-III due to net returns obtained is high.

Table 1. Production, retention and marketed surplus of graded *Kharif* and *Rabi* onion

Particular	<i>Kharif</i> onion	<i>Rabi</i> onion
1 Onion production (q)	226.02 (100.00)	426.37 (100.00)
2 Retention for home consumption and otl	1.21 (0.53)	2.05 (0.48)
3 Marketed surplus in channel-I (Producer-Consumer)	0.97 (0.43)	5.47 (1.28)
4 Marketed surplus in channel-II (Producer-Village merchant-Commission cum Wholesaler Retailer-Consumer)	54.72 (24.21)	97.39 (22.84)
5 Marketed surplus in channel-III (Producer- Wholesaler -Retailer- Consun	169.13 (74.83)	321.46 (75.40)

Cost of marketing incurred by producer

Item wise per quintal cost of marketing of onion incurred by producer in different channels were calculated and are presented in Table 2. Results revealed that *kharif* onion in channel-III cost incurred by producer was higher as Rs 130.5 followed by Rs 85.5 and Rs 75.5 in channel-II and channel-I, respectively, whereas in *rabi* onion in channel-III cost incurred by producer was higher as Rs 178.2 followed by Rs 113.5 and Rs 90 in channel-II and channel-I, respectively. *Kharif* onion In channel-I proportionate expenditure on individual items showed that transportation charge is highest as 42.39 per cent followed by cost of packaging material was (33.12 per cent), labour charge (16.56 per cent) and loading-unloading charges (7.94 per cent). In channel-II cost of transportation charges was highest as 46.78 per cent followed by packaging material charges (29.24 per cent), labour charge (14.61 per cent) and loading-unloading charges (9.36 per cent). Similarly in channel-III proportionate expenditure was highest in cost of transportation charges 61.30 per cent followed by packaging material (19.17), labour charge (9.58 per cent), loading-unloading charges (7.66 per cent), weighing charges (1.92 per cent) and storage charge (0.39 per cent).

Rabi onion in channel-I proportionate expenditure on individual items showed that transportation charge is highest as 44.45 per cent followed by cost of packaging material was (33.33 per cent), labour charge (15.55 per cent) and loading-unloading charges (6.67 per cent). In channel-II cost of transportation charges was highest as 52.86 per cent followed by packaging material charges (26.43 per cent), labour charge (11.89 per cent) and loading-unloading charges (8.81 per cent). Similarly in channel-III proportionate expenditure was highest in cost of transportation charges 67.34 per cent followed by packaging material (16.83 per cent), labour charge (7.01 per cent), loading-unloading charges (6.74 per cent), weighing charges (1.68 per cent) and storage charges (0.39 per cent).

Cost of marketing of *kharif* and *rabi* onion incurred by village merchant

Cost of marketing of onion incurred by village merchant is calculated and presented in Table 3. In channel-II per quintal cost of onion marketing was found to be Rs 72.33 and 102.01 *kharif* and *rabi* onion respectively, in which share of transportation charge was higher as 55.30 per cent and 58.82 per cent followed by losses (12.50 and 13.77 per cent), marketing fees (11.84 and 12.32 per cent), labour charge was (10.16 and 7.84 per cent), shop tax (5.51 and 3.92 per cent) and weighing charges (4.14 and 2.94 per cent).

Table 2. Cost of marketing of *kharif* and *rabi* onion incurred by producer (Rs./q)

Sr.No.	Particular	Kharif Onion			Rabi Onion		
		Channel-I	Channel-II	Channel-III	Channel-I	Channel-II	Channel-III
1.	Labour charge	12.50 (16.56)	12.50 (14.61)	12.50 (9.58)	14.00 (15.55)	13.50 (11.89)	12.50 (7.01)
2.	Cost of packing material	25.00 (33.12)	25.00 (29.24)	25.00 (19.17)	30 (33.33)	30 (26.43)	30 (16.83)
3.	Storage charge	-- (0.00)	-- (0.00)	00.50 (0.39)	--	--	00.70 (0.39)
4.	Loading & Unloading charge	6.00 (7.94)	8.00 (9.36)	10.00 (7.66)	6.00 (6.67)	10.00 (8.81)	12.00 (6.74)
5.	Transportation charge	32 (42.39)	40.00 (46.78)	80.00 (61.30)	40 (44.45)	60 (52.86)	120.00 (67.34)
6.	Weighing charge	-	-	2.50 (1.92)	--	--	3.00 (1.68)
Cost incurred by producer		75.5 (100.00)	85.5 (100.00)	130.5 (100.00)	90 (100)	113.5 (100)	178.2 (100)

(Figure in the parenthesis indicate percentage to total)

Cost of marketing of *kharif* and *rabi* incurred by commission agent cum wholesaler

Per quintal cost of marketing of *kharif* onion with respect to various items incurred by commission agent cum wholesaler are presented in Table 3. The results revealed that in channel-II cost incurred by commission agent cum wholesaler was Rs 64.28 followed by Rs 70.93 in channel-III. In channel-II proportionate expenditure on individual items showed that transportation was highest as 46.67 per cent followed by losses (17.89 per cent), storage charge (12.95 per cent), labour charge was (7.55 per cent), market fees (4.67 per cent), shop tax (4.41 per cent), license and electricity charges (1.01 and 0.86 per cent) respectively. Similarly, in channel-III proportional expenditure on transportation charge was highest as 50.05 per cent followed by losses (17.48 per cent), storage charge (12.12 per cent), labour charge (8.02 per cent), market fees (6.09 per cent), shop tax (4.40 per cent), license and electricity charges (0.99 and 0.85 per cent) respectively.

Per quintal cost of marketing of *rabi* onion with respect to various items incurred by commission agent cum wholesaler are presented in Table 3. The results revealed that in channel-III cost incurred by commission agent cum wholesaler was Rs 81.52 followed by Rs 70.6 in channel-II. In channel-II proportionate expenditure on individual items showed that transportation was highest as 42.49 per cent followed by losses (19.83 per cent), storage charge (14.16 per cent), labour charge was (8.50 per cent), market fees (8.50 per cent), shop tax (4.49 per cent), license and electricity charges (1.13 and 0.89 per cent) respectively. Similarly, in channel-III proportional expenditure on transportation charge was highest as 46.61 per cent followed by losses (18.15 per cent), storage charge (12.88 per cent), labour charge (7.97 per cent), market fees (10.08 per cent), shop tax (4.07 per cent), license and electricity charges (1.04 and 0.80 per cent) respectively.

Cost in marketing of *kharif* and *rabi* onion incurred by retailer

Per quintal cost of *kharif* onion marketing incurred by retailer were calculated and are presented in Table 3. The results revealed that cost incurred by retailer was highest in channel-III as Rs 36.38 followed by Rs 32.46 in channel-II, respectively. Proportionate expenditure in channel-II was highest in transportation charge 46.21 per cent followed by losses (16.17 per cent), market fees (12.93 per cent), shop tax (11.28 per cent) and labour charge (10.96 per cent). Similarly in channel-III share of expenditure was highest in transportation charge 49.48 per cent followed by losses (16.05 per cent), market fees (12.48 per cent), shop tax (10.86 per cent) and labour charge (9.18 per cent), while for *rabi* onion proportionate expenditure in channel-II was highest in transportation charge 46.02 per cent followed by losses (19.79 per cent), market fees (12.65 per cent), shop tax (9.90 per cent) and labour charge (9.90 per cent).

Similarly in channel-III share of expenditure was highest in transportation charge 49.80 per cent followed by losses (18.92 per cent), market fees (11.16 per cent), labour charge (9.56 per cent) and shop tax (8.96 per cent).

Table 3. Cost of marketing of *kharif* and *rabi* onion incurred by village merchant, wholesaler and retailer.

Sr. No.	Particular	<i>Kharif</i> Onion		<i>Rabi</i> onion		<i>Rabi</i> Onion		<i>Kharif</i> onion			
		Channel-II	Channel-II	Channel-II	Channel-III	Channel-II	Channel-III	Channel-II	Channel-III	Channel-II	Channel-III
1.	Labour charge	7.35 (10.16)	8.00 (7.84)	4.85 (7.55)	5.69 (8.02)	6.00 (8.50)	6.50 (7.97)	3.56 (10.96)	3.34 (9.18)	4.3 (9.9)	4.8 (9.56)
2.	Transport charge	40.00 (55.30)	60.00 (58.82)	30.00 (46.67)	35.5 (50.05)	30.00 (42.49)	38.00 (46.61)	15 (46.21)	18 (49.48)	20 (46.02)	25 (49.8)
3.	License charge	0.39 (0.55)	0.39 (0.38)	0.65 (1.01)	0.70 (0.99)	0.80 (1.13)	0.85 (1.04)	--	--	--	--
4.	Weighing charge	3.00 (4.14)	3.00 (2.94)	--	--	--	--	--	--	--	--
5.	Shop tax	3.99 (5.51)	4.00 (3.92)	3.00 (4.41)	3.12 (4.40)	3.17 (4.49)	3.32 (4.07)	3.66 (11.28)	3.95 (10.86)	4.3 (9.9)	4.5 (8.96)
6.	Market fees	8.56 (11.84)	12.57 (12.32)	5.40 (4.67)	4.32 (6.09)	6.00 (8.50)	6.50 (7.97)	4.2 (12.93)	4.54 (12.48)	5.5 (12.65)	5.6 (11.16)
7.	Electric Charges	--	--	0.55 (0.86)	0.60 (0.85)	0.63 (0.89)	0.65 (0.80)	0.79 (2.44)	0.71 (1.95)	0.75 (1.73)	0.8 (1.59)
7.	Losses	9.04 (12.50)	14.05 (13.77)	11.5 (17.89)	12.4 (17.48)	14.0 (19.83)	14.80 (18.15)	5.25 (16.17)	5.8 (16.05)	8.6 (19.79)	9.5 (18.92)
8.	Storage charge	--	--	8.33 (12.95)	8.60 (12.12)	10.0 (14.16)	10.5 (12.88)	--	--	--	--
Total Cost		72.33 (100.00)	102.01 (100.00)	64.28 (100.00)	70.93 (100.00)	70.6 (100.00)	81.52 (100.00)	32.46 (100)	36.38 (100)	43.45 (100)	50.2 (100)
		Cost of Village Merchant		Cost of Wholesaler			Cost of Retailer				

Price spread in onion marketing

Per quintal marketing cost, marketing margin and price spread in *kharif* and *rabi* onion marketing with respect to different channels were calculated and presented in Table 4. The results revealed that in *kharif* onion the price paid by the consumer was highest as Rs 485.83 in channel-II followed by Rs 424.25 in channel-III and Rs 75.5 in channel-I. In regard to channel-I, price received by producer was Rs 800 and marketing cost incurred by producer was Rs 75.5 thus the net price received by the producer was Rs 724.5. Hence the marketing cost involved was only the cost incurred by the producer and thus the price spread in channel-I was Rs 75.5.

In channel-II, that the price paid by the consumer in this channel was Rs 1150. The price received by the producer from village merchant was Rs 750 while cost incurred by the producer was Rs 85.5. Hence, net price received by the producer was Rs 664.5. In next order cost incurred by village merchant was Rs 72.33 while marketing margin of village merchant was Rs 34.25. It inferred that village merchant sale the produce to the commission agent cum wholesaler at Rs 856.25. The cost incurred by the commission agent cum wholesaler was Rs 64.28 and marketing margin of commission agent cum wholesaler was Rs 79.47. Hence the price paid by the retailer to commission agent cum wholesaler was Rs 1000. The cost incurred by retailer was Rs 32.46 while marketing margin of retailer was Rs 117.54. It inferred that retailer sale the produce at Rs 1150. In other word price paid by the consumer was same. Hence, in this channel marketing cost was Rs 254.57 while marketing margin was Rs 231.26 and the price spread was found to be 485.83.

In regard to channel-III, price paid by the consumer was Rs 1150. The price received by the producer from commission agent cum wholesaler was Rs 856.25 while cost incurred by the producer was Rs 130.5. Hence, net price received by the producer was Rs 725.75 in next order cost incurred by commission agent cum wholesaler was Rs 70.93 while the marketing margin of commission agent cum wholesaler was Rs 72.82. It inferred that price paid by the retailer to commission agent cum wholesaler was Rs 1000. The cost incurred by the retailer was Rs 36.38 and the price paid by the consumer was Rs 1150. Hence, the margin of retailer was Rs 113.62. It implied that in this channel total marketing cost was Rs 237.81 while marketing margin was Rs 186.44 and price spread was Rs 424.25.

In *rabi* onion the results (table 4.) revealed that price paid by the consumer was highest as Rs 590.69 in channel-II followed by Rs 422.59 in channel-III and Rs 193.34 in channel-I. In regard to channel-I, price received by producer was Rs 1150 and marketing cost incurred by producer was Rs 90 thus the net price

received by the producer was Rs 1060. Hence marketing cost involved was only the cost the incurred by the producer and thus the price spread in channel-I was Rs 193.34.

In channel-II, that the price paid by the consumer in this channel was Rs 1550. The price received by the producer from village merchant was Rs 1250 while cost incurred by the producer was Rs 85.5. Hence, net price received by the producer was Rs 1164.5. In next order cost incurred by village merchant was Rs 102.01 while marketing margin of village merchant was Rs 47.99. It inferred that village merchant sale the produce to the commission agent cum wholesaler at Rs 1250. The cost incurred by the commission agent cum wholesaler was Rs 70.6 and marketing margin of commission agent cum wholesaler was Rs 71.49. Hence the price paid by the retailer to commission agent cum wholesaler was Rs 1400. The cost incurred by retailer was Rs 43.45 while marketing margin of retailer was Rs 106.55. It inferred that retailer sale the produce at Rs 1550. In other word price paid by the consumer was same. Hence, in this channel marketing cost was Rs 364.66 while marketing margin was Rs 226.03 and the price spread was found to be 590.69.

Table 4. Per quintal marketing cost, margin and price spread in *Kharif* and *Rabi* onion marketing.

Particular	<i>Kharif</i> onion				<i>Rabi</i> onion	
	Channel I	Channel II	Channel III	Channell	Channel II	Channel III
1. Net price received by producer (producer's share in consumer's rupee)	724.5 (90.56)	664.5 (88.6)	725.75 (87.96)	1060 (92.17)	1164.5 (93.16)	1127.41 (89.69)
2. Expenses incurred by producer	75.5 (9.44)	85.5 (11.4)	130.5 (15.24)	90 (7.83)	85.5 (6.84)	130.5 (10.31)
3. Price received by producer	800 (100.00)	750 (100.00)	856 (100.00)	1150 (100.00)	1250 (100.00)	1257 (100.00)
4. Price paid by village merchant	-	750 (87.55)	-	-	1250 (89.28)	-
5. Expenses incurred by village merchant	-	72.33 (8.44)	-	-	102.01 (7.28)	-
6. Margin of village merchant	-	34.25 (3.99)	-	-	47.99 (3.42)	-
7. Price paid by commission agent cum wholesaler	-	856 (85.62)	856 (85.62)	-	1257 (89.85)	1257 (89.85)
8. Expenses incurred by commission agent cum wholesaler	-	64.28 (6.43)	70.93 (7.09)	-	70.6 (5.04)	81.52 (5.82)
9. Margin of commission agent cum wholesaler	-	79.47 (7.95)	72.82 (7.28)	-	71.49 (5.106)	60.57 (4.32)
10. Price paid by retailer	-	1000 (86.95)	1000 (86.95)	-	1400 (90.32)	1400 (90.32)
11. Expenses incurred by retailer	-	32.46 (2.82)	36.38 (3.16)	-	43.45 (2.80)	50.2 (3.24)
12. Margin of retailer	-	117.54 (10.22)	113.62 (9.88)	-	106.55 (6.87)	99.8 (6.44)
13. Price paid by consumer	800 (100.00)	1150 (100.00)	1150 (100.00)	1150 (100.00)	1550 (100.00)	1550 (100.00)
14. Marketing cost	75.5 (100)	254.57 (52.40)	237.81 (56.05)	193.34 (63.66)	364.66 (61.73)	262.22 (62.05)
15. Marketing margin	-	231.26 (47.60)	186.44 (43.95)	-	226.03 (38.27)	160.37 (37.95)
16. Price spread	75.5 (100)	485.83 (100)	424.25 (100)	193.34 (100)	590.69 (100)	422.59 (100)

(Figure in the parenthesis indicate percentage to total)

In regard to channel-III, price paid by the consumer was Rs 1550. The price received by the producer from commission agent cum wholesaler was Rs 1257.91 while cost incurred by the producer was Rs 130.5. Hence, net price received by the producer was Rs 1127.41 in next order cost incurred by commission agent cum wholesaler was Rs 81.52 while the marketing margin of commission agent cum wholesaler was Rs 60.57. It inferred that price paid by the retailer to commission agent cum wholesaler was Rs 1400. The

cost incurred by the retailer was Rs 50.2 and the price paid by the consumer was Rs 1550. Hence, the margin of retailer was Rs 99.8. It implied that in this channel total marketing cost was Rs 226.22 while marketing margin was Rs 160.37 and price spread was Rs 422.59.

From the results it was concluded that in *kharif* and *rabi* onion, the most preferable marketing channel was channel-III followed by the channel II and channel -I. The net price received by producer in *kharif* onion is highest in channel- III (725.75) followed by the channel-I (724.50) and Channel -II (664.50) while for in *rabi* onion, channel-II is the highest (1164.50) followed by the channel-III (1127.41) and channel -I (1060).

In *kharif* and *rabi* onion marketing with respect to different channels were calculated and it was concluded that per quintal marketing cost, was highest with channel-II (254.57) followed by channel-III (237.81), channel- I (75.50) in *kharif* and channel-II (364.66) followed channel-III (262.22) and channel-I (193.34) in *rabi* onion, respectively. Marketing margin was highest with channel-II (231.26) followed by channel-III (186.44) in *kharif* and channel-II (226.03) followed by channel-III (160.37) in *rabi* onion, respectively and price spread was highest with channel-II (485.83) followed by channel-III (424.25) and channel-I (75.50) in *kharif* and channel-II (590.69) was highest price spread followed by channel-III (422.59) and channel-I (193.34) in *rabi* onion, respectively.

CONCLUSION

In regards to marketing of onion three channels were found, channel-I (Producer - Consumer), channel-II (Producer - Village merchant - Commission agent cum wholesaler - Retailer - Consumer) and channel III (Producer - Wholesaler - Retailer - Consumer). Net price received by producer was highest in channel III in *kharif* season whereas in *rabi* season channel II was highest net price received by producer.

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