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IMPACT OF CO-OPERATIVE SOCIETIES ON SAPOTA MARKETING

S. R. Dahima[1] and V. M. Thumar[2]

1 M.Sc.(Agril Econ.) scholar, Navsari Agricultural University, Navsari - 396450
2 Associate Professor and Planning Officer, Navsari Agricultural University, Navsari - 396450
EMail : vallabhthumar@gmail.com

ABSTRACT

The present study was conducted in Navsari district of Gujarat .The results revealed that there were two different types of marketing channels of sapota identified in the study area ;Channel- I: Producer → Commission agent → Wholesaler → Retailer → Consumer and Channel- II: Producer → Cooperative Societies → Wholesaler → Retailer→ Consumer. In Jalalpore taluka producer could secure about 50.45 and 53.44 per cent of consumer's rupee in channel - I and channel – II, respectively. Whereas, total price spread is highest 49.55 per cent in channel - I as compared to channel - II 46 .56 per cent. In Gandevi taluka producer could secure about 50.43 and 54.08 per cent of consumer's rupee in channel – I and channel–II, respectively. Whereas, total price spread is highest 49.57 per cent in channel-I as compared to channel-II 45. 92 per cent. In Navsari taluka producer could secure about 50.19 and 53 .68 per cent of consumer's rupee in channel-I and channel– II, respectively. Whereas,total price spread is highest 49.81 per cent in channel - I as compared to channel-II 46. 32 percent.

Keywords : *marketing, co-operatives, sapota*

INTRODUCTION

In India sapota cultivationwas taken up for the first time in Maharashtra in 1898 in Gholwad village. Thereafter, the cultivation of this fruit crop spread to Andhra Pradesh, Maharashtra, Gujarat, Karnataka, Tamil Nadu, Orissa, West Bengal and Haryana. Karnataka shares 27. 27 per cent of all India in sapota produce. Whereas, Gujarat holds second position in sapota production, with production 325. 15 thousand MT under 29 .56 thousand Ha area in the year 2016 - 17. Gujarat shares 25. 31 per cent of all India in sapota produce. Navsari district of South Gujarat ware chosen for study purposively due to higher concentration of area under sapota. Thus, the present study entitled; Impact of Co-operative Societies on Sapota Marketing in South Gujarat has been taken with following objectives

OBJECTIVES

(1) To identify the marketing channels for sapota

(2) To study marketing cost and price spread in sapota across major marketing channel in South Gujarat

METHODOLOGY

Navsari district of South Gujarat was selected for study purposively due to higher concentration of area under sapota, The Jalalpore, Navsari and Gandevi taluka from Navsari district were purposively selected. The Navsari district was selected purposively on the basis of strong cooperative structure, highest area (8133 Ha) and production (102886.00 MT) under sapota for the study. Besides in Navsari district the highest area and production, share of sapota came from Jalalpore, Gandevi and Navsari blocks.Four villages from each taluka were selected randomly thereby, making a sample of 12 villages.

RESULTS AND DISCUSSION

Marketing channels for sapota

South Gujarat is gratified of very operative fruit and vegetable marketing co- operative societies. Majority, more than 80 percent of the farmer sold sapota through co- operatives societies. However, some of the farmer's soldtheirproduce at wholesale market. There were two types of marketing channels (Table-1) identified in the study are a which were preferred by the farmers to sold the sapota.

Table 1: List of marketing channels according to area

Sr. No.	Channels	Area
1	Producer → Commission agent → Wholesaler → Retailer→ Consumer	Jalalpore, Gandevi, Navsari
2	Producer → Cooperative Retailer → Societies → Wholesaler → Consumer	Jalalpore, Gandevi, Navsari

From above table 1, it was observed that channel-I and channel- II both were found in Navsaridistrict.As imaginary through the farmers' point of view therewas least risk in co- operative than private agencies. There was moreproblem of grading when sold to wholesaler as compared to cooperative markets. The other motive was price stability in cooperatives. However, there weredetected graterprice fluctuation while selling through wholesalers. Furthermore, the wholesalers buy sapota only in peak period, not throughout theseason.

Marketing cost and price spread in sapota

(1) Marketing cost incurredby different intermediaries in Jalalpore taluka

The data pertaining to marketing costs and margins in channel -I and channel - II in Jalalpore taluka are presented in Table 2 to Table 5.

The data depicted from table 2 average marketing cost incurred by producerindicated that average marketing cost incurred by producer in channel - I was ₹ 111 .10 per quintal of sapota which was 3 .83 per cent of consumer's rupee. Among different cost incurred by producer, commission chargesfound highest 2 .00 per cent. Whereas, in channel - II average marketing cost incurred by producer was ₹ 50.24 per quintal of sapota which was 1 .73 per cent of consumer's rupee. Among differentcosts incurred by the producer, transportation cost foundto be the highest0.98 per cent. The producer's share in consumer's rupee was 50. 45 and 53.44per cent in channel – I &II,respectively.

Table 2: Marketing cost incurred by producer in Jalalpore taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
1	Grading & Packaging cost	8.47	0.29	8.49	0.29
2	Transportation cost	31.50	1.09	28.50	0.98
3	Load/unload labour charge	10.00	0 .34	10.00	0.34
4	Weighing cost	1.50	0.05	1.50	0.05
5	Commission charge	58.00	2.00	-	-
6	Miscellaneous cost	1.63	0.06	1.76	0.06
	Total cost	**111.10**	**3.83**	**50.24**	**1.73**
	Producer's sale price	1574.28	54.29	1600.00	55.17
	Producer's net price	1463.18	50.45	1549.76	53.44

The data depicted from table 3. was marketing cost incurred by cooperative in jalalpor taluka. Itwas ₹ 127 .00 per quintal of sapota which was 4. 38 per cent of consumer's rupee. Among different cost incurred by cooperative, transport cost found highest was ₹ 60.00 per quintal of sapota which was 2 .07 per cent of consumer's rupee. Per quintal margin earned by cooperative society was ₹ 73.00 which accounted for 2. 52 per cent of consumer' srupee.

Table 3: Marketing cost incurred by cooperative in Jalalpore taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Cooperative purchase price	-	-	1600.00	55.17
1	Grading & Packaging cost	-	-	3.00	0.10
2	Weighing cost	-	-	2.50	0.09
3	Damage / Spoilage cost	-	-	26.50	0.91
4	Storage charge	-	-	15.00	0.52
5	Load/unload labour charge	-	-	10.00	0.34
6	Transportation cost	-	-	60.00	2.07
7	Miscellaneous cost	-	-	10.00	0.34
	Total cost	-	-	**127.00**	**4.38**
	Cooperative sale price	-	-	1800.00	62.07
	Margin earned	-	-	73.00	2.52

The data shown in table 4 indicated thatin channel-I marketing cost incurred by wholesaler was ₹ 125. 60 per quintal of sapota which was 4. 33 per cent of consumer's rupee. Amongthe differentcost incurred by wholesaler, transport cost found highest1.72 per cent. In channel- II marketing cost incurred by wholesalerwas ₹ 118 .60 per quintal of sapota which was 4. 09 per cent ofconsumer's rupee. Among different cost incurred by wholesaler, transport cost found highest 1.72 per cent. Per quintal margin earned by wholesalerfor channel- I and channel- II were ₹ 500 .13 and ₹ 381 .40 which accounted for 17.25 and 13 .15 per cent of consumer' s rupee, respectively.

Table 4: Marketing cost incurred by wholesaler in Jalalpore taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Wholesaler purchase price	1574.28	54.29	1800.00	62.07
1	Grading & Packaging cost	12.00	0.41	5.00	0.17
2	Weighing cost	2.50	0.09	2.50	0.09
3	Load/unload labour charge	10.00	0.34	10.00	0.34
4	Transportation cost	50.00	1.72	50.00	1.72
5	Market charges	6.10	0.21	6.10	0.21
6	Damage / Spoilage cost	45.00	1.55	45.00	1.55
	Total cost	**125.60**	**4.33**	**118.60**	**4.09**
	Wholesaler sale price	2200.00	75.86	2300.00	79.31
	Margin earned	500.13	17.25	381.40	13.15

Table5. Marketing cost incurred by retailer in Jalalporetaluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Retailer purchase price	2200.00	75.86	2300.00	79.31
1	Load/unload labour charge	10.00	0 .34	10.00	0.34
2	Transportation cost	28.00	0.97	28.00	0.97
3	Market charges	8.00	0.28	8.00	0. 28
4	Damage / Spoilage cost	80.00	2.76	80.00	2.76
5	Miscellaneous cost	4.00	0.14	4.00	0. 14
	Total cost	**130.00**	**4.48**	**130.00**	**4.48**
	Retailer sale price	2900.00	100.00	2900.00	100.00
	Margin earned	570.00	19.66	470.00	16.21

It is clear from the data (table 5) that in channel- I marketing cost incurred by retailer was ₹ 130 .00per quintal of sapota which was 4. 48 percentof consumer'srupee. In case of retailer the different cost incurred were indamage and spoilage cost found highest 2. 76 per cent. In channel- II marketing costincurred by retailer was₹ 130 .00 per quintal of sapota which was 4. 48 per cent of consumer's rupee. Among different cost incurred by retailer,damageandspoilagecost found highest 2 .76 per cent. Per quintal margin earned by retailer for channel- I and channel- II were ₹ 570 .00 and ₹ 470 .00 which accountedfor19.66 and 16 .21 per cent of consumer' s rupee, respectively.

(2) Marketing cost incurred by different intermediaries in Gandevi taluka

The data pertaining to marketing costs and margins in channel-I and channel - II in Gandevi taluka are presented in Table 6 toTable 9.The data depicted intable 6 indicatedthat average marketing cost incurred by producer in channel - I was ₹ 109 .84 per quintal of sapota which was 3 . 79 per cent of consumer'srupee.

Table 6: Marketing cost incurred by producer in Gandevi taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
1	Grading & Packaging cost	8.37	0.29	8.40	0.29
2	Transportation cost	31.50	1.09	28.50	0.98
3	Load/unload labour charge	10.00	0.34	10.00	0.34
4	Weighing cost	1.50	0.05	1.50	0.05
5	Commission charge	58.00	2.00	-	-
6	Miscellaneous cost	0.47	0.02	0.65	0.02
	Total cost	**109.84**	**3.79**	**49.06**	**1.69**
	Producer's sale price	1572.28	54.22	1617.50	55.78
	Producer's net price	1462.43	50.43	1568.44	54.08

The variouscost incurred byproducer, commission charge found highest 2.00 per cent. Whereas, in channel - II average marketing cost incurred by producer was₹ 49. 06 per quintal of sapota which was 1. 69 per cent of consumer' s rupee. Among different costs incurred by the producer, transportation cost found to be the highest 0.98 per cent. The producer' s share in consumer's rupee was 50. 43 and 54.08 per cent in channel – I &II,respectively.There was(Table7) ₹ 127 .00 per quintal ofsapota which was4 .38per cent of consumer's rupee.Among different cost incurred by cooperative, transport cost found highest was ₹ 60. 00 perquintal of sapota which was 2 . 07 per cent of consumer' s rupee. Per quintal marginearned by cooperative society was ₹ 75 .50 which accounted for 2.60 per cent of consumer'srupee.

Table 7: Marketing cost incurred by cooperative in Gandevi taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Cooperative purchase price	-	-	1617.50	55.78
1	Grading & Packaging cost	-	-	3.00	0.10
2	Weighing cost	-	-	2.50	0.09
3	Damage / Spoilage cost	-	-	26.50	0.91
4	Storage charge	-	-	15.00	0.52
5	Load/unload labour charge	-	-	10.00	0.34
6	Transportation cost	-	-	60.00	2.07
7	Miscellaneous cost	-	-	10.00	0.34
	Total cost	**-**	**-**	**127.00**	**4.38**
	Cooperative sale price	-	-	1820.00	62.76
	Margin earned	-	-	75.50	2.60

In channel- I (table 7) marketing cost incurred by wholesaler was ₹ 122. 50 per quintal of sapota which was 4. 22 per cent of consumer's rupee. Among different costincurredbywholesaler,transportcostfoundhighest1.72 per cent. In channel- II marketing cost incurred by wholesaler was ₹ 115. 50 per quintal of sapota which was 3. 98 per cent of consumer's rupee. Among different cost incurred by wholesaler, transport cost found highest1.72 per cent. Per quintal margin earned by wholesaler for channel- I and channel- II were ₹ 505.23 and ₹ 364. 50 which accounted for 17. 42 and 12.57 per cent of consumer's rupee,respectively.

Table 8: Marketing cost incurred by wholesaler in Gandevi taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Wholesaler purchase price	1572.28	54.22	1820.00	62.76
1	Grading & Packaging cost	12.00	0.41	5.00	0.17
2	Weighing cost	2.50	0.09	2.50	0.09
3	Load/unload labour charge	10.00	0.34	10.00	0.34
4	Transportation cost	50.00	1.72	50.00	1.72
5	Market charges	6.00	0.21	6.00	0.21
6	Damage / Spoilage cost	42.00	1.45	42.00	1.45
	Total cost	**122.50**	**4.22**	**115.50**	**3.98**
	Wholesaler sale price	2200.00	75.86	2300.00	79.31
	Margin earned	505.23	17.42	364.50	12.57

It is clear from the data depictedintable9 that in channel- I marketing cost incurred by retailer was ₹ 129 .00per quintal of sapota which was 4. 45 percentof consumer'srupee. Among different cost incurred by retailer, damage and spoilage cost found highest 2. 76 per cent. In channel- II marketing costincurred by retailer was ₹ 129 .00 per quintal of sapota which was 4. 45 per cent of consumer's rupee. Among different cost incurred by retailer,damageandspoilagecost found highest 2 .76 per cent. Per quintal margin earned by retailer for channel- I and channel- II were ₹ 571 .00 and ₹ 471 .00 which accounted for 19.69 and 16 .24 per cent of consumer' s rupee, respectively.

Table 9 : Marketing cost incurred by retailer in Gandevi taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Retailer purchase price	2200.00	75.86	2300.00	79.31
1	Load/unload labour charge	10.00	0.34	10.00	0.34
2	Transportation cost	28.00	0.97	28.00	0.97
3	Market charges	8.00	0.28	8.00	0.28
4	Damage / Spoilage cost	80.00	2.76	80.00	2.76
5	Miscellaneous cost	3.00	0.10	3.00	0.10
	Total cost	**129.00**	**4.45**	**129.00**	**4.45**
	Retailer sale price	2900.00	100.00	2900.00	100.00
	Margin earned	571.00	19.69	471.00	16.24

(3) Marketing cost incurredby different intermediaries in Navsari taluka

The data pertaining to marketing costs and margins in channel-I and channel - II in Navsari taluka are presented in table 10 to table13.The data depicted in table 10 indicated that the average marketing cost incurred by producer in channel - I was ₹ 110 .90 per quintal of sapota which was 3 . 82 per cent of consumer'srupee.

Table 10: Marketing cost incurred by producer in Navsari taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
1	Grading & Packaging cost	8.41	0.29	8.47	0.29
2	Transportation cost	31.50	1.09	28.50	0.98
3	Load/unload labour charge	10.00	0.34	10.00	0.34
4	Weighing cost	1.50	0.05	1.50	0.05
5	Commission charge	58.00	2.00	-	
6	Miscellaneous cost	1.49	0.05	6.86	0.23
	Total cost	**110.90**	**3.82**	**55.33**	**1.91**
	Producer's sale price	1566.60	54.02	1612.00	55.59
	Producer's net price	1455.70	50.19	1556.67	53.68

Among different cost incurred by producer, commission charge found highest 2 .00 per cent. Whereas, in channel - II average marketing cost incurred by producer was ₹ 55. 33 per quintalofsapota which was 1.91 per cent of consumer' s rupee. Among different costs incurred by the producer, transportation cost found to be the highest 0.98 per cent. The producer's share in consumer's rupee was 50 .19 and 53.68 per cent in channel – I &II, respectively. The marketing cost incurred by cooperative(table 11) was ₹ 127.00 per quintal of sapota which was 4 .38 per cent of consumer's rupee. Among different cost incurred by cooperative, transport cost found highest was ₹ 60.00 perquintal of sapota which was 2 . 07 per cent of consumer' s rupee. Per quintal marginearned by cooperative society was ₹ 101 .00 which accounted for 3.48 per cent of consumer'srupee.

Table 11: Marketing cost incurred by cooperative in Navsari taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Cooperative purchase price	-	-	1612.00	55.59
1	Grading & Packaging cost	-	-	3.00	0.10
2	Weighing cost	-	-	2.50	0.09
3	Damage / Spoilage cost	-	-	26.50	0.91
4	Storage charge	-	-	15.00	0.52
5	Load/unload labour charge	-	-	10.00	0.34
6	Transportation cost	-	-	60.00	2.07
7	Miscellaneous cost	-	-	10.00	0.34
	Total cost	**-**	**-**	**127.00**	**4.38**
	Cooperative sale price	-	-	1840.00	63.45
	Margin earned	-	-	101.00	3.48

In channel- I marketingcost incurredby wholesaler was ₹ 123.70 per quintal of sapota which was 4. 27 per centofconsumer's rupee. Among different cost incurred by wholesaler, transport cost found highest 1. 72 per cent. In channel- II marketing cost incurred by wholesaler was ₹ 116.70 per quintal of sapota which was 4. 02 per cent of consumer's rupee. Among different cost incurred by wholesaler, transport cost found highest 1 .72per cent. Per quintal margin earned by wholesaler forchannel- I and channel- II were ₹ 509. 70 and ₹ 343. 30 which accounted for 17 .58 and 11 .84 per cent of consumer's rupee, respectively.

Table 12: Marketing cost incurred by wholesaler in Navsari taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Wholesaler purchase price	1566.60	54.02	1840.00	63.45
1	Grading & Packaging cost	12.00	0.41	5.00	0.17
2	Weighing cost	2.50	0.09	2.50	0.09
3	Load/unload labour charge	10.00	0.34	10.00	0.34
4	Transportation cost	50.00	1.72	50.00	1.72
5	Market charges	6.20	0.21	6.20	0.21
6	Damage / Spoilage cost	43.00	1.48	43.00	1.48
	Total cost	**123.70**	**4.27**	**116.70**	**4.02**
	Wholesaler sale price	2200.00	75.86	2300.00	79.31
	Margin earned	509.70	17.58	343.30	11.84

In channel- I (table12) marketing cost incurred by retailer was ₹ 131. 00 per quintal of sapota which was 4. 52 per cent of consumer's rupee. Among different cost incurred by retailer, damage and spoilage cost found highest 2. 76 per cent. In channel- II marketing costincurred by retailer was ₹ 131 .00 per quintal of sapota which was 4. 52 per cent of consumer's rupee. Among different cost incurred by retailer,damageandspoilagecost found highest 2 .76 per cent. Per quintal margin earned by retailer for channel- I and channel- II were ₹ 569 .00 and ₹ 469 .00 which accounted for 19.62 and 16 .17 per cent of consumer' s rupee, respectively.

Table 13: Marketing cost incurred by retailer in Navsari taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
	Retailer purchase price	2200.00	75.86	2300.00	79.31
1	Load/unload labour charge	10.00	0.34	10.00	0.34
2	Transportation cost	28.00	0.97	28.00	0.97
3	Market charges	8.00	0.28	8.00	0.28
4	Damage / Spoilage cost	80.00	2.76	80.00	2.76
5	Miscellaneous cost	5.00	0.17	5.00	0.17
	Total cost	**131.00**	**4.52**	**131.00**	**4.52**
	Retailer sale price	2900.00	100.00	2900.00	100.00
	Margin earned	569.00	19.62	469.00	16.17

(4) Price spread in marketing of sapota in Jalalpore taluka

The variance between the price paid by the final consumer and the price received by the farmer for an equal quantity of produce is known as price spread. It holds cost of performing various marketing functions and margins of different agencies associated in the marketing process of the commodity.

The results pertaining to price spread in marketing of sapota in Jalalpore taluka are presented in table 4.14. It was inferred from the table that total marketing cost was the highest in channel - II (₹ 425. 84) as compared to channel - I (₹ 366 .70) which was 14.68 and 12.64 per cent of consumer's rupee, respectively. The highest marketing cost born by retailer was 4. 48 per cent in channel- I, whereas it was 4 .48 per cent in channel - II. The producercould secure about 50 .45 and 53. 44 per cent of consumer's rupee in channel - I and channel – II, respectively. Whereas, total price spread was highest 49. 55 per cent in channel - I as compare to channel - II 46.56 per cent. Thus, the channel- II of Jalalpore taluka was found to be more efficient as compared to other channels. These results were to the tune withthe results obtained by Gajanana *et al.* (2006) and Murthy *et al.* (2007) on sapota and banana, respectively.

Table 14: Price spread in marketing of sapota in Jalalpore taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
1	Producer's net price	1463.18	50.45	1549.76	53.44
2	Cost incurred by				
	i. Producer	111.10	3.83	50.24	1.73
	ii. Cooperative	-	-	127.00	4.38
	iii. Wholesaler	125.60	4.33	118.60	4.09
	iv. Retailer	130.00	4.48	130.00	4.48
	Total cost	366.70	12.64	425.84	14.68
3	Margin earned by				
	i. Cooperative	-	-	73.00	2.52
	ii. Wholesaler	500.13	17.25	381.40	13.15
	iii. Retailer	570.00	19.66	470.00	16.21
	Total margin	1070.13	36.90	924.40	31.88
4	Consumer's price	2900.00	100.00	2900.00	100.00
5	Price spread	1436.82	**49.55**	1350.24	**46.56**

(5) Price spread in marketing of sapota in Gandevi taluka

The results pertaining to price spread inmarketing of sapota in Gandevitaluka are presented in table 4.15, fig 4.3 & Fig 4.4 . It was inferred from the table that total marketing cost was the highest in channel - II (₹ 422. 56) as compared to channel - I (₹ 363 .34) which was 14.57 and 12.53 per cent of consumer's rupee, respectively. The highest marketing cost born by retailer was 4. 52 per cent in channel- I, whereas it was 4 .52 per cent in channel - II. The producercould secure about 50.43 and 54.08 per cent of consumer's rupee in channel - I and channel – II,respectively. Whereas, total price spread is highest 49. 57 per cent inchannel - I as compare to channel - II 45.92 percent.

Table 15: Price spread in marketing of sapota in Gandevi taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's price
1	Producer's net price	1462.43	50.43	1568.44	54.08
2	Cost incurred by				
	i. Producer	109.84	3.79	49.06	1.69
	ii. Cooperative	-	-	127.00	4.38
	iii. Wholesaler	122.50	4.22	115.50	3.98
	iv. Retailer	131.00	4.52	131.00	4.52
	Total cost	363.34	12.53	422.56	14.57
3	Margin earned by				
	i. Cooperative	-	-	75.50	2.60
	ii. Wholesaler	505.23	17.42	364.50	12.57
	iii. Retailer	571.00	19.69	471.00	16.24
	Total margin	1076.23	37.11	911.00	31.41
4	Consumer's price	2900.00	100.00	2900.00	100.00
5	Price spread	1437.57	**49.57**	1331.56	**45.92**

(6)Price spread in marketing of sapota in Navsari taluka

The results pertaining to price spread in marketingofsapotain Navsari taluka are presented in table 4.16 , f ig4 .5 &fig 4.6. It was inferred from the table that total marketing costwas the highest in channel - II (₹ 430. 03) as compared to channel - I (₹ 365 .60) which was 14.83 and 12.61 per cent of consumer's rupee, respectively. The highest marketing cost born by retailer was 4. 52 per cent in channel- I, whereas it was 4 .52 per cent in channel - II. The producercould secure about 50 .19 and 53. 68 per cent of consumer's rupee in channel - I and channel – II,respectively. Whereas, total price spread is highest 49. 81 per cent inchannel - I as compare to channel - II 46.32 per cent. Thus, the channel- II of Navsari taluka was found to be more efficient as compared to other channels.

Table 16: Price spread in marketing of sapota in Navsari taluka (n=120)

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's Price
1	Producer's net price	1455.70	50.19	1556.67	53.68
2	Cost incurred by				
	i. Producer	110.90	3.82	55.33	1.91
	ii. Cooperative	-	-	127.00	4.38
	iii. Wholesaler	123.70	4.27	116.70	4.02
	iv. Retailer	131.00	4.52	131.00	4.52
	Total cost	365.60	12.61	430.03	14.83

Sr. No.	Particulars	Channel-I		Channel-II	
		₹ per quintal	Per cent share in consumer's price	₹ per quintal	Per cent share in consumer's Price
3	Margin earned by				
	i. Cooperative	-	-	101.00	3.48
	ii. Wholesaler	509.70	17.58	343.30	11.84
	iii. Retailer	569.00	16.92	469.00	16.17
	Total margin	1078.70	37.20	913.30	31.49
4	Consumer's price	2900.00	100.00	2900.00	100.00
5	Price spread	1444.30	**49.81**	1343.33	**46.32**

CONCLUSION

The results of the study revealed that in Jalalpore taluka, channel - I average marketing cost incurred by producer was 3. 83 per cent of consumer's rupee. Marketing cost incurred by wholesaler was 4.33 per cent of consumer's rupee. Marketing cost incurred by retailer was 4.48 per cent of consumer's rupee. The producer' s share in consumer' s rupee was 50. 45 per cent in channel- I. Margin earned by commission agent, wholesaler and retailer were 2.00 ,17.25 and 19.66 per cent of consumer's rupee respectively. Whereas, in channel - II average marketing cost incurred by producer was 1.73 per cent of consumer's rupee. Marketing cost incurred by co-operative was 4.38 per cent of consumer' s rupee. Marketing cost incurred by wholesaler was 4.09 per cent of consumer's rupee. Marketing cost incurred by retailer was 4.48 per cent of consumer's rupee. The producer's share in consumer's rupee was 53.44 percent in channel - II. In channel - II no interference of commission agent so only wholesaler, retailer and cooperative earned margin 13.15, 16.21 and 2.52 percent of consumer'srupee, respectively. In Gandevi taluka, channel - I average marketing cost incurred by producer was 3.79 per cent of consumer's rupee. Marketing cost incurred by wholesaler was 4 .22 per cent of consumer's rupee.

There were more than 80 per cent sapota growers of South Gujarat sale their produce in cooperatives. Because of price stability in cooperatives therefore farmers preferred cooperatives. Also cooperatives help to sapota growers for strengthen their condition and to get high profit. Cooperative societies give 15 per cent dividend every year to the members of cooperative. Cooperatives were pursued on the principle of "self help by mutual help". It reduces the marketing cost, enhances the bargaining power and there is equitable distribution of the proceeds. Presence of marketing cooperatives makes the market more competitive and ensures better returns to the producer.

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