

ECONOMIC ANALYSIS OF MARKETING OF FENUGREEK IN RAJASTHAN

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ABSTRACT

The economic analysis of marketing of fenugreek in Rajasthan was performed. In state of Rajasthan as a whole, on an average 61.33 per cent farmer's marketed 34.50 per cent fenugreek crop in the villages to the village traders and 38.67 per cent farmers sold 65.50 per cent fenugreek crop in the regulated market. The quantity of fenugreek sold by them in the regulated market was positively associated with the increase in size of holding. 67.27 per cent quantity was marketed only in the first quarter i.e. during the month of March to May and rest 32.73 per cent quantity was marketed in the remaining three quarters of the year. Total cost in sale of fenugreek crop has been ₹ 403.36 and ₹ 372.81 per quintal, respectively at village and mandi of the state. Marketing costs were higher by ₹ 30.55 per quintal in sale at village as compared to that in mandi because of involvement of more number of middlemen in village sale of the state. Producer's share in the consumer's rupee has been 58.81 per cent in village sale and 66.04 per cent in mandi sale. Total marketing margin earned by the middlemen in sale of fenugreek crop accounted about one third of the consumer's price (29.50 per cent) in channel-I and about one fourth (23.14 per cent) in channel-II. Margin earned by the middlemen has been lesser by 6.36 per cent in sale of fenugreek in the mandi than the village sale of the state.

KEYWORDS: Marketing Cost, Fenugreek & Rajasthan

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INTRODUCTION

Out of the total 63 spices grown in India, 20 are classified as seed spices with 36 per cent share in area and 17 per cent share in production of total spice in India (annual report 2012-13, National Research Centre on Seed Spices, Ajmer). Main seed spices of India are coriander, cumin, fennel, fenugreek, dill, ajwain, celery, anise nigella and caraway. Seed spice crops are extensively cultivated in the arid and semi arid region of India during rabi season covering an area of 12.20 lakh ha with production of 10.58 lakh tones annually.

Rajasthan is the major seed spices producing state, accounted for 57.66 per cent of the total area and 55.53 per cent of the total production of seed spices in the country (based on the quinquennial average) average of 2008-09 to 2012-13. The main seed spices grown in the state are coriander, cumin, fennel, fenugreek and ajwain.

Out of these seeds spices fenugreek is one of the main seed spices, which is commonly used in the daily food basket of the consumers. In India, total area under fenugreek cultivation was 93.10 thousand hectares with a production of 112.84 thousand tones in the year 2012-13. The productivity of fenugreek was 1212 kg per hectare during the same period. Total export of fenugreek from India was 31.00 thousand tones valued at ₹ 10,835 lakh during the year 20012-13. It was exported to the countries like Dubai, Singapore, Malaysia, Europe, USA and

Japan (www.indianspices.com).

Rajasthan, Gujarat, Uttar Pradesh and Uttaranchal are the major fenugreek producing states of the country which together accounted more than 90 per cent of the total area and total production of fenugreek in the country. In 2012-13, the total area under fenugreek in Rajasthan state was 82.36 thousand hectares which accounted for 88.45 per cent of the total area and produced 87.38 thousand tones of fenugreek, which accounted for 77.43 per cent of the total production under fenugreek in the country.

Costs in agriculture play a significant role in making the farm sector economically viable and feasible under the pressure of continuous rise in input prices. The level of input use and their prices affect the profitability of the crop enterprise. This mechanism needs to be critically examined for formulating effective policies in relation to costs and output prices for understanding the income path in the farm sector. As such there is a need to study the costs of and returns from fenugreek crop in the state (www.pib.nic.in).

Fenugreek being grown as a cash crop by the farmers enjoys comparative advantage in its cultivation over food grains and non food grain crops. The farmers need better marketing facilities for marketing of high value risky crops which is generally reflected through a higher share in consumer's rupee. It is not only essential to obtain higher yields but it is equally essential to market the surplus produce at right time and at right place/market also. It is of immense importance to examine the marketing system, costs, margins and price-spread to devise appropriate product specific marketing strategy (www.icar.org.in).

Although, Kumawat *et. al.* (2016, 2017) has reported studies on growth rates and instability in area, production and productivity of fenugreek and on resource use efficiency of fenugreek crop in the state of Rajasthan. But in this context, except Fenugreek few studies were conducted on economic analysis of marketing. Killedar *et. al.* (2002) have conducted a study on economics of production and marketing of ginger in Satara district of Western Maharashtra. Ghorbani (2008) concluded that during the period 2000-01 to 2005-06 revealed that out of many marketing channels, the second channel, i.e. (producer-wholesaler-domestic consumer) was most efficient that had marketing margin and producer share in consumer price equal to 12 per cent and 88 per cent, respectively. Marketing margin of saffron was high so the produces received less than 65 per cent of final price of consumer.

Singh *et. al.* (2009) conducted a study on economics of production and supply chains of high value enterprises with special reference to chillies in Punjab. The results related to the sales outlet revealed that 45.83 per cent sample producers sold the produce at their village level in Patiala district. Kaur and Singh (2010) concluded that the per quintal total marketing cost of kinnow was estimated to be the highest when the produce was sold through commission agent to wholesaler in the wholesale market as compared to produce sold through other marketing channels.

Keeping the above facts in view, the present study is aimed to analyze the marketing costs incurred and margins earned by different agencies involved in the marketing of fenugreek in the state of Rajasthan.

METHODOLOGY

Collection of Data

For selection of regulated markets, two districts viz., Sikar and Jaipur were selected randomly from the selected ten districts for the studying the marketing cost. One regulated market from each of these two districts, Shri Madhopur mandi (Sikar) and Chomu mandi (Jaipur) were purposively selected on the basis of highest arrivals of fenugreek

production during the past three years.

Separate lists of all the villages falling within the catchment area of the regulated markets were prepared. Three villages from each of the lists so prepared were randomly selected. A list of all the fenugreek growing farmers of the selected villages was prepared from the information provided by the village patwaris. The total number of fenugreek growing farmers in the sample villages was 261 and 354, in Sikar and Jaipur districts, respectively. All the farmers were divided into following five size groups on the basis of size of their land holdings: marginal (less than 1 hectare); small (1–2 hectares); semi-medium (2–4 hectares); medium (4–10 hectares); large (10 hectares and above). Out of 615 farmers, a sample of 150 farmers was selected on the basis of systematic sampling. The numbers, thus, obtained were 23 (marginal), 35 (small), 41 (semi-medium), 34 (medium) and 17 (large) farmers.

The marketing behaviour of farmers in respect of place of sale, time of sale, agency adopted in sale of the surplus produce was analysed by using the tabular analysis. The data pertaining to marketing costs and margins were analysed.

Total Cost of Marketing

The total cost incurred on marketing of particular crop by the farmers and the intermediaries involved in the process of marketing were calculated as:

$$C = C_F + C_{m1} + C_{m2} + C_{m3} + \dots + C_{mi} + \dots + C_{mn}$$

Where; C = total cost of marketing of the commodity, C_F = cost paid by the producer-farmer from the time the produce leaves the farm till it is sold, C_{mi} = cost incurred by the i^{th} middleman in the process of buying and selling.

Marketing Margin

The absolute margin earned by a middleman was calculated as: $A.M. = S_p - (P_p + C_m)$. Where; S_p = sale price of fenugreek per unit of output, P_p = purchase price of fenugreek per unit of output, C_m = per unit cost incurred in marketing the middleman.

$$\text{Percent margin} = \frac{S_p - (P_p + C_m)}{S_p} \times 100$$

Producer's Share

It represents the per centage share of producer in the price paid by the consumer. $P_s = \frac{P_f}{P_c} \times 100$; Where; P_s = producer's share in consumer's rupee, P_f = price of the produce received by the farmer, P_c = price of the produce paid by the ultimate consumer.

Price-Spread

Price-spread refers to the difference between the price paid by the ultimate consumer and the price received by the producer for an equivalent quantity of the farm produce. The breakup of costs, margins and share of the producer farmer and different market middleman were worked out in the consumer's price in simple percentage terms.

RESULTS AND DISCUSSIONS

The marketing behaviour of the selected fenugreek growing farmers with respect to the place, time and agency

adopted by them in sale of fenugreek is presented under following sub-sections: (i) place-wise sale pattern; (ii) time-wise sale pattern; (iii) agency-wise.

Place-Wise Sale Pattern

The farmers sold the surplus of fenugreek in their own village as well as in nearby Krishi Upaj Mandi Samities. 65.50 per cent produce of fenugreek was sold by the selected farmers in the mandi and 34.50 per cent in their village market. Among the size groups, there existed large variation. All the marginal and small farmers sold the crop produce in their own villages. As against this, all the large farmers sold their fenugreek produce in the nearby regulated market. The semi-medium and medium farmers sold their fenugreek at both the places. The semi-medium farmers sold 53.99 per cent produce in the village and 46.01 per cent in regulated market.

Table 1: Place-Wise Disposal Pattern of Fenugreek Seed by the Sample Farmers in State of Rajasthan

Size Groups	No of Farmers	Village Sale	Mandi Sale	Total
		(Quantity in Quintals)		
Marginal (< 1 ha.)	23	65.91*	-	65.91*
		2.87**	-	2.87**
		(100.00)		(100.00)
Small (1-2 ha.)	35	213.57*	-	213.57*
		6.10**	-	6.10**
		(100.00)		(100.00)
Semi-medium (2-4 ha.)	41	219.56*	187.07*	406.63*
		5.36**	4.56**	9.92**
		(53.99)	(46.01)	(100.00)
Medium (4-10 ha.)	34	93.53*	377.00*	470.53*
		2.75**	11.09**	13.84**
		(19.88)	(80.12)	(100.00)
Large (10 ha. & above)	17	-	547.47*	547.47*
		-	32.20**	32.20**
			(100.00)	(100.00)
Overall	150	584.53*	1109.62*	1694.15*
		3.90**	7.40**	11.29**
		(34.50)	(65.50)	(100.00)

Figures in parentheses are the per cent of total sale by the respective size group of farmers;
* total quantity; ** per farm quantity

The medium sized farmers sold 80.12 per cent produce in the regulated market and rest 19.88 per cent in the village itself (Table 1). Thus, from the above results it could be concluded that the sale of fenugreek in the regulated market increased with the increase in size of farm holding because of the low quantity of produce available with farmers of small land holdings.

Time-Wise Sale Pattern

Farmers of all sized groups sold on an average 67.27, 22.58, 7.97 and 2.18 per cent surplus in the first, second, third and fourth quarters of the year, respectively (Table 2).

Table 2: Time Pattern of Disposal of Fenugreek Seed by the Sample Farmers in State of Rajasthan (Quantity in Quintals)

Size Groups	No of Selected Farmers	I Quarter (March to May)	II Quarter (June to Aug.)	III Quarter (Sept. to Nov.)	IV Quarter (Dec. to Feb.)	Total Sale
Marginal	23	65.91*	-	-	-	65.91*
(< 1 ha.)		2.87**	-	-	-	2.87**
		(100)				(100)
Small	35	213.57*	-	-	-	213.57*
(1-2 ha.)		6.10**	-	-	-	6.10**
		(100)				(100)
Semi-Medium	41	284.93*	121.71*	-	-	406.63*
Medium		6.95**	2.97**	-	-	9.92**
(2-4 ha.)		(70.07)	(29.93)			(100)
Medium	34	288.94*	111.88*	69.71*	-	470.53*
(4-10 ha.)		8.50**	3.29**	2.05**	-	13.84**
		(61.41)	(23.78)	(14.81)		(100)
Large	17	299.00*	145.71*	65.71*	37.06*	547.47*
(10 ha. & above)		17.59**	8.57**	3.87**	2.18**	32.20**
		(54.61)	(26.61)	(12.00)	(6.77)	(100)
Overall	150	1139.67*	382.52*	135.00*	36.96*	1694.15*
		7.60**	2.55**	0.90**	0.25**	11.29**
		(67.27)	(22.58)	(7.97)	(2.18)	(100)

Figures in parentheses are the per cent of total sale by the respective size group of farmers;

* total quantity; ** per farm quantity

This showed that large farmers sold low quantity in the first quarter of the year probably because of low prices prevailing in this season due to heavy arrival of the produce. Among the size groups semi-medium, medium and large sized farmers sold 70.07, 61.41 and 54.61 per cent of their total surplus in the first quarter of the year i.e. immediately after harvest to meet the cash needs for domestic necessities as well as for clearing the loan obligations. Sale in the second quarter by the semi-medium, medium and large sized farmers was 29.93, 23.78 and 26.61 per cent of total marketed surplus, respectively. Marginal, small and semi-medium farms did not sale in the third quarter as they had no surplus for disposal. The medium and large sized farmers sold 14.81 and 12.00 per cent of their marketed surplus in this quarter. In the fourth quarter, only large sized farmers sold the produce. This was 6.77 per cent of their total marketed surplus. The results revealed that there was tendency of sale immediately after harvest among the marginal and small farmers. The semi-medium farmers sold the total surplus in the first and second quarters of the years. The medium farmers sold their produce in first three quarters of the year. The large farmers sold their produce in all the four quarters of the year but more quantity was sold in first and second quarter of the year.

Agency-Wise Sale Pattern

The selected farmers adopted following two channels in marketing of their fenugreek:

- Marketing channel adopted for selling fenugreek in village: Producer farmer-village trader-wholesaler-retailer-consumer.
- Marketing channel adopted for selling fenugreek in regulated market: Producer farmer – wholesaler – retailer – consumer.

Out of the 150 farmers selected for the study 92 farmers (61.33 per cent) marketed fenugreek in their own village. Among the size groups cent per cent marginal and small farmers and 60.98 per cent semi-medium and 26.47 per cent medium farmers marketed their fenugreek in the village to the village traders (Table 3). Further interrogation revealed that they preferred to market in village due to lesser quantity of fenugreek available with them as well as due to high unit cost incurred in marketing of small lots of produce in the regulated market. None of the large farmers sold fenugreek in the village. Adoption of village sale by the farmers revealed declining trend with the increase in farm size.

Arrivals of fenugreek in the market started from the month of March and reached to a peak in the month of April and May. It was noted that 38.67 per cent selected farmers brought surplus fenugreek in regulated market for sale. Among the size groups: 39.02 per cent semi-medium, 73.53 per cent medium and cent per cent large farmers brought their fenugreek in the mandi for sale. The study results revealed that number of farmers adopting mandi sale increased in number with increase in farm size.

Table 3: Distribution of Producer Farmers Adopting different Marketing Channels in Marketing of Fenugreek Seed in State of Rajasthan

Marketing Channels & Size Group	Village sale (Producer-Village Trader-wholesaler-Retailer-Consumer)	Mandi sale (Producer-Wholesaler-Retailer-Consumer)	Total
Marginal	23 (100.00)	-	23 (100.00)
Small	35 (100.00)	-	35 (100.00)
Semi-medium	25 (60.98)	16 (39.02)	41 (100.00)
Medium	9 (26.47)	25 (73.53)	34 (100.00)
Large	-	17 (100.00)	17 (100.00)
Total	92 (61.33)	58 (38.67)	150 (100.00)

Figures in parentheses are the per cent of their respective column total

Marketing Costs, Margins and Price-Spread in Marketing

Marketing Charges at Village Level

Marketing costs borne by the producer farmer and the village trader in the sale of fenugreek at the village level has been as: (1) transportation charges -the average cost of transportation of the produce to the village traders shop was estimated ₹ 8.55 per quintal; (2) cost of gunny bags -the charge for a gunny bag was estimated at ₹ 8.40; (3) loading and unloading charges - prevailing charges for this were ₹ 5.00 per bag of 100 kg and was borne by the village trader; (4) weighing charges - at rate of ₹ 1.20 per bag of 100 kg was borne by the village trader; (5) filling and stitching charges - for 100.00 kg bag was ₹ 2.50; (6) Karda - village trader deducted Karda charges from producer-farmers @ 2 kg per bag of 100 kg valued at ₹ 44.46 on an average basis; (7) cleaning and sieving charges - the village-trader incurred ₹ 5.00 per bag carrying 100 kg of fenugreek for its cleaning and sieving.

Marketing Charges at Mandi Level

Cost of performing various functions in sale of fenugreek at mandies is as: (1) transportation charges - the average cost of transportation borne by the farmer was ₹ 32.60 per quintal at mandi; (2) cost of gunny bags - the carrying cost of fenugreek in jute gunny bags per trip from the farmer's field to mandi was estimated at ₹ 8.40 per quintal; (3) loading and unloading charges - the cost of loading and unloading was ₹ 5.00 per 100 kg bag; (4) weighing charges - at ₹1.20 per bag was borne by buyer; (5) filling and stitching charges - the prevailing charges for filling and stitching a bag were ₹ 2.50 per bag of 100 kg; (6) karda - deducted by the wholesaler from the producer-seller @ 2 kg per 100 kg of fenugreek valuing at ₹

44.60 per quintal; (8) VAT (value added tax) - charged from the buyer at the rate of 5 per cent of the value of the produce (fenugreek) by the commission agent for depositing the same in the government account; (9) mandi fee - realized by the mandi samiti @ ₹ 1.60 per ₹ 100 worth of fenugreek and was borne by the buyer; (10) commission - commission agents charged commission at the rate of two per cent of the value of fenugreek from the buyers; (11) cleaning and sieving charges - the wholesalers incurred ₹ 5.00 per bag of 100 kg for cleaning of fenugreek.

Cost of Marketing at Village Sale

Total cost incurred in marketing of fenugreek at village level was noted to be ₹ 403.36 per quintal of fenugreek. Of this ₹ 68.91, 59.60, 237.75 and 37.10 were incurred by the producer, village trader, wholesaler and retailer, respectively. Agency wise break-up of the marketing cost in sale of fenugreek revealed that wholesalers incurred the major share in total marketing costs. Component wise break-up of marketing cost indicated that VAT, mandi fee, commission, cost of gunny bags, transportation cost and karda were the major cost items and these items together accounted for over 86.59 per cent of the total marketing costs (Table 4).

Table 4: Marketing Costs Incurred in Sale of Fenugreek Seed at Village in State of Rajasthan (₹/qtl)

Particulars of Cost	Producer	Village Trader	Wholesaler	Retailer	Total Costs
VAT	-	-	120.00 (50.47)	-	120.00 (29.75)
Commission	-	-	48.00 (20.19)	-	48.00 (11.90)
Mandi fee	-	-	38.40 (16.15)	-	38.40 (9.52)
Cleaning and sieving	-	5.00 (8.39)	-	-	5.00 (1.24)
Filling & stitching	2.50 (3.63)	2.50 (4.19)	2.50 (1.05)	2.50 (6.74)	10.00 (2.48)
Bag and sutli charges	8.40 (12.19)	8.40 (14.09)	8.40 (3.53)	8.40 (22.64)	33.60 (8.33)
Transportation	8.55 (12.41)	32.50 (54.53)	8.75 (3.68)	15.00 (40.43)	64.80 (16.07)
Weighing	-	1.20 (2.01)	1.20 (1.50)	1.20 (3.23)	3.60 (0.89)
Collection for association	-	-	0.50 (0.21)	-	0.50 (0.12)
Karda	44.46 (64.52)	-	-	-	44.46 (11.02)
Loading	5.00 (7.26)	5.00 (8.39)	5.00 (2.10)	5.00 (13.48)	20.00 (4.96)
Unloading	-	5.00 (8.39)	5.00 (2.10)	5.00 (13.48)	15.00 (3.72)
Total	68.91 (100.00)	59.60 (100.00)	237.75 (100.00)	37.10 (100.00)	403.36 (100.00)
	[17.08]	[14.78]	[58.94]	[9.20]	[100.00]

Figures in parentheses are the per cent of total marketing cost incurred by the respective middleman. Figures in square brackets are the per cent of total marketing cost incurred in each channel.

Cost of Marketing at Mandi Sale

The table reveals that selected farmers incurred ₹ 97.96 (26.28 per cent) per quintal in taking produce to mandi. Component wise, transportation and karda were major items of cost which together accounted for 78.67 per cent of total cost. Wholesaler incurred ₹ 237.75 per quintal (67.77 per cent) in mandi sale. Component wise, VAT, commission and mandi fee were major cost items accounting for 87.81 per cent of total cost. Cost of transportation, gunny bags, loading and unloading charges accounted 11.41 per cent of total marketing costs (Table 5).

Wholesaler sold fenugreek to retailers in the mandi. Retailers took the purchased fenugreek to their place of business and incurred ₹ 37.10 per quintal (9.95 per cent) of fenugreek in marketing to the consumers. Producer, wholesaler and retailers together incurred a cost of ₹ 372.81 per quintal in sale of fenugreek. The share of producer, wholesaler and retailer in total cost of marketing was of the order of 26.28, 63.77, and 9.95 per cent, respectively. Comparison of cost incurred in marketing of fenugreek at village and mandi revealed that marketing costs were higher in village sale by

₹ 30.55 per quintal than that in mandi sale.

Table 5: Marketing Costs Incurred in Sale of Fenugreek Seed at Mandi in State of Rajasthan (₹/qtl)

Particulars of cost	Producer	Village Trader	Wholesaler	Retailer	Total Costs
VAT	-	-	120.00 (50.47)	-	120.00 (32.19)
Commission	-	-	48.00 (20.19)	-	48.00 (12.88)
Mandi fee	-	-	38.40 (16.15)	-	38.40 (10.30)
Cleaning & sieving	5.00 (5.10)	-	-	-	5.00 (1.34)
Filling & stitching	2.50 (2.55)	-	2.50 (1.05)	2.50 (6.74)	7.50 (2.01)
Bag & sutli charges	8.40 (8.57)	-	8.40 (3.53)	8.40 (22.64)	25.20 (6.76)
Transportation	32.60 (33.28)	-	8.75 (3.68)	15.00 (40.43)	56.35 (15.12)
Weighing	-	-	1.20 (0.50)	1.20 (3.23)	2.40 (0.64)
Collection for association	-	-	0.50 (0.21)	-	0.50 (0.13)
Karda	44.46 (45.39)	-	-	-	44.46 (11.93)
Loading	5.00 (5.10)	-	5.00 (2.10)	5.00 (13.48)	15.00 (4.02)
Unloading	-	-	5.00 (2.10)	5.00 (13.48)	10.00 (2.68)
Total	97.96 (100.00)	-	237.75 (100.00)	37.10 (100.00)	372.81 (100.00)
	[26.28]	-	[63.77]	[9.95]	[100.00]

Figures in parentheses are the per cent of total marketing cost incurred by the respective middleman. Figures in square brackets are the per cent of total marketing cost incurred in each channel.

Price-Spread in Marketing at Village

Producer got a net price of ₹ 2029 per quintal or 58.81 per cent of the price paid by the consumer in sale of fenugreek at village. Marketing cost incurred by the middlemen was ₹ 403.36 or 11.69 per cent of the consumer's price. Intermediaries earned a total margin of ₹ 1017.64 or 29.50 per cent of the price paid by the consumer in sale of fenugreek. Agency-wise breakup of the gross margin revealed that the village trader, wholesaler and retailer got 6.38, 8.75 and 14.37 per cent of the consumer price, respectively (Table 6 & Figure 1). Further the share of retailer in the total margin has been much higher (48.70 per cent) due to the demand of fenugreek in small quantity by the consumers.

Table 6: Price-Spread in Marketing of Fenugreek Seeds at Village and Mandi Sale in State of Rajasthan

Particulars	Village Sale		Mandi Sale	
	₹/ Quintal	Share in Consumer's ₹ (Per Cent)	₹/ Quintal	Share in Consumer's ₹ (Per Cent)
Producer's Net Price	2029.00	58.81	2279.00	66.06
Cost Incurred by				
Producer	68.91	2.00	97.96	2.84
Village trader	59.60	1.73	-	-
Wholesaler	237.75	6.89	237.75	6.89
Retailer	37.10	1.08	37.10	1.08
Total Cost	403.36	11.69	372.81	10.81
Margin Earned by				
Village trader	220.00	6.38	-	-
Wholesaler	302.00	8.75	302.00	8.75
Retailer	495.64	14.37	496.19	14.38
Total Margin	1017.64	29.50	798.19	23.14
Consumer's Price	3450	100.00	3450	100.00

Price-Spread in Marketing in Mandi

In sale of fenugreek in mandies, producer-farmers got a net price of ₹ 2279 per quintal or 66.06 per cent of the price paid by the consumers. Marketing cost incurred by different middlemen was ₹ 372.81 or 10.81 per cent of

consumer’s price. Middleman in sale of fenugreek earned a margin of ₹ 798.19 or 23.14 per cent of the price paid by the consumers (Table 6 & Figure 2).

Among the various middlemen, retailer’s margin was ₹ 496.19 (14.38 per cent) which was higher by 5.63 per cent than the wholesaler’s margin. Farmers got 7.25 per cent higher share in sale of fenugreek in the mandi than in the village. Margins earned by the middlemen were observed 6.36 per cent high in sale of feungreek in the village sale than the regulated market. From the above discussion, it may be concluded that the net price received by the producer farmer in village sale was lower than that of the mandi sale by the farmer.

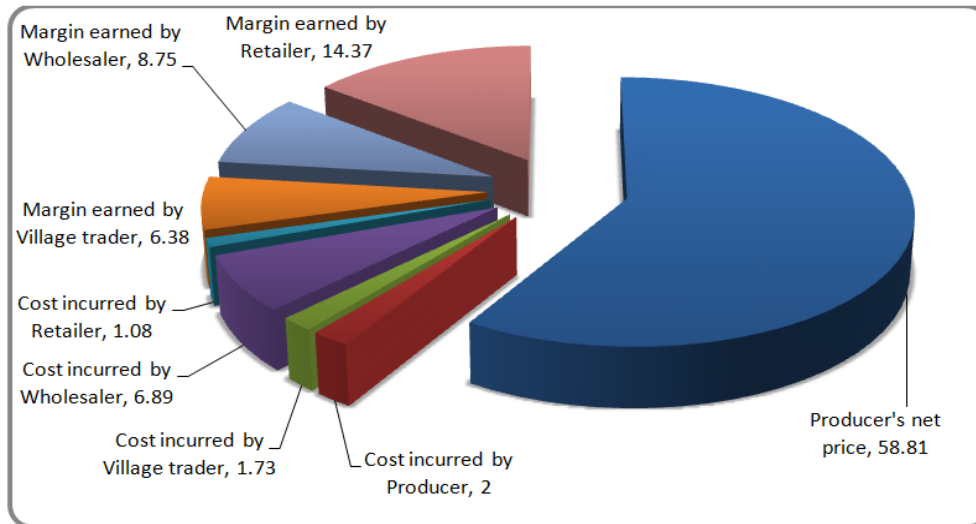


Figure 1: Price-Spread in Marketing of Fenugreek Seeds at Village in State of Rajasthan

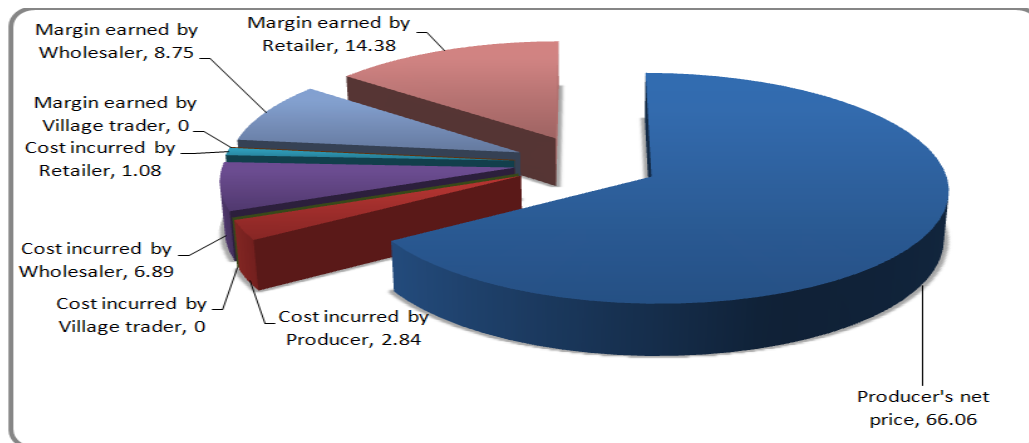


Figure 2: Price-Spread in Marketing of Fenugreek Seeds at Mandi Sale in State of Rajasthan

CONCLUSIONS

The sale of fenugreek in the regulated market increased with the increase in size of farm holding because of the low quantity of produce available with famers of small land holdings. There was tendency of sale immediately after harvest among the marginal and small farmers. The semi-medium farmers sold the total surplus in the first and second quarters of the years. The medium farmers sold their produce in first three quarters of the year. The large farmers sold their produce in all the four quarters of the year but more quantity was sold in first and second quarter of the year. The common marketing

channels observed in sale of fenugreek by the farmers of the study area at village and mandi level were:

- At village level: Producer/farmer-village trader-wholesaler-retailer-consumer
- At mandi level: Producer/farmer-wholesaler-retailer-consumer

The number of farmers adopting mandi sale increased in number with increase in farm size. The net price received by the producer farmer in village sale was lower than that of the mandi sale by the farmer.

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