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Marketing behaviour of cumin in Jodhpur district of Rajasthan

Vinod Kumar Verma✉ and Pradeep Kumar

Department of Agricultural Economics, S.K.N. College of Agriculture, Jobner-303329, District-Jaipur Rajasthan, India.

✉Corresponding author: dr.vinod4u@rediffmail.com

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ABSTRACT

The study pertains to Jodhpur district of Rajasthan state where cumin is cultivated extensively. The study examined various economic aspects of cumin such as assessment marketable surplus, sale pattern, and channels involved in marketing of cumin. Out of which two tehsils namely looni and falodi were selected on the basis of highest production and area. Six villages were selected randomly from selected tehsils. A sample of sixty cumin growers was selected randomly. Primary data were utilized in the study. The primary data utilized in the study were collected from the respondent farmers by personal by interviewing them with the help of a set of pre tested schedule. The marketable and marketed surplus ranged between 95 to 97% on different sized farms. The sample farmers disposed 85.74% surplus cumin seed in the Mandor regulated market and only 14.26% quantity was disposed in the villages to village traders of the surplus cumin seed, 53% was sold in the first quarter immediately after harvest (March to May) and others 47% was marketed in remaining three quarters of the year (Aug. to Feb.). Small sized farmers disposed off their total surplus cumin seed in one lot as against this medium and large sized farmer disposed off their total surplus in two and more lots. Following two marketing channels were identified in the study area for marketing of cumin. Channel I: Producer – Village trader – Wholesaler- Retailer – Consumer. Channel II: Producer –Wholesaler- Retailer – Consumer. Among these channels, 75% quantity of cumin moved through channel –II and 25% quantity was moved through channel-I.

Keywords: Cumin, marketed surplus, sale pattern, Marketing Channels.

Cumin (Cuminum cyminum) is an important spice mainly cultivated for flavoring vegetables, pickles, soups, sauces, cheese and for pleasant aroma. Cumin is one of the important ingredients of human diet throughout the World. It is used in a large number of processed foods as well as in daily food recipes due to its agreeable flavour and aroma. It is also used in seasoning bakery products such as bread and cake. Besides, it has some medicinal importance for human and livestock, and acts as an antioxidant. The cumin oil is used in perfumery as well as for flavoring liquors and cordials.

In India, cumin is mainly cultivated in the states of Gujarat, Rajasthan, Uttar Pradesh, M.P., Karnataka and Tamil Nadu. Rajasthan and Gujarat together account for over 90% of the total cumin production of the country. Rajasthan state with 13.15% production stands second in the production of cumin in the country (Spices Board of India). Cumin seed in Rajasthan state is grown mainly in the districts of Jodhpur, Jalore, Barmer, Nagour, Pali, Ajmer, Sirohi, Bhilwara and Tonk (Commissionerate of Agriculture, Rajasthan). An efficient marketing system is one of the pre-requisites for raising the income of the farmers. The available marketing facilities and different marketing channels bring variation in the net price got by the producer-farmers for the produce disposed of by them. The farmers behaviour with respect to sale of their surplus produce and the pattern of flow of surplus produce in the marketing channels is influenced by number of factors as proximity to market, price of the produce in the market, availability of transport facilities, available storage facilities, finanical position of the farmer, etc. The study on performance of cumin seed

marketing helps in planning and developing the system for efficient marketing for the crop (Agarwal and Singh 2003). In this paper, an attempt has been made to examine the existing marketing behaviour in respect of marketable surplus, sale pattern, marketing channels of cumin seed in Jodhpur district of Rajasthan.

Data and Methodology

The study is confined to the Jodhpur district of Rajasthan as this district occupied first place in production (31.23%) third place in area (18.21%) and of the cumin crop in the state in study period 2008-09 (Commissionerate of Agriculture, Rajasthan). Looni and Falodi tehsil of Jodhpur district have been selected for the study because these tehsils have highest production and area of cumin crop in the district. Out of these tehsils, based on the information of maximum production and sale of cumin, six villages namely Guda vishnoiyan, Looni, Bhandu Kallan, Mandla Kallan, Dadhu and Gumanpura under the command area of Krishi Upaj Mandi Samti, Mandor Jodhpur were selected. The list of the cumin growing farmers in these six villages was prepared along with their size of operational holding during the year 2009-10. After arranging the list of the farmers in the ascending order of size of operational holding these were divided to in three size group viz., small, medium and large. Finally, a sample of 60 cumin growing farmers was randomly selected in proportion to their total number in each size group. Mandor market was selected because of highest arrivals of cumin in this market. Primary data were utilized in the study. The primary data in respect of area under cumin crop and production of cumin, producer's surplus, sale pattern, marketing channels were collected from the respondent farmers by personal by interviewing them with the help of a set of pre tested schedule. The Data were analysed by expressing the data in simple percentage terms

The data were analysed using the appropriate statistical tools and techniques.

Marketable surplus and marketed surplus of cumin crop was worked out using the formula:

MS = P-C

Where:

MS = Marketable surplus,

P = Total production,

C = Total requirements (family and farm).

Marketed surplus was the actual quantity of the produce sold out by the farmers

The marketable surplus was compared with the actual quantity marketed by the farmers i.e. marketed surplus.

The sale pattern of the marketed surplus of cumin with respect to time, place and lots were examined. For studying the sale pattern with respect to time, a year was divided into four seasons (quarters) as under:

Quarters 1: March to May

Quarters 2: June to August

Quarters 3: September to November

Quarters 4: December to February

There were two marketing channel involved in the sale of cumin.

Channel – I- (Producer – Village- trader- Wholesaler-Retailer consumer)

Channel –II- (Producer - Wholesaler-Retailer consumer)

Results and Discussion

Marketable and Marketed Surplus

The marketable and marketed surpluses of cumin on different sized farms of the selected villages were estimated on the basis of total production presented in Table 1. Total production of cumin on the selected farms was 51.95 quintals. Production of cumin on different sized farms viz., small, medium and large sized groups was 8.12, 16.75 and 27.08 quintals, respectively. This shows that production of cumin and farm size were positively associated i.e. with the increase in farm size, area under cumin as well as the total production of cumin had increased. On farm utilization of cumin was 1.67 quintals or 3.21% of total production. On farm utilization of cumin on different sized farms was 0.33, 0.54 and 0.80 quintal on small, medium and large sized farms, respectively. In percent terms, this varied from 2.96% (of total production) on large sized farms to 4.06% on small sized farms. Among the size groups the

Table 1. Marketable and Marketed Surplus of Cumin crop on Sample Farms of Looni and Falodi Tehsil 2009-10

(Quantity in Quintals)

S. No.	Size of group	Total number of farmers	Total production	Utilization			Marketable surplus	Marketed surplus
				Consumed by family	Kept for seed	Total utilization		
1	Small (< 2 ha)	28	8.12 (100)	0.05 (0.86)	0.26 (3.20)	0.33 (4.06)	7.79 (95.94)	7.79 (95.94)
2	Medium (2-4 ha)	22	16.75 (100)	0.12 (0.71)	0.42 (2.51)	0.54 (3.22)	16.21 (96.78)	16.21 (96.78)
3	Large (> 4 ha)	10	27.08 (100)	0.17 (0.63)	0.63 (2.33)	0.80 (2.96)	26.28 (97.04)	26.28 (97.04)
	Overall	60	51.95 (100.00)	0.36 (0.69)	1.31 (2.52)	1.67 (3.21)	50.28 (96.78)	50.28 (96.78)

quantity retained for on farm utilization increased with the increase in farm size but as percentage of total production it exhibited a declining trend. The utilization of seed on the farms accounted for 3.20, 2.51 and 2.33% of total production on small, medium and large sized farms, respectively. The family consumption accounted for 0.86, 0.71 and 0.63% of total production on small, medium and large sized farm groups, respectively. The percentage share in total production of quantity retained for consumption by different sized farm exhibited declining trend with an increase in the size of holding. On the overall basis, farm utilization has been 0.69 and 2.52% for family consumption and seed, respectively. The marketable surplus of cumin crop on an average was 50.28 quintals or 96.78% of total production. Among the different size groups the marketable surplus in absolute as well as in percentage terms increased with the increase in farm size. In percentage terms this being 95.94, 96.78 and 97.04% on small, medium and large sized farms. The marketed surplus was found to be equal to the marketable surplus on all farm size groups of farms. This has been so due to poor retention capacity of the farmers and deterioration in quality with the passage of time (Singh 1999).

Sale Pattern

Sale pattern of the cumin produce has been studied under the fowling heads:

Sale Pattern of Cumin According to Place

Farmers sold the surplus cumin to the local traders of their villages as well as in the nearby regulated market of Mandor. The quantity of cumin marketed by the farmers at different places is shown in Table 2. Farmers of the selected villages sold 85.74% cumin in the regulated market (Mandor) and only 14.26% in the villages. Among the different size groups, small and medium sized farmers sold 37.61 and 26.16% surplus cumin in the village itself. Small sized farmers sold 62.39%, medium sized sold 73.84% and large sized sold 100% of the cumin produces in the market. The large sized farmers sold their total surplus of cumin in the regulated market (Mandor) (Agarwal and Meena 1995).

Table: 2 Place Wise Disposal Pattern of Marketed Surplus of Cumin by the Sample Farmers – 2009-10

(Quantity in quintals)

Place of sale	Farm size groups			Overall
	Small	Medium	Large	
Village sale	2.93 (37.61)	4.24 (26.16)	-	7.17 (14.26)
Market sale	4.86 (62.39)	11.97 (73.84)	26.28 (100)	43.11 (85.74)
Total	7.79 (100)	16.21 (100)	26.28 (100)	50.28 (100)

Figures in parentheses are the percentage of the quantity sold by the respective size group farmers.

Sale Pattern of Cumin According to Time

The quarter (season) wise disposal pattern of sale of cumin by the farmers of different size groups has

been presented in Table 3. The table reveals that 70 to 75% cumin was marketed by the farmers in the first two quarters after harvest and only 25 to 30% was marketed by them in the last two quarters of the year farmers of all size groups sold on an average 53.10, 18.64, 13.74 and 14.52% surplus in the first, second, third and fourth quarters of the year. As such more than 70% produce was sold in the first two quarters and more than 85% in the first three quarters of the year. Among all the size groups small, medium and large sized farmers sold 100, 61.94 and 33.75% of their total surplus of cumin in the first quarter. This shows that total disposal in the first quarter decreased with the increase in farm size. Cent percent quantity by the small sized farmers and 61.94% surplus by the medium sized farmers sold immediately after harvest in the first quarter to meet the cash needs for domestic purposes as well as for clearing the loan obligations. 18% cumin was disposed of by the farmers in the second quarter (June to August). Among all the size groups decreased with the increase in farm size. Small sized farmers do not have any surplus to sell in the third quarter. On other had medium and large sized farmers sold 15.61 and 16.67% in the third quarter, respectively? Only the large sized farmers sold 27.78% in the fourth quarter. The small sized farmers sold their total surplus in the first quarter, medium sized farmers sold in the first three quarters and large sized farmers sold in all the four quarters in the marketing year (Agarwal and Meena 1995).

Sale Pattern According to Number of Lots

The distribution of farmers according to the number of lots in which they disposed of their cumin surplus is shown in Table 4. On an average 80% farmers sold their surplus cumin in one lot, 16.67% two lots and only 3.33% farmers in more than two lots. The quantities of cumin sold by the farmers in one, two and three lots were 72.67%, 18.79% and 8.53%, respective of total marketed quantity. Among all the size groups, cent per cent of small farmers sold their marketed surplus of cumin in one lot. The corresponding figures for sale in one lot for medium sized farmers were 68.18% was sold 73.84% of the produce in the one lot. 50% of the large farmers sold 63.86% of produce in one lot. Only 20% large sized farmers sold 16.32% in more than two lots (Agarwal and Meena 1995) .

Marketing Channels

The producer – farmers sold cumin in the study area both at village site as well as in the nearby regulated market. The marketing channels identified in the sale of cumin at these places are presented in Table 5.

Channel – I (Producer – Village- trader- Wholesaler-Retailer consumer)

The study reveals that producer farmers sold 14.26% of the total marketed surplus of cumin to the village traders. Out of 60 sample farmers, 15 farmers (25%) sold cumin in village. None of the large sized farmers

Table 3. Quarter Wise Disposal Pattern of Marketed Surplus of Cumin by the Sample Farmers (2009-10)

(Quantity in quintals)

Quarter the year	Farm size groups			Overall
	Small	Medium	Large	
I Quarter (March to May)	7.79 (100)	10.04 (61.94)	8.87 .(33.75)	26.70 (53.10)
II Quarter (June to august)	-	3.64 (22.45)	5.73 (21.80)	9.37 (18.64)
III Quarter (September to November)	-	2.53 (15.61)	4.38 (16.67)	6.91 (13.74)
IV Quarter (December to February)	-	-	7.30 (27.78)	7.30 (14.52)
Total	7.79 (100)	16.21 (100)	26.28 (100)	50.28 (100)

Figures in parentheses are the percentage of the total quantity sold by the respective size groups of farmers

sold cumin in the village. According to different size groups eight and seven farmers of small and medium size of holding sold cumin in the village, respectively the reason being that the low quantity of surplus available with them.

Table: 4 Lot Wise Disposal Pattern of Marketed Surplus of Cumin by the Sample Farmers (2009-10)

Farm size groups	Selling in one lot		Selling in two lots		Selling in more than two lots	
	No. of farmers	Quantity (Qtls)	No. of farmers	Quantity (Qtls)	No. of farmers	Quantity (Qtls)
Small (< 2 ha)	28 (100)	7.79 (100)	-	-	-	-
Medium (2-4 ha)	15 (68.18)	11.97 (73.84)	7 (32.82)	4.24 (26.16)	-	-
Large (> 4 ha)	5 (50)	16.78 (63.86)	3 (30)	5.21 (19.82)	2 (20.00)	4.29 (16.32)
Overall	48 (80)	36.54 (72.67)	10 (16.67)	9.45 (18.79)	2 (3.33)	4.29 (8.53)

Figures in parentheses are the percentage of numbers/ quantity of produce in the respective size group

Table 5. Distributions of Producer Farmers Adopting Different Marketing Channels

Marketing channels	Size groups			
	Small	Medium	Large	Total
Channel I (Producer-village trader-wholesaler- retailer-consumer)	8 (28.57)	7 (31.82)	-	15 (25)
Channel III (Producer-wholesaler-retailer-consumer) (in Mandi sale)	20 (71.43)	15 (68.18)	10 (100)	45 (75)
Total	28 (100)	22 (100)	10 (100)	60

Figures in parentheses are the percentage of their respective column totals

Channel–II- (Producer-Wholesaler-Retailer consumer)

Mandor market is one of the main markets of the Jodhpur district for transactions of cumin. Mandor market stands first among the important Mandies of Rajasthan for cumin arrivals. The arrivals of cumin in the Mandi start from the months of February with the peak arrivals in March to May months. More than 85.84% surplus of cumin was brought by 75% farmers in the mandor market. According to different size groups 71.43% small, 68.18% medium and cent percent large farmers brought the produce in Mandi (Agarwal and Meena 1995).

Conclusions

To recapitulate the results, cumin is an important seed spice crop having 97.04% marketable surplus of total production. Farmers market cent per cent surplus immediately after harvest as the colour of seeds deteriorate due to storage. Place-wise sale depicts that 85.74% surplus was sold in the regulated markets and village sale was only 14.26 per cent. Time pattern-wise of sale revealed that 71% surplus was sold in the first two quarters after harvest and 29% surplus was carried in the last two quarters by the medium and large size groups of farmers. There are two marketing channels were identified in sale of cumin by the farmers.

Research Implications

1. Marketing of the farmer sold than produce in the first two quarters of the year to meet and their financial requirements, hear facilities for storage of their produce should is created in the area so that the farmers may store then produce and sell it when the conditions are favourable to them.
2. The storage of the produce is cited with loan facilities so that the farmer is not come petted to make distress sale.

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