

Analysis of Disposal Pattern of Cotton in Sriganganagar District of Rajasthan

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ABSTRACT

Among the major cotton producing districts of Rajasthan Sriganganagar alone contributes 62% of the total cotton produced in the state. The marketing of cotton in Sriganganagar district extends from October to March and negligible arrivals are there in the remaining six months. The behavior of farmer with respect to sale of their produce determines the pattern of flow of the produce in the marketing channel. The farmer's decision regarding the place, time and agency of sale is influenced by a number of factors viz. mode and availability of transportation facilities, storage facilities, proximity to market price of the produce and economic conditions of the farmers. The present paper analyses the disposal pattern of cotton by small, semi- medium, medium and large size farmers with regard to place, time and no. of lots in Sriganganagar district of Rajasthan.

Keywords: Marketing channel, Disposal pattern, cotton, Sriganganagar

INTRODUCTION

Cotton is one of the most important commercial crops, which occupies a prominent place in the world's economy. It constitutes a leading textile fibre in the world accounting for about 85% of the global textile industry (Basu et al., 1992: 365-373). It is a plant of Indian origin and is grown here from the time immemorial. There are some archaeological evidences which show that in about 3000 B.C. the people of Indus Valley Civilization wove and spun cotton for their clothing (Randhawa, 1989: 179)

India is the largest producer of cotton in the world accounting for about 26% of the total cotton produced in the world. It has the distinction of having the largest area under cotton cultivation in the world ranging between 10.9 million hectares to 12.8 million hectares and constituting about 38% to 41 % of the world area under cotton cultivation. The main cotton producing states of India are Gujarat, Maharashtra, Andhra Pradesh, Haryana, Karnataka, Madhya Pradesh, Rajasthan, Punjab and Tamil Nadu. These 9 states account for 99% of the total area and production of cotton on an average.

In terms of area under cotton cultivation and the production of cotton, Rajasthan has not any major stake as it accounts for merely 9% of the total cotton produced in the country, the area under cotton cultivation being 5.17 lac hectares and the production about 16 lac tones. The main cotton growing areas of Rajasthan are Sriganganagar and Hanumangarh in the north, Ajmer and Tonk in the centre, Pali in the west, Banswara, Udaipur, Chittorgarh in the south and Kota, Bundi, Jhalawar in the south east. Ganganagar and Hanumangarh jointly accounts for 90% of the cotton produced in the state.

The area under study i.e. Sriganganagar district alone contributes 62% of the total area under cotton cultivation in Rajasthan. Cotton is grown throughout the district and among the 9 tehsils of the district Sriganganagar occupies the largest area under cotton cultivation followed by Srikanpur and Padampur districts. Mainly 3 varieties of cotton viz. Desi, American and Malvi cotton are produced in different parts of Rajasthan. In Ganganagar mainly American cotton (popularly known as Narma) is grown but apart from this Desi cotton is also produced here. The

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production of American and Desi cotton in 2014-15 is 2.94 lac bales and 0.55 lac bales respectively.

The marketing of cotton in the selected market i.e. Sriganganagr market extends from October to March and negligible arrivals are there in the remaining six months viz. April to September. Generally farmers dispose off their most part of surplus produce immediately after harvest as they are hard pressed for money in addition to the problem of storage space. The financially sound farmers retain their surplus produce for sale in other months than the peak harvest season month of the year. The farmers sell their crop both in the mandi as well as at the village.

The present study analyses the the disposal pattern of cotton by small, semi- medium, medium and large size farmers with regard to place, time and no. of lots in Sriganganagar district of Rajasthan.

METHODOLOGY

The methodology adopted during the study is as follows-

Selection of Market

For conducting field survey in the selection of regulated market multi-stage random sample method has been employed. The market has been selected keeping in view that it serves as the true representative of the area in general. Since the major cotton producing markets of Rajasthan are located in Sriganganagar district therefore Sriganganagar district is selected for the study. There are 15 markets in Sriganganagar district out of which Sriganganagar markets (mandi) has been randomly selected as it is the market with highest arrival of cotton in the state.

Selection of Villages

A few villages of Sriganganagar mandi area have been selected randomly as a sample for survey. Out of a list of main cotton producing villages of Sriganganagar mandi area 4 villages have been randomly selected for the study and the farmers of these villages have been interviewed to analyse the sale pattern of cotton in the area as a whole.

Selection of Farmers

At the final stage of sampling complete list of cotton growing cultivators along with their size of operational holding has been prepared. The farmers have been divided into four size groups- Small (below 2 hectares), Semi-medium (2-4 hectares), Medium (4-10 hectares) and Large (above 10 hectares). In all 90 farmers have been randomly selected in proportion to their total number in respective size groups. The group- wise details of the selected farmers are as follows-

Table 1: Groupwise Distribution of Selected Farmers

S.N.	Selected Villages	Number of selected farmers from different size groups				
		Small (below 2 hectares)	Semi-medium (2-4 hectares)	Medium (4-10 hectares)	Large (above 10 hectares)	Total
1	Bakhtana	2	7	5	8	22
2	Khyaliwala	2	3	10	2	17
3	Naiwala	3	2	20	4	29
4	Banwali	2	7	7	6	22

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	Total	9	19	42	10	90
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Data base

The study is based on primary data for which an intensive survey method has been adopted wherein the personal contacts and interviews have been organized from the selected farmers.

The sale pattern of the surplus cotton with respect to time, place and number of lots have been examined. For studying the sale pattern with respect to time a year has been divided into 3 seasons each of 2 months.

Season 1- October- November

Season 2- December - January

Season 3- February – March

RESULTS AND DISCUSSION

The farmer's behavior with respect to time, place and number of lots in which cotton has been disposed of by them is presented in the following sub- sections:

- (i) Sale pattern according to place
- (ii) Sale pattern according to time and
- (iii) Sale pattern according to number of lots

Sale pattern according to place

Farmers of Sriganganagar district sell cotton in villages as well as in the Krishi Upaj Mandi, Sriganganagar. The quantity of cotton marketed by the selected size group of farmers at different places is presented in table 2

Table 2: Place-wise disposal pattern of cotton by the sampled farmers in Sriganganagar District

Farm-size groups	Desi Cotton			American Cotton		
	Village sale	Market sale	Total sale	Village sale	Market sale	Total sale
Small (below 2 ha)	1.63 (26.59)	4.50 (73.41)	6.13 (100.00)	8.00 (6.71)	111.25 (93.29)	119.25 (100.00)
Semi-medium (2-4 ha)	3.20 (8.27)	35.50 (91.73)	38.70 (100.00)	26.00 (5.97)	409.53 (94.03)	453.53 (100.00)
Medium (4-10 ha)	6.25 (2.73)	222.50 (97.27)	228.75 (100.00)	53.75 (5.25)	969.25 (94.75)	1023.00 (100.00)
Large (above 10 ha)	---	222.50 (100.00)	225.20 (100.00)	---	1281.25 (100.00)	1281.25 (100.00)

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Overall	11.08 (2.22)	487.70 (97.98)	498.78 (100)	87.75 (100.00)	2771.03 (96.93)	2858.03 (100.00)
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Figures in parentheses are percentages of total sale in the respective size group

The farmers of Sriganganagar tehsil sell 98% of Desi Cotton and 97% of American Cotton in Sriganganagar regulated market. Only 2.22% of Desi and 3.07% American Cotton is sold in villages. Among the size groups, small, semi-medium and medium size farmers sell 26.59, 8.27 and 2.73% surplus Desi cotton in the village as against 6.71%, 5.97% and 5.25% sale of American cotton in the villages. Small, semi-medium and medium sized farmers sell 73% to 97% of Desi cotton and 93% to 95% of American cotton in the market. Large sized farmers sell 100% quantity of both Desi and American cotton in the market. Market sale of both Desi and American cotton increased in percentage terms with increase in farm size. The tendency of village sale exists mostly in small sized farmers due to low quantity of cotton available to them. The village sale percentage of total production decreases with the increase in the farm size for both Desi and American cotton.

Sale pattern according to time

The disposal pattern of cotton adopted by the sample farmers of Sriganganagar district has been presented in the table 3. On an average, farmers of Sriganganagar district dispose off 44.26% Desi cotton and 24.93% American cotton during the first two months after harvest (October- November). There exists wide variation in time pattern of sale among the size groups. Small and semi-medium sized farmers market their total surplus of Desi cotton during the first two months as against 53.09% and 24.21% by medium and large sized farmers in this period, respectively.

Table 3: Time pattern of disposal of cotton by the farmers of Sriganganagar District

Farm-size group	Desi Cotton			Total sale	American Cotton		
	I season	II season	III season		I season	II season	III season
	(Oct.- Nov.)	(Dec.- Jan.)	(Feb.- Mar.)		(Oct.- Nov.)	(Dec.- Jan.)	(Feb.- Mar.)
Small (below 2 ha)	6.13 (100.00)	----	----	6.13 (100.00)	119.25 (100.00)	----	----
Semi- medium (2-4 ha)	38.70 (100.00)	----	----	38.70 (100.00)	182.88 (41.99)	252.65 (58.01)	----
Medium (4- 10 ha)	121.45 (53.09)	107.30 (46.91)	----	228.75 (100.00)	215.00 (21.02)	422.00 (41.25)	386.00 (37.73)
Large(above 10 ha)	54.50 (24.21)	92.00 (40.85)	78.70 (34.95)	225.20 (100.00)	195.75 (15.28)	586.00 (45.74)	499.50 (38.99)

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Overall	220.78 (44.26)	199.30 (39.96)	78.70 (15.76)	498.78 (100.00)	712.88 (24.93)	1260.65 (44.09)	885.50 (30.97)	2859.03 (100.00)
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Figures in parentheses are percentages of total sale in the respective size group

About 40 to 44% of Desi and American cotton produce has been disposed of by the farmers in the second season months (Dec.-Jan.). Among the various size groups, the quantity of Desi cotton marketed in this season was 46.91% in medium farmers and 40.58% in large farmers. The quantity of American cotton marketed by semi-medium, medium and large sized farmers is 58, 41 and 46 % respectively during the second season. Only 15.76% Desi cotton and 30.97% American cotton is marketed by the medium and large size farmers during the last season months (Feb.-Mar.).

The results discussed in this sub-section reveal that there exists wide variation in time pattern of disposal of both Desi and American cotton among the different sized farmers of Sriganganagar district. Small and semi- medium sized farmers sell most of their surplus produce immediately after harvest. The medium and large sized farmers carry the produce for sale up to the last season (Feb.-Mar.) due to better holding capacity.

Sale pattern according to number of lots

The pickings of Desi cotton commence from mid-september and continue till early January, whereas the pickings of American cotton commence from early October till January. There are two to three pickings of cotton and the produce of different pickings is disposed off in mixed lot in the study area.

Distribution of farmers according to number of lots in which they market their surplus Desi cotton and American cotton is presented in tables 4 & 5 respectively.

Table: 4 Lot wise Disposal Pattern of Marketed Surplus of Desi Cotton by sample farmers

Farm-size group	One lot		Two lots		More than two lots	
	No. of farmers	Quantity (qtls.)	No. of farmers	Quantity (qtls.)	No. of farmers	Quantity (qtls.)
Small (below 2 ha)	2 (22.22)	6.13 (100.00)	----	----	----	----
Semi-medium (2-4 ha)	6 (31.58)	38.70 (100.00)	----	----	----	----
Medium (4-10 ha)	8 (19.05)	66.25 (28.96)	10 (23.81)	162.50 (71.04)	----	----
Large (above 10 ha)	----	----	5 (22.73)	94.45 (41.94)	4 (20.00)	130 (58.06)
Overall	16 (17.78)	118.08 (22.27)	15 (16.67)	256.95 (51.52)	4 (4.44)	130 (26.21)

Figures in parentheses are percentages of total number/quantity of cotton in the respective size group.

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On an average, 17.78% farmers sell surplus Desi cotton in one lot, 16.67 % in two lots and only 4.44% in more than two lots. The quantity of Desi cotton disposed off in one, two and more than two lots are 22.27, 51.52 and 26.21% respectively. While 21.11, 28.89 and 11.11% farmers sell American cotton in one, two and more than two lots respectively. The quantity of Desi cotton disposed off in one, two or more than two lots are 22.27, 51.52 and 26.21% respectively as against 20.50, 38.27 and 41.23% of American cotton in the respective number of lots. Among the size groups, small sized farmers market total surplus quantity of both Desi American cotton in one lot. The corresponding figure for semi-medium sized farmers selling in one lot was cent percent of Desi cotton and 59% of American cotton.

Table: 5 Lot wise Disposal Pattern of Marketed Surplus of American Cotton by sample farmers

Farm-size group	One lot		Two lots		More than two lots	
	No. of farmers	Quantity (qtls.)	No. of farmers	Quantity (qtls.)	No. of farmers	Quantity (qtls.)
Small (below 2 ha)	7 (77.78)	119.25 (100.00)	----	----	----	----
Semi-medium (2-4 ha)	5 (26.31)	257.38 (59.10)	8 (42.11)	178.15 (40.90)	----	----
Medium (4-10 ha)	6 (14.23)	173.50 (16.91)	13 (30.95)	559.05 (54.65)	5 (11.90)	290.45 (28.35)
Large (above 10 ha)	1 (5.26)	36.00 (2.81)	5 (25.00)	357 (27.86)	5 (25.00)	888.25 (69.33)
Overall	19 (21.11)	586.13 (20.50)	26 (28.89)	1094.20 (38.27)	10 (11.11)	1178.70 (41.23)

Figures in parentheses are percentages of total number/quantity of cotton in the respective size group.

About 19.05% and 14.23% medium sized farmers sell off 28.96% Desi cotton and 54.17% American cotton in one lot. None of the small and semi-medium sized farmers market Desi cotton in two lots while about 42.11% semi-medium sized farmers sell 41% American cotton in two lots. More than 22% large sized farmers market 42% Desi cotton and 25% large sized farmers sell about 28% of American cotton in two lots. Major quantity of both Desi and American Cotton are sold in more than two lots by only 25% of the large sized farmers. Only 12% medium sized farmers sell American cotton in more than two lots.

CONCLUSION

The study reveals that Regulated markets as sale point of cotton are popular among the farmers of Sriganaganar district. More than 97% of cotton is sold in regulated market of Sriganaganar. Only 3% of cotton is sold in villages by the farmers. The market sale of both Desi and American cotton

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increased in percentage terms with increase in farm size. The tendency of village sale exists mostly in small sized farmers due to low quantity of cotton available with them. The study shows that the small and semi-medium sized farmers sell their produce immediately after harvest whereas the medium and large sized farmers carry the produce for sale upto the last season due to better holding capacity. In terms of lot size, medium and large sized farmers dispose off their surplus cotton in two lots as against of small and semi medium sized farmers who sell their surplus cotton in only one lot.

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REFERENCES

1. Basu, A.K., Narayan S.S. and Singh Phundan (1992).," *Cotton Production and Improvement in India*", Agricultural Situation in India, 47 (5),
2. Randhawa, M.S (1980), "*A History of Agriculture in India*", Vol. I, Indian Council of Agricultural Research, New Delhi,