Marketing Behaviour of Jute Farmers in Katihar District of Bihar

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ABSTRACT: The study explored the marketing behaviour of jute farmers in Katihar district of Bihar based on a sample of 90 jute farmers. The sampling was done through SRSWOR method using Multi-stage Sampling Technique from two clusters consisting of three villages in each of two blocks namely Kadwa and Mansahi of Katihar District. The data were collected through Survey Method with help of pre-tested schedule. The sample taken during study consisted of 29 small and marginal farmers (32.33 per cent), 30 semi-medium farmers (33.33 per cent), 21 medium farmers (23.33 per cent) and 10 large farmers (11.11 per cent). The marketing behaviour of jute farmers were analysed in terms of their time of sale, choice of market and place of sale. The data obtained for marketing behaviour of jute farmers from the primary survey was analysed, summarized and tabulated. The study revealed that, time of sale for majority of farmers (81.1 %) sold their produce immediately after harvest and only 18.9 per cent sold on later date. The study reveals that choice of market for them was 56.6 per cent of jute growers sold their produce within the village and 43.4 per cent of them sold outside the village. The place of sale of jute growers varied from the farm gate, Gulab Bagh Mandi (Purnea) and JCI procurement center (Durgaganj and Katihar). Strengthening of marketing system for raw jute was a major challenge in the study area. The constraints faced by the sample jute growers during marketing was also analyzed using Garrett Ranking Technique. The marketing constraints faced by jute growers were mostly shortage of Government Procurement Centers (GS: .69) followed by unorganized market (GS: 51.53) and lack of remunerative prices for jute (GS:51.27).

Keywords: Golden Fibre, SRSWOR, Garrettt Score,

INTRODUCTION

Jute (*Corchorus* spp*.*) is also named as 'golden fiber' and it is also the second most important natural fiber produced in India after cotton (www.nirjaft/publication 2018). There are mainly two most important commercial species of jute, namely White jute (*Corchorus capsularis)* and Tossa jute (*Corchorus olitorius*) (Chakraborty and Bera 2014). The raw jute fiber is commercially used to make carpet, apparel, composites, decorative, furnishings, sacks, mats, bags, tarpaulins and ropes etc. In the present scenario many non-biodegradable fiber have resulted in growing environmental concern whereas jute as a biodegradable and natural fiber is a boon for the society and with its unique characteristics jute deserves to be branded as the 'fiber for the future' (Bag, 2017). Jute is majorly grown in South-Eastern part of Asia and 85 per cent of jute produced in the world is mostly concentrated in Ganges region that covers mostly parts of both India and Bangladesh (Banik and Shil 2016). Out of the total global production of raw jute (29.4 lakh tones). According to Md. Mohiuddin (2015) the demand for fiber for clothing alone will raise from the current 60 million tons up to 130 million ton per year in the year 2050. The total production of raw jute in the country

was 10.14 million bales (1bale = 180 kg jute fiber) in 2018 and it contributed around Rs 7000 crores which is 0.32 per cent of India's total value of agriculture output (Annual Report CRIJAF, 2019)**.** The export value of raw jute products in India was Rs. 2080 crore (Report on jute, Kenaf, sisal, coir and allied fibers FAO, 2016). The cultivation of jute in India is mainly confined to the states of West Bengal, Bihar, Assam, Odisha, Meghalaya, Nagaland and Tripura, out of which West Bengal is the leading producer, contributing 75 per cent of total production of the country (Shamna *et al*., 2017). Bihar is the second largest producer of jute, with cultivation area of 0.835 lakh hectares and production of 1.11 million bales (raw jute) and productivity of 2393 bales / hectare (DES, 2018, Bihar, Patna). The districts of Katihar, Purnea, Saharsa, Supaul and Madhepura are the major jute producing districts of the state.

It is reported that the jute growers are not able to harvest optimum yield and also not getting remunerative prices of their produce. In view of this the study was planned to identify the constraints involved in production and marketing of jute in the study area and suggest policy measures for betterment of the farming community. The area, production and productivity of jute from 2008-09 to 2017-18 has been

presented in Table 1 which reveals that area under jute is declining while production and productivity was showing a fluctuating trend in the state. The major jute producing districts of the state are Katihar, Purnea, Saharsa, Supaul and Madhepura. Table 2 represents area, production and productivity of jute in these districts. Katihar District had the largest area grown for jute (20638 ha) but in terms of production it was the second with production of 20948 bales of jute while Supaul district was the highest producer of jute with 50670 bales and the productivity of jute was highest (6.64 bales/ha) in Madhepura. The Katihar district was selected on the basis of highest area under jute in the state. Further Kadwa and Mansahi blocks of the district were selected on the basis of highest (3869 bales) and lowest (658 bales) production of jute.

Table 1: Area, Production and Productivity of Jute in Bihar (2017-18).

Year	Area ('000 ha)	Production ('000 bales)	Productivity (kg/ha)
2008-09	121	971	1361
2009-10	123	1118	1637
2010-11	127	1164	1642
2011-12	129	1490	2079
2012-13	123	1490	2180
2013-14	104	1498	2571
2014-15	94	1418	2694
2015-16	93	1308	2508
2016-17	91	1356	2671
2017-18	83	1110	2393

Source: DES, Ministry of Agriculture and Farmer welfare, GoI, New Delhi (Status of Raw Jute in India).

Table 2: District-wise Area, Production and Productivity of jute in Bihar (2017-18).

Sr. No.	Name of District	Area (ha)	Production (bales)	Productivity (bales/ha)
1.	Araria	15693	27494	1.75
2.	Katihar	20638	20948	1.02
3.	Kishanganj	14977	20878	1.39
4.	Madhepura	5536	36759	6.64
5.	Purnia	12272	42989	3.50
6.	Supaul	14354	50670	3.53

Source: Bihar at Glance DES, Government of Bihar (2018)

MATERIALS AND METHOD

The study area and the sample farmers were selected using Multistage Sampling Technique . The primary data was collected from 90 sample jute growers from two clusters consisting of six villages and three villages each selected from two blocks namely Kadwa and Mansahi of Katihar District of Bihar state. The blocks were selected purposively on the basis of highest and lowest production of jute. The sample jute growers were selected using Simple Random Sampling without Replacement Method (SRSWOR). The data obtained from the survey was analysed and tabulated to show the results of marketing behaviour of sample farmers. Garrett ranking technique was used to rank the constraints faced by sample jute growers during marketing of jute.

Garrettt's Ranking Technique
In this method, the sample farmers were asked to rank the constraints faced by them in pr marketing of jute separately in order of severity. The rank assigned by them was converted into percent position, from which Garrettt values were obtained using Garrettt's table. Then Garrettt value obtained from Garrettt's table were multiplied to rank given by individual responses and added together. The sum value as obtained was divided by total number of respondents'. Thus mean score obtained from each constraint and ranked by arranging in descending order. The formula used was as follows;

Percentage Position = **100 (Rij – 0.5) / Nj** Where, R_{ij} = Rank for i^{th} item by j^{th} individual and N_j = Number of items ranked by j^{th} individual.

RESULTS AND DISCUSSION

The sample jute growers obtained from study were 32% of marginal & small farmers (29), 33% semi-medium farmers (30), 23% medium farmers (22) and 11% large farmers (10) and has been presented in Table 3.

Table 3: Classification of sample Jute Growers.

Category of Jute Growers	Land holding (ha)	Number of Farmers	
		Number	Percent
Marginal & Small	Less than 2 .00 ha	29	32.22
Semi-Medium	2.00 - 4.00 ha	30	33.33
Medium	4.00 - 10.00ha	21	23.33
Large	More than 10.00 ha	10	11.11
Total		90	(100.00)

A. Marketing Behaviour of jute growers

Table 4 represents Marketing Behaviour of jute growers. Study revealed that 81.1% of sample farmers sold their produce immediately after harvest while only 18.9 per cent sold on later date. 56.6 per cent of the sample growers sold their produce within the village and 43.4 per cent of them sold outside the village. The 56.6 per cent of farmers sold their produce directly at the farm gate, 24.4% sold at the Gula Bagh Mandi (Purnea) and 19% at JCI center. The category wise results in table 4 shows that 89.6% of marginal and small farmers sold the produce immediately after harvest due to lack of storage facilities and majority of them (96.5 %) sold at the farm gate itself and none of them sold at JCI center. Majority of large farmers (80 per cent) sold their produce at JCI center while 38.1 and 3.4% of medium and semi-medium farmers sold at JCI center.

The major marketing functionaries involved in marketing of raw jute were the Village Traders with 56.6 per cent that farmers followed by commission agents (24.4%) and JCI (19%). On category basis marginal & small farmers (96.5%) sold their raw jute through Village Trader, this was particularly due to their urgent requirement of cash to repay debt and lack of money to sell their produce at distant market as they have to bear the transportation cost along with it. The semi-medium farmers with 63.3% were also referred to sell their produce to Village Traders which may be due to same reason. The 47.6 and 33.3% of medium and semi-medium farmers also sold their produce to Commission Agents whereas only 3.5% of marginal & and small and 10 per cent of large farmers sold to Commission Agents. The majority of large farmers 80 per cent sold their produce to JCI whereas, 38.1 per cent of medium and only 3.1% semi-medium farmers while none of the marginal & small farmers sold their produce at JCI center. The results obtained are in concurrence with the findings of Kalita and Bhuyan (2018) who reported the marketing behaviour of jute growers in Assam They found that 95 per cent of jute fibers were sold out by the jute growers and 5 per cent are retained for their domestic purposes. It was also found that 45.3% of raw jute was marketed through primary market, 35.7% through traders while to Jute Corporation of India was low (5%).

Table 4: Marketing Behaviour of sample farmers.

Marketing behaviour of jute farmers	Category of farmers				
	Marginal and Small	Semi-Medium	Medium	Large	Total
	$n_1=29$	$n_2=30$	$n_3=21$	$n_4=10$	n=90
Time of sale					
Immediate after harvest sale	26 (89.6)	21 (70.0)	16 (76.2)	10 (100.0)	73 (100.0)
On later date sale	3 (10.4)	9 (30.0)	5 (23.8)	0 (0.0)	17 (18.9)
Choice of market					
Within the Village	28 (96.5)	19 (63.3)	3 (14.3)	1 (10.0)	51 (56.6)
Outside the Village	1 (3.5)	11 (36.7)	18 (85.7)	9 (90.0)	39 (43.4)
Place of sale					
At Farm gate	28 (96.5)	19 (63.3)	3 (14.3)	1 (10.0)	51 (56.6)
Gulab Bagh Mandi (Purnea)	1 (3.5)	10 (33.3)	10 (47.1)	1 (10.0)	22 (24.4)
JCI (Durgaganj, Katihar)	0 (0.0)	1 (3.4)	8 (38.1)	8 (80.0)	17 (19.0)
Market functionaries					
Village Trader	28 (96.5)	19 (63.3)	3 (14.28)	1 (10.00)	51 (56.60)
Commission Agent	1 (3.5)	10 (33.3)	10 (47.1)	1 (10.00)	22 (24.40)
J.C.I. (Durgaganj, Katihar)	0 (0.00)	1 (3.4)	8 (38.1)	8 (80.00)	17 (19.00)

Note: Figure in Parentheses shows percent to total.

B. Constraints in marketing of jute

The results of constraints in marketing of jute are indicated in Table 5. The study revealed that the shortage of Government Procurement Center was considered as the most important constraint and ranked first by all categories of sample farmers, except the large farmers who found lack of remunerative prices for jute as the most important constraint for them. Lack of remunerative prices (GS: 53.81 and 52.61) was the next most crucial problem for the marginal and small farmers and the semi-medium farmers while for medium farmers it was exploitation by middlemen (GS: 54.69) and no organized market (GS: 57.36) for large farmers. The third important constraint for marginal and small, semi-medium and medium farmers was 'no organized market' with Garrett score of 51.03, 51.71 and 52.08 and in overall basis it was the third most important marketing constraint (GS: 51.53). The constraint of least concern in the study area were low bargaining power of farmer (Garrett Score 37.41) that ranked sixth and presence of subsidiaries, e.g. plastic bags (Garrett Score: 23.12) which ranked seventh. Most

of the farmer received less prices for raw jute because of the exploitation by middle- men in marketing of raw jute (Garrett Score: 47.54) that ranked fourth and high marketing and transportation cost involved during marketing of raw jute ranked fifth (Garrett Score: 46.76) on overall basis. The results obtained are in concurrence with the findings of Ghimire and Thakur (2013) conducted a case study in eastern Terai of Nepal on constraints and opportunity in raw jute production. The study revealed that the major constraints in jute production and processing were unavailability of quality seed (90%), lack of irrigation facility (78%), wilt problem (64%), lack of soil testing facility (62%) and labour problems with (60%). The results obtained for number of constraints in marketing of jute are also concurrent to findings of Sheheli and Roy (2014) who analyzed the constraints of raw jute production in Bangladesh. The study revealed that unstable jute price, high cost of jute cultivation, lack of training facilities, high marketing and transportation cost and shortage of labour at peak time, were the major problems.

Table 5: Constraints of Jute Marketing.

Sr. No.	Marketing constrains	Category of Jute growers (Number)									
		Marginal and Small (n1=29)		Semi-Medium (n2=30)		Medium (n3=21)		Large (n4=10)		Overall (n=90)	
		Garrett Score	Rank	Garrett Score	Rank	Garrett Score	Rank	Garrett Score	Rank	Garrett Score	Rank
1.	Lack of Remunerative Price for jute	53.81	2	52.61	2	45.78	5	57.54	1	51.27	2
2.	Shortage of government procurement centres	55.68	1	54.73	1	59.86	1	56.81	3	55.69	1
3.	Low Bargaining Power	38.9	6	38.23	6	35.73	6	41	6	37.41	6
4.	High Marketing and Transportation cost	47.4	5	45.35	5	51.6	4	45.45	4	46.76	5
5.	Exploitation of middle men involved In marketing	48.12	4	46.21	4	54.69	2	41.54	5	47.54	4
6.	Presence of cheap subsidiaries (Plastic Bags)	24.21	7	22.61	7	26.21	7	21.18	7	23.12	7
7.	Unorganized market	51.03	3	51.71	3	52.08	3	57.36	2	51.53	3

CONCLUSION

It may be concluded from the study that there is a need of proper training for the farmers in adopting the appropriate agro-techniques in production and post-harvest management of jute for increasing the production efficiency of it. Majority of jute growers in the study area were found exploited by middle-men because of lack of market information and less knowledge about different grade of jute. The raw jute cultivated in the state is being exported to neighbouring state West Bengal as there is lack of jute processing mills in the state, (Schemes and Measures to Strengthen Jute Sector PIB, 2017). Therefore strengthening the marketing system of raw jute for ensuring remunerative price for raw jute should also be given at most priority. The government procurement centers should be increased so that farmers will be able to deposit their produce at the time when prices are very low in market. Production of jute diversified products should be encouraged as they will create huge demand for raw jute and an alternative employment opportunity for the state. The findings will be helpful to jute growers in making aware of the present marketing structure and constraints in marketing of jute faced by them and will enable them to develop alternate means to overcome these problems in the study area. The findings of research can be utilized by economists, scientist, extension personnel and administrators to understand the existing position of marketing of raw jute in the study area.

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How to cite this article: Nayak, S., Wadhwani, M. K., Kumari, S. and Susovita, S. (2021). Marketing Behaviour of Jute Farmers in Katihar District of Bihar. *Biological Forum – An International Journal*, *13*(3a): 270-274.