SHORT COMMUNICATION

MARKETING OF PADDY IN MAHASAMUND DISTRICT OF CHHATTISGARH

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Abstract: The study is based on data collected through a survey of 123 farmers and 15 intermediaries/traders carried out during crop year 2010-11 in Mahasamund district of Chhattisgarh. Three stages stratified random sampling technique was adopted for conducting the enquiry from farmers and traders. Cost of paddy marketing for farmers and traders were calculated separately for each channel. The efficiency of the different marketing channels was analyzed by estimating the Shepherd's index. Absolute, percentage and mark-up margin were also calculated for all traders. In the surveyed area, 5 types of middlemen and 4 types of major marketing channels were identified. Channel III was more common in area adopted by 39.02 percent of Farmers for marketing of paddy. Channel IV was observed least efficient with highest marketing cost (Rs. 366.20) and lowest Producer's share in consumer rupee (65.68%). Comparison of Shepherd's index indicated that channel I (12.24) was most efficient followed by channel II (3.28), channel III (3.17) and Channel IV(2.91).

Keywords: Paddy, Marketing cost, Marketing efficiency, Shepherd's Index, Margin.

INTRODUCTION

As rice is grown as principal crop during Kharif and Summer in whole Chhattisgarh. The state is ranked first for ever highest rice production of 61.59 lakh tons during 2010-11 and awarded with Krishi Karman award by the govt. of India. (Krishi Karman Award 2010-11). But the income level of the farmers can be improved only with the better disposal of their produce because marketing is the ultimate stage where the farmers converts all his efforts and investment in cash. Marketing of paddy in state is not properly organized (Gauraha et.al. 2002). Producers of the state are exploited by middlemen at various stages of marketing, resulting in the low share of farmer in the consumer's rupee. Further, the continued adoption of unorganized marketing practices also lead to high marketing costs, margins and price spread. In this situation efficient marketing of paddy will be one of the most important factors which will determine the rural economy of Chhattisgarh.

Mahasamund district of Chhattisgarh is major rice growing area sharing 5.61 per cent of the total area and 7.82 per cent of total production in state. The productivity of rice in the district is 1.97 tons per hectare which is low to national productivity level (Diwakar 2009) but higher than the state's productivity level (Pandey et.al. 2010). Keeping the above view present study was aimed to indentify the major marketing channel of paddy and their marketing efficiency in the study area and also to estimate the marketing cost and margins of the middleman.

METHODOLOGY

Three stages stratified random sampling technique was adopted for conducting the present enquiry. At first stage, out of the total 5 developmental blocks in this district, Mahasamund block was selected randomly. At second stage, 8 villages were selected randomly from selected block. At third stage, list of all the farmers were prepared from the selected villages with their net cultivated area. Thereafter paddy growers were classified into four farm size group, viz. Marginal (Less than 1 ha), Small (1 to 2 ha), Medium (2 to 4 ha) and large (Above 4 ha). Then a sample of 59 marginal, 32 small, 16 medium, 16 large size paddy growers were selected randomly from the universe of 08 selected villages making the sample size of 123 paddy growers.

To study the various aspects of marketing, 5 intermediaries operating at each level of marketing channel were identified and contacted. The primary data pertaining to crop year 2010-11 were collected from the selected farmers, wholesalers, retailers, and various other agencies and people involved in the marketing with the help of a pre structured schedule by personal interview method.

Data and Analytical Framework

Marketable Surplus

MS= P – C
Where,
MS = Marketed Surplus
P = production
C = Total Requirements

Marketed Surplus

It is that portion of the marketable surplus which is actually sold in market.

Marketing Cost

This is the cost incurred either in cash or in kind by the producer-seller and by the various intermediaries

involved in the sale and purchase of commodity till the commodity reaches the ultimate consumer; symbolically it can be written as-

$C= C_f+ C_{m1}+ C_{m2}+ C_{m3}+\ldots\ldots\ldots\ldots+ C_{mn}$

Where,

C= Total cost of marketing of the commodity.

C_f= Cost paid by the producer from the time the produce leaves the farm till he sells it.

C_{mn}= Cost incurred by the i^{th} middleman in the process of buying and selling the product.

Marketing margins

Following marketing margins have been worked out in the study.

I. Absolute margin

$A_{mi}= P_{Ri}- (P_{Pi} + C_{mi})$

II. Percentage margins

It is the share of absolute margin in selling price.

$$P_{mi} = \frac{\left[P_{Ri} - \left(P_{Pi} + C_{mi}\right)\right]}{P_{Ri}} \times 100$$

III. Mark-up

It is the share of absolute margin in buying price.

$$M_i = \frac{\left[P_{Ri} - \left(P_{Pi} + C_{mi}\right)\right]}{P_{Pi}} \times 100$$

Where,

A_{mi} = Absolute margins of i^{th} functionary

P_{mi} = Percentage margin of i_{th} functionary

M_i = Mark-up of ith functionary

P_{Ri} = Total value of receipts per unit (sale price)

P_{Pi} = Purchase value of goods per unit (purchase price)

C_{mi} = Cost incurred on marketing per unit

(Achnarya and Agarwal, 2004)

Producer's Share in Consumer Price

$$\text{Producer's Share} = \frac{\text{Net price Received by Producer}}{\text{Price Paid by the Consumer}} \times 100$$

Marketing efficiency

Marketing efficiency was calculated using Shepherd's approach. It can be given as-

$M.E. = C_P /(P_C + C + A_{mi})$

Where,

M.E. = Market efficiency

C_P = Consumer's purchase price

P_C = Marketing cost of producer

C = Marketing cost of all the intermediaries

A_{mi} = Market margin of the intermediaries

RESULT AND DISCUSSION

Marketing Channels of Paddy

four marketing channels were operated in the area for marketing of paddy. Which were

Channel I.

Producer → Consumer

Channel II.

Producer → Miller → Consumer

Channel III.

Producer → Retailer (Paddy) → Miller → Retailer (rice) → Consumer

Channel IV.

Producer → Retailer (Paddy) →Wholesaler (Paddy) → Miller → Wholesaler (Rice) → Retailer (Rice)→ Consumer

It is evident from Table 1 that most of the producers have been selling their produce through Channels III or Channel IV. Retailers and wholesalers of both (Paddy and Rice) were observed to be main functionaries involved in the marketing of paddy.

Table 1: Distribution of Paddy Producers using different Marketing Channels

S. No.	Marketing Channel	Number of Producers	% of Producers (N=123) adopting Marketing Channel
Channel I	Producer → Consumer	**15**	**12.20**
Channel II	Producer → Miller → Consumer	**28**	**22.76**
Channel III	Producer → Retailer (Paddy) → Miller → Retailer (rice) → Consumer	**48**	**39.02**
Channel IV	Producer → Retailer (Paddy) →Wholesaler (Paddy) → Miller → Wholesaler (Rice) → Retailer (Rice)→ Consumer	**32**	**26.02**
	Total	**123**	**100.00**

Marketing Cost incurred by different Functionaries

The marketing cost incurred by producers was comparatively low in channel III and channel IV because in these channel producer itself performed all other activities like weighing, bagging, transportation etc (Table 2). Rice millers play very important role in marketing of Paddy-Rice because they convert paddy into its edible form i.e. rice. Marketing cost incurred by rice miller was higher in Channel II than Channel III and Channel IV indicating that all costs other than processing cost are same in each channel but processing cost vary, which

is only due to price of paddy. Total marketing cost was found out to be maximum in channel IV followed by in channel III and Channel II and minimum in Channel I indicating that longer channel include higher marketing cost.

Table 2: Marketing Cost of different Functionaries in Marketing of Paddy (Rs/qt.)

S. No.	Market Functionaries		Channel I	Channel II	Channel III	Channel IV
1	Producer	Transportation	5 (5.10)	10 (3.50)		
		Loading and Uploading	4.00 (4.08)	4.00 (1.40)		
		Processing Cost (at huller mill)	30 (30.61)			
		Charge of Gunny bag	2 (2.04)	2 (0.70)		
		Cleaning of rice after Processing	30 (30.61)			
		Labour charges	27 (27.55)	30 (10.52)	10 (3.25)	10 (2.73)
2	Retailer (Paddy)	Weighing charges			3 (0.97)	3 (0.82)
		Transportation			10 (3.25)	5 (1.36)
		Charges of Ginni bag and Sutli			5 (1.63)	2 (0.55)
		Loading and uploading			3 (0.97)	3 (0.82)
		Labour Charges			30 (9.76)	17 (4.64)
3	Whole-saler (Paddy)	Transportation				5 (1.36)
		Market Charges				5 (1.36)
		Labour Charges				10 (2.73)
		Weighing charges				1 (0.27)
		Other charges				2 (0.55)
4	Miller	Transportation				
		Market taxes		2.2 (0.77)	2.2 (0.71)	2.2 (0.60)
		Labour Charges		30 (10.52)	30 (9.76)	30 (8.19)
		Processing Cost		197 (69.07)	147 (47.85)	172 (46.98)
		Charges of Ginni bag		5 (1.75)	5 (1.63)	5 (1.36)
		Weighing and Filling Charges		5 (1.75)	5 (1.63)	5 (1.36)
5	wholesaler (Rice)	Transportation				10 (2.73)
		Labour Charges				30 (8.19)
		Other charges				2 (0.55)
6	Retailer (Rice)	Transportation			20 (6.51)	10 (2.73)
		Market Charges			2 (0.65)	2 (0.55)
		Labour Charges			30 (9.76)	30 (8.19)
		other charges			5 (1.63)	5 (1.36)
Total			**98 (100)**	**285.2 (100)**	**307.2 (100)**	**366.2 (100)**

Note: Figures in parentheses indicate percentage to total

Price Received by different Functionaries

It is evident from the table no. 3 that price received by different functionaries in channel III and channel IV has been found to be comparatively higher than the other channels. The producers who have been disposing off their produce directly to the consumer received better prices as compared to those who sold their produce to other functionaries. Prices paid by retailer (paddy) in channel III and Channel IV were quiet low. The prime reason for offering so low prices has been found to be the poor bargaining power of the producers and forced sell (just selling the produce no matter what price they are getting) of product as farmers has already taken money in advance from them.

Marketing Margins

Channel I was most efficient channel for producers as they were earning highest margin in this channel. Markup of miller in Channel II was highest comparing all channels and minimum in case of retailer (paddy). (Table no 3).

Producer's share in Consumer's Rupee

From Table 3 it is evident that out of all the intermediaries involved in marketing of paddy, producer's share in consumer's rupee has been found to be highest in channel I whereas it was found to be minimum in channel IV.

Marketing Efficiency of different Channels

From Table 4 it was clear that the producer's price was highest in channel I and it was lowest in channel III and channel IV. So it was supposed to be the efficient channels and the Table 4 reveals the same results. Shephard's index of marketing efficiency was calculated for all four channels. Table 4 shows that channel I was the most efficient marketing channel with efficiency of 12.24 followed by channel II with efficiency of 3.28. The least efficient channel was channel IV with marketing efficiency of 2.71 because of high margins earned by the Retailers and wholesalers.

CONCLUSION

In the surveyed area, 5 types of middlemen and 4 types of major marketing channels were identified. Channel III was more common in area adopted by 39.02 percent of farmers for marketing of paddy. Channel IV was observed least efficient with highest marketing cost (Rs. 366.20) and lowest Producer's share in consumer rupee (65.68%). Comparison of Shepherd's index indicated that channel I (12.24) was most efficient followed by channel II (3.28), channel III (3.17) and Channel IV(2.91). Low efficiency of the Marketing Channel III (adopted by the 39.02 percent of the farmers) in this area is indication of the inefficiency of paddy marketing as the major chunk of the production is enjoyed by the middleman.

Table 3: Marketing Costs, Margins and Price Spread (Rs. /Qtl.) under Various Identified Marketing Channels:

	Market Functionaries	Price Received	Price paid	Marketing cost	Marketing cost in % of consumer rupee	Producer's Price	Absolute Margin	Percentage margin	Percentage mark-up	Producer's share in consumer's rupee
Channel I	Producer	1200		98	8.17	1102				91.83
	Consumer		1200							
Channel II	Producer	950		46	3.54	904				
	Miller	1300	950	239.2	18.4		111	8.52	11.68	69.54
	Consumer		1300							
Channel III	Producer	900		10	0.77	890				
	Retailer (Paddy)	960	900	51	3.92		9	0.94	1.00	68.46
	Miller	1200	960	189.2	14.55		50.8	4.23	5.29	
	Retailer (Rice)	1300	1200	57	4.38		43	3.31	3.58	
	Consumer		1300							
Channel IV	Producer	900		10	0.74	890				65.68
	Retailer (Paddy)	945	900	30	2.21		15	1.59	1.67	
	Wholesaler (Paddy)	985	945	23	1.70		17	1.73	1.80	
	Miller	1250	985	214.2	15.81		50.8	4.06	5.16	
	Wholesaler (Rice)	1300	1250	30	2.21		20	1.54	1.6	
	Retailer (Rice)	1355	1300	40	2.95		15	1.11	1.15	
	Consumer		1355							

Table 4 : Marketing Efficiency of Different Distribution Channels of Paddy Marketing:

S. No	Particulars	Channel I	Channel II	Channel III	Channel IV
1	Marketing costs incurred by producers	98	46.00	10	10

2	Marketing costs incurred by retailer (paddy)			51	30
3	Marketing margin of retailer (paddy)			9	15
4	Marketing cost incurred by wholesaler(paddy)				23
5	Marketing margin of wholesaler (paddy)				17
6	Marketing cost incurred by miller		239.20	189.2	214.2
7	Marketing margin of miller		110.80	50.8	50.8
8	Marketing cost incurred by wholesaler(Rice)				30
9	Marketing margin of wholesaler (Rice)				20
10	Marketing cost incurred by retailer (Rice)			57	40
11	Marketing margin of retailer (Rice)			43	15
12	Total costs and margins	98	396.00	410	465
13	Consumer's Purchase price	1200	1300.00	1300	1355
14	Shephard's index of marketing efficiency(13/12)	12.24	3.28	3.17	2.91

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