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Critical Analysis of The Supply Chain Management of Pulses

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Abstract— The present study was done to find out the supply chain challenges and issues of pulse processing industry. The findings are based on case study, conferences data collected in the designed schedule/ questionnaires from 60 processing units, traders, farmers and commission agents. The study recommends that to meet consumer demand. for pulses which is the best evaluation of the channel of distribution i.e Producer-Village Trader-Miller- Retailing of Pulses-Consumer.

I. INTRODUCTION

Pulses are also marketed as a raw whole as well as dehusked split. The selected farmers reported that their produce is sold in markets, to agents of Dal mills and traders. The farmers marketed pulses as grains. The ultimate product sold is Dal. Cleaned and well graded whole grains fetch higher price. For dehusked splits, better packaging is required to reduce post milling losses and to increase acceptability. The marketing of pulses encompasses the wholesale and retail markets. Numerous layers exist in the marketing chain between farmers and consumers.

1.1 Marketing Channels

A characteristic feature of the marketing channel is the large number of intermediaries between the producers and the consumers.

.The study outlined that the main marketing channels for the pulses are.[1]

Channel No-1: Farmer/Producer > Village trader> Dal miller >Whole seller>Retailer>Consumer

Channel No-2: Producer> Village trader> Dal miller>Retailing > Consumer

Channel No-3: Farmer/Producer> Village trader> Commission agent> Dal Miller> Whole seller > Retailer> Consumer

1.2 Institutional Marketing Channels

The institutional arrangement for marketing activities include provision for procuring the pulses by providing minimum support prices to the farmers through agencies like National Agricultural Cooperative Marketing Federation (NAFED). The main institutional marketing channels for the pulses as prevailing in most parts of the country include the following:

1- Farmer/Producer > procuring agency> Dal miller> consumer.
2- Producer> procuring agency > Dal miller > whole seller> retailer> consumer.
3- Producer> procuring agency> Dal miller > retailer > consumer.

Following study is from tur pulse purchased through various channels and rates of raw Tur are assumed to be Rs 40/Kg.

Channel No -1

Table No-1: Share of producer in consumer price

Sr. No	Particulars	Rs/qty	% to next link purchase price
1	Producers sale price/village traders	4,000	
2	Cost incurred by producer/farmer		
	A Cost of gunny bags	2 5	0.59
	B Loading	3	0.072
	C Unloading, weighing and cleaning	8	0.19
	D Transportation	39	0.92
	Total cost(A+B+C+D)	75	1.78
3	Village traders margin	125	2.98
4	Village traders selling price	4,200	100.00
5	Processors purchase price	4,200	77.06
6	Fixed operational cost of Dal mill	738.55	13.55
7	Processors margin	511.45	9.38
8	Processors selling price	5,450	100.00
9	Wholesalers purchase price	5 ,450	97.12
10	Cost incurred by wholesaler		
	A Labor charges	10	0.178
	B Weighing	2	0.035
	C Cleaning and packing	10	0.178
	D Transportation	70	1.25
	Total Cost (A+B+C+D)	92	1.64
11	Wholesalers net margin	70	1.25
12	Wholesalers selling price	5,612	100.00
13	Retailers purchase price	5,612	97.48
14	Cost incurred by retailer		
	A Labor charges	25	0.43
	B Cleaning and packing	10	0.17
	C Transportation	40	0.70
	Total cost (A+B+C)	75	1.30
15	Retailers net margin	70	1.21
16	Retailers selling /consumers	5,757	100.00
17	Producers share in consumer price		70

(Figures are in Rs)

Analysis: Consumer getting Dal @ Rs 5757 /100 Kg.

Channel No -2

Table No-2: Share of producer in consumer price

Sr. No	Particulars	Rs/qty	% to next link purchase price
1	Producers sale price/village traders	4,000	
2	Cost incurred by producer/farmer		
	A Cost of gunny bags	2 5	0.59
	B Loading	3	0.072
	C Unloading, weighing & cleaning	8	0.19
	D Transportation	39	0.92
	Total cost(A+B+C+D)	75	1.78
3	Village traders margin	125	2.98
4	Village traders selling price	4,200	100.00
5	Processors purchase price	4,200	74.84
6	Fixed operational cost of Dal mill	738.55	13.16
7	Processors margin	511.45	9.12
8	Processors selling price	4,450	79.30
9	Cost incurred for Packaging and retailing		
	A Labor charges	10	0.17
	B Weighing	2	0.035
	C Cleaning and packing	10	0.178
	D Transportation	70	1.24
	Total Cost (A+B+C+D)	92	1.64
10	Outlets net margin	70	1.24
11	Processor selling price	5,612	100.00
12	Malls/Retailers purchase price	5,612	98.34
13	Cost incurred by retailer		
	A Labor charges	25	0.43
	Total (A)	25	0.43
14	Retailers net margin	70	1.22
15	Malls/Retailing selling /consumers	5,707	100.00
16	Producers share in consumer price		70

(Figures are in Rs)

Analysis: Consumer getting Dal @ Rs 5707 /100 Kg.

Channel No -3

Table No-3: Producer share in consumer price[2]

Sr No	Particulars	Rs/Qty	% to the next links purchase price
1	Producers sale price/village traders	4,000	
2	Cost incurred by producer/farmer		
	A Cost of gunny bags	25	0.59
	B Loading	3	0.072
	C Unloading, weighing and cleaning	8	0.19
	D Transportation	39	0.92
	Total cost(A+B+C+D)	75	1.78
3	Village traders margin	125	2.98
4	Village traders selling price	4,200	100.00
5	Processors purchase price	4,200	75.69
6	Cost incurred by processor		
	A APMC tax and cess	55	0.99
	B Agents commission	44	0.79
	C Fixed operational cost of Dal mill	738.55	13.30
	Total cost (A+B+C)	837.55	15.09
7	Processors margin	511.45	9.21

8	Processors selling price	5,549	100.00
9	Wholesalers purchase price	5,549	94.78
10	Cost incurred by wholesaler		
	A Labor charges	10	0.17
	B VAT	142	2.42
	C Weighing	2	0.034
	D Cleaning and packing	10	0.17
	E Transportation	70	1.19
	Total Cost (A+B+C+D+E)	234	3.99
11	Wholesalers net margin	72	1.22
12	Wholesalers selling price	5,855	100.00
13	Retailers purchase price	5,855	97.58
14	Cost incurred by retailer		
	A Labor charges	25	0.41
	B Cleaning and packing	10	0.16
	C Transportation	40	0.66
	Total cost (A+B+C)	75	1.25
15	Retailers net margin	70	1.16
16	Retailers selling /consumers	6,000	100.00
17	Producers share in consumer price		66

Analysis: Consumer getting Dal @ Rs 6000 /100 Kg. (Figures are in Rs)

Table No-4: Channel No-1 Cost incurred for selling (Margin)[3]

Sr. No	Particulars	Selling	Marketing	Margin Received
1	Producer	4000	53	-
2	Village Trader	4200	75	125
3	Processor	5450	739	511
4	Whole seller	5612	92	70
5	Retailer	5757	75	70
	Total			981

Source: Field data
(Figures in Rupees)

Table No-5: Channel No-3 Cost incurred for selling (Margin)

Sr. No	Particulars	Selling	Market	Margin
1	Producer	4000	-	-
2	Village Trader	4200	75	125
3	Processor	5549	838	511
4	Whole seller	5855	234	72
5	Retailer	6000	75	70
	Total			778

(Figures in Rupees)

Table No - 6: Comparison of producer shares in consumer price

Channel -1				Channel-3				Channel -2			
No	Part.	Rs	%	No	Part.	Rs	%	No	Part.	Rs	%
1	Producer Share	4000	70	1	Producer Share	4000	66	1	Producer Share	4000	70
2	Cost of sell	981		2	Cost of sell	1222		2	Cost of sell	931	
3	Margin	776		3	Margin	778		3	Margin	776	
	Total	57			Total	60			Total	57	

		5 7				0 0				0 7			

Case-1: The producer's share in consumer price for Channel (1 and 2) is 70 %.

Conclusions: It may be concluded on the basis of the above analysis, that the Channel -1 is the Consumer getting the price for Rs 5757/- and the producer's share 70% in this channel.

Case -2: In Channel-2 the farmers / producer sold one quintal of produce at Rs 4000 to village traders who purchased and sold the quantum of produce at Rs 4200 including cost incurred for purchase of gunny bag, loading, unloading and transportation Rs75 and trader's margin of Rs 125. The village trader sold the produce to processor at Rs 5549, which takes into account, APMC tax and cess, agent's commission and fixed cost of Dal mill Rs 838 and processor's margin of Rs 511. The processor sold the produce to whole sellers at Rs 5855 which is inclusive of marketing cost i.e. cost of labor, weighing, cleaning, packaging and transportation Rs 234 and processor's margin of Rs 72. The processor sold the produce to retailer at Rs 6000 of which marketing cost and whole seller's margins are Rs 75 and 70 respectively. Thus, consumers purchase the produce at Rs 6000 per quintal and producer share is 66 %.

Case 3: It may be concluded on the basis of the above analysis, that the Channel No 2 is the Consumer purchase the product for Rs 5707/- and the producer's share 70% in this channel.

Conclusion: Studying all the three cases we prefer that Channel No-2 is benefit to the farmer/ producer and also the miller. The best channel evaluated is Producer-Village Trader-Miller- Retailing of Pulses-Consumer.

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