

# An Economics Analysis of Price-Spread in Marketing of Rapeseed-Mustard

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**Abstract**—As per the producer net price of marketing channel '**Producer – Processors**', was the best channel than the remaining marketing channels. The input-output ratio in the cultivation of rapeseed-mustard was found to be more than one indicating investment in the rapeseed-mustard production was remunerative in the study area. Under the marketing channels of '**Producer – Village merchant – Wholesaler – Processors**' three market agencies were involved in village merchant, wholesaler and processors. In this channel more marketing margin was received by wholesaler Rs. 54 than the remaining agencies. Although more marketing cost was paid by the wholesaler in term of mandi tax and packing charges. In the marketing channel, (**Producer – Wholesaler – Processors**) producer directly sold the rapeseed-mustard to wholesaler and received Rs.2235 net price More margin was received by the wholesaler Rs. 75.00, while more cost paid by the wholesaler in form of mandi tax. In the marketing channel (**Producer – Processors**) only one market agent was involved. Producer directly sold the rapeseed-mustard to processors and the producer received net price of Rs. 2295. Regarding producer share in consumer rupee, it was higher (96.23%) in '**Producer – Processors**' channel followed by the marketing channel (**Producer – Wholesaler – Processors**) (88.16%) and '**Producer – Village merchant – Wholesaler – Processors**' (85.51%) marketing channels. As far as price spread is concerned more amount was observed under (**Producer – Village merchant – Wholesaler – Processors**) channel (Rs. 250) than (Rs. 200) and the (**Producer – Processors**)(Rs. 60) marketing channels, which indicated that in the long channel (**Producer – Village merchant – Wholesaler – Processors**) the difference was more between price received by producer and price paid by consumer. Thus it could be concluded that for producer the marketing channel (**Producer – Processors**) was the best channel in the study area. Producers share in consumer rupee (retailer) was also found maximum (96.23) in the marketing channel (**Producer – Processors**) than the remaining marketing channel.

**Keyword:** Marketing, Rapeseed-mustard cost, Margins, Price spread.

## 1. INTRODUCTION

India is one of the largest producers of rapeseed and mustard in the world and contributing about 19.29 per cent with area of 6.8 million hectares in 2012-13 crop season [1] (USDA,

2013). Rapeseed-mustard is the second most important edible oilseed crop in India after groundnut. Mustard is one of the major sources of oil and meal to India. Mustard oil is traditionally the most important oil for the Northern, Central and Eastern parts of the country.

Gill and Singh (1989) studied pattern of market arrivals and prices of groundnut in Punjab and observed that the majority of the farmers sold their groundnut produce at a lower price in the post harvest period thereby lowering their income. The major reason which compelled the farmers to sell their produce was the low retention power due to non-storability and immediate cash requirements. It was observed during the investigation that the traders took benefit of this situation. They purchased most of the groundnut produce from the market at the lowest prices and sold the groundnut to the retailers (roasters) and the ultimate consumers at higher prices, thereby increasing the price spread and lowering the share of farmers in the consumer rupee [2].

Jain *et al.* (1991) attempted to estimate the price spread and marketing efficiency of soybean in Sehore district of Madhya Pradesh. In his study, it was observed that the three marketing channels were existing in the study area. It was revealed from the study that the average producers share in the consumers rupee was highest (72.34%) in channel II (through whole sale dealers) and (70.2%) channel I (through village merchant) thus, though channel III (directly to consumers), producers get maximum margin in consumers rupee, than rest of the channels [3].

The study of Banafar *et al.* (2006) examined the marketing cost and price spread under different marketing channels in the mustard-growing area of Ambikapur of Chhattisgarh in India. Three village traders, four wholesalers and six retailers of mustard grain, four wholesalers of mustard oil and cake and five retailers of mustard oil and cake, were selected randomly from the Ambikapur block. The most efficient marketing channel for mustard is Channel II (*producer-processors of*

wholesale dealers of mustard oil and cake - retailers of mustard oil and cake-consumers) followed by Channel III (producer-wholesale dealers-processor-wholesale dealers of mustard oil and cake-retailers of mustard oil and cake-consumer) and Channel I (producer-village merchant-wholesale dealers-processor-wholesale-dealers of mustard oil and cake-retailers of mustard oil and cake-consumers). The producer's share in the consumer's rupee was higher in Channel II [4].

In a study of price spread in marketing of fig (*Ficus carica* Linn.) in Maharashtra with cross sectional random sample of 60 fig growers from Aurangabad market and Gultekadi market yard from Pune district, following marketing channels are studied viz., (I) Producer - Consumer, (II) Producer - Retailer - Consumer, (III) Producer - Commission Agent-cum-wholesaler - Retailer - Consumer. Maximum percentage of produce of fig growers was sold through channel-II. Marketing cost was maximum in channel-III as compared to other channels. Producer's share in consumer's rupee was maximum in Channel-I, while it was minimum in Channel-III. (Ghulghule *et al.*, 2009) [5].

The study by Patel *et al.* (2012) revealed that, in marketing of mustard crop, the producer's net receipt was Rs. 1592.55 per quintal in Palanpur market, which was equivalent to 87.54 per cent of consumer's price. The total marketing costs incurred by the producer was Rs. 32.45, (1.78 per cent) of consumer's price. The wholesalers enjoyed the margin of Rs.62.63 per quintal (3.44%) of consumer's price and his total marketing cost was Rs. 45.62 per q (2.51%) of consumer's price [6].

Hence this study attempted to study the price spread of rapeseed-mustard across the different marketing channels. The various costs were computed for production, marketing and processing of rapeseed-mustard.

## 2. METHODOLOGY

The study was carried out in Morena district, one of the important rapeseed-mustard producing districts in the Madhya Pradesh. A list of markets in Morena district was prepared, from these markets, one market *i.e.*, *Krishni Upaj mandi*, Morena was selected on the basis of highest rapeseed-mustard arrivals among all the markets of the district. A list of rapeseed-mustard growing villages was prepared with respect to the Morena market. A list of rapeseed-mustard growing farmers were divided in to three size groups, *viz.*, small (less than-2 ha), medium (2 to 4 ha) and large (more than 4 ha) based on their size of farm holdings. In each group, five farmers and a total of fifteen farmers from each village were selected at random, making a total of 225 cultivators in fifteen selected villages. Both primary as well as secondary data were collected. The secondary data were collected on hectare, production marketing and processing, arrivals and prices of rapeseed-mustard in district.

**Marketing channels:** The information collected from farmers, village traders and market traders, regarding disposal pattern and purchases was pooled together to identify the marketing channels prevailing in rapeseed-mustard trade.

**Marketing costs:** Marketing cost includes all the marketing charges paid by producer, wholesalers, and retailers of rapeseed-mustard and rapeseed-mustard oil from local assembling to retailing centre in the marketing processes.

**Marketing channels:** The study area following three marketing channels was identified:

Channel I- Producer-Village merchant-Wholesaler-Processors

Channel II- Producer-Wholesaler-Processors

Channel III- Producer-Processors

**Market margins:** It includes profit of margins kept by different market functionaries.

**Price-spread:** Producer's share in consumer's rupee, It is the price received by the farmer expressed as a percentage of the retail price (*i.e.* the price paid by consumer):

$$P = \left( \frac{C-M}{C} \right) \times 100$$

Where,

P = Producer's share in the consumer's rupee

C = Price paid by ultimate consumers

M = Marketing costs and margins

## 3. RESULT AND DISCUSSIONS

Since the objective of this research study was to determine price spread of rapeseed and mustard in different marketing channels, the costs incurred in production, packing, weighing, loading, transporting, unloading, storing and other expenses including mandi fees were computed for farmers, village merchants and wholesalers. Purchase prices at different marketing channels were also recorded. Then the margins and price-spread of rapeseed-mustard across marketing channels and the share of consumer's rupee were computed. The results are presented in Table 1 and the bar diagram is presented in Fig.1.

**Table 1: Marketing costs, margins and price spread in different marketing channels**

S. No.	Particulars	Costs incurred in Rupees		
		Channel I 2212	Channel II 2235	Channel III 2295
1.	<b>Producer net price</b>			
2.	<b>Cost incurred by producer</b>			
A	Packing charges	5	10	10
B	Loading & unloading	3	3	3
C	Transportation charges	-	20	25
D	Weighing charges	2	2	2
E	Mandi fees	-	-	-
F	Storage charges	-	5	5
G	Other charges	-	10	15
	<b>Total</b>	<b>10</b>	<b>50</b>	<b>60</b>
	Purchase price of village merchant	2227	-	-
3.	<b>Cost incurred by village merchant</b>			
A	Packing charges	10	-	-
B	Loading & unloading	3	-	-
C	Transportation charges	15	-	-
D	Weighing charges	3	-	-
E	Mandi fees	-	-	-
F	Storage charges	5	-	-
G	Other charges	20	-	-
	<b>Total</b>	<b>56</b>	-	-
	Village merchant margin	49	-	-
4.	<b>Cost incurred by wholesaler</b>			
	Purchase price of wholesaler	2385	2310	
A	Packing charges	10	10	-
B	Loading & unloading	3	3	-
C	Transportation charges	-	-	-
D	Weighing charges	3	3	-
E	Mandi fees	35	34	-
F	Storage charges	5	5	-
G	Other charges	25	20	-
	<b>Total</b>	<b>81</b>	<b>75</b>	-
	Wholesalers' margin	54	75	-
	Purchase price of processors	2587	2535	2385
5.	Producers share in consumer rupee (%)	85.51	88.16	96.23
6.	Price spread (%)	250 (14.49)	200 (11.84)	60 (3.77)

Three marketing channels existed in the study area for marketing of rapeseed-mustard. Farmers sell their produce through all the channels. Only small farmers preferred the 1<sup>st</sup> channel (sale through village merchant) as they sold larger quantity to village merchant and few medium and large farmers also like to sell small quantities of the rapeseed-mustard through village merchants. Generally the farmers, who had large quantity of rapeseed mustard, preferred sale through wholesaler as well as to processors. While most of large farmers preferred to sell the rapeseed-mustard through wholesalers in the *krishi upaj mandi*.

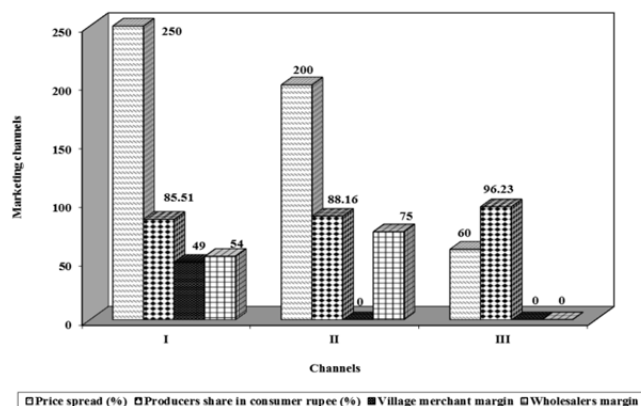
Under the 1<sup>st</sup> marketing channel (Producer–Village merchant–Wholesaler–Processors) three market agencies were involved: the village merchants, wholesalers and processors. In the marketing channel (Producer–Village merchant–Wholesaler–Processors) more marketing margin was received by wholesaler Rs. 54 than the remaining agencies. Although more marketing cost was paid by the wholesaler in term of *mandi* tax and packing charges.

In the 2<sup>nd</sup> marketing channel, (Producer–Wholesaler–Processors) producer directly sold the rapeseed-mustard to wholesalers and received Rs. 2235 net price Results in the table also revealed that more margin was received by the wholesalers Rs. 75.00 while more cost paid by the wholesalers in form of *mandi* tax.

In the 3<sup>rd</sup> marketing channel (Producer–Processors) only one market agent was involved. Producer directly sold the rapeseed-mustard to processors and the producer received a net price of Rs. 2295.

Regarding producer's share in consumer's rupee, it was higher (96.23%) in the 3<sup>rd</sup> marketing channel (Producer–Processors) followed by 2<sup>nd</sup> marketing channel (Producer–Wholesaler–Processors) (88.16%) and the 1<sup>st</sup> marketing channel (Producer–Village merchant–Wholesaler–Processors) (85.51%) marketing channels. As far as price spread is concerned more amount was observed under the 1<sup>st</sup> marketing channel (Producer–Village merchant–Wholesaler–Processors), (Rs. 250) than in 2<sup>nd</sup> marketing channel (Producer–Wholesaler–Processors) (Rs. 200), and in the 3<sup>rd</sup> marketing channel (Producer–Processors), (Rs.60). The results indicated that in the marketing channel (Producer–Village merchant – Wholesaler–Processors), the difference was more between price received by producer and price paid by consumer.

Thus it can be concluded that for producer the marketing channel (Producer–Processors) was the best channel in the study area.

**Fig. 1: Marketing costs, margins and price spread in different marketing channels**

Producer's share in consumer's rupee (retailer) was also found to be the maximum (96.23) in this direct marketing channel (Producer–Processors) than the remaining marketing channels.

#### 4. CONCLUSION

As per the producer's net price the marketing channel (Producer–Processors) was the best channel than the remaining marketing channels. The input-output ratio in the cultivation of rapeseed-mustard was found to be more than one indicating investment in the rapeseed-mustard production was remunerative in the study area. Under the marketing channel, (Producer–Village merchant–Wholesaler–Processors) three market agencies were involved: the village merchants, wholesalers and processors. In the marketing channel (Producer–Village merchant–Wholesaler–Processors) more marketing margin received by wholesalers was Rs. 54 than the remaining agencies. Although more marketing cost was paid by the wholesalers in term of *mandi* tax and packing charges. In the marketing channel, (Producer–Wholesalers–Processors) producer directly sold the rapeseed-mustard to wholesalers and received Rs. 2235 net price. Results in table also revealed that more margin received by the wholesaler Rs. 75.00 while more cost paid by the wholesalers in the form of *mandi* tax. In the marketing channel (Producer–Processors) only one market agent was involved. Producer directly sold the rapeseed-mustard to processors and the producer received net price of Rs. 2295. Regarding producer's share in consumer's rupee, it was higher (96.23%) in the 1<sup>st</sup> marketing channel (Producer – Processors) followed by 2<sup>nd</sup> the marketing channel (Producer–Wholesaler–Processors), (88.16%) and the 3<sup>rd</sup> marketing channel (85.51%) marketing channels. As far as price spread is concerned, more amount was observed under the 1<sup>st</sup> marketing channel (Rs. 250) than other two the marketing channels.

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