

Original Research Article

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Marketing Strategies for the Mustard Crop in Madhya Pradesh, India

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ABSTRACT

National economy occupies 6th position in mustard production. The study contains the impact of expended marketable surpluses on the pattern of market arrivals and their impact on the market development with reference to Rapeseed-Mustard oilseeds. To achieve the stated objective, the wholesale regulated markets of Madhya Pradesh were categorized into small, medium and large markets based on the arrivals of selected commodities. In small markets it was 36.42 percent, while it was 34.55 percent and 41.44 percent in medium and large markets, respectively. The co-efficient of price variation ranged from 31 to 34 percent in the three markets. Marketable and marketed surplus in absolute and percentage terms was directly related with the size of holding, while the total quantity retained was inversely related with the size of holdings and extent of marketable and marketed surplus was identical on sample holdings. The main objective is to find the marketing strategies in Madhya Pradesh of the mustard crop.

Keywords

Surpluses,
Price,
Oilseeds

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Introduction

In India Madhya Pradesh contributes about 40 per cent production on national economy and occupies 6th position in mustard production and also contributes about 0.3million hectare area, 0.21 million tones production and 66kg/hectare productivity (Agricultural statistics at a glance 2008-2009). The local economy of Neemuch is mainly based on the agriculture produce market. In Neemuch

district of M.P 19,335hectare area is covered under rapeseed – mustard cultivation. Indian mustard (*Brassica juncea*) is predominantly cultivated in the states of Rajasthan, Uttar Pradesh, Haryana, Madhya Pradesh, and Gujarat which contribute 81.5% area and 87.5% production (2001-02 to 2005-06). During 2006-07, more than 84 % of the total rapeseed-mustard acreage and production in the country is accounted for by these states, out of which more than 47.0% is contributed

by Rajasthan state alone. The crop takes 135-150 days to mature. Some early varieties maturing in 110 days are also available. Its cultivation is also being extended to non-traditional areas of Southern States like Karnataka, Tamil Nadu and Andhra Pradesh. The cultivation of brown sarson which once dominated the entire rapeseed-mustard growing region is now shadowed by Indian mustard. There are two different ecotypes of brown sarson (*Brassica rapa* var brown sarson): lotni (self-incompatible) and tora (self-compatible). In Haryana, Himachal Pradesh, Madhya Pradesh, Punjab, Uttaranchal and western Uttar Pradesh, it is grown as a cash crop during September-December.

Patan *et al.*, (2002) conducted a study on marketing problems and pattern of disposal of mustard in Banaskantha district of Gujarat state. Being a major rabi (winter season) oilseed crop and having an advantage of soil moisture conserved during monsoon, it has greater potential to increase the availability of edible oil from the domestic production. Despite the high quality of oil and meal and also its wide adaptability for varied agro-climatic conditions, the area, production and yield of rapeseed-mustard in India have been fluctuating due to various biotic and a biotic stress coupled with India's domestic price support programmed. Nevertheless, the crop has potential to ensure the nutritional security and contribute to livelihood security. Singh (2005) reported that economic analysis of rapeseed – mustard production (Dhekale *et al.*, 2017, Mishra *et al.*, 2020 and Vishawajith *et al.*, (2016).

Grover *et al.*, (1994) revealed the impact of expended marketable surpluses on the pattern of market arrivals and their impact on the market development with reference to Rapeseed-Mustard oilseeds. This crop is important for the economy, so the marketing

is also playing a vital role for the economy. The main objective is to spread the price and the marketing efficiency of the various channel in mustard marketing.

Materials and Methods

Selection of respondents

The selection of Mustard growers, a list of Mustard growers was prepared. In this stage stratified random sampling technique was used for drawing a sample for the present study. From each selected village three mustard growing farmers category i.e. Small, Medium and Large size of land holding were selected. Thus 35 Small, 30 Medium and 15 Large land holding farmers were finally selected. Thus, the total sample size was 80 from 6 villages for investigation.

For collecting information on marketing costs and margins, 80 farmers were selected, from among those who deal with Mustard seed, 10 wholesalers and 10 retailers were selected randomly.

Respondent allocation

S. No.	Size of holding	Mustard growers
1.	Small	35
2.	Medium	30
3.	Large	15
4.	Total	80

Nature of the data

The primary and secondary data was utilized in present study. The primary data on different aspect were collected through pre-tested interview schedule. Each of the selected Mustard growers was approach personally for recording relevant data. The secondary data was collected from published record of district head quarter.

Marketing strategies

Marketing channels

The channels in the marketing of Mustard were operating

Producer Village Merchant.....
Wholesaler.....Retailer.....
Consumers
Producer Wholesaler Retailer
.....Consumers
Producer.....Retailer.....Consu
mer

Marketable and marketed surplus

Marketable surplus

It is the residual product available with farmer after meeting his family needs. It defined as Marketable surplus = total production — produce which held for family consumption, payment of wages in kinds, cattle feed and seed for sowing. It is the actual quantity of produce sold in the market.

Marketing costs

Marketing costs include all the marketing charges paid by producer, wholesalers and retailers of Mustard and mustard oil from local assembling to retailing center in the marketing process

Marketing margins

It includes profit of margins kept by different marketing functionaries.

Price spread

Difference between price paid by consumers and price received by producer.

Producer share in the consumer's rupee =

$$Ps (Pf / Pr) 100$$

Where,

Ps = Producer share in the consumer's rupee.

P_f = Producer price

P_r = Retail price

Results and Discussion

Sample respondents' characteristics

The study contains Maximum numbers of sample respondents were found fewer than 3 types of age group than the other selected size groups, shown in Table 1.

Land utilization pattern

The details of the land utilization pattern of the sample respondents are given in Table 2.

Marketing pattern

In this section extent of marketable and marketed surplus of Mustard and disposal of produce during different months on different size groups of holding were examined.

Marketable and marketed surplus

Extent of marketable and marketed surplus on different size groups of holdings were examined to assess the quantity which is available and actually marketed. The data on the same is given in the Table 3.

Out of the total quantity retained by the producers, 4.8 % was used for consumption as raw mustard and for oil crushing. The total average marketable surplus was 1030 qt.

Disposal of mustard in different months

The data on disposal of produce during different months on different size groups of holdings is presented in Table 4.

Table.1 Sample of respondents

Size of groups	Family members				Age groups				Caste					Literacy level						
	Male	Female	Children	Total	I 25 to 35	II 35 to 45	III above 45	Total	S T	SC	OBC	GEN	Total	Illiterate	Primary	Middle	HS	HSS C	Graduate	Total
I Small Farmers (35)	45	38	65	148	9	14	12	35	4	8	16	7	35	6	5	9	8	5	2	35
II Medium Farmers (30)	39	29	48	116	6	13	11	30	5	7	10	8	30	4	7	5	8	5	1	30
III large Farmers (15)	50	42	60	152	3	2	10	15	2	4	6	3	15	2	6	3	2	1	1	15
Overall (80)	134	109	173	416	18	29	33	80	11	19	32	18	80	12	18	17	18	11	4	80

Table.2 Land utilization pattern

S.No.	Particulars	Size			
		Small	Medium	Large	Overall
1.	No. of sample respondents	35	30	15	80
2.	Total area (ha.)	28.9	59.4	135.4	223.3
3.	Average size of land holding (ha.)	1.46	3.29	6.03	3.59
4.	Net sown area (ha.)	38.6	55.92	110.87	205.39
5.	Irrigated area (ha.)	35.43	50.47	104.86	190.76
6.	Area sown more than once (ha.)	18.9	24.45	34.76	78.11
7.	Total cropped area (ha.)	44.86	74.36	165.67	284.89
8.	Cropping intensity	179.8	164.39	168.40	170.86

Table.3 Marketable surplus of Mustard on different size groups of holdings

(unit :-qt.)

S.No.	Particulars	Size of groups			
		Small	Medium	Large	Average all size
1.	Main product (qt.)	410.00 (14.65)	1230.00 (16.98)	1485.00 (17.53)	1041.66 (16.39)
2.	Seed (qt.)	0.30	0.50	0.60	0.47
3.	Home consumption (qt.)	3.32	5.89	6.19	5.14
4.	Quantity retained (qt.)	3.65	6.20	7.45	5.77
5.	Marketable surplus ((qt.)	402.73	1217.41	1470.76	1030.30

(Figures in parentheses show the quantity of product per hectare)

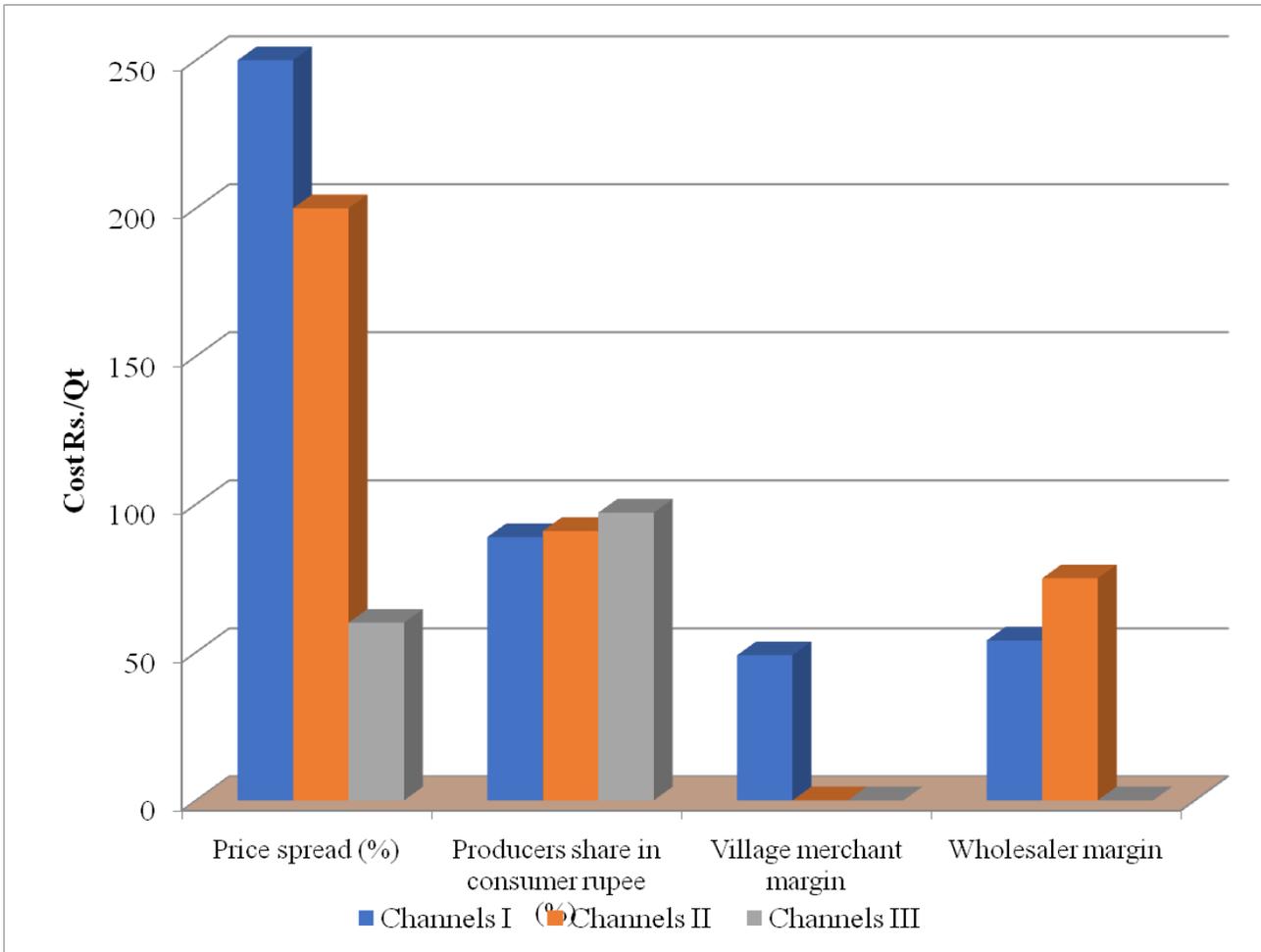
Table.4 Disposal of Mustard in different months

(unit :- Qt.)

S.N.	Months	Size of holding			
		Small	Medium	Large	Average
1.	October	-	13.14	21.15	11.43
2.	November	-	10.87	14.54	8.47
3.	December	0.98	7.58	11.25	6.60
4.	January	-	-	1.87	0.62
5.	February	-	-	1.95	0.65
6.	March	-	-	-	-
7.	April	9.54	8.35	1.99	6.62
8.	May	6.21	30.58	34.85	23.88
9.	June	-	9.25	-	3.08
10.	July	-	-	-	-
11.	August	-	-	-	-
12.	September	1.89	8.14	6.32	5.45
Total marketed surplus (Qt.)		18.62	87.91	93.92	66.81

Table.5 Marketing costs, margins and price spread in different marketing channels

S.N.	Particulars	Channels		
		I	II	III
1.	Producer net price (Rs.)	2,010	2,020	2,070
2.	Cost incurred by producer (Rs.)	-	-	-
a.	Packing charges (Rs.)	5	10	10
b.	Loading unloading charge (Rs.)	3	3	3
c.	Transportation charges (Rs.)	-	20	25
d.	Weighting charges (Rs.)	2	2	2
e.	Mandi fee (Rs.)	-	-	-
f.	Storage charges (Rs.)	-	5	5
g.	Other charges (Rs.)	-	10	15
	Total (Rs.)	10	50	60
	Purchase price of village merchant	2,020	-	-
3.	Cost incurred by village merchant (Rs.)	-	-	-
a.	Packing charges (Rs.)	10	-	-
b.	Loading unloading charge (Rs.)	3	-	-
C.	Transportation charges (Rs.)	15	-	-
d.	Weighting charges (Rs.)	3	-	-
e.	Mandi fee (Rs.)	-	-	-
F	Storage charges (Rs.)	5	-	-
g.	Other charges (Rs.)	20	-	-
	Total (Rs.)	56	-	-
	Village merchant margin (Rs.)	49	-	-
	Purchase price of wholesaler (Rs.)	2,125	2,070	-
4.	Cost incurred by wholesaler (Rs.)			
a.	Packing charges (Rs.)	10	10	-
b.	Loading unloading charge (Rs.)	3	3	-
c.	Transportation charges (Rs.)	-	-	-
d.	Weighting charges (Rs.)	3	3	-
e.	Mandi fee (Rs.)	35	34	-
F	Storage charges (Rs.)	5	5	-
g.	Other charges (Rs.)	25	20	-
	Total (Rs.)	81	75	-
	Wholesaler margin (Rs.)	54	75	-
	Purchase price of processors (Rs.)	2,260	2,220	2,130
5.	Producers share in consumer rupee (%)	88.93	90.99	97.18
6.	Price spread (%)	250	200	60



As noted from the table 4 on an average farm, the maximum quantity (23.88) of mustard is disposed in the month of May. Total average marketed surplus was 66.82 qt.

Marketing channels

In the study following three marketing channels were identified.

- (i) Producervillage merchant
.....wholesaler.....retailer
- (ii) Producer
.....wholesaler..... retailer
- (iii) Producerretailer

In 3rd marketing channel only one market agent was involved. Producer directly sold the Mustard to Retailer. Regarding producer share in consumer rupee, it was higher (97.18%) in 3 channel followed by 2nd (90.99%) and 1st (88.93 %) marketing channels.

Average production of Mustard was 78.52 quintal. Out of the total production, only 2.1 percent of the produce was retained by the producers for meeting his family and farm obligations. Out of the total quantity retained by the producers, 1.46 % was used for consumption as raw mustard and for oil

crushing. The total marketable and marketed surplus was 59.69 quintals, which accounts for 96.86 percent of the total production. Marketable and marketed surplus in absolute and percentage terms was directly related with the size of holding. It is interesting to note that as the size of holding increases percentage disposal of produce during the month of May decreases which shows that large farmers due to their strong resources and financial base withhold the produce to get higher prices during the lean period. As it is noted that percentage of quantity marketed during lean period (October) was higher on large farms as compared to medium size group of farms and none of the small mustard producer was selling his produce during the lean period.

Under 1st marketing channel, three market agencies were involved in village merchant, wholesaler and retailers. In 1st 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 channels.

In 2nd channel, producer directly sold the mustard to wholesaler and received 2,020 net prices also revealed that more margin received by the wholesaler Rs.75.32 while more cost paid by the wholesaler in form of mandi tax. In 3rd marketing channel only one market agent was involved. Producer directly sold the Mustard to retailer and the producer received net price of Rs. 2,070.

Regarding producer share in consumer rupee, it was higher (97.18%) in 3rd channel followed by 2nd (90.99%) and 1st (88.93 %) marketing channels. As far as price spread is concerned more amounts was observed under 1st channel (Rs. 250) than (200) and 3rd (60) marketing channels. This indicated that in 1st channel the difference was more between price

received by producer and price paid by consumer. Thus, it could be concluded that for producer 3rd marketing channel was the best channel in the study area. Producer share in the consumer rupee (retailer) was also found maximum (97.18) in 3rd channel than the remaining marketing channels.

In conclusion, oil seed plays a vital role in the development of agricultural economy. Mustard is an annual, cool season economic cash crop that has a short growing season and is commonly grown in rotation with small grains. Yellow mustard varieties usually mature in 80 to 85 days, while brown and oriental varieties typically require 90 to 95 days to mature.

A sample of eighty Mustard growers was drawn from the randomly selected villages of Javad block of Neemuch district. From each selected village three mustard growing farmers from each category i.e. Small, Medium and large size of land holding were selected. Thus 35 small, 30 medium and 15 large land holding farmers were finally selected. Thus, the total sample size was 80 from 7 villages for investigation.

The study finds that

The profit per unit of volume was directly related with the size of holding but this was not only due to scale economy but mainly due to market price difference for the mustard cropping the study area.

The total marketing surplus was 54.69 quintals, which accounts for 96.86 percent of the total production.

The maximum quantity (23.88 Qt.) of mustard was disposed in the market during month of May.

As per the producer net price 3rd marketing channel was the best channel than the remaining marketing channels.

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