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# Economics of linseed marketing in Bhandara district

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#### Abstract

Assured marketing as a remunerative support price may be the greatest incentive to the farmers. This can be done by the government through an effective system of procurement, handling and disposal. This paper examines the different marketing channels, marketing cost & marketing margins and to work out the producer's shares in consumer's rupee for linseed. The primary data regarding marketing of linseed were collected from producer farmers including wholesalers and oil processors. It was found that the channel I (Direct channel) was most effective and remunerative having highest producer's share in consumer rupee i.e., 96.56 per cent followed by Channel II (43.97 per cent), Channel IV (43.69 per cent) and Channel III (37.84 per cent). The total marketing cost was incurred by the intermediaries was the highest in channel III i.e., Rs. 1340.80. Marketing cost and marketing margins are found to be higher in channel II, channel III and channel IV due to the intervention of intermediaries in the market and which is least in channel I. As linseed is an important emerging oilseed crop. Therefore, it is felt necessary to study marketing of linseed in Bhandara district.

Keywords: Linseed, marketing channels, marketing cost, marketing margin and price spread

#### Introduction

In India, Linseed is cultivated on 262.86 thousand hectare with a production of 125.09 million tonnes and productivity is 477 kg / hectare during the year 2015-16 (Socio economic survey of Maharashtra 2016). Its cultivation is mostly confined to Madhya Pradesh, Maharashtra, Chhattisgarh, Uttar Pradesh and Bihar west Bengal and Assam. Madhya Pradesh occupies first position in India in respect of both area and production. In India, Madhya Pradesh is top most state with area of 2.87 lakhs hectare, 70.8 tonnes production and productivity i.e., 452 kilogram per hectare. In Maharashtra area under linseed crop was about 16000 hectare with a total production 4.00 MT and productivity 0.35 kg /ha during the year 2015-16. (Economic survey of Maharashtra 2016). Chhattisgarh with area of 86000 hectare, 24.2 tonnes production and productivity i.e., 281 kilogram per hectare. The total cultivated area under linseed crop in Bhandara district was 1996.40 hectare during the 2016-17. The major Linseed growing talukas in Bhandara district namely Bhandara with sowing area of 65.40 hectare, Mohadi 290.00 hectare, Tumsar 388.00 hectare, Paoni 162.00 hectare, Sakoli 338.00 hectare, Lakhani 706.00 hectare and Lakhandur 47.00 hectare. Linseed is one of the oldest cultivated crops grown by humans for food and fibre. Every part of Linseed is utilized commercially either directly or after processing. Total production and productivity of linseed crop was 3421.43 qtl and 171.38 kg /hectare respectively, of the Bhandara district (S.A.O. Office Bhandara, 2016-17). In Bhandara district linseed is the dominant crop growing more than 70% of total grossed crop area in kharif season.

Among the oilseed crops raised during *rabi* season, linseed is next importance to rapeseed-mustard in area as well as in production. In technical oil production, it ranks first in the country. Every part of the linseed plant is utilized commercially, either directly or after processing. Seed contains 33 to 47% of oil. In linseed oil omega-3 is contained 58 per cent. On a very small scale, the seed is directly used for edible purposes. It is one of the most important crops of the world cultivated in over 2.6 million hectares. The important linseed growing countries are India, Canada, China, USA and Ethiopia. India ranks first in the world in respect of acreage accounting for 23.8 per cent of the world total and third in production contributing of 10.2 per cent of the world total.

Better income from the sale proceeds of the linseed, therefore, encourages the farmers to boost up the production of linseed. As this crop is mainly for industrial use, its market is rather controlled by the millers instead of the farmers. The market rate generally becomes quite high within 3-4 months of its harvesting (over 70 per cent). The millers almost double their investment simply on the cost of a, short time storing investment. Such type of price policy

naturally develops lack of interest in farmers for its cultivation. The linseed crop in India is cultivated primarily for its oil. However, in many other countries this crop is grown primarily for its fibre. (Gill K.S., 1987) [2].

### **Data and Methodology**

The study was undertaken in Bhandara district for the agricultural year 2017-18. The primary data was collected through personal interviews from 60 linseed cultivators, 10 village traders, 15 wholesalers, 10 oil wholesaler, 10 processors and 10 retailers by survey method. The list of Linseed cultivators was obtained from the Talathi office from which two Villages were selected purposively from each tahasil, namely Khapa and Devadi from Tumsar tahasil, Sakarla and Jamb from Mohadi tahasil were selected.

# Estimation of cost of marketing, marketing margin and price spread

Market cost and market margin is worked out from the actual data collected from market intermediaries. Marketing cost incurred by producers is estimated from the data collected by selected cultivators.

# Price spread

Producer's share in consumer's rupee  $(P_s)$  expressed as follows:

$$P_{\rm s} = \frac{P_{\rm f}}{P_{\rm c}} \times 100$$

Where.

 $P_f$  = Net price received by the producer

 $P_c$  = Price paid by the consumer

**Gross price of producer**: This is equal to wholesale price at the primary assembling center or the price at the time of the first sale received by the producer.

**Net price of producer**: It is equal to gross price received by producer minus all expenses incurred by him on marketing the produce.

**Producer's share in consumer's rupee**: It is the net price received by producer expressed as a percentage of the price paid by the ultimate consumer.

#### **Results and Discussion**

The four marketing channels were identified for marketing of linseed:

Channel I: Producer – Consumer.

Channel II: Producer - Village Trader - Oil Miller - Oil

Retailer – Consumer.

Channel III: Producer - Oilseed Wholesaler - Oil Miller - Oil

Wholesaler – Oil Retailer – Consumer.

Channel IV: Producer - Oil Miller - Consumer.

Table 1: Schedule of data for different marketing cost incurred in different channels

Sr. No.	Producer	Village Trader	Wholesaler	Oil Millers	Oil Wholesaler	Retailer
1.	Cost of packing	Cost of Packing	Cost of Packing	Cost of Packing	Cost of Packing	Cost of Packing
	material	Material	Material	Material	Material	Material
2.	Stitching Charges	Stitching Charges	Stitching Charges	Stitching Charges	Stitching Charges	Transportation
3.	Transportation	Loading and unloading	Loading and unloading	Loading and unloading	Loading and unloading	Labour Charges
4.	Cost of unloading	Transportation	Transportation	Weighing charges	Transportation	Weighing Charges
5.	Weighing charges	Storage charges	Weighing charges	Transportation	Storage charges	Other Charges
6.	Commission@1%	Weighing charges	Storage charges	Processing Cost	Weighing charges	
7.	Miscellaneous	Miscellaneous	Market cess@1.05%	Storage charges	Miscellaneous	
8.			Miscellaneous	Packaging		
9.		_		Miscellaneous		

- a. From the study it is revealed that the total marketing cost of producer in the marketing of linseed was Rs. 126.00, Rs.24.00, Rs. 177.50 and Rs. 130.25 in channel I, channel II, channel III and channel IV, respectively incurred by the producer farmer. The cost of packing material shared was 15.87 per cent in channel I, 91.67 per cent in channel II, 13.52 per cent in channel III and 15.36 per cent in channel IV. The transportation cost was 81.35 per cent, 59.15 per cent and 77.15 per cent in channel I channel III and channel IV, respectively. In channel II, as the producer sold their produce to the village trader therefore transportation cost was not incurred by the farmer. The commission charges incurred by farmer in the marketing of linseed was 21.69 per cent in channel III.
- b. The per quintal marketing cost village trader was only incurred in channel II which was was Rs. 163.25 in which the share of transportation charges was the highest i.e., 67.38 per cent, followed by cost of packing material i.e., 14.70 per cent of the total cost.
- c. The total marketing cost of wholesaler only incurred in channel III was Rs. 213.85 in which the share of transportation charges was the highest 56.11 per cent followed by the market cess was 19.87 per cent and cost

- of packing material was 10.11 per cent of the total marketing cost.
- d. Marketing cost of miller in Channel II was Rs. 614.00 followed by Rs. 642.25 Channel III and Rs. 653.25 in Channel IV, which contribute higher share of transportation cost which was 17.92 per cent, 16.35 per cent and 13.85 per cent in channel II, channel III and channel IV, respectively. The cost of processing was 73.28 per cent, 74.74 per cent and 76.54 per cent in channel II, channel III and channel IV respectively and the share of cost of packing material was 3.26 per cent, 3.50 per cent and 3.75 per cent in channel II, channel III and channel IV, respectively.
- e. The total marketing cost was observed Rs. 164.75 by oil wholesaler which incurred in channel III. The highest transportation cost (68.29 per cent) was incurred by the oil wholesaler in marketing of linseed oil. It is revealed that the cost of packing material, storage cost and loading unloading cost was 14.57 percent, 6.67 percent and 6.07 percent in the marketing of linseed oil incurred by oil wholesaler respectively.
- f. The total marketing cost incurred by the retailer was Rs. 142.45 in channel III followed by Rs. 131.80 in channel

II in which the transportation cost was the highest (85.99 per cent) in channel III followed by 85.17 per cent in channel II. The share of cost of packing material was 5.31 per cent and 5.27 per cent in channel II and channel

III and other charges was 2.88 per cent and 2.81 per cent in channel II and channel III respectively incurred by the oil retailer.

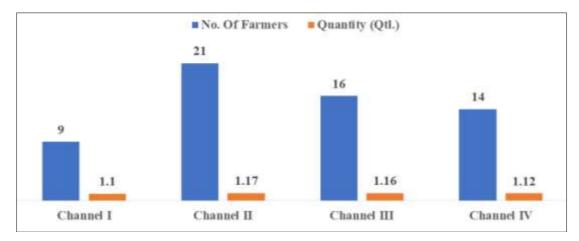


Fig 1: Channel wise Linseed sold by Producer

**Table 3:** Marketing Cost and Margins of Linseed (Rs. /Qtl.)

To 1				
	Channel I	Channel II	Channel III	Channel IV
				3585.50 (43.69)
				130.25 (1.59)
c) Gross Price Received	3658.75 (100.00)	3760.25 (44.25)	3849.50 (39.67)	3715.45 (45.27)
Village trader				
a) Purchase price	-	3760.25 (44.25)	-	-
b) Marketing Cost incurred	-	163.25 (1.92)	-	-
c) Net margin	-	151.50 (1.78)	-	-
d) Selling price	-	4075.00 (47.96)	-	-
Wholesaler				
a) Purchase price	-	-	3849.50 (39.67)	-
b) Marketing Cost incurred	-	-	213.85 (2.20)	-
c) Net margin	-	-	223.15 (2.30)	-
d) Selling price	-	-	4286.50 (44.17)	-
Oil Miller				
a) Purchase price	-	4075.00 (47.96)	4286.50 (44.17)	3715.45 (45.27)
b) Marketing Cost incurred	-	614.00 (7.23)	642.25 (6.62)	653.25 (7.97)
c) Net margin	-	3556.00 (41.85)	4213.75 (43.42)	3838.80 (46.77)
d) i) Selling price (Oil)	-	6175.00 (72.67)	7192.50 (74.12)	6197.50 (75.51)
ii) Selling price (Oil cake)	-	2070.00 (24.36)	1950.00 (20.10)	2010.00 (24.49)
Total Selling price	-	8245.00 (97.03)	9142.50 (94.22)	8207.50 (100)
Oil wholesaler				
a) Purchase price	-	-	9142.50 (94.22)	-
b) Marketing Cost incurred	-	-	164.75 (1.70)	-
c) Net margin	-	-	130.45 (1.34)	-
d) Selling price		-	9437.70 (97.26)	-
Retailer				
a) Purchase price	-	8245.00 (97.03)	9437.70 (97.26)	-
b) Marketing Cost incurred	-	131.80 (1.55)	142.45 (1.47)	-
c) Net margin	-	120.25 (1.42)	123.45 (1.27)	-
d) Selling price or price paid by consumer	3658.75 (100.00)	8497.05 (100.00)	9703.60 (100.00)	8207.50 (100.00)
	a) Purchase price b) Marketing Cost incurred c) Net margin d) Selling price Wholesaler a) Purchase price b) Marketing Cost incurred c) Net margin d) Selling price Oil Miller a) Purchase price b) Marketing Cost incurred c) Net margin d) i) Selling price (Oil) ii) Selling price (Oil cake) Total Selling price Oil wholesaler a) Purchase price b) Marketing Cost incurred c) Net margin d) Selling price Foil wholesaler a) Purchase price b) Marketing Cost incurred c) Net margin d) Selling price Retailer a) Purchase price b) Marketing Cost incurred c) Net margin d) Selling price	Producer  a) Net price received 3532.75 (96.56) b) Marketing Cost incurred 126.00 (3.44) c) Gross Price Received 3658.75 (100.00)  Village trader  a) Purchase price - b) Marketing Cost incurred - c) Net margin - d) Selling price - wholesaler a) Purchase price - b) Marketing Cost incurred - c) Net margin - d) Selling price - b) Marketing Cost incurred - c) Net margin - d) Selling price - Oil Miller a) Purchase price - b) Marketing Cost incurred - c) Net margin - d) Selling price - b) Marketing Cost incurred - c) Net margin - d) i) Selling price (Oil) - ii) Selling price (Oil cake) - Total Selling price - Oil wholesaler a) Purchase price - b) Marketing Cost incurred - c) Net margin - d) Selling price - b) Marketing Cost incurred - c) Net margin - d) Selling price - Ci Net margin - d) Selling price - Di Wholesaler a) Purchase price - b) Marketing Cost incurred - c) Net margin - d) Selling price - Ci Net margin -	Producer	Producer

(Figures in parentheses indicate the percentage to the consumer price)

# **Price Spread of Linseed**

The net price received by the producer was the highest (96.56 per cent) in the Channel I with followed by Channel II (43.97 per cent), Channel IV (43.69 per cent) and Channel III (37.84 per cent). The net price received by the producer in Channel I, II, III and IV was Rs. 3532.75, Rs. 3736.25, Rs. 3672.00 and Rs. 3585.50, respectively. Consumer's price was Rs. 3658.75, Rs. 8497.05, Rs. 9703.60, and Rs. 8207.50 in Channel I, Channel II, Channel III and Channel IV, respectively.

The marketing cost incurred by the producer was Rs. 126.00, Rs. 24.00, Rs. 177.50 and Rs. 130.25 in Channel I, Channel II, Channel III and Channel IV, respectively. The gross price received by producer was Rs. 3658.75, Rs. 3760.25, Rs. 3849.50 and Rs. 3715.45, respectively. The village trader incurred the marketing cost was 163.25 and received margin Rs. 151.50 per quintal. The wholesaler had incurred marketing cost of Rs. 213.85 and received margin of Rs. 223.15 and sold the produce to the linseed miller (processing industry) at Rs. 4286.50 per quintal.

**Table 4:** Price Spread of Linseed (Rs. /qtl.)

Sr. No.	Particulars	Channel I	Channel II	Channel III	Channel IV
1	Net price received by producer	3532.75 (96.56)	3736.25 (43.97)	3672.00 (37.84)	3585.50 (43.68)
2	Total marketing costs	126.00 (3.44)	933.05 (10.98)	1340.80 (13.82)	783.50 (9.55)
3	Total marketing margins	-	3827.75 (45.05)	4690.80 (48.34)	3838.80 (46.77)
4	Price paid by Consumer	3658.75 (100)	8497.05 (100)	9703.60 (100)	8207.50 (100)
5	Producer's share in consumer rupee	(96.56)	(43.97)	(37.84)	(43.69)

Figures in parentheses indicate the percentage to total

The net price received by producer was observed highest in channel II i.e., Rs. 3736.25 (43.97 per cent) followed by channel III Rs. 3672.00 (37.84 per cent), channel IV Rs. 3585.50 (43.68 per cent) and channel I Rs. 3532.75 (96.56 per cent). The total marketing cost was observed highest in channel III Rs. 1340.80 (13.82 per cent) followed by channel II Rs. 933.05 (10.98 per cent), channel IV Rs. 783.50 (9.55

per cent) and channel I Rs. 126.00 (3.44 per cent). The marketing margins received by the intermediaries in Channel II, Channel III and Channel IV was 45.05 per cent, 48.34 per cent and 46.77 per cent, respectively. The producer's share in consumer rupees was the highest (96.56 per cent) in Channel I followed by Channel II (43.97 per cent), Channel IV (43.69 per cent) and Channel III (37.84 per cent).

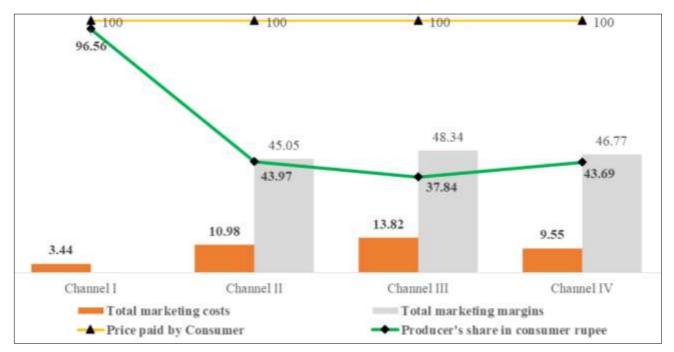


Fig 2: Price spread of Linseed (Percentage)

## **Conclusions**

In the channel I (Direct channel) (96.56 per cent) producer's share in consumer rupee was the highest followed by Channel II (43.97 per cent), Channel IV (43.69 per cent) and Channel III (37.84 per cent).

The marketing margin received by the intermediaries in Channel III (Rs. 4690.80) was the highest as compared to other channels.

The total marketing cost was incurred by the intermediaries was the highest in channel III i.e. Rs. 1340.80.

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