



ISSN (E): 2277-7695

ISSN (P): 2349-8242

NAAS Rating: 5.23

TPI 2022; 11(7): 585-588

© 2022 TPI

www.thepharmajournal.com

Received: 02-04-2022

Accepted: 07-05-2022

Ajay Singh

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

KK Singh

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

Ashish Srivastava

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

Aditya Bhooshan Srivastava

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

Harshit Mishra

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

Corresponding Author:

KK Singh

Department of Agriculture
Economics, Acharya Narendra
Deva University of Agriculture
and Technology, Kumarganj,
Ayodhya, Uttar Pradesh, India

Constraints on sesame and mustard of production and marketing by using Garrett ranking

Ajay Singh, KK Singh, Ashish Srivastava, Aditya Bhooshan Srivastava and Harshit Mishra

Abstract

The present study was conducted in the Banda district of Uttar Pradesh State to identify the constraints in Sesame and mustard crop cultivation, production, and marketing as perceived by the growers. Garrett ranking was employed. A random sample method was used to pick respondents for this investigation. One blocks were chosen for the current study to generate the study's inferences. The survey covered five village and 100 farmers in the chosen villages. Data acquired for the study covering the years 2021-22. Primary data was collected from selected sesame and mustard growers through personal interview method with the help of a pretested schedule. The main production constraints noticed were i.e. Availability of input, Non-availability of HYV Seed, Lack of knowledge about latest production technology, Non-availability of Credit, Assistance by government, non-availability of quality water for irrigation etc. and for mustard grower non-availability of HYV Seed, availability of input, Non-availability of quality water for irrigation, Non-availability of Credit, Lack of knowledge about latest production technology, etc. The main marketing constraints were for sesame growers, i.e. Problem faced due small quantity of marketable surplus, Lack of scientific knowledge and training, Cheating by purchaser, Lack of scientific storage facilities, Delay in payment and for Mustard grower Problem faced due small quantity of marketable surplus, Lack of demand of produce in local area, Lack of scientific knowledge and training, lack of skilled labour and High cost of transportation etc. in the study area.

Keywords: Constraints, production and marketing

Introduction

India is one of the major oilseeds grower and importer of edible oils. India's vegetable oil economy is world's fourth largest after USA, China & Brazil. The diverse agro-ecological conditions in the country are favorable for growing 9 annual oilseed crops. During last decade (1999-2009) the area production and yield have recorded an annual growth rate of 2.44 percent, 3.47 percent and 2.96 percent respectively. Oilseed production in 2017/18 is poised to trail behind last season's record, mainly reflecting reduced yield levels in a number of countries following adverse weather conditions (Burman *et al.*, 2012) [1].

Oilseed crops are the second most important determinant of agricultural economy, next only to cereals within the segment of field crops. The self-sufficiency in oilseeds attained through "Yellow Revolution" during early 1990's, could not be sustained beyond a short period (Kumar *et al.*, 2018) [2]. There is a spurt in the vegetable oil consumption in recent years in respect of both edible and industrial usages. India is the largest producer of oilseeds in the world and accounts for about 14 per cent of the global oilseed area. Major consuming states of rapeseed-mustard oil in India are: Gujarat, Maharashtra, Rajasthan and Madhya Pradesh accounting 9%, Delhi, Punjab, J&K, Himachal Pradesh and UP accounting 25% and East West Bengal, Orissa, Bihar, Assam, Chhattisgarh, Jharkhand accounting about 30%.

Oilseeds accounts for 3% to the Growth of National Products and 10% to total value of all agricultural products, and employs 14 and 1 million people respectively. Presently, India's annual edible oil consumption is about 17.5 mmt, which in the last decade has increased steadily at a compounded annual growth rate of 4.6%. The major edible oils consumed in the country are palm oil, soybean oil and mustard oil, with their respective shares of 46%, 16% and 12%. (FAO Stat 2017) [4].

Materials and Methods

The present study is based on an analysis of primary data at the Banda district of Uttar Pradesh. The one blocks were selected for present study.

The study covered 5 villages & it covered 100 farmer in the selected villages. Data for the study was gathered for the years 2021-22. Primary data was obtained from chosen sesame and Mustard growers using the personal interview approach and pre-tested schedules to obtain information on Constraints in the Production and Marketing of sesame and Mustard related elements. The collected data were compiled, tabulated and analyzed to accomplish the objectives of the present study.

In order to study the constraints, a schedule was developed in accordance with the available literature. Accordingly, constraints were identified and sub divided into production and marketing constraints and there after the response of the sample farmers were recorded. The data will be analysed by using simple statistical tools such as Garrett's Ranking Technique.

Analytical Tools Garrett's Ranking Technique

The ranks given by the respondents were then converted into percentage position with the help of formula given by Garrett. Garrett's formula for converting ranks into percent is:

$$\text{Percent position} = \frac{100(R_{ij} - 0.5)}{N}$$

Where, R_{ij} is the rank given to i th item by the j th individual and N is the number of item ranked by the j th individual. The per cent position of each rank thus obtained was converted into scores using Garrett's table. Then for each reason the

scores of individual respondents were added and divided by the total number of respondents. Thus the mean score for each constraints was ranked by arranging them in a descending order.

Result and Discussion

Production constraints faced by sesame growers

Sesame growers faced by different types of Production constraints in the study area. It is presented in Table: 1. It reveal that the major Production constraint faced by most of the Sesame growers was Availability of input with a score of 82.12 (rank I). The second most important constraint faced by the sesame growers was Non-availability of HYV Seed (overall Garrett score 82.00). Keeping this in view H.Y.V. of seeds to be used along with timely sowing. The other most important constraints reported by the sesame growers were Lack of knowledge about latest production technology overall Garrett score 79.78 (rank III). Keeping this in view, there was a strong need to strengthen extension services amongst the sesame growers in the study area. Assistance by Government overall Garrett mean score 79.18 with rank IV and Non-availability of quality water for irrigation overall Garrett score 78.52 (rank V) and Non-availability of Credit overall Garrett mean score 78.30 with rank VI. In addition to the above problems, the minor problems faced by also Unfavourable weather conditions(VII), Poor quality of land (VIII), (IX), Inadequate knowledge of recommended package and practices (X), (XI),and (XII) in the study area.

Table 1: Production Constraints of sesame on different size of farms.

S. No.	Sesame Production Constraints	Total	Average Score	Final Rank
1	Poor quality land	7501	75.01	8
2	Availability of Input	8212	82.12	1
3	Assistance by Government	7918	79.18	4
4	Non-availability of HYV Seed	8200	82.00	2
5	Unfavourable weather conditions	7724	77.24	7
6	Lack of knowledge about latest production technology	7978	79.78	3
7	Lack of adoption of plant protection measures	7035	70.35	11
8	Non-availability of Credit	7830	78.30	6
9	Non-availability of quality water for irrigation	7852	78.52	5
10	Inadequate knowledge of recommended package and practices	7279	72.79	10
11	Infertility problem	7454	74.54	9
12	Irregular electricity problem	6717	67.17	12

Marketing constraints by sesame growers

Sesame growers faced by various types of marketing problems in the study area. It is presented in Table: 2. From the contents of Table: 2, it was indicated that Problem faced due small quantity of marketable surplus was ranked as the most important constraint among the sesame growers with mean score value of 54.34 (rank I) followed by Lack of scientific knowledge and training Garrett score 54.16 (rank II). High cost of transportation was ranked mean score value

of 51.66 (rank III), Fourth major constraint reported by the sesame growers Lack of scientific storage Facilities overall Garrett score 53.05. Delay in payment of sesame growers which got rank V with a score of 50.05, Price fluctuations got XI rank with overall Garrett score 49.46. In addition to the above problems, High cost of transportation (VII), Lack of availability about market news (VIII), Lack of skilled labour (IX). Lack of skilled labour (X) High cost of transportation (XI) and Higher commission charges (XII) in the study area.

Table 2: Marketing Constraints of sesame on different size of farms.

S. No.	Sesame Marketing Constraints	Total	Average Score	Final Rank
1	Delay in payment	5005	50.05	5
2	High cost of transportation	4927	49.27	7
3	Problem faced due small quantity of marketable surplus	5434	54.34	1
4	Lack of scientific knowledge and training	5416	54.16	2
5	Price fluctuations	4946	49.46	6

6	Lack of skilled labour	4742	47.42	10
7	Lack of availability about market news	4837	48.37	8
8	Lack of demand of produce in local area	4657	46.57	11
9	Higher commission charges	4577	45.77	12
10	Lack of scientific storage facilities	5305	53.05	4
11	Cheating by purchaser	5329	53.29	3
12	Knowledge of mandi charge	4825	48.25	9

Production constraints faced by Mustard growers

The Mustard growers faced by various types of Production constraints in the study area. It is also clear from the Table: 3, that the major Production constraint faced by most of the Mustard growers was Non-availability of HYV Seed with a score of 56.39 (rank I). Keeping this in view H.Y.V. of seeds to be used along with timely sowing. The second most important constraint faced by the mustard growers was availability of Input (overall Garrett score 54.27). The other most important constraints reported by the mustard growers

Non-availability of quality water for irrigation overall Garrett score 52.81 (rank III), Non-availability of Credit overall Garrett score 52.27 (rank IV), Lack of knowledge about latest production technology overall Garrett score 52.08 (rank V) and Lack of adoption of plant protection measures with overall Garrett score 51.98 (rank VI). In addition to the above problems, the minor problems faced by also the assistance by Government (VII), Poor quality land (VIII), and Un-favorable weather conditions (X) in the study area.

Table 3: Production Constraints of Mustard on different size of farms.

S. No.	Mustard Production Constraints	Total	Average Score	Final Rank
1	Un favourable weather conditions	4799	47.99	10
2	Poor quality land	4969	49.69	8
3	Assistance by Government	5012	50.12	7
4	Non-availability of HYV Seed	5639	56.39	1
5	Availability of Input	5427	54.27	2
6	Lack of knowledge about latest production technology	5208	52.08	5
7	Lack of adoption of plant protection measures	5198	51.98	6
8	Non-availability of Credit	5227	52.27	4
9	Non-availability of quality water for irrigation	5281	52.81	3
10	Inadequate knowledge of recommended package and practices	4959	49.59	9
11	Infertility problem	4392	43.92	11
12	Knowledge about use of manure	3889	38.89	12

Marketing constraints of Mustard growers

The Mustard growers faced by various types of marketing problems in the study area. It is presented in Table 4 From the contents of Table: 4, it was indicated that Problem faced due small quantity of marketable surplus was ranked as the most important constraint among the mustard growers with mean score value of 82.00 (rank I) followed by Lack of demand of produce in local area overall Garrett score 81.61 (rank II). Lack of scientific knowledge and training was ranked mean score value of 79.18 (rank III), Lack of skilled labour which

got rank IV with a score of 77.70. Fifth major constraint reported by the mustard growers was High cost of transportation in the marketing which resulted in decrease of farmer's share in consumer's rupee overall Garrett score 77.39 (rank V), Price fluctuations major constraints which got sixth rank with overall Garrett score 77.24. In addition to the above problems, Lack of scientific storage facilities (VII), Delay in payment (IX), Lack of availability about market news (XI). Higher commission charges (XII) in the study area.

Table 4: Marketing Constraints of mustard on different size of farms.

S. No.	Mustard Marketing Constraints	Total	Average Score	Final Rank
1	Delay in payment	7552	75.52	9
2	Lack of demand of produce in local area	8161	81.61	2
3	Lack of scientific knowledge and training	7918	79.18	3
4	Problem faced due small quantity of marketable surplus	8200	82.00	1
5	Price fluctuations	7724	77.24	6
6	Lack of skilled labour	7770	77.70	4
7	Lack of availability about market news	7035	70.35	11
8	High cost of transportation	7739	77.39	5
9	Higher commission charges	6917	69.17	12
10	Lack of scientific storage facilities	7661	76.61	7
11	Cheating by purchaser	7590	75.90	8
12	Knowledge of mandi charge	7433	74.33	10

Conclusion

It is clear concluded that as - The major common production constraints for sesame growers, i.e. Availability of input,

Non-availability of HYV Seed, Lack of knowledge about latest production technology, Non-availability of Credit, Assistance by Government, Non-availability of quality water

for irrigation etc. and for mustard grower Non-availability of HYV Seed, Availability of input, Non-availability of quality water for irrigation, Non-availability of Credit, Lack of knowledge about latest production technology, etc in the study area.

The major common Marketing constraints for sesame growers, i.e. Problem faced due small quantity of marketable surplus, Lack of scientific knowledge and training, Cheating by purchaser, Lack of scientific storage facilities, Delay in payment and for Mustard grower Problem faced due small quantity of marketable surplus, Lack of demand of produce in local area, Lack of scientific knowledge and training, Lack of skilled labour and High cost of transportation, etc. in the study area.

Reference

1. Burman RR, Dubey SK, Jha GK, Singh G, Sharma MK. Analysis of production gap, marketing and processing status and associated constraints for major oilseeds in the states of Rajasthan and Gujarat. *Journal of Community Mobilization and Sustainable Development*. 2012;7(2):198-209.
2. Kumar R, Gupta JK, Gurjar NS, Bhadouria AKS, Rathor N. Analysis of resource use efficiency and constraints of mustard production in Bhind district of Madhya Pradesh, *Journal of Pharmacognosy and Phytochemistry*, 2018;SP2: 219-221.
3. Sharma S, Raghuwanshi JS, Jaulkar AM, Srivastava SC, Constraints in Production, Marketing and Processing in Rapeseed-Mustard Cultivation and Suitable Measures to Overcome these Constraints. *Journal homepage*, 2019. 8(01):1-9. <http://www.ijemas.com>,
4. www.fao.org.in, Last accessed, 2017.