



CONSTRAINTS FACED BY MUSTARD GROWERS IN ADOPTION OF IMPROVED MUSTARD CULTIVATION PRACTICES IN PRAYAGRAJ DISTRICT OF UTTAR PRADESH

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Abstract:

The present study was conducted in Prayagraj District of Uttar Pradesh to find out the constraints faced by mustard growers in adoption of improved mustard cultivation practices. A total of 120 respondents were selected randomly for the present study. The data were collected through a pre-structured interview schedule and appropriate statistical analysis was done to find out the association. It was found that unavailability of seed at time, lack of credit facility at time, lack of hybrid seed, lack of training programme related with improved practices, lack of proper market facilities were major constraints faced by the mustard growers in adoption of improved mustard cultivation practices.

Keywords: Mustard, Constraints, Socio-economic profile, Improved cultivation practices.

Introduction

Agriculture is the most central and key sector of Indian economy. It accounts for about 28.00 per cent GDP (Gross Domestic Product) and sustains about two-third of the country's population. The fast-growing population is putting tremendous pressure on the agricultural production in the country. The production per unit area is very low in comparison to other countries of the world. Fast changing agricultural technology is a must to keep pace with the ever-increasing demand for food and other agricultural produces in a developing country like India. It is evident that even at



the existing level of technology available; there is considerable scope for increasing production through identified constraints and steps taken to remove them. **(Indian Farming, 2022)**

India is the fourth largest producers of oilseeds in the world; however, India ranks first in production of castor, Safflower, Sesame, and Niger, second in Groundnut, third in linseed and Mustard and fourth in Soybean. This sector occupies an important position in the agricultural economy covering an area of 26.75 million hectares and accounting for the production of 26.32 million tons of cultivated oilseeds during the year 2007-08. India contributes about 8-9 per cent of world's oilseeds production and is the fourth largest edible oil economy in the world. Oilseeds account for about 1.5 per cent of GDP and 8 per cent of values of all agricultural products. **(Pandey, 1998)**

Among different oilseed crops groundnut, mustard and soybean account for about 80 per cent of oilseeds area and 88 per cent of oilseeds production in the country. Mustard is the major rabi oil seed crop in India. It occupies a prominent place being next in importance to groundnut both in area and production meeting the fat requirement of about 50 percent population in the state of Uttar Pradesh, Punjab, Rajasthan, Madhya Pradesh, West Bengal, Bihar, Odissa and Assam. India is one of the largest producers of rape seed and mustard in the world. India's contribution in the world rape seeds and mustard in India is around 16.2 million tones which accounts for about 18 per cent of the oil seed production of the country.

The rapeseed-mustard, which contributes nearly 80 per cent of the total rabi oilseed production, is a vital component in edible oil sector in India. India contribution to the world acreage and production is 19.29 per cent and 11.12 per cent respectively. In India, rapeseed- mustard is grown in diverse agro-climatic conditions ranging from north-eastern/north-western hills to southern parts of the country. Of the total area and production under the nine oilseeds crops grown in India, rapeseed-mustard accounts for 22.2 per cent of the acreage and 22.6 per cent of the production. **(Bhardwaj, 2013)**



The requirement of oilseed in country is rapidly increasing because of increasing the population and the living standard of the people. The oilseed sector has come out as a net foreign exchange earner thus oilseeds have great potentiality in foreign trade. Though the production of oilseeds in India has increased over the time, but the quality of edible oil available, still falls short of the requirements. The per capita availability of oil is very low in India. Hence, increasing oil production has been included as an important component of agricultural production programmes. Mustard is very important crop of the UP state. Efforts are made to increase the productivity considering its importance as oilseed crop and its industrial values.

Research Methodology

The present study was conducted in Prayagraj district of the Uttar Pradesh state because maximum area come under mustard cultivation and also the researcher belong to the area is well conversant with language, geography, agriculture and other aspect of the area. There are 20 blocks functioning in the district out of that, Meja block has been selected purposively because maximum area come under mustard cultivation as per pilot survey. There are 137 villages in Meja Block out of these, 10 villages were selected purposively based on maximum area that come under mustard cultivation

One hundred twenty respondents were selected randomly for the present study. A structured interview schedule was used for data collection. Descriptive research design was used for this study. The statistical tools such as frequency, percentage was used to interpret the data and for drawing logical conclusion.



Results and Discussion

Table.1. Socio-economic profile of the respondents (n=120)

S. No.	Characteristics	Category	Frequency	Percentage
1	Age (in years)	Young (<35)	40	33.30
		Middle (36-55)	46	38.40
		Old (>55)	34	28.30
2	Education	Illiterate	25	20.83
		Literate (can read only)	18	15.00
		Primary school	20	16.66
		Middle school	7	5.83
		High school	18	15.00
		Intermediate	22	18.33
		Graduate and above	8	6.67
3	Working experience	Less than 3 years	30	25.00
		5-10 years	65	55.00
		More than 10 years	24	20.00
4	Family size	Small	34	28.33
		Medium	57	47.50
		Large	29	24.17
5	Land holding	Marginal farmer (Less than ha)	30	25.00
		Small farmer (1-2 ha)	65	55.00
		Large farmer (2-3 ha)	24	20.00
6	Annual income	Low (up to 50,000)	14	11.70
		Medium (50,000 – 1 lakh)	98	81.70



		High (above 1 lakh)	8	6.60
7	Mass media exposure	Low	35	29.17
		Medium	73	60.83
		High	12	10.00
8	Leadership capacity	Low	29	24.17
		Medium	77	64.17
		High	14	11.67
9	Social participation	Low	21	17.50
		Medium	59	49.17
		High	38	31.67

The Table.1 shows that, it can be interpreted that 38.40 percent of the respondents were middle aged, followed by young aged (33.30%) and old aged people (28.30%). 20.83 percent were illiterate, 15 percentage high school, 6.67 percentage graduate of less than half of the respondents had medium level of family size (47.50%), followed by small sized family (28.33%) and large sized family (24.17%). More than three-fourth of the respondents earns medium level of annual income (81.70%), followed by low (11.70%) and high (6.60%) level of annual income. Less than two-third of the respondents had medium level of mass media exposure (60.83%), followed by low (29.17%) and high level of mass media exposure (10%).

Meanwhile, more than half of the respondents were small farmer (1-2 ha) (55%), followed by small farmer (less than 1 ha) (25%) and remaining 20 per cent of respondents were large farmer (2-3 ha). Majority of the respondents had medium level of leadership capacity (64.17%), followed by low (24.17%) and high (11.67%) level of leadership capacity. Nearly half of the respondents (49.17%) had medium level of social participation, followed by high (31.67%) and low (17.50%) level of social participation. More than half of the respondents had 3-10 years working experience (55%), followed by less than 3 years working experience



(25%) and only 20 per cent had more than 10 years of working experience. Majority of the respondents had medium level of communication media exposure (47.50%), followed by low level (42.50%) and low (10%) level of communication media exposure. Similar Findings were also reported by **Bagheri and Shabanali** (2016)

Table 2: Constraints experienced by respondents in adoption of improved mustard cultivation practice. (n=120)

S No.	Constraints	Response		
		Frequency	Percentage	Rank
1	Lack of hybrid seed	71	59.17	IV
2	Unavailability of seed at time	82	68.33	II
3	Lack of credit facility at time	98	81.75	I
4	Lack of proper information at time	56	46.67	VIII
5	Lack of technical knowledge	70	58.33	VI
6	Lack of training programme related with improved practices	81	67.50	III
7	Unavailability of electricity	54	45.00	X
8	Nonperformance of visit by agricultural personnel time to time.	48	40.00	IX
9	Costly critical inputs	62	51.67	VII
10	Lack of proper market facilities	71	59.17	V
11	Lack of education	21	17.50	XI

Table 2 shows that majority of the respondents had lack of credit facility at time (81.75%) as the major constraint. Meanwhile, the other constraints listed by the mustard growers were unavailability of seed at time (68.33%), lack of training programme related with improved practices (67.50%), lack of hybrid seed (59.17%), lack of technical knowledge (5833%), lack of



proper market facilities (59.17%), storage facilities (56.67%), costly critical inputs (51.67%), lack of proper information at time (46.67%), unavailability of electricity (45%), non-performance of visits by agricultural personnel time to time (40%), non-availability of labors (37.50%), soil testing (31.67%), lack of proper resources and capital (30.83%) and lack of education(17.50%). Similar findings was reported by **Rathod *et.al.*, (2013) and Nain *et al.*(2015)**

Conclusion

It was concluded that majority of the respondents were middle age group educated upto primary, income upto 1 lakh rupee and medium level of mass media exposure, leadership ability. The major constraints faced by the respondents in adoption of improved mustard cultivation practices are lack of credit facilities, unavailability of seeds at time, lack of training programme.

References

- [1]. Bagheri, A and Shabanali, Fami H. (2016). "Potato growers" Risk perception: A case study in Ardabil Province of Iran" *Journal of agri. Science and Technology*. 18(2): 55-65.
- [2]. Bhardwaj V. (2013). Overview of Indian Oilseed Sector; How to increase rapeseed production to reach 10 million tonnes. A presentation in National Council of Applied Economic Research (NCAER) and The Solvent Extractors, Association of India (SEA) held at New Delhi 15th March.
- [3]. Chouhan, Sandeep, Sigh, S.R.K., Pande, A.K. and Gautam, U.S. (2013). Adoption dynamics of improved sugarcane cultivation in Madhya Pradesh. *Indian Research Journal of Extension Education*. 13(2):26-30.
- [4]. Daur, D.S., Choudhary and Swarnakar, V.K. (2014). Study on knowledge and adoption level of soybean growers through Front Line Demonstrations (FLD's) in Ujjain district of M.P. M.Sc. (Ag.) Thesis, College of Agriculture, Indore, RVSKVV, Gwalior.
- [5]. Dhore, R. K., Pavan Kumar, P., and S. N. Singh. (2019). Profile characteristics of farmer in Adoption of Bt. Cotton. *Int. J. Curr. Microbiol. App. Sci.* 8(01): 2373-2378.
- [6]. Directorate of Rapeseed-Mustard Research (DRMR). (2015). Vision-2030 Document.
- [7]. Sharma V P. (2014). Report on „Problems and prospects of oilseeds production in India“. Centre for Management in Agriculture (CMA), Indian Institute of Management (IIM) Ahmedabad.
- [8]. Hulagar, B., J. Tulasiram, and G.N Maraddi, (2018). A study on Adoption level of recommended cultivation practices of Black gram growers in North Eastern Karnataka, India. *Int. J. Curr. Microbiol. App. Sci.*, 7(2): 567-574.
- [9]. Sharma, Kramjit, Dhaliwal, N.S. and Kumar, Ajay. (2015). Analysis of adoption and constraints perceived by small paddy growers in rice production technologies in Muktsar District of Punjab State, India. *Indian Research Journal of Extension Education*. 15(2):20-23