



Constraints And Suggestions Analysis Of Adoption Of Maize Production Technology In Chhindwara District Of M.P.

Mubeen Mansuree¹, Dr.Y.K. Singh² and Dr.Beena Singh³

Research Scholar¹, Associate Prof.² and Assist. Prof.³

MGCGVV Chitrakoot, Satna M.P.^{1&2} and KNIPSS, Sultanpur (U.P.)³

Abstract

The present study was conducted in chaurai block of chhindwara District of M.P. maximum respondents were personal constraints, maximum number of respondents were reported that other occupation (31.25%) followed by Technological constraints non understanding the true value of maize (20.00 %), economic constraints were low income (46.25%), and market constraints were non availability of fertilizer (32.5%), regarding adoption of recommended maize production technology.

Key words: Farmers, Constraints, Suggestion, Maize and Technology

INTRODUCTION

Farmers are able to grow crops in areas where they were thought could not grow, but this is only possible through agricultural biotechnology. Maize is used for the production of numerous indigenous foods, maize meals, flours, grits, starches, sweeteners, cooking oils, breads, tortillas, breakfast foods, snacks, bioethanol, and alcoholic beverages. Maize or Indian corn (called corn in some countries) is *Zea mays*, a member of the grass family Poaceae. It is a cereal grain which was first grown by people in ancient Central America. Approximately 1 billion tonnes are harvested every year. in 2022, the production volume of maize in Kenya declined to 34.3 million bags, down from 36.7 million bags in the previous year. The drop by 6.5 percent was mainly attributed to unfavorable weather conditions. Total maize production in India is estimated at around 24.51 MMT in 2020-21 against our total annual demand including exports of 25.2 MMT. The ending stocks are expected to be 1.59 MMT in 2020-21.

Methodology

The study was selected in chaurai block of Chhindwara district of in Madhya Pradesh. due to maximum number farmers growing maize crop in this block. The sample of the study has been selected simple random sampling techniques. 04 village (Baraha baryari, Dhanora, Haivarkhedhi and Chousara). out of selected villages, 20 farmers were selected from each village. Thus, the total sample of the study comprises of 80 farmers. The interview schedule was used for data collection through personal interview method. The data were interpreted in terms of percentage and qualitative data were tabulated on the basis of categorization methods. After tabulation, percentage and frequency was carried out.

Result and Discussion**Table 4.1: Constraints faced by growers in adoption of maize production technology**

S.N.	Constraint	frequency	Percent	Rank
A.	Personal constraints			
1.	Lack of education	14	17.5	II
2.	Old age	08	10.00	IV
3.	Big family	21	10.5	III
4.	Other occupation	25	31.25	I
5.	Less cultivation	08	10.00	V
B.	Technical constraints			
1.	low knowledge about improved variety	18	22.5	II
2.	Lack of skill about the adoption of improved technology viz. seed treatment	08	10	IV
3.	Lack of knowledge about IPM	06	7.5	VI
4.	non availability of fertilizer	26	32.5	I
5.	High cast of chemical fertilizer	14	17.5	III
6.	Lack of training	08	10.00	V
C.	Economical constraints			
1.	High cast of chemical fertilizer	37	46.25	I
2.	Inadequate credit	19	23.75	II
3.	High rate of interest on credit	17	21.25	III
4.	High rate of manure, seed, diesel, medicines and equipment	07	8.75	IV
D.	Market related constraints			
1.	Non understanding the true value of maize	16	20.00	I
2.	Lack of regular market	08	10.00	VII
3.	Lack of transporting facility	09	11.25	VI
4.	Not getting any time on fertilizer, seed and medicines in market	12	15.00	V
5.	Malpractices of middleman	13	16.25	III
6.	Greater distance of market	08	10.00	VI

7.	Not getting proper value of maize	14	17.5	II
----	-----------------------------------	----	------	----

Multiple responses were taken to ascertain the constraints faced by the maize growers in adoption of recommended maize production technology. Various constraints are presented in table 1 which indicates that under the personal constraints, maximum number of respondents were reported that other occupation (31.25%), lack of education (17.50%), big size of family (10.5%), old age (10.00%), and (10.00%) less cultivation were the major constraints faced by the maize growers in adoption of recommended maize production technology.

In the category of Technological problem constraints i.e. non understanding the true value of maize (20.00%), not getting proper value of maize (17.5%), malpractices of middleman (16.25%), not getting any time on fertilizer, seed and medicines in market (15.00), lack of transporting facility (11.25), Greater distance of market (10.00), were the major constraints in adoption of maize production technology.

In the category economic problem constraints the major constraints were low income (46.25%), inadequate credit (23.75%), high rate of interest on credit (21.25%), and high high rate of manure, seed, diesel, medicines and equipment (8.75%) regarding adoption of recommended maize production technology.

In the category of market related constraints i.e. non availability of fertilizer (32.5%), low knowledge about improved variety (22.5%), high cast of chemical fertilizer(17.5%), lack of skill about the adoption of improved technology viz. seed treatment (10.00%), and Lack of training (5.00%), lack of knowledge about IPM (7.5%)were the major constraints in adoption of maize production technology.

Table 2: Suggestions to overcome constraints faced by farmers during adoption of maize production technology

No.	Suggestions	No. of respondents	Percentage	Rank
1.	HYV seed at the time of sowing should be made available	64	80.00	I
2.	Availability of loan with less interest rate	61	76.25	II
3.	Availability of fertilizers	54	67.5	III
4.	Organization of camps for providing time to time training on technical knowledge	49	61.25	IV
5.	Seedling facility should be provided	48	60.00	V
6.	Time to time visit of experts	42	52.5	VI
7.	Timely availability of irrigation facilities	41	51.25	VII
8.	Facility of subsidized inputs should be provided	34	46.25	VIII
9	Suitable marketing facilities should be provided	15	18.75	IX

The Table 2 describes that the various suggestions provided by the maize growers in regard to the better adoption of the recommended maize production technology. The farmers suggested to increase their knowledge and adoption level seed of HYV at the time of sowing should be made available (80.00%), availability of loan with less interest rate (76.25%), availability of fertilizers (67.5%), organization of camps for providing time to time training on technical aspects (61.25%), seedling facility should be provided (60.00%), time to time visit of experts (81.67%), timely availability of irrigation facilities (51.25%), facility of subsidies inputs should be provided (46.25%) and suitable marketing facilities should be provided (18.75%).

Summary

Thus, it can be concluded that under the personal constraints, maximum number of respondents were reported that other occupation (31.25%) followed by Technological constraints non understanding the true value of maize (20.00 %), economic constraints were low income (46.25%), and market constraints were non availability of fertilizer (32.5%), regarding adoption of recommended maize production technology.

Reference

Dr. Yogendra Kumar Singh, Ajai Kumar Yadav and Dr. Beena Singh 2022 “Adoption level of farmers on recommended maize cultivation technology in Chhindwara, district M.P.” *The Pharma Innovation*; 11(12): 3221-3223.

Dandu. Snigdha, Dipakkumar Bose, Jahanara 2019 “Adoption of Improved Production Practices of Maize in Bheemadevarapalli Vangara Block of Warangal District,” *International Journal of Innovative Science and Research Technology* ; Volume 4, Issue 7, pp 277-279.

Sifti, Vishakha Bansal. Adoption of improved maize production technologies among farm women of Udaipur district, Rajasthan *The Pharma Innovation Journal*. 2022;SP-11(9):1934-36

Vikas Chowhan, MV Srinivasa Reddy, Mohan Kumar TL. A study on extent of adoption of recommended production technologies by maize growers in Koppal district of Karnataka *The Pharma Innovation Journal*. 2021;SP-10(12):45-49.