

## **Short Communication**

### **Constraints Faced by the Farmers in Chickpea Production Technology of Tikamgarh District of M.P**

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Large scale adoption of innovation is essential feature of agricultural development. The main problem as it exists today is that of transfer of fruitful technologies and their skills pertaining to various practices of chickpea production cultivation among the farmers. However, some farmers adopt all the recommended practices while some others don't. The personal, social and economic aspects of the farmers play a major role in their adoption process. It was felt that information about the adoption level and technological gap in cultivation of chickpea crop in relation to personal characteristics of the farmers and reasons for the same would form an important

The study was conducted in Tikamgarh district of Madhya Pradesh. Tikamgarh district comprises of six blocks, out of six blocks, Tikamgarh block was selected purposively because maximum area under chickpea crop and low productivity than potential yield as compared to other blocks. Also the block has more transfer of technology centers and marketing facilities. The Tikamgarh blocks comprise of 174 villages, out of which, a list of chickpea growing villages will be prepared and 6 villages will be selected randomly. From each selected

aspect today. It is to be noted that there are no studies in Tikamgarh district with reference to the technological gap in adoption of recommended cultivation practices by the chickpea growers. Hence, in this context the present study was undertaken to measure the extent of adoption and locating the technological gap in specific components of chickpea cultivation was under taken with the objective to know the constraints responsible for existing technological gap and suggestions for enhancing chickpea production technology. Later on these constraints were classified into situational, technological, economical, marketing, extension and institutional constraints.

villages namely Pahadi, Shivpuri, Surajpur, Karmai Karmashanghat, and Ganeshpura, 20 chickpea growers were selected by using random sampling method, to make the total sample size 120. The data were collected and recorded using pre tested and well structured interview schedule. Secondary data was collected from source of reports and documents. Frequencies, percentage and mean percent score, standard deviation, t-test and correlation analysis were used for analyzing the data statistically.

The constraints responsible for technological gap in improved technology of chickpea cultivation as perceived by the respondents were pertaining situational, technological, economical, marketing, extension and institutional constraints which were as follows. All the possible statements to measure all the above mentioned constraints were given in the

**Situational constraints**

Table 1 incorporates the findings of situational constraints of chickpea cultivation as perceived by the chickpea growers. It is clear from the data that the majority of the chickpea growers reported market is far away from village (95.8%), Irregular supply of electricity (87.5%),

interview schedule and their intensity was computed by calculating percentage according to the frequencies of the respondents against each of the constraints. Then they were assigned rank on the basis of percentage against each constraint. The results have been presented from Table 1 to 5.

poor transport facilities for crop produce (83.3%), lack of agriculture implements in village (79.1%), Non- availability of sufficient irrigation facilities (71.6%) and lack of labourers at the time of harvesting (51.6%).

**Table 1 Situational constraints reported by chickpea growers in adoption of chickpea production technology**

S.No	Constraints	Frequency	Percentage	Rank
1	Lack of agriculture implements in village	95	79.1	IV
2	Market is far away from village	115	95.8	I
3	Irregular supply of electricity	105	87.5	II
4	Non-availability of sufficient irrigation facilities	86	71.6	V
5	Lack of labourers at the time of harvesting	62	51.6	VI
6	Poor transport facilities for crop produce	100	83.3	III

**Technological constraints**

Table 2 incorporates the findings of situational constraints of chickpea cultivation as perceived by the chickpea growers. The technological constraints perceived by the chickpea growers were lack of knowledge about seed treatment (98.3%), lack of knowledge about

recommended dose of fertilizer (96.6%), lack of knowledge about improved varieties (88.3%), lack of knowledge about calibration chemical and their recommended doses (85%), lack of knowledge about insects, pests, diseases and weeds (70.8%).

**Table 2 Technological constraints reported by chickpea growers in adoption of chickpea production technology**

S. No	Constraints	Frequency	Percentage	Rank
1	Lack of knowledge about improved varieties	106	88.3	III
2	Lack of knowledge about seed treatment	118	98.3	I
3	Lack of knowledge about recommended does of fertilizer	116	96.6	II
4	Lack of knowledge about insects, pests, diseases and weeds	85	70.8	V
5	Lack of knowledge about calibration chemical and their recommended doses	102	85	IV

**Economic constraints**

Table 3 incorporates the findings of economic constraints of chickpea cultivation as perceived by the chickpea growers. The economic constraints perceived by the chickpea growers were lack of funds to purchase agriculture

inputs (95%), complex procedure of bank loan (85%), high cost of inputs like seed, fertilizer, biofertilizer (79.1%), higher rate of interest on loan (63.3%), Higher charges of labourers (58.3%).

**Table 3 Economic constraints reported by chickpea growers in adoption of chickpea production technology**

S. No	Constraints	Frequency	Percentage	Rank
1	Lack of funds to purchase agriculture inputs	114	95	I
2	Complex procedure of bank loan	102	85	II
3	Higher rate of interest on loan	76	63.3	IV
4	Higher labourer charges	70	58.3	V
5	High cost of inputs like seed fertilizers biofertilizer	95	79.1	III

**Marketing constraints**

Table 4 reflected the findings of the marketing constraints responsible for technological gap in chickpea production technology. The data revealed that the majority of chickpea growers reported

daily market facilities in their locality (93.3%), Irregular supply of seed, fertilizer and pesticides (91.6%), Lack of knowledge about market value of product (82.5%).

**Table 4 Marketing constraints reported by chickpea growers in adoption of chickpea production technology**

S. No	Constraint	Frequency	Percentage	Rank
1	Lack of knowledge about market value of product	99	82.5	III
2	Daily market facilities in their locality	112	93.3	I
3	Irregular supply of seed, fertilizer and pesticides	110	91.6	II

**Extension constraints**

Table 5 incorporates the findings of extension constraints of chickpea cultivation as perceived by the chickpea growers shows that the majority of them

reported less contact with RAEOs (97.5%), lack of knowledge about communication media (81.6%), lack of technological knowledge (78.3%).

**Table 5 Constraints about extension activities reported by chickpea growers in adoption of chickpea production technology**

S. No.	Constraints	Frequency	Percentage	Rank
1	Less contact with RAEOs	117	97.5	I
2	Lack of knowledge about communication media	98	81.6	II
3	Lack of technological knowledge	94	78.3	III

**Institutional constraints**

In addition to situational, technological, economical, marketing, extension and technological constraints some institutional constraints were also studied. The institutional constraints in this

study were the impediments pertaining to organisation in the way of adoption of recommended chickpea production technology which were responsible for technological gap in the crop. The

information regarding the same is presented in Table 6. It shows the institutional constraint of chickpea as perceived by the chickpea growers. It is clear from the data that the majority of

chickpea growers reported Unavailability of seed, fertilizer through government agencies (87.5%) and Lack of co-operative societies (78.3%).

**Table 6 Constraints about institution reported by chickpea growers in adoption of chickpea production technology**

S. No	Constraints	Frequency	Percentage	Rank
1	Lack of co-operative societies	94	78.3	II
2	Unavailability of seed, fertilizers through government agencies	105	87.5	I

The major suggestions made by the chickpea growers to overcome constraints regarding adoption of improved chickpea production technology<sup>[3]</sup>. Were ‘visit of RAEOs should be regular’(100 %) ranked I<sup>st</sup>, technological knowledge should be given by RAEOs (98.3 %) ranked II<sup>nd</sup>, ‘demonstration should be conducted on farmer field by agriculture department’ (97.5 %) ranked III<sup>rd</sup>, ‘co-operative societies should be in every village’(96.6%) ranked IV<sup>th</sup>, ‘rate of

seed fertilizer and insecticide should be less’ (93.3%) ranked V<sup>th</sup>, ‘technical chickpea production training should be given (86.6%) VI<sup>th</sup>, ‘minimum support price should be made by the government’ (83.3 %) ranked VII<sup>th</sup>, ‘the crop loan and subsidy should be provided in time’ (82.5%)ranked VIII<sup>th</sup>,‘electricity should be made available’(81.6 %)ranked IX<sup>th</sup>, ‘field visit should be taken by ADO at two times in a months (71.6 %) ranked X<sup>th</sup>.

S. No.	Suggestions	Frequency	Percentage	Rank
1	Rate of seed fertilizer and insecticide should be less	112	93.3	V
2	Electricity should be made available	98	81.6	IX
3	Demonstration should be conducted on farmer field by agriculture department	117	97.5	III
4	Technical chickpea production training should be given	104	86.6	VI
5	Visit of RAEOs should be regular	120	100	I
6	Technological knowledge should be given by RAEOs	118	98.3	II
7	The crop loan and subsidy should be provided in time	99	82.5	VIII
8	Minimum support price should be made by the government	100	83.3	VII
9	Filed visit should be taken by ADOs at two times in a months	86	71.6	X
10	Co-operative societies should be in every village	116	96.6	IV

## References

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