
ORIGINAL ARTICLE

Constraints and Suggestions for Chickpea Growers Satna District of M.P.

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ABSTRACT

All the chickpea growers (90.83%) of the study area were facing the problem of Lack of labourers at the time of harvesting. Another major constraint was Poor transport facilities for crop produce reported by (82.50%) growers. Lack of agriculture implements in village for crop produce was also major constraint as reported by the majority (81.67%) chickpea growers. Market is far away from village In technological constraints, the majority of chickpea growers (93.33%) faced the problem of Lack of knowledge about improved varieties. Another constraint was Lack of knowledge about seed treatment reported by (89.17%) growers. Lack of knowledge about insects, pests, diseases and weeds .Lack of knowledge about recommended dose of fertilizer was also a major constraint as reported by majority (82.50%) of growers. Lack of fund to purchase agriculture inputs was major constraint as reported by higher percentage (85.83%) of growers. higher percentage of growers reported Lack of knowledge about market value of product (86.67%) and daily market facilities in their locality (82.50%). the higher percentage (89.17%) of chickpea growers reported the problem of less contact with RAEOs and lack of technological knowledge (87.50%). The most important suggestions that the visit of RAEOs should be regular, technical information should be given by RAEOs, technical chickpea production training should be given demonstrations should be conducted on the farmer's field.

Keywords: Agriculture inputs, demonstrations, technological constraints, chickpea

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INTRODUCTION

The chickpea growing states in India are Madhya Pradesh, Uttar Pradesh, Maharashtra, Andhra Pradesh, Rajasthan, Karnataka, Chhattisgarh, Bihar and Haryana. Madhya Pradesh is one of the important pulses growing State in India[1]. The common pulses growing in Madhya Pradesh are pigeonpea moong bean, urad bean during kharif season and chickpea, lentil, pea and rajma during rabi season[2]. The split data on these pulse crops' statistics shows that 60 per cent of pulses are grown in rabi and 40 per cent in kharif season respectively. Madhya Pradesh is one of the leading pulses producing state (having first position among other sates of India) contributing about 20.00 and 25.00 per cent pulse area and production of the country[3]. Area, production and productivity of total pulses were more than 4500 thousand hectares with more than 3500 thousands tonnes production and more than 780 kg per hectare in the year 2014-15, against 3023.00 thousand hectare area, 1446.60 thousand tonnes production and 479 Kg per hectare productivity in the year 1969-70 respectively at the time of green revolution in India[4].Satna district is also leading chickpea growing district of the state which shared 7200 hectare area with production of 40461 Metric tonnes and productivity 561 kg/ha[5]. The yield per hectare of chickpea crop is low through having high percentage of cropped area as compared to other districts of M.P. It also clearly observed form the available secondary data from Agricultural statistics that the area of production corresponding previous years of Satna district had continuously increased but productivity was decreased[6].

MATERIAL AND METHODS

The investigation was conducted in Sohawal block of Satna district which was selected purposively on account of larger area (7200 ha.) and low productivity (561 kg/ha.) of gram as compared to other blocks. Ten villages were taken on random basis after preparation of list of gram growing villages and twelve farmers from each village were selected on random basis[7]. Thus, a total of 120 respondents were considered for the study. The data were obtained through pre-tested structured schedule with the help of interview. Both qualitative and quantitative types of data were collected[8]. The qualitative data were converted into quantitative form by giving suitable scores. The collected data were quantified, classified, tabulated and presented on the basis of frequencies and percentages. In order to ascertain association between independent and dependent variables, the chi-square test was worked out.

RESULTS AND DISCUSSION

Situational constraints:

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

S. No	Constraint	Frequency	Percentage	Rank
1	Lack of agriculture implements in village	98	81.67	III
2	Market is far away from village	87	72.50	IV
3	Irregular supply of electricity	63	52.50	VI
4	Non-availability of sufficient irrigation facilities	79	65.83	V
5	Lack of labourers at the time of harvesting	109	90.83	I
6	Poor transport facilities for crop produce	99	82.50	II

Table 1 shows the situational Constraints of chickpea as perceived by the growers. It is clear from the data that the majority of the growers reported lack of labourers at the time of harvesting (90.83%)[8], poor transport facilities for crop produce (82.50%), lack of agriculture implements in village (81.67%),market is far away from village(72.50%),Non- availability of sufficient irrigation facilities (65.83%) and Irregular supply of electricity (52.50 %)[9].

Technological constraints:

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

S. No	Constraint	Frequency	Percentage	Rank
1	Lack of knowledge about improved varieties	112	93.33	I
2	Lack of knowledge about seed treatment	107	89.17	II
3	Lack of knowledge about recommended does of fertilizer	99	82.50	IV
4	Lack of knowledge about insects, pests, diseases and weeds	102	85.00	III
5	Lack of knowledge about calibration chemical and their recommended doses	91	75.83	V

Table 2 shows the technological constraint of chickpea as perceived by the growers.It is clear from the data that the majority of growers reported lack of knowledge about improved varieties (93.33%), lack of knowledge about seed treatment (89.17%), lack of knowledge about insects, pests, diseases and weeds (85.00%), lack of knowledge about recommended does of fertilizer (82.50%) and lack of knowledge about calibration chemical and their recommended doses (75.83%)[10].

Economic constraints

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

S. No	Constraint	Frequency	Percentage	Rank
1	Lack of funds to purchase agriculture inputs	103	85.83	I
2	Complex procedure of bank loan	92	76.67	III
3	Higher rate of interest on loan	69	57.50	V
4	Higher labourer charges	72	60.00	IV
5	High cost of inputs like seed fertilizers biofertilizer	98	81.67	II

Table 3 shows the economic constraint of chickpea as perceived by the growers. It is clear from the data that the majority of growers reported lack of funds to purchase agriculture inputs (85.83%), high cost of

inputs like seed, fertilizer, biofertilizer (81.67%), complex procedure of bank loan (76.67%) Higher charges of labourers (60.00%), higher rate of interest on loan (57.50%)[11].

Marketing constraints

Table 4: Market 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	104	86.67	I
2	Daily market facilities in their locality	99	82.50	II
3	Irregular supply of seed, fertilizer and pesticides	87	72.50	III

Table 4 shows the marketing constraint of chickpea as perceived by the growers. It is clear from the data that the majority of chickpea growers reported Lack of knowledge about market value of product (86.67%), daily market facilities in their locality (82.50%) and Irregular supply of seed, fertilizer and pesticides (72.50%)[12],

Extension constraints:

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

S. No	Constraint	Frequency	Percentage	Rank
1	Less contact with RAEOs	107	89.17	I
2	Lack of knowledge about communication media	89	74.17	III
3	Lack of technological knowledge	105	87.50	II

Table 5 shows the extension constraint of chickpea as perceived by the growers. It is clear from the data that the majority of growers reported less contact with RAEOs (89.17%), lack of technological knowledge (87.50%) and lack of knowledge about communication media (74.17%)[13].

Institutional constraints:

Table 6: Constraints about institutional reported by growers in adoption of chickpea production technology

S. No	Constraint	Frequency	Percentage	Rank
1	Lack of co-operative societies	89	74.16	II
2	Unavailability of seed, fertilizers through government agencies	103	85.83	I

Table 6 shows the institutional constraint of chickpea as perceived by the growers. It is clear from the data that the majority of chickpea growers reported Unavailability of seed, fertilizer through government agencies (85.83%) and Lack of co-operative societies (74.16%)[14].

Table 7: Suggestions reported by chickpea grower in technological gap of improved chickpea production technology

S. No.	Suggestions	Frequency	Percentage	Rank
1	Rate of seed fertilizer and insecticide should be less	102	85.00	VI
2	Electricity should be made available	89	74.17	IX
3	Demonstration should be conducted on farmer field by agriculture department	97	80.83	VIII
4	Technical chickpea production training should be given	111	92.50	III
5	Visit of RAEOs should be regular	117	97.50	I
6	Technological knowledge should be given by RAEOs	114	95.00	II
7	The crop loan and subsidy should be provided in time	101	84.17	VII
8	Minimum support price should be made by the government	105	87.50	V
9	Filed visit should be taken by ADOs at two times in a months	88	73.33	X
10	Co-operative societies should be in every village	108	90.00	IV

Table 7 shows the suggestion made by the chickpea growers for technological gap of improved chickpea production technological out of the total chickpea growers 97.50 per cent Visit of RAEOs should be regular, 95.00 per cent Technological knowledge should be given by RAEOs, 92.50 cent Technical chickpea production training should be given, 90.00 cent Co-operative societies should be in every village, 87.50 per cent Minimum support price should be made by the government, 85.00 per cent Rate of seed fertilizer and insecticide should be less, 84.17 per cent The crop loan and subsidy should be provided in time, 80.83 cent Demonstration should be conducted on farmer field by agriculture department, 74.17 per cent Electricity should be made available and 73.33 per cent Field visit should be taken by ADO at two times in a month's[15].

CONCLUSION

As situational constraints are concerned, lack of labourers at the time of harvesting village was faced by all the gram growers (90.83%) in the study area. In case of technological constraints, the large majority of growers (93.33%) were facing lack of knowledge about improved varieties. Regarding economical constraints, the large majority (85.83%) of growers were facing the constraints like lack of fund to purchase agriculture inputs. In case of market related constraints, majority chickpea growers (86.67%) were facing Lack of knowledge about market value of product. Regarding extension related constraints, majority of the growers (89.17%) faced the problem of less contact with RAEOs. In case of institutional constraints, majority of growers faced the problem of unavailability of seed, fertilizer through government agencies (85.83%). The most important suggestions given by chickpea growers for adoption of improved chickpea production technology were that the electricity should be made available, technical chickpea production training should be given, visit of RAEOs should be regular, price of seed, fertilizers and insecticides should be less, minimum support price should be attractive, demonstrations should be conducted the farmer's field by the agriculture department and technical information should be given by RAEOs. The present study was confined to limited area. Hence, the result may not be applicable to a large area. For appropriate generalization, similar work should be undertaken on a large scale. In this study, the dependent and independent variables were limited and therefore, further studies may be taken up based on situational and infrastructural variables.

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