

RESEARCH NOTE

Constraints in Use of Chemical Fertilizer among the Tribals of Bastar (M.P.)

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INTRODUCTON

During the last decade the fertilizer consumption in India has increased ten fold in terms of Nitrogen and twenty time in terms of phosphatic fertilizer.

The consumption of chemical fertilizer per unit of cropped area in Madhya Pradesh is 31 kg/ha and the consumption of chemical fertilizer in Bastar District is only 15.09 kg/ha (N), 5.10 kg/ha ($P_2 O_5$) and 1.7 (kg/ha) (K_2). There are many constraints for lower consumption of chemical fertilizer.

It is high time that the problems of farmers be critically observed and facts about lower consumption of chemical fertilizer be identified and efforts be made to increase fertilizer onsumption.

Keeping this view in mind, the present study was carried out with following objectives.

OBJECTIVES

(1) To identify the constraints towards lower consumption of chemical fertilizer among the tribals of Bastar (M. P.).

(2) To find out the suggestions to increase consumption of chemical fertilizer among the tribals.

METHODOLOGY

Bastar district has been divided into four Agriculture units viz., Kanker, Kondagaon, Jagdalpur and Dantewada out of which Jagdalpur Agriculture unit was purposively selected for this study. There are ten blocks in Jagdalpur Agriculture unit, out of which three blocks were selected and two villages were randomly selected from each block. From each village, 20 farmers were selected at random making the total sample of 120 farmers.

Constraints faced by the farmers in use of chemical fertilizer were recorded in a schedule prepared for the purpose.

Response towards Research system, Extension approach, Socio Economic condition, Technology, Psychology and availability etc. were recorded as major constraints and many sub constraints were also recorded on a three point continuum i.e., Agree, Undecided and disagree and the score was calculated against each sub constraint.

The rank position of the each sub constraint was decided on the basis of mean score against each constraint.

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Constraints in use of...

Table. 1 : Constraints in use of Chemical Fertilizer

Sr.No.	Constraints	Mean Score
	Related To Research System :	
1.	Lack of Research Findings about Chemical Fertilizer	2.57
	Constraints Related to Extension Approach	
1.	Lack of Guidance	2.51
2.	Lack of Training Programme	2.48
3.	Lack of Demonstration	2.34
4.	Non availability of printed media and A. V. Aids in local language	2.20
	Related to Socio-Economic condition	
1.	Very Poor Economic condition	2.80
2.	Illiteracy	
3.	High cost of chemical Fertilizer	2.78
4.	Lack of Awareness about Chemical Fertilizer	1.96
5.	Use of Chemical Fertilizer is not profitable	1.34
	Related to Technology	
1.	Lack of knowledge about method and Time of Fertilizer Application	2.17
2.	Complexity in Technique for Fertilizer Application	1.47
	Related to Availability	
1.	Non availability of fertilizer in time	2.28
2.	Inadequate subsidy on chemical fertilizer	2.25
3.	Non-availability of fertilizer near by villages	2.14
4.	Unavailability of credit facilities	2.05
5.	Non-availability of Improved Agriculture Implements	1.92
	Related to Water Management	
1.	Lack of Irrigation Facilities	2.57
2.	Erratic Distribution of Rainfall	2.34
	Related to Effect of Chemical Fertilizer on crop and soil :	
1.	It creates crop susceptibility to Insects and pests	1.99
2.	It creates crop susceptibility to diseases	1.94
3.	Deterioration of soil quality due to Chemical Fertilizer	1.74
4.	Chemical Fertilizer Creates Weed Problem	1.60
5.	Deterioration of Grain Quality due to Chemical Fertilizer	1.42
6.	Non adoption of recommended Fertilizer Responsive varieties of different crops	1.42
7.	Problamatic soils	1.40
8.	Chemical Fertilizer creates problem in field application	1.31
	Psychological constraints	
1.	Fatalistic attitude of farmers	1.22
2.	Conservative attitude of farmers	1.20
	Other constraints	
1.	Lack of soil Testing Facilities	1.91
2.	Leaching of Fertilizer along with Irrigation water.	1.63
3.	Adulteration in Chemical Fertilizer	1.62
4.	High Soil Fertility	1.31

Constraints in use of...

RESULTS AND DISCUSSION

On the basis of the findings of this study, it was observed that there were numerous constraints which affected the use of chemical fertilizers among the tribals.

Lack of research findings about chemical fertilizer and lack of guidance and training programme were the major constraints related to research system and extension approach respectively. So far as socio-economic condition of the tribals was concerned, they rated their poor economic condition and high cost of chemical fertilizers as the major constraints whereas lack of knowledge about method and time of fertilizer application was the main technological constraint. With regard to availability of chemical fertilizers, farmers considered non-availability of fertilizers in time and inadequate subsidy to be the major constraints. Lack of irrigation facilities and erratic distribution of rainfall were the main constraints related to water management. Regarding constraints in relation to effect of chemical fertilizer on crop and soil, they

opined "Chemical fertilizers create crop susceptibility to insects, pests and diseases and deteriorate soil quality" as the major constraints. Fatalistic and conservative attitude of farmers was the major psychological constraint where as lack of soil testing facilities, leaching of fertilizer alongwith irrigation water and adulteration in chemical fertilizer were some other important constraints in the use of chemical fertilizers among the tribals.

CONCLUSION

It can be concluded on the basis of findings from this study that there are numerous constraints in use of chemical fertilizer among the tribal farmers. This investigation shows that most of these constraints are beyond the control of the farmers, it is therefore suggested that the Govt. should prepare immediate and appropriate long term action plan to overcome these. A sincere effort is also needed on the part of research station and the state Extension officers to device way for elimination of these constraints.

❖ This is the miracle that happens every time to those who really love : the more they give, the more they possess of that precious nourishing love from which flowers and children have their strength and which could help all human beings if they would take it without doubting...

- RAINER MARIA RILKE