Constraints in Adoption of Soybean Production Technology

Ishwar Singh¹, K.K. Singh² and U S Gautam³

1. SMS, (Agril. Ext.), KVK, Burhanpur, 2. Asso.Prof. (Agril. Ext.) MGCGVV-Chitrakoot –Satna (MP), 3. Zonal Project Director-ZPD-Zone-VII ICAR, Jabalpur Corresponding author e-mail: ishwarharsh@gmail.com

ABSTRACT

The study was conducted in the eight villages of two blocks (four each) of Burhanpur district of Madhya Pradesh during the year 2009-2010. The finding of study reveals that the constraints related with personal matter farmers reported that lack of education (67.72%) and lacks of knowledge (54.05%) were the major constraint. Problem of non availability of credit at proper time and non availability of proper amount in credit were important socioeconomic constraints. The study also indicated that the lack of social participation and lack of risk bearing capacity were major socio-psychological constraint. As far as the communicational constraints were concerned, lack of information at proper amount was found a major constraint followed Lack of information in proper time and non availability of information media. The study also shows the technological constraints due to which the rate of adoption is low. It was observed about 91.72 per cent respondents reported the lack of irrigation facility as the major constraints.

Key words: Socio-economic constraints; Social participation; Lack of risk bearing capacity; Socio-psychological constraint; Communicational constraints;

Transfer of new agricultural technology is necessary for farmer in an usable form. But it has been observed that the dissemination of the new farm technology is limited amongst the farmers and ultimately result in low yield. Transfer of new technology is very important to increase the agricultural production. Although a large number of research have been done but not all of them have been adopted by the farmers. Its results a wide gap between the available knowledge and its adoption. Soybean crop has been considered important for meeting the requirement of balanced diet in human being. As a result of researchers conducted in the field of soybean, specific recommendation has been released for the adoption by the farmers to increase the farm production per unit area. The average yield of soybean is much less in farmer's field as compared to the yields obtained in experiment and demonstration. Further, the yield of soybean production can be increased if the farmers are motivated to adopt the recommended technology of soybean. This requires identifying the factors which affect the adoption of the recommended technology.

In Madhya Pradesh per hectare yield of soybean crop is very low. This is only due to lack of information,

lack of knowledge and use of less productive technology by the farmers to a great extent which is reflected in yield. The oilseed production in India is in increasing order, but the fact remains that even a significant number of farmers are not using the recommended soybean production technology.

There has been numerous studies on the adoption in various crop but very few in the area of adoption of soybean technology, which is highly important oilseed crop. Having inspired by this situation, a study to assess the adoption and its related factors on soybean in Burhanpur district was under taken. For research work entitled "A study on Constraints in adoption of soybean production technology" was taken.

METHODOLOGY

The study was conducted in the eight villages of two blocks (four each) of Burhanpur district of Madhya Pradesh during the year 2009-2010. Out of all the total farm family. 15 farmers were selected as respondents from each village. In this way a total 120 farmers were selected from whole selected villages for collection of data. The data were collected through personal interview and analyzed with appropriate statistical methods.

RESULTS AND DISCUSSION

In the present study effort were made to categorize the major constraints viz., personal, socio-economic, socio-psychological, communication and technological constraint as faced by the farmers in adopting recommended soybean production technology. The constraints narrated by the farmers regarding adoption of recommended soybean production technology are presented in Table 1. The table showed that constraints related with personal matter farmers reported that lack of education (67.72%) and lacks of knowledge (54.05%) were the major constraint. The big family, old age and other business were another important constraint in adoption of soybean production technology which scored 46.89, 42.17 and 36.83 per cent, respectively.

Table 1. Constraints faced by farmers in adoption of soybean production technology

Categories	MPS*	Rank
Personal Constraint		
Lack of education	67.72	I
Lack of knowledge	54.05	II
More age	42.17	IV
Big family	46.89	III
Other business	36.83	V
Socio-economic constraint		
Small land holding	59.61	V
Un consolidation of existing land holding	58.22	VI
Lowincome	78.22	III
Credit is not available at proper time	83.54	I
Credit is not available at proper amount	82.35	II
High rate of interest on credit	67.39	IV
Lack of social motivation	40.44	VII
Other people not adopt advance technology	32.94	VIII
Socio-psychological constraint		
Lack of social participation	47.66	I
Lack of risk bearing capacity	41.55	II
Communication constraint		
Not availability of information at proper	87.72	I
amount		
Lack of information in proper time	80.16	II
Not available of information media	65.61	III
Technological constraint		
Lack of irrigation	91.72	I
Non availability of inputs (Seed fertilizer,	78.17	II
chemicals, equipments etc) at proper time		
in village or near by village.		

^{*}Mean per cent score

The table also revealed that important socioeconomic constraints were reported by the farmers in which problem of non availability of credit at proper time and non availability of proper amount in credit were scored first and second rank with 83.54 and 82.35 per cent, respectively. Low income (78.22%), high rate of interest (67.39%), small land holding (59.61%) and un consolidation of existing land holding (58.22%) were the another major constraint faced by the farmers. Other constraint like lack of social response and non adoption of technology were also reported by 40.44 and 32.94 per cent of the respondents, respectively.

Regarding socio-psychological constraint lack of social participation and lack of risk bearing capacity were reported as major constraints by 47.66 and 46.55 per cent of the respondents.

As far as the communicational constraints were concerned lack of information at proper amount was found to be a major constraint with 87.72 per cent. Lack of information in proper time was found second important constraint with 80.16 per cent, whereas, non availability of information media 65.61 per cent were rank third (65.61%)

Father, the table depicts that technological constraints due to which the rate of adoption is low. It was observed about 91.72 per cent respondents reported the lack of irrigation facility as the major constraints, while, non availability of inputs at proper time at village or nearby village was reported by 78.17 per cent.

Suggestion given by the farmers for removing the constraints: The table 2 showed that majority of the farmers (73.33%) suggested that the irrigation facility should be provided. About (68.33%) farmers suggested that the credit facilities should be provided at proper time. While, 63.33 and 62.50 per cent farmers reported that the proper information at proper time and training facility should be important for adoption.

Table: 2 Suggestion given by the farmers for removing the constraints (n=120)

Suggestion	F	Percent*
Irrigation facility should be provided	88	73.33
Seed, fertilizer and other inputs	55	45.83
Credit should be provided at proper time	82	68.33
Subsidies shall be increased on agricultural credit and inputs	70	58.33
Extension agent or agency should convey proper information at proper time	76	63.33
Training should be provided	75	62.50

However, 58.33 per cent farmers suggested that subsidies should be provided on agricultural inputs and credit, while, 45.83 per cent farmers suggested that the

seeds, fertilizers and plant protection measures should be supplied at proper time during the season of soybean crop.

CONCLUSION

Regarding constraints faced by the farmers, major personal constraint faced by the farmers was lack of education and lack of knowledge. About socio-economic constraints faced by respondents were the credit acquisition at the proper time and proper amount, high rate of interest and small land holding. Lack of social participation was the main socio-psychological constraint

in adopting soybean production technology. However, non availability of information at proper time and proper amount were the major informational constraints. Major technological constraint faced by the respondents were lack of irrigation facility, non availability of input i.e. seed, fertilizer and un availability of chemical for plant protection. For removing the constraint farmers suggested to provide the irrigation facility. Extension agency should work properly, credit facility should provide at proper time and most require input should be supplied at proper time, were the major suggestion from the farmers' side.

REFERENCES

- Shriram and M.S. Chouhan (2000) Adoption Gap in improved practices of wheat cultivation among tribal and non-tribal farmers. *Maharashtra J.Extn. Edun.* 19:(121-123).
- Thyagarajan S. and J. Siva Subramaniam (2006) adoption of recommended farming practices by coconut growers. *Indian J. Extn. Edun.* 42 (1&2):61-63.
- Thyagarajan S. and K.S.R.P. Parnikumar (2006). Constraints in adoption of recommended cultivation practices by coffee growers. *Indian J. Extn. Edun.* 42 (1-2):126-129.
- Talukar P.K. and B.S. Sontanki (2005). Correlates of Adoption of Composite fish culture practices by fish farmers of Assam, India. *The J. of Ag. Science*. 1 (1):12-18.

• • • • •