



Adoption level of Soybean Growers about Improved Production Technology under the guidance of Krishi Vigyan Kendra in Sehore District of M.P

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ABSTRACT

The present study was undertaken in Sehore district of Madhya Pradesh. A probability proportion to size sampling design was used to select the sample soybean growers. A total of 200 soybean growers were selected for the study purpose, in which 100 soybean growers were trained and 100 soybean growers were untrained. The primary data required for the study were collected from selected sample soybean growers through structured interview schedule. It was showed that nearly 73 per cent trained and 59 per cent untrained soybean growers had medium adoption about improved production technology of soybean crop. Whereas, only 9.0 per cent of trained soybean growers had low adoption level about improved production technology of soybean crop and 14 per cent of untrained soybean growers had high adoption level about improved production technology of soybean crop. The results clearly indicated that the overall adoption level about improved production technology of soybean crop of trained soybean growers were higher than untrained soybean growers.

Key words: Soybean, Soybean growers, Krishi Vigyan Kendra, Adoption level.

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INTRODUCTION

Soybean (*Glycin max* L.) is the major oilseed crop in the world accounting for nearly 50 per cent of the total oilseeds area as well as production. It is classified as an oilseed rather than a pulse due to its high oil content and its more popular use as a source of vegetable oil and industrial applications such as biodiesel. It provides approximately 60 per cent of vegetable proteins and 30 per cent of oil in the world. Soybean ranks third in vegetable oil economy after groundnut and rapeseed-mustard. Soybean contains about 42 per cent protein and 20 per cent oil. Madhya Pradesh is a major producer of soybean in India. It shares in total production about 70 to 73 per cent hence designated as "Soya state". Looking the problems of low productivity of soybean crop the KVK personnel exercised suitable transfer of technology to fill the adoption gap between trained and untrained soybean growers. Krishi Vigyan Kendra is an integral part of the National Agricultural Research System (NARS) aims at assessment of location specific technology modules in agriculture and allied enterprises, through technology assessment, refinement and demonstrations. Therefore, the questions arise whether there is an impact of KVK on trained soybean growers in adoption of improved production technology of soybean crop and what difference between trained and untrained soybean growers about adoption level of improved production technology of soybean crop. So, keeping these aspects in mind, a study entitled "Adoption level of Soybean Growers about Improved Production Technology under the guidance of Krishi Vigyan Kendra in Sehore District of Madhya Pradesh" has been conducted.

MATERIAL AND METHODS

The study was entirely concerned with innovative activities conducted by Krishi Vigyan Kendra, Sehore . A cumulative list of villages was prepared on the basis of soybean growers who received training under KVK Sehore. The villages having maximum number of trained soybean growers were selected from prepared list and five villages were selected from each selected block, thus a total of ten villages were selected from both blocks, similarly five villages were also selected from the each block that is uncovered under KVK. Therefore, a total number of 20 villages were selected to select soybean growers. The soybean growers are main source of information. In view of the objectives of study two types of soybean growers, trained and untrained were selected. A total 200 soybean growers in which 100 trained and 100 untrained soybean growers will be selected through probability to proportion size sampling method from the selected villages. A well-structured and pretested interview schedule was used for data collection through personal interview method. The following statistic was used for Study on Adoption level of Soybean Growers about Improved Production Technology under the guidance of Krishi Vigyan Kendra in Sehore District of Madhya Pradesh. The data was analyzed by using percentage, frequency, standard deviation and correlation coefficient.

RESULT AND DISCUSSION

Adoption level

Table 1. Distribution of soybean growers according to their adoption level

| S.N | Items | Trained Growers (N = 100) | | Untrained Growers (N = 100) | |
|--------------|-----------------------|----------------------------|------------|------------------------------|------------|
| | | Frequency | Percentage | Frequency | Percentage |
| 1 | Low (score up to 4) | 09 | 09 | 27 | 27 |
| 2 | Medium (score 5 to 8) | 73 | 73 | 59 | 59 |
| 3 | High (score & above) | 18 | 18 | 14 | 14 |
| Total | | 100 | 100 | 100 | 100 |

The data presented in Table 1 indicates that nearly 73.00 per cent of trained soybean growers had medium adoption level about improved production technology of soybean crop followed by high 18.00 per cent and low adoption level 09.00 per cent, respectively supported by [4] and [6]. Whereas, in case of untrained soybean growers majority of the soybean growers 59.00 per cent had medium adoption level about improved production technology of soybean crop followed by low 27.00 per cent and high adoption level 14.00 per cent respectively supported by [5]. Thus, the result clearly indicate that in the study area, soybean growers of the trained category showed higher adoption level about improved production technology of soybean crop than those of untrained soybean growers. This could be due to the exposure of the training programme and front line demonstrations conducted about improved technology of soybean crop by KVK scientists. The untrained soybean growers lacked this opportunity and hence, they showed lower adoption level about improved production technology of soybean crop. [3] stated that the adoption level of the tribal farmers was amplified after imparting training and conducting frontline demonstrations by Krishi Vigyan Kendra. According to [2] KVK playing a vital role in disseminating the improved crop production technology and helps in increasing the crop yield.

The data presented in Table 2 indicates that, in cases of trained soybean growers, age, education, caste, type of family, size of family, land holding, farm power, occupation, annual income, social participation, extension contact, scientific orientation, economic motivation, risk and orientation found to be significantly correlated with adoption level about improved production technology of soybean crop supported by [1] Whereas, in case of untrained soybean growers, social participation, extension contact, scientific orientation, economic motivation, and risk orientation found to be non significantly correlated with adoption level about improved production technology of soybean crop and remaining variables viz, age, education, caste, type of family, size of family, land holding, farm power, occupation and annual income found to be significantly correlated with adoption level about improved production technology of soybean crop supported by [7] and [1].

Table 2. Relationship of socio-economic, psychological and communicational variables with adoption level

| S.N | Characteristics | Trained Growers | Untrained Growers |
|-----|---|-----------------------|-----------------------|
| | | Correlation value 'r' | Correlation value 'r' |
| 1 | Age (X ₁) | .692** | .569** |
| 2 | Education (X ₂) | .639** | .535** |
| 3 | Caste (X ₃) | .701** | .464** |
| 4 | Type of family (X ₄) | .718** | .457** |
| 5 | Size of family (X ₅) | .703** | .531** |
| 6 | Land holding (X ₆) | .654** | .427** |
| 7 | Farm power (X ₇) | .732** | .578** |
| 8 | Occupation (X ₈) | .764** | .412** |
| 9 | Annual income (X ₉) | .681** | .533** |
| 10 | Social participation (X ₁₀) | .663** | .172 |
| 11 | Extension contact (X ₁₁) | .784** | .169 |
| 12 | Scientific orientation (X ₁₂) | .757** | .168 |
| 13 | Economic motivation (X ₁₃) | .781** | .144 |
| 14 | Risk orientation (X ₁₄) | .793** | .156 |

**Significant at 0.01 level of probability with 98 d.f, NS, Non-Significant

CONCLUSION

It may be concluded that the Krishi Vigyan Kendra play a proactive role in enhancing adoption level of soybean growers about improved production technology of soybean crop. KVKs various activities created great awareness and motivated soybean growers to adopt improved production technology about soybean crop. Due to the exposure of the training programme, front line demonstrations and other extension activities conducted about improved by KVK scientists, enhancing the adoption level of soybean growers about improved production technology of soybean crop.

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