

## To Measure the Knowledge Level of Soybean Growers about Improved Production Technology through Krishi Vigyan Kendra in Sehore District of Madhya Pradesh

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### ABSTRACT

Soybean is one of the most versatile crops grown around the world. Soybean also known as “golden bean”, or “miracle crop” because of its several uses, It is an excellent source of protein and oil. It contains good quality protein (43%), carbohydrate (21%), mineral (5%), moisture (8%), fat (20%), fiber (4%) and reasonable amounts of vitamins. Presently soybean contributes 43% to the total oilseeds and 25% to the total oil production in the country. Soybean has largely been responsible in uplifting soybean grower's economic status in many areas of the country but soybean crops low yield may create problem in uplifting of economic condition of the soybean growers. Today Krishi Vigyan Kendras (KVKs) play a very crucial role as actor in the Agricultural Innovation System at district level in India as a knowledge partner for development in agriculture and allied sector due to its contribution in adaptive trials and technology transfer frontline extension system in the country. The mandate of Krishi Vigyan Kendra is technology assessment and demonstration for its application and capacity development under different farming situations across the country. Therefore, keeping the above facts in mind, the study was entirely concerned with innovative activities conducted by Krishi Vigyan Kendra, Sehore. In view of the objectives of the study two types of soybean growers, trained and untrained were selected. A total 200 soybean growers in which 100 trained soybean growers and 100 untrained soybean growers were selected through random sampling method from the selected village panchayats. In case of soybean growers majority of the trained soybean growers 71.00 per cent untrained soybean growers 61.00 per cent had medium knowledge level about improved production technology of soybean crop.

**Key words:** Soybean, Krishi Vigyan Kendra, Knowledge level.

### INTRODUCTION

Importance of soybean in Indian economy, as it contributes significantly to the Indian edible oil pool. Presently soybean contributes 43% to the total oilseeds and 25% to the total oil

production in the country. Currently, India ranks fourth in respect to production of soybean in the world. The crop helps earn valuable foreign exchange (Rs. 62000 millions in 2012-13) by way of soya meal exports.

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Soybean has largely been responsible in uplifting soybean grower's economic status in many pockets of the country. It usually fetches higher income to the soybean growers owing to the huge export market for soybean de-oiled cake. While on one hand production of soybean in India has increased at a compound annual growth rate of 9.60 per cent from 6.87 million tons in 2004-05 to 15.68 million tons in 2012-13. On the other hand soybean meal consumption has also increased at a compound annual growth rate of 10.82 per cent over the last eleven years from 1365 thousand million tons in 2004-05 to 4225 thousand million tons in 2014-15. Therefore to keep pace with the increasing demand it is imperative to increase the productivity level of soybean the improved production technology will be adopted with the help of Krishi Vigyan Kendra. Krishi Vigyan Kendras (KVKs) play a very important role as frontline extension system in the country and are mandated for technology assessment and demonstration for application and capacity development under different farming situations across the country. Today Krishi Vigyan Kendra is an important actor in the Agricultural Innovation System at district level in India as a knowledge partner for development in agriculture and allied sector due to its contribution in adaptive trials and technology transfer. The study was entirely concerned with innovative activities conducted by Krishi Vigyan Kendra, Sehore. KVK's function in collaboration with scientists, subject matter experts, extension workers and soybean growers. There are 690 Krishi Vigyan Kendra in India and 11 Zonal Project Directorate working under administrative control of Indian Council of Agriculture Research. In Madhya Pradesh states 47 KVK's are functioning under zone XI ATARI. These KVK's are primarily focused on dissemination of location specific technologies access to information for uplifting and empowerment of

rural community. Therefore, keeping the above facts in mind, the present study is entitled as "To Measure the Knowledge level of Soybean Growers about Improved Production Technology through Krishi Vigyan Kendra".

## MATERIAL AND METHODS

The study was entirely concerned with innovative activities conducted by Krishi Vigyan Kendra, Sehore. A cumulative list of village panchayats was prepared on the basis of soybean growers who received training under KVK Sehore. The village panchayats having maximum number of trained soybean growers were selected from prepared list and five village panchayats were selected from each selected block, thus a total of ten village panchayats were selected from both blocks, similarly five village panchayats were also selected from the each block that is uncovered under KVK. Therefore, a total number of 20 village panchayats 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 soybean growers were selected. A total 200 growers in which 100 soybean growers trained and 100 soybean growers untrained will be selected through Proportionate random sampling method from the selected village panchayats. A well-structured and pretested interview schedule was used for data collection through personal interview method. The following statistic was used for Study on Knowledge level of Soybean Growers about Improved Production Technology through Krishi Vigyan Kendra. The data was analyzed by using percentage, standard deviation and correlation coefficient.

## RESULTS AND DISCUSSION

**Table 1. Distribution of soybean growers according to their knowledge level**

S.N.	Items	Trained Growers (N = 100)		Untrained Growers (N = 100)	
		Frequency	Percentage	Frequency	Percentage
1.	Low (score up to 8)	06	06	26	26
2.	Medium (score 9 to 16)	71	71	61	61
3.	High (score 17 & above)	23	23	13	13
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The data presented in Table 1 indicates that nearly 71.00 per cent of the trained soybean growers had medium knowledge level about improved production technology of soybean crop followed by high 23.00 per cent and low 6.00 per cent respectively. The results of this study are in same line of findings repeated by Shivanand<sup>5</sup>, and Borate *et al.*<sup>1</sup>. Whereas, in case of untrained soybean growers majority of the soybean growers 61.00 per cent had medium knowledge level about improved production technology of soybean crop followed by low 26 per cent and high 13.00

per cent respectively. The results of this study are in same line of findings repeated by Kothari *et al.*<sup>4</sup>. Thus, the result clearly indicates that in the study area, soybean growers of the trained category showed higher knowledge level about improved production technology of soybean crop than those of soybean growers of untrained soybean growers due to the exposure of the trained growers to knowledge through on-farm trail, front line demonstration and different type of training conducted by KVK about soybean crop.

**Table 2. Relationship of socio-economic, psychological and communicational variables with knowledge level of trained and untrained growers**

S.N.	Characteristics	Trained Growers	Untrained Growers
		Correlation value 'r'	Correlation value 'r'
1.	Age	.677**	.537**
2.	Education	.637**	.573**
3.	Caste	.703**	.632**
4.	Type of Family	.610**	.626**
5.	Size of Family	.666**	.226*
6.	Land Holding	.631**	.499**
7.	Farm Power	.658**	.495**
8.	Occupation	.622**	.638**
9.	Annual Income	.675**	.535**
10.	Social Participation	.610**	.588**
11.	Extension Contact	.755**	.126 <sup>NS</sup>
12.	Scientific Orientation	.786**	.160 <sup>NS</sup>
13.	Economic Motivation	.799**	.133 <sup>NS</sup>
14.	Risk Orientation	.755**	.120 <sup>NS</sup>

\*Significant at 0.05 level of probability; \*\*Significant at 0.01 level of probability with 98 d.f. NS= Non-Significant.

The data presented in the Table 2 indicates that, in case 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 and risk orientation found to be significantly correlated with knowledge level about improved production technology of soybean crop. The results of this study are in same line of findings repeated by Dwivedi<sup>2</sup> and Jadhao<sup>3</sup>. Whereas, in case of untrained soybean growers, extension contact, scientific orientation, economic motivation and risk orientation of untrained soybean growers have

no significant correlation with knowledge 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, annual income and social participation found to be significantly correlated with knowledge level about improved production technology of soybean crop. The results of this study are in same line of findings repeated by Dwivedi<sup>2</sup> and Jadhao<sup>3</sup>.

## CONCLUSION

Thus, it can be concluded that in study area, the knowledge level of trained soybean

grower's about improved production technology of soybean crop was comparatively high as compare to untrained soybean growers. This could be due to the exposure of the trained soybean growers to knowledge through on-farm trail, front line demonstration and different type of training conducted by KVK about soybean crop. The untrained soybean growers lacked this opportunity and hence, they showed lower knowledge level about improved production technology of soybean crop.

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