Attitude of Farmers Towards Improved Soybean Production Technology in Indore District of Madhya Pradesh

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ABSTRACT: The present investigation was conducted in Indore block of Indore district, Madhya Pradesh. One hundred twenty respondents were selected randomly from 12 villages which were selected purposively. The primary data were gathered by the researcher itself through pre-structured interview schedule. Appropriate statistical tools were used to interpret the collected data to draw logical conclusion. The finding inferred that majority of farmers were having medium level of attitude towards improved soybean production technology. Age, Education, land holding, Mass media exposure, Extension contacts, Economic motivation were observed positive and significant correlation with their attitude level.

Keywords:- Attitude, Production technology, Soybean.

I. INTRODUCTION

Soybean had played a pivotal role in socio-economic transformation of majority of small and marginal farming community of central India and continued to contribute significantly to the oil economy of India. The average productivity of soybean presently is staggering around one ton per ha, which is a matter of concern. A study, therefore, was conducted in major soybean growing districts Indore with a prime objective to assess the attitude towards improve soybean production technology by the farmers. (Dupare et al. 2019)

Soybeans are among the few complete protein vegetable based foods with nine essential amino acids.1,2 For this reason, the soybean has become an important source of human and animal protein, with 85% of its cultivation destined for animal feed and the remaining destined for direct human consumption.4,5 This “king of beans” is mostly crushed into soy oil and meal and is found in hundreds of edible and non-edible products, ranging from cooking oil, animal grains, vegan food, and milk to biodiesel and other industrial applications.4 After palm oil, soybean oil is the most consumed cooking oil in the world. (Voora et al. 2020)
MATERIALS AND METHODS:

The present study was purposively undertaken in Indore block of Indore district in Madhya Pradesh. 12 villages were purposively selected on the basis of majority of farmers practicing soybean cultivation. From each selected villages, 10 farmers were selected randomly making a sample of 120 respondents. Pretested interview schedule was used for collection of data. The collected data were classified, tabulated and analyzed in the light of the objectives. Descriptive research design was followed and the variables were measured by using suitable scale and procedures adopted by various researchers in past with few modification. Appropriate statistical tools were used to draw the inferences.

II. RESULTS AND DISCUSSION

➢ Socio-economical characteristics of the respondents:
The socio-economic characteristics of the respondents were studied and the data are given below.

Table 1: Socio-economic characteristics wise distribution of the respondents (N=120)

| Category                  | Frequency | Percentage |
|---------------------------|-----------|------------|
| **Age**                   |           |            |
| Young (up to 35 years)    | 24        | 20.00      |
| Middle (36 - 55 years)    | 66        | 55.00      |
| Old (Above 55 years)      | 30        | 25.00      |
| **Education**             |           |            |
| Low (illiterate + primary)| 31        | 25.83      |
| Medium (6-12)             | 66        | 55.00      |
| High (above 12)           | 23        | 19.17      |
| **Size of Land Holding**  |           |            |
| Low (Less than 1 hectare) | 22        | 18.34      |
| Medium (1-2 hectares)     | 44        | 36.66      |
| High (more than 2 hectares)| 54       | 45.00      |
| **Annual Income**         |           |            |
| Low (up to Rs.40,000)     | 21        | 26.67      |
| Medium (Rs. 40,001-80,000)| 37        | 30.83      |
| High (above 80,000)       | 57        | 47.00      |
| **Mass Media Exposure**   |           |            |
| Low                       | 22        | 18.33      |
| Medium                    | 59        | 49.17      |
| High                      | 39        | 32.50      |
| **Extension Contacts**    |           |            |
| Low                       | 42        | 35.00      |
| Medium                    | 47        | 39.17      |
| High                      | 31        | 25.83      |
| **Economic Motivation**   |           |            |
| Low                       | 31        | 25.83      |
| Medium                    | 55        | 45.83      |
| High                      | 34        | 28.33      |
Table-1. Shows that majority (55.00%) of respondents belongs to middle level of age group. It was observed that (55.00%) of the respondents belongs to medium level (literate upto intermediate) category. It was found that (45.00%) of the respondents belongs to high level land holding (>2 ha), similarly it was observed that (47.00%) of the respondents belongs to high level of income i.e. above 80,000. It was found that (49.17%) of the respondents belongs to medium level of mass media exposure category, (39.17%) of the respondents belongs to medium level extension contacts category, (45.83%) of the respondents belongs to medium level economic motivation category.

TABLE-2 ATTITUDE OF THE RESPONDENTS TOWARDS IMPROVED SOYBEAN PRODUCTION TECHNOLOGY

| S No. | Sentences                                                                 | Agree F (%) | Undecided F (%) | Disagree F (%) |
|-------|---------------------------------------------------------------------------|-------------|-----------------|----------------|
| 1.    | Improved soybean production technology is Cheapest.                       | 24 (20)     | 56 (46.67)      | 40 (30.33)     |
| 2.    | Improved soybean production technology is help to improving soil fertility.| 27(22.50)   | 54 (45.00)      | 39 (32.50)     |
| 3.    | To stop the use of chemical fertilizers is not easy for soybean growers    | 28 (23.34)  | 55 (45.83)      | 37 (30.83)     |
| 4.    | Adoption of new technology is decreasing crop yield.                       | 33 (27.50)  | 59 (49.66)      | 28 (23.34)     |
| 5.    | Only big farmers can adopt new technology                                  | 34 (28.33)  | 62 (51.67)      | 24 (20.00)     |
| 6.    | Inputs of soybean are costly                                               | 35 (29.17)  | 63 (52.50)      | 22 (18.33)     |
| 7.    | Soybean cultivation is more profitable than any other crop                 | 34 (28.33)  | 57 (47.50)      | 29 (24.17)     |
| 8.    | Soybean farming requires area specific research                            | 37 (30.83)  | 47 (39.17)      | 36 (30.00)     |
| 9.    | Soybean cultivation is labor intensive. Hence, costly                      | 39 (32.50)  | 48 (40.00)      | 33 (27.50)     |
| 10.   | Soybean crop is main source of farm income                                 | 29 (24.17)  | 49 (40.83)      | 42 (35.00)     |
Table 3: Overall attitude of farmers towards improved soybean production technology of the respondents. (N=120)

| Category         | Attitude score | Frequency | Percentage |
|------------------|----------------|-----------|------------|
| Low level        | 10-16          | 27        | 22.50      |
| Medium level     | 17-22          | 53        | 44.17      |
| High level       | 23-28          | 40        | 33.33      |
| Total            |                | 120       | 100.00     |

Table-3 reveals that majority of the respondents (44.17%) fell in the medium attitude group, whereas (33.33%) per cent respondents were observed in the high attitude group and remaining (22.50%) per cent respondents formed low attitude group. It is concluded that majority of farmers were having medium attitude followed by high and low attitude towards improved soybean production technology respectively.

Table-3 Fig.1 Attitude in percentage
Table 4: Relationship between the selected independent variables with Attitude of farmers towards improved soybean production technology.

| Sr. No. | Variables                  | Correlation coefficient (‘r’ value) |
|---------|----------------------------|------------------------------------|
| 1.      | Age                        | 0.935857*                          |
| 2.      | Education                  | 0.7652216*                         |
| 3.      | Size of Land holding       | 0.671932*                          |
| 4.      | Annual income              | 0.349957*                          |
| 5.      | Mass media exposure        | 0.998906*                          |
| 6.      | Extension contacts         | 0.305424*                          |
| 7.      | Economic motivation        | 0.917663*                          |
| *       | =                          | Significant at 0.05 level of probability. |

From Table 4 it is concluded that out of seven independent variables, seven variables are i.e. age, education, size of land holding, annual income, mass media exposure, extension contacts, economic motivation positively and significantly correlated with attitude of farmers towards improved soybean production technology.

III. CONCLUSION

It is concluded that the socio-economic profile of the sample group were medium level. It was evident that the attitude of farmers towards improved soybean production technology were found medium level. The factors influencing in attitude of farmers towards improved soybean production technology are age, education, size of land holdings, annual income, mass media exposure, extension contacts, and economic motivation were positively and significantly correlated with attitude of farmers towards improved soybean production technology. Timely supply of genuine variety at reasonable rate, Availability of timely and sufficient credit from bank and co-operative institution at low interest rate in time, Chemical fertilizers and FYM should be made available in time, Insecticides and pesticides be made in time and at reasonable rate Chemical fertilizers should be made available at subsidized rates.

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