

Knowledge and Adoption level of the Tribal Farmers About Maize Production Technology

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INTRODUCTION

Tribal mostly use traditional pattern for their agriculture. They are in habit to use the same method from year to year. Their farm productivity is very low. Thus, there is wide scope for increasing agricultural production by tapping of potential resources and bringing change in their traditional pattern of farming. This is only possible through diffusion of modern technology from research stations to the farmers' fields and thereby increasing their knowledge about improved technology.

The knowledge of an innovation is pre-requisite for adoption. In order to increase the level of adoption, farmer must be made aware of the recent technologies. On this ground, a study was conducted to examine the knowledge and adoption level of the tribal farmers about maize production technology. The specific objectives of the study were; (1) to measure the knowledge of the tribal farmers about recommended maize production technology, and (2) to find out the extent of adoption of low cost maize production technology by tribal farmers.

METHODOLOGY

Present study was conducted in Khedbrahma taluka of Sabarkantha district as the tribal population in the taluka is the highest as compared to other talukas (56 per cent of it's total population). Ten villages were selected randomly from the taluka. Totaly, 150 tribal farmers were selected using proportionate random sampling technique.

Knowledge of recommended technology about maize cultivation among tribal farmers was measured using teacher made scale to suit the local conditions of the area. A score of one was given to correct response, and zero to incerrect answer. The knowledge index was calculated for each respondent with the help of formula given below :

$$K_i = \frac{X_1 + X_2 + X_3 + \dots + X_n}{N} \times 100$$

Where, K_i = Knowledge index

$X_1 + X_2 + X_3 + \dots + X_n$ = Total number of correct or yes answers

N = Total number of items in the test

For the purpose of measurement of extent of adoption of various low cost

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recommended practices of maize crop by the respondents, a simple adoption scale was developed and used in the present study. The process followed to find out 'Adoption quotient' to measure extent of adoption of low cost recommended maize practices was as follow :

$$\text{Adoption Quotient} = \frac{\text{Number of practices used}}{\text{Number of applicable practice}} \times 100 \\ (\text{A.Q.})$$

RESULTS AND DISCUSSION

Data presented in Table 1 indicate that majority of the respondents (71.33 per cent) was found to possess medium knowledge level, whereas, 14.67 per cent and 14 per cent respondents had low and high knowledge level, respectively.

Table 1 : Distribution of the respondents according to their knowledge level

| Knowledge level | Number | Per cent |
|---------------------------|--------|----------|
| Low (below 30) | 22 | 14.67 |
| Medium (between 30 to 47) | 107 | 71.33 |
| High (above 47) | 21 | 14.00 |
| Total | 150 | 100.00 |

Table 2 : Distribution of the respondents according to their extent of adoption of low cost technology

| Extent of adoption | Number | Per cent |
|---------------------------------|--------|----------|
| Low (below 39 index) | 27 | 18.00 |
| Medium (between 39 to 73 index) | 105 | 70.00 |
| High (above 73 index) | 18 | 12.00 |
| Total | 150 | 100.00 |

Data in Table 2 reveal that majority of the respondents (70.00 per cent) were found to be in the group of medium level of adoption followed by 18 per cent with low

level of adoption. While, only 12 per cent of the respondents had high level of adoption.

CONCLUSION

It can be concluded from the findings that overall knowledge and adoption level of the tribals about maize production technology was medium.

IMPLICATION

The above findings clearly indicated that knowledge and adoption of maize production technology by majority tribal farmers was medium.

The extension agencies need to put in more educational efforts to transfer the available technological know-how to

them as speedily as possible. This may help them to adopt improved maize production technology quickly and thereby to increase the maize yield.