



P-ISSN: 2349-8528

E-ISSN: 2321-4902

IJCS 2020; 8(1): 365-367

© 2020 IJCS

Received: 16-11-2019

Accepted: 18-12-2019

Poonguzali B

Ph.D. Scholar, Department of Agricultural Extension & Rural Sociology, Agricultural College & Research Institute-TNAU, Madurai, Tamil Nadu, India

Velusamy R

Associate Professor, Department of Agricultural Extension & Rural Sociology, Agricultural College & Research Institute-TNAU, Madurai, Tamil Nadu, India

Pushpa J

Professor and Head, Department of Agricultural Extension & Rural Sociology, Agricultural College & Research Institute-TNAU, Madurai, Tamil Nadu, India

Sujatha. K

Professor (Seed Technology), Department of Seed Science and Technology, Agricultural College & Research Institute-TNAU, Madurai, Tamil Nadu, India

Prabhakaran K

Assistant Professor (Agrl. Statistics), Department of Agricultural Extension & Research Institute-TNAU, Madurai, Tamil Nadu, India

Corresponding Author:

Poonguzali B

Ph.D. Scholar, Department of Agricultural Extension & Rural Sociology, Agricultural College & Research Institute-TNAU, Madurai, Tamil Nadu, India

Study on attitude and the constraints faced by pulse growers in practicing indigenous technologies

Poonguzali B, Velusamy R, Pushpa J, Sujatha K and Prabhakaran K

DOI: <https://doi.org/10.22271/chemi.2020.v8.i1e.8273>

Abstract

The Study was conducted to measure the attitude of pulse growers towards indigenous technology and the constraints faced by Pulse growers in practicing indigenous technologies. The study was carried out in Thanjavur, Pudukkottai, Tiruvarur districts of Tamil Nadu. In each district five blocks were selected for the study based on the area under pulse crop. Two villages were selected in each selected blocks based on the maximum area under pulse crop. Three hundred farmers were selected randomly from the selected villages as ten farmers in each village, as these blocks have highest area and production of pulses crop. The result shows that majority of the pulse growers had favorable attitude towards Indigenous Technical Knowledge in agriculture. The major constraints faced by the pulse growers were lack of expertise in the field of indigenous practices, lack of proper documentation of indigenous practices, poor water retention capacity of the soil, lack of expertise in indigenous technologies, appearance of periodic drought spells and lack of pest and disease resistant varieties.

Keywords: Attitude, constraints, indigenous technology, pulse growers

Introduction

Pulses are one the staple food and major contributor of protein. India has key place in global pulses production and contributes about 25 per cent to the total pulse basket. About a dozen of pulse crops, namely chickpea, pigeonpea, mungbean, urdbean, lentil, field pea, lathyrus, cowpea, common bean, moth bean, horse gram are cultivated in different agro-ecological regions. In India steady increase in food grain production as a result of the green revolution since 1970.

Thurston (1990)^[3] uses a number of references to suggest that it was practiced in India at least as early as 1000 EC. Similarly, multistory cropping and traditional house hold gardens prominent in the tropical areas for centuries without major disease problems may well provide useful model, for other areas of the world. Traditional farmers probably far our distance agricultural scientists in knowledge concerning site selection and adjusting time of planting.

This was possible mainly because of efficient use of the natural resources, improved genetic engineering technology and better crop management practices. By way of intensive cultivation which compelled the indiscriminate usage of inorganic Fertilizers, pesticides and weedicides. Moreover the intensive farming and Green revolution brings the Hybrids and transgenic plants into the native cultivation which leads the environment has been treated in an unfriendly manner. The intensive production systems causes in depletion of major and minor nutrients from the soil deteriorated the soil health and resultantly the productivity and sustainability in ruin.. Continuous use of fertilizers and pesticides has damaged the soil flora and fauna. Earthworm activity in the soil has been reduced greatly. In Tamil Nadu pulses are cultivated by farmers in garden land and dry land conditions. Pulses growing farmers are cultivating pulses with local own technologies right from seed germination, plant nutrition, plant protection and storage to value addition. It is necessary to identify the attitude of pulse farmers towards indigenous technologies and identify the constraints in adoption of indigenous technologies and it will be useful to formulate strategies for adoption of indigenous technologies in pulse cultivation.

Materials and Methods

The study was undertaken among 300 pulse farmers in Thanjavur, Pudukkottai, and Tiruvarur districts. The districts were selected based on the maximum number of pulse farmers and area under pulse crop. In each districts five blocks were selected based on the area under pulse crop. Two villages were selected in each selected blocks of each districts. Ten pulse farmers were selected randomly in each village and totally 300 pulse farmers were selected for this study. Attitude was operationalized as the degree of positive (or) negative mental disposition associated with the ITK towards pulse cultivation. The scale adopted by Meenakshi (2017) was used in this study.

There were nine statements it was selected and were administrated to the respondents for the 'Agreement' or 'Dis agreement' over five point continuum scale- 'strongly Agree' to 'Strongly Dis agree'. Pulse farmers were asked to list out the problems faced by them in the adoption of ITK practices. A well-constructed pretested interview schedule was used to measure the attitude of pulse farmers towards indigenous technologies and to identify the constraints in adoption of indigenous technology.

Result and Discussion

Attitude of pulses growers towards indigenous technologies in pulses

The attitude of pulse farmers towards indigenous technology was measured and the results are presented in the table 1.

Table 1: Distribution of respondents according to their attitude towards Indigenous Technical Knowledge in agriculture

S. No.	Category	Frequency	Percentage
1.	Highly favorable attitude	43	14.33
2.	Favorable attitude	178	59.34
3.	Neutral attitude	30	10.00
4.	Unfavorable attitude	21	7.00
5.	Highly unfavorable attitude	28	9.33
	Total	300	100.00

The respondents were classified into five groups i.e., highly favorable, favorable, neutral, unfavorable and highly unfavorable, which is given in 1. It was evident from Table 1 that majority of the respondents (59.34 per cent) had favorable attitude towards Indigenous Technical Knowledge, followed by highly favourable attitude (14.33 per cent), neutral attitude (10.00 per cent), highly unfavourable attitude (9.33 per cent) and unfavourable attitude (7.00 per cent) respectively. From the above findings it could be inferred it was revealed that majority of respondents had favourable attitude towards Indigenous Technical Knowledge in pulse cultivation. Proper documentation and validating the indigenous technologies will leads to adoption.

Constraints faced by the pulse farmers in adoption of indigenous technologies

The problems or difficulties faced when the farmers adopting the indigenous technologies were collected and presented in the table No. 2

Table 2: Constraints faced by the pulse farmers in adoption of indigenous technologies

S. No	Constraints	Frequency	Percentage	Rank
1.	Poor water retention capacity of the soil	258	86.00	II
2.	Appearance of periodic drought spells	218	72.67	III
3.	Soil fertility variation	132	44.00	IX
4.	High cost of neem related products	176	58.66	VI
5.	Traditional belief of the farmer	143	47.67	VIII
6.	Lack of pest and disease resistant varieties	214	71.33	IV
7.	Lack of expertise in indigenous technologies	263	87.67	I
8.	Lack of publications on proven indigenous technologies	174	58.00	VII
9.	Lack of training facilities	117	39.00	X
10.	Lack of extension machinery to disseminate the proven indigenous technologies	189	63.00	V

Regarding the constrains faced by pulse farmers in adopting the indigenous technologies lack of expertise in indigenous technologies was first and foremost problem faced by farmers and this was expressed by 87.67 per cent pulse farmers. Poor water retention capacity of the soils was the major constraint and it was expressed by 86.00 per cent of pulse farmers. When we are adopting the indigenous technologies the water moisture conditions favours the results of indigenous technologies. Suitable technology on soil management may be transferred to farmers through training and demonstration to avoid this constraint.

Appearance of periodical drought is another important constraints faced by 72.67 per cent of pulse farmers. Continuous drought leads to urgency in getting more yields and simultaneously farmers will prefer the inorganic and modern method instead of organic way of cultivation. The latest varieties are more susceptible to pest and diseases and also the pest and disease outbreak due to environmental changes, in this situation the indigenous technologies could not able to remedies for problems and this was expressed by 71.33 per cent of pulse growers. Also there is no proper extension mechanism to disseminate the indigenous

technologies and it was expressed by 63.33 per cent of pulse growers. Neem is one of the important constituent in organic products and also it plays a vital role in each and every indigenous technology. The cost of neem and neem related products fetches high cost and it was expressed as problem by 58.60 per cent of pulse growers. Also there is lack of publications in indigenous technologies and it was expressed by 58.00 per cent of pulse farmers. Traditional belief, lack of training facilities is the other constraints expressed by pulse farmers.

Conclusion

From the present investigation it could be concluded that majority of the pulse growers had favorable attitude towards Indigenous Technical Knowledge in agriculture. The major constraints faced by the pulse growers were poor water retention capacity of the soil, lack of expertise in indigenous technologies, appearance of periodic drought spells and lack of pest and disease resistant varieties. Evolving disease resistant varieties can be made to reduce the incidence of diseases in pulses.

References

1. Dogra P. Traditional agricultural in India: High yields and No waste. *The Ecologist*. 1983; 13(2, 3):84-87.
2. Rogers M. Everett. *Diffusion of innovations*. The Free Press., Collier Mac Millan publishers London, 1983.
3. Thurston HD. Plant Disease Management Practices of Traditional Farmers. *Plant Disease*. 1990; 7(92):96-102.