



## Research Article

Available online at [www.journal-advances-developmental-research.com](http://www.journal-advances-developmental-research.com)

### Journal of Advances in Developmental Research

ISSN: 0976-4704 (Print), e-ISSN: 0976-4844 (Online)

J.Adv.Dev.Res. Volume 2, No.2, December 2011

# Knowledge and Attitude of Small and Marginal Farmers Towards Soil Testing

Pradeep Pagaria

Krishi Vigyan Kendra, Barmer (Rajasthan), Email- [p\\_pagaria@yahoo.com](mailto:p_pagaria@yahoo.com)

## Abstract

A survey was undertaken in ten randomly selected villages of Barmer block of Barmer district Rajasthan, to find out the knowledge and attitude of farmers towards soil testing. Obtained data were analyzed by frequency distribution method. Results show that farmers know the benefits of soil testing like they agree with the statements like soil testing is necessary for better crop production; impact of recommended material is always positive; and expenditure of crop production decrease after soil testing, but simultaneously they told that it is a very long process; result of soil testing are not reliable; and results are not given timely. This study indicates that farmers have willingness to adopt soil testing method but they face some minor problems which can be solved if government and other agencies took some steps.

**Key Words-** Survey, agriculture, crop production, soil quality

## Introduction

Soil testing is a comprehensive soil fertility programme, which help the farmers in judicious application of fertilizers to the crops. The soil testing of a particular field gives reliable information about the deficiency of major nutrients in the soil as well as soil hazards such as soil acidity, alkalinity and salinity etc. After testing the soil, farmers can know the exact amount of nutrients to be applied for a particular crop. The farmers will be able to know how much nutrients are already present in the soil and how much will have to be provided additionally for a particular crop.

Farmers in the areas of intensive cultivation are using larger quantities of fertilizers to increase production of their crops<sup>1</sup>. Therefore,

soil testing will definitely be advantageous to small and marginal farmers, if they can get reliable information as to what and how much fertilizers he should apply to a particular crop to achieve maximum production and to earn maximum profit<sup>2</sup>. So, it is essential to create awareness among the farmers about the balanced use of fertilizers.

Keeping in view the importance of soil testing towards optimum net profit of farmers, this study was carried out in Barmer district of Raj. The main objective of the study was, to know the knowledge and attitude of small and marginal farmers towards soil testing practices.

## Experimental

Present study was designed in 2007-08. A sample of 100 farmers from the ten randomly

selected villages of Barmer block of Barmer district was selected. Farmers who have adopted soil testing practices were arranged according to the size of land holding viz. Marginal, Small and Large. 100 adopters comprising 40 marginal, 30 small and 30 large farmers were selected randomly. Likewise the non-adopter farmers were also arranged according to the size of holding and sample of 50 farmers comprising 20 marginal, 15 small and 15 large were also selected randomly for the study. Data were collected by personal interview method with the pretested schedule designed for the purpose.

## Results and Discussion

The knowledge about soil testing practices was found satisfactory in adopters whereas non-adopters were found to be ignorant about the practices. The knowledge of adopters and non-adopters in term of soil testing practices is compiled in Table 1. It indicates that all the adopters had knowledge about soil testing practices, while in non-adopters the majority of farmers (64 per cent) had knowledge about soil testing but there were 36.0 non-adopters who had no knowledge about soil testing practices. Knowledge is the behavior and test situation which emphasis remembering either by recognition or recall of ideas, materials and phenomena<sup>3</sup>. Most of the farmers know the situation of soil testing. The distribution of respondents utilizing different sources of knowledge is presented in Table 2.

**Table 1: Knowledge of respondents about soil testing practices**

Response	No. of adopters	No. of non-adopters
Positive	100 (100)	32 (64.0)
Negative	0	18 (36.0)

The data (Table 2) indicates that majority of the respondents (29 and 27 per cent) were using the knowledge gained from supervisors and villagers while 7 percent respondents dependents on farmers fair/kisan gosthis for the knowledge and 5 per cent on magazines/booklets/journals and gram panchyat for the knowledge of soil testing. Only 3 percent respondents collected the knowledge

through training. 22 farmers had no knowledge about soil testing practices.

**Table 2. Distribution of respondents according to utilization of sources of knowledge**

S. No.	Sources of knowledge	Frequency
1	Supervisors	29
2	Villagers	27
3	Gram Panchyat	05
4	Magazines/Booklets/journals	05
5	Farmers Fair/Kisan Gosthis	07
6	Training	3
7	Radio/TV	02
8	No knowledge	22
<b>Total</b>		<b>100</b>

The attitude of the respondents towards soil testing practices is presented in Table 3. Table 3 depicts that majority of respondents were disagree with the statements but sometimes they showed positive attitude because most of the adopters (83 percent) did not agree with the statement that "Soil testing is wastage of time and money". So efforts should be made to encourage the farmers to adopt soil testing practices. If possible mobile soil testing laboratories should visit the negative people because in their opinion soil adopters did not give their attitude towards soil testing<sup>4,5</sup>.

When the adopters were asked that "Result of soil testing is reliable" only 36 percent adopters agreed with the statement whereas 61 percent adopters disagreed with it. 60 Percent adopters said that "Soil testing is a very long process". This means the soil testing agencies are not working properly in the area as farmers did not show much faith on the results of soil testing and they felt that "It is very long process". It was also observed that about 72 percent adopters agreed with the statement "Soil testing is necessary for better crop production". It means the farmers' attitude was generally conservative.

## Conclusion

The study points that the soil testing process is well known to the small and marginal farmers and they also know its importance. Village level workers

**Table 3.** Distribution of the respondents according to their attitude towards soil practices

S. No.	Statement	Response			Total
		Agree	Undecided	Disagree	
1	Result is given timely	40	5	55	100
2	Result of soil testing is reliable	36	3	61	100
3	No. of crop increased in one year after soil testing	37	24	39	100
4	Impact of recommended material is always positive	61	21	18	100
5	Soil testing is necessary for better crop production	72	13	15	100
6	It is very long process	60	10	30	100
7	Soil testing is wastage of time and money	2	15	83	100
8	Expenditure of crop production decrease after soil testing	12	40	48	100

should help the farmers and work more sincerely. If we could do so, we can reduce larger quantities of unnecessary fertilizer consumption. This will help in getting cooperation of farmers to carry out soil testing practices in future for better farming.

### References

1. Chauhan J and Singh AK. 2001. Use of communication sources by tribal dairy farmers – A study. *Indian Research Journal of Extension Education*, 1 (1):8-10.
2. Shriram and Chauhan MS. 2002. Sources of information used by the farmers regarding the improved technology. *Indian Research Journal of Extension Education*, 2(1):134-136.
3. Bloom BS, Hardts ME, Furst F, Hill W and Krathwhol DR. 1956. *Taxonomy of Educational objectives. The Cognitive Domain*, New York, Longmans Green, pp. 258.
4. Samanta RK. 1993. *Extension Strategy for Agricultural Development in 21<sup>st</sup> century*. First Edn., Mittal Publication, New Delhi-110059.
5. Thakur RF and Patel KF. 1998. Knowledge of farm women about improved Agricultural and Animal Husbandry Practices. *Rural India*, March:73-75.