

Original Research Article

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## Perception of Farmers about the Soil Health Card

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### ABSTRACT

#### Keywords

Soil Health Card,  
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Soil test based nutrient management has emerged as a key issue in efforts to increase agricultural productivity and production since optimal use of nutrients, based on soil analysis can improve crop productivity and minimize wastage of these nutrients, thus minimizing impact on environmental leading to bias through optimal production. Governments do efforts towards these through Soil Health Cards. The present study was conducted in Navsari district of South Gujarat region. All the taluka were selected for the present study. The data were collected with help of well-structured interview schedule following personal interview methods. It was found that majority (70.83 per cent) of the SHC holders had moderate level of perception about followed by 15.00 and 14.17 per cent possessed good and poor level of perception about Soil Health Card, respectively.

### Introduction

Agriculture will continue to be the main occupation of majority of the rural population for a long time to come. While we have brought Green revolution in the country, the growing population demands a lot more efforts in the field of research, education and extension. In view of large number of productive technologies available everywhere in the country, to know perception of farmers about this technology is very important for extension workers for the adopting technology. Soil Health Card is one of the important approaches in agriculture because it

is key elements for the sustainable production is soil which serves as a natural nutrient source for growth of plants. The components of soils are mineral, organic matter, water and air, the proportions of which vary and together form a system for plant growth. Farmers are resorting to addition of more and more fertilizers to obtain yields but as a result continued degradation of natural resources under intensive agriculture and also declining the productivity and stagnation in food grains production in the country. With increase fertilizer use efficiency or appropriate use of fertilizer for specific soils and crops, it is necessary to have report on soil testing. On the

basis of soil testing report, farmer can know the information regarding their soil health and recommendation regarding fertilizer use can be made for the farmers. Countering the importance and facts in view the present study was under taken with the following specific objectives.

To measure the level of perception of farmers about the Soil Health Card.

To ascertain the relationship between profile of the farmers and level of perception about the use of Soil Health Card.

### **Materials and Methods**

The present study was conducted in the South region. Government of Gujarat distributes the soil health card to every district of Gujarat including southern part of the state in South Gujarat. The south Gujarat has seven district viz., Navsari, Valsad, Dang, Surat, Tapi, Bharuch and Narmada. South Gujarat region is highly diversified and potential area for farming. High rainfall and good irrigation facilities are also available in major part of district.

The Navsari district was selected purposively for this study with following reasons. Krishi Vigyan Kendra and Soil Science Department of Navsari Agricultural University are actively engaged with soil testing activity and head quarter of Navsari Agricultural University is located in Navsari further its comes under the jurisdiction of NAU.

Moreover, better convention for appropriate and reliable sources of respondents from the District Agricultural department. All the six talukas namely Navsari, Chikhali, Gandevi, Jalalpore, Vansda and Khergam were selected. The two villages from each talukas selected randomly and thus the total villages were twelve under study. The list of farmers who

are holding the Soil Health Card was collected from the reliable source i.e. VLWs/ Talati for each randomly selected village. 10 respondents were selected randomly from each 12 randomly selected villages. Thus the total numbers of respondents were 120. An Ex-post-facto research design was used in the present investigation.

Perception about soil health card by respondents was the centre point in the study. The perception inspires an individual to behave in expected form and carry out the work effectively.

For the present study, total 36 statements administered on the sample farmers, who were asked to express their reaction in terms of their agreement or disagreement with each item by selecting any one of three response categories: Agree, Undecided and disagree. The scores given for the positive statements were 3, 2 and 1. The respondents were grouped into three categories on the basis of Mean  $\pm$  S.D. as under.

### **Results and Discussion**

Perception refers to the ability to pick out something through the different senses like seeing, hearing, smelling or touching in farming practices. The data regarding the perception of farmers about SHCs are given in the Table- 1.

It is apparent from the table 5 that majority (70.83 per cent) of the SHC holders had moderate level of perception about followed by 15.00 and 14.17 per cent possessed good and poor level of perception about Soil Health Card, respectively.

It can be inferred from the above findings that majority of the SHC holders (85.83 per cent) had medium to high level of perception about Soil Health Card.

**Level of Perception**

Sr. no	Level of perception	Categories
1.	Poor perception	Up to Mean – S.D.
2.	Moderate perception	In between Mean ± S.D.
3.	Good perception	Above Mean + S.D.

**Table.1** Distribution of the SHC holders according to their level of perception

n=120

Sr. No.	Perception	Number	Per cent
1.	Poor perception (up to 54 Score)	17	14.17
2.	Moderate perception (between 54 to 82 Score)	85	70.83
3.	Good perception (above 82 Score)	18	15.00
	<b>Total</b>	<b>120</b>	<b>100.00</b>

(Mean= 67.84, S.D. = 13.62)

**Table.2** Relationship between profile of the farmers and their level of perception about Soil Health Card

Sr.	Variables	Correlation co-efficient ('r' value)
<b>Independent variables</b>		
1	Age	-0.127 <sup>NS</sup>
2	Education	0.196 <sup>*</sup>
3	Mass media exposure	-0.057 <sup>NS</sup>
4	Source of information	0.265 <sup>**</sup>
5	Social participation	0.199 <sup>*</sup>
6	Land holding	0.272 <sup>**</sup>
7	Annual income	0.466 <sup>**</sup>
8	Scientific orientation	0.263 <sup>**</sup>
9	Risk orientation	-0.073 <sup>NS</sup>
10	Farming experience	-0.0008 <sup>NS</sup>
11	Innovativeness	0.0005 <sup>NS</sup>
12	Occupation	0.0262 <sup>NS</sup>

NS= non-significant; \* = significant at 0.05 level; \*\* = significant at 0.01 level

The probable reason might be due to the fact that farmer had education up to secondary level of education, medium level of mass media exposure and good scientific orientation and another things more important to the state agriculture department that to improve this result along with regular follow-up by the extension machinery is required and also simplify the components of SHC to farmer so perception of Soil Health Card effective.

**Relationship between profile of the farmers and their level of perception about the use of soil health card**

The information about association between independent characters and level of perception is depicted in table -2.

Independent variables like, education and social participation had positive and significant relationship with their perception

about Soil Health Card. The probable reason for this might be that most of the SHC holders were well educated. It is fact that education can increase the understanding ability of a farmer and also easily perceive the scientific facts which increase their level of perception. At the same time farmers had goods social relation in society which made them cosmopolite nature and also increased their perception ability.

While, Source of information, land holding, annual income and scientific orientation had positive and highly significant relationship with their perception about Soil Health Card. The probable reason for this might be that most of the SHC holders had more land so they need to decrease their fertilizer cost by using information given in SHC. Also they have willingness to use all the components wise information covers in SHC.

Further, respondents had more annual income which affects their education which important part of perception also good information sources like Extn. Officers, A.O., University Scientist etc. They had provided detail information about the SHCs which had affected on the perception level of the respondent. Whereas, innovativeness and occupation had positive but non-significant

relationship with their perception about Soil Health Card.

Moreover, Age, mass media exposure, risk orientation and farming experience had negative and non-significant relationship with their perception about SHC.

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