Constraints Faced By The Farmers During Utilization Of Soil Health Card

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Abstract: A Soil Health Card is used to assess the current status of soil health and, when used over time, to determine changes in soil health that are affected by land management. A Soil Health Card displays soil health indicators and associated descriptive terms. The indicators are typically based on farmers' practical experience and knowledge of local natural resources. The card lists soil health indicators that can be assessed without the aid of technical or laboratory equipment. Soil Health Card (SHC) is a Government of India's scheme promoted by the Department of Agriculture & Co-operation under the Ministry of Agriculture and Farmers' Welfare. It is being implemented through the Department of Agriculture of all the State and Union Territory Governments. Major Constraints in adopting the SHC recommendations were difficulty in understanding the information given in the soil health card and calculating fertilizer dose on the basis of nutrient status of soil, unscientific method of collecting soil samples. Regular trainings to the farmers on soil sample collection procedure followed by interpreting recommended dose of fertilizers will create the positive intent among the farmers in adopting the SHC recommendation for sustainable soil health management**.**

Keywords - **constraints, soil health card**

INTRODUCTION:

Cramb et al. (1999) found that household-level cash flow, rather than access to labour, was considered to bea more important explanatory factor for adoption of soil conservation practices. As per FAO (2001) and Pannell et al. (2006), adoption of agricultural technologies is usually influenced by several factors, among them, adopters own skill level and the abilities of farmers are critical determinant factors in adoption of agricultural technologies.Bayard et al. (2006) studied the adoption and management of soil conservation practices in Haiti. In this study he identified the factors which played a significant role in the management of this land improvement technology. In their findings, it was discovered that age, education, group membership and per capita income negatively influence the adoption and management of soil conservation practices. First, they must have an awareness of particular problems affecting their land (i.e., recognizing

soil erosion symptoms or water quality impairments) and they must be willing to undertake measures to correct the root problem(s) that cause such problems.

METHODOLOGY:

Locale of the study:

The present study was conducted in Khandwa district of M.P. The district has 07 blocks namely Khandwa, Chhegaon, Makhan, Pandhana, Harsud, Khalwa, Baldi and Punasa.

The sampling procedure that was used here was:Multistage random sampling technique was used for the selection of block, village and respondents as per procedure wasSelection of block: In first stage, out of seven blocks, Khandwa block was selected purposively due to well-known area by the researcher.and then the Selection of villages:Ten villages was selected randomly. A list of SHC holders was taken from KVK Khandwa. From this list 12 respondents were select randomly from each village. These villages are considered on basis of large number of Soil Health Cards holders. In this way a total of 120 SHC holders were taken as respondents for collection of data for this study. The data was collected through personal interview with the help of a schedule and analyzed with appropriate statistical tools.

Statistical tools- there were various statistical tools used, all of them are mentioned below along with their applied formulas,

- o Frequency
- o Percentage - $x / N \times 100$
- o Arithmetic mean- $(X) = \sum X / N$
- o Standard deviation- $\sigma = \sum (X - \mu)^2 / N$

Results and discussion

Table 1: Constraints faced by the farmers during utilization of soil health card

S. No.	Constraints	Frequency	Percentage	Rank
I.	Lack of trust in the information given in soil health card	88	73.33	IV
II.	Lack of knowledge about what is SHC and its use even after receiving the card	81	67.50	V
III.	Lack of coordination and linkage between extension personal and farmers	65	54.17	VIII
IV.	Other personal constraints associated with illiteracy/low education	93	77.50	III
V.	High cost for micro-nutrient analysis of soil sample	51	42.50	X
VI.	Unavailability of recommended quantity of organic manure for farming	58	48.33	IX
VII.	High cost of fertilizers (recommended in SHC)	77	64.17	VI
VIII.	Unavailability of SHC before crop season	47	39.17	XI
IX.	Difficult to understand the information on SHC without the assistance of agricultural/extension officer	69	57.50	VII
X.	Difficulty in calculating fertilizer dose on the basis of nutrient status of soil.	111	92.50	I
XI.	Time gap between soil sample taken and issuing SHC is too high for successive crop	102	85.00	II

Table-3 reported that majority of the respondents were faced Difficulty in calculating fertilizer dose on the basis of nutrient status of soil (92.50 per cent) followed by Time gap between soil sample taken and issuing SHC is too high for successive crop (85.00 per cent), Other personal constraints associated with illiteracy/low education (77.50 per cent), Lack of trust in the information given in soil health card (73.33 per cent), Lack of knowledge about what is SHC and its use even after receiving the card (67.50 per cent), High cost of fertilizers (recommended in SHC) (64.017 per cent), Difficult to understand the information on SHC without the assistance of agricultural/extension officer (57.50 per cent), Lack of coordination and linkage between extension personal and farmers (54.17 per cent), Unavailability of recommended quantity of organic manure for farming (48.33 per cent), High cost for micro-nutrient analysis of soil sample (42.50 per cent) and lowest respondents were faced Unavailability of SHC before crop season (39.17 per cent).

Table 4: Suggestion given by the respondents overcome them to constraints

S./No.	Suggestions	Frequency	Percentage	Rank
I.	Soil analysis should be done in different near by laboratories	56	46.67	VIII
II.	Method of calculating dose on the basis of recommendation nutrient status by the expert.	64	53.33	VII
III.	Training should be given on proper method of collecting soil sample (90.00 per cent) followed by	108	90.00	I
IV.	Method of fertilizer application should be given individually.	79	65.83	V
V.	Proper coordination and linkage between extension personal and farmers	72	60.00	VI
VI.	Timing should be specify for application of fertilizers	93	77.50	III
VII.	Contact no. of the scientist and additional information regarding disease management should be given in SHC	88	73.33	IV
VIII.	Extension officers should come before sowing to interpreted the content./recommendation of SHC	101	84.17	II

Table 4 reported that majority of the respondents suggests Training should be given on proper method of collecting soil sample (90.00 per cent) followed by Extension officers should come before sowing to interpreted the content./recommendation of SHC (84.17 per cent), Timing should be specify for application of fertilizers (77.50 per cent), Contact no. of the scientist and additional information regarding disease management should be given in SHC (73.33 per cent), Method of fertilizer application should be given individually (65.83 per cent), Proper coordination and linkage between extension personal and farmers (60.00 per cent), Method of calculating dose on the basis of recommendation nutrient status by the expert (53.33 per cent) and lowest farmers were suggests Soil analysis should be done in different near by laboratories (46.67 per cent).

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