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The opinion of farmers towards the soil health card scheme in Western Uttar Pradesh

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Abstract

This study was conducted in Meerut and Muzaffarnagar district of Western Uttar Pradesh during the year 2021-22. The investigation was conducted to know the opinion of farmers towards the soil health card scheme. The investigation was revealed that the majority of (58.13%) belongs to SHC helps in selection of crop (Kharif & Rabi) crops, (58.75%) respondents were having SHC helps in adoption of crop rotation, (64.37%) respondents were belonging to it helps in future cropping pattern, (71.87%) respondents were SHC effects the irrigation schedule, (63.75%) respondents were SHC helps to improve the quality of produce and (51.25%) respondents were SHC effects the water logging condition, (56.88%) respondents were SHC helps to reduce the soil degradation, (61.25%) respondents were having SHC helps to maintain soil structure & texture, (51.88%) respondents were SHC helps to increase the organic matter in soil, (76.25%) were SHC gives an idea of fertilizers usage pattern, majority of the respondents (53.75%) were having SHC provide the dose of farmyard manure (FYM)/ compost, (70.63%) were having SHC helps in timely management of fertilizers, (59.38%) were having SHC helps to increase farm income by applying recommended fertilizers dosage at appropriate time in the study area. The majority of (61.87%) SHG respondents were having SHC provides the dose of lime and gypsum, (59.37%) respondents were SHC provides the dose of organic manure, (54.38%) respondents were SHC provides information about crop grown suited to soil type.

Keywords: Opinion of farmers towards the soil health card scheme

Introduction

Swasth Dharaa – Khet Haraa

Soil Health Card Scheme is one of the important approaches in agriculture because it is key elements for the sustainable production of soil which serves as a natural nutrient source for growth of plants. Government of India launched the scheme on 19th February 2015. The scheme aims to provide soil card to every farmer of country and crop-wise recommendations of nutrients and fertilizers required for the individual farms to help farmers to improve productivity through judicious fertilizer and manure uses. A target of 14 crore soil health cards to as many farmers across the country was set in a phased manner. An outlay of Rs. 568.54 crore was provided for a period of three years (later revised to two years). The scheme is implemented on 50:50 sharing pattern between central and state government. Soil health plays a vital role to ensure sustainable agricultural production. To popularizing soil test-based fertilizer usages, soil health card is a tool to help the farmer to monitor and improve the soil health based on scientific recommendations and enables the farmer to use the soil and crop specific fertilizers. It provides a qualitative assessment of soil health and reclamation measures about the problematic soil. A SHC is mean to give each farmer soil nutrient status of his holding and advise him on the dosage of fertilizers and micronutrient and also the needed soil amendments that he should apply to reclaimed soil health in the long run. The scheme is considered as a holistic approach for soil health and farm economy.

Soil Health card (SHC) has to be issued once in three years for 12 parameters - N, P, K, S, Zn, Fe, Cu, Mn, Bo, pH, EC, Organic carbon. It should also contain fertilizer recommendations for kharif, rabi and summer crops. As per the Government of India norms, the soil samples are taken generally two times in a year, after harvesting of Rabi and Kharif Crop respectively or when there is no standing crop in the field. Soil is the lifeblood for all the crops as it provides all the necessary micro nutrient, macro nutrient and water. Nutrients and fertilizers play pivotal role in maintaining soil fertility.

India is at the second place in fertilizer consumption, next to China. Here, fertilizer consumption had increased over a period of four decades. There is an increase in production because of efficient technologies adopted in the agricultural sector leading to economic and social development. The increase in food production is due to use of innovative inputs like fertilizers, quality seeds and pesticides. It implies that the rapid expansion of irrigation, introduction of HYV seeds, introduction of Retention Price Scheme, distribution of fertilizers to farmers at an affordable price, expansion of input dealers' network, improvement in fertilizer availability and virtually no change in farm gate fertilizer prices were the major reasons for the increase in fertilizer consumption. The over adoption of fertilizers and nutrients leads to degradation of soils in most of the districts in India. A large majority of the farmers do not know about the soil conditions of their own farms. They do not follow the recommended doses by the government officials and private dealers. Therefore, the farmers should learn about the application of fertilizers and plant nutrients. The government provides information to the farmers about how to use the right quantity of fertilizers and the method of using them and the time of application for increasing production.

Research Methodology

This study was conducted in Meerut district from Meerut region and Muzaffarnagar districts from Saharanpur region of Western Pradesh. From the Meerut district 4 blocks named Kharkhauda, Machhara, Daurala, Sardhana and from the Muzaffarnagar district Khatuali, Jansath, Sadar and Budhana were selected purposively because in these districts most of the farmers covered under Soil Health Card scheme. In addition to innovative behaviour of the farmers to adopted new technologies and seeking the new agricultural information. From each block four villages were selected purposively thus the total 32 villages were selected for the investigation and from each village 5 respondents were selected purposively. Thus, the total sample size was of 160 respondents for the investigation. The data was collected through personal interview with the help of pre-tested

interview schedule. The data was analysed by frequency, percentage, mean, mean percentage score, standard deviation, correlation coefficient and rank order.

Result and Discussion

The result present in table 1 indicates as per ranked given to aspect of opinion that majority of SHC beneficiaries (76.25%) had opinion that SHC gives an idea of fertilizers usage pattern, followed by SHC helps in timely management of fertilizers (70.63%), SHC helps to improve the quality of produce (63.75%), SHC helps to maintain soil structure & texture (61.25%), SHC helps to increase farm income by applying recommended fertilizers dosage at appropriate time (59.38%), SHC helps in selection of crop in kharif and rabi (58.13%), SHC helps to reduce the soil degradation (56.88%), SHC provides information about crop grown suited to soil type (54.38%), SHC helps to increase the organic matter in soil (51.88%), SHC effects the water logging condition (48.75%), SHC provide the dose of farmyard manure (FYM)/compost (46.25%), SHC helps in adoption of crop rotation (41.25%), SHC provides the dose of organic manure (40.63%), SHC provides the dose of lime and gypsum (38.13%), It helps in future cropping pattern (35.63%) and SHC effects the irrigation schedule (28.13%), respectively.

Thus, it can be concluded that majority of SHC holders had opinion that SHC gives an idea of fertilizers usage pattern, followed by SHC helps in timely management of fertilizers and SHC helps to improve the quality of produce. The factors influencing the dissemination of farmer's opinion on SHC scheme depends partly on their immediate situations, partly on social-economic factors, and partly on their preexisting knowledge, attitudes, and values. Because attitudes and values play such a crucial role in the development of opinion that is influential factors of farmers opinion. It is also observable that the traditional information characteristics and information source attributes are not the only key factors affecting the opinion, while the information channel is worth more consideration. The above results were in accordance by the findings of Sherawat (2018) [10].

Table 1: Distribution of the respondents according to their opinion towards the soil health card scheme.

S. No	Aspects regarding Opinion	Yes	No	Rank
1.	SHC helps in selection of crop (Kharif & Rabi)	93 (58.13%)	67 (41.87%)	VI
2.	SHC helps in adoption of crop rotation	66 (41.25%)	94 (58.75%)	XII
3.	It helps in future cropping pattern	57 (35.63%)	103 (64.37%)	XV
4.	SHC effects the irrigation schedule	45 (28.13%)	115 (71.87%)	XVI
5.	SHC helps to improve the quality of produce	102 (63.75%)	58 (36.25%)	III
6.	SHC effects the water logging condition	78 (48.75%)	82 (51.25%)	X
7.	SHC helps to reduce the soil degradation	91 (56.88%)	69 (43.12%)	VII
8.	SHC helps to maintain soil structure & texture	98 (61.25%)	62 (38.75%)	IV
9.	SHC helps to increase the organic matter in soil	83 (51.88%)	77 (48.12%)	IX
10.	SHC gives an idea of fertilizers usage pattern	122 (76.25%)	38 (23.75%)	I
11.	SHC provide the dose of farmyard manure (FYM)/ compost	74 (46.25%)	86 (53.75%)	XI
12.	SHC helps in timely management of fertilizers	113 (70.63%)	47 (29.37%)	II
13.	SHC helps to increase farm income by applying recommended fertilizers dosage at appropriate time	95 (59.38%)	65 (40.62%)	V
14.	SHC provides the dose of lime and gypsum	61 (38.13%)	99 (61.87%)	XIV
15.	SHC provides the dose of organic manure	65 (40.63%)	95 (59.37%)	XIII
16.	SHC provides information about crop grown suited to soil type	87 (54.38%)	73 (45.62%)	VIII

Conclusion

It may be concluded that most of the SHC scheme

respondents were belonging to SHC gives an idea of fertilizers usage pattern, having SHC helps in timely

management of fertilizers, SHC helps to improve the quality of produce, SHC helps to maintain soil structure & texture, SHC helps to increase farm income by applying recommended fertilizers dosage at appropriate time, SHC helps in selection of crop (Kharif & Rabi), having SHC helps to reduce the soil degradation, most of them SHC provides the dose of organic manure, most of them having SHC helps to increase the organic matter in soil, having SHC effects the water logging condition, SHC provide the dose of farmyard manure (FYM)/ compost. Most of the SHC respondents SHC helps in adoption of crop rotation, SHC provides the dose of organic manure, SHC provides the dose of lime and gypsum, It helps in future cropping pattern and SHC effects the irrigation schedule.

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