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## A socio-economic evaluation of SHC (Soil health card scheme) on status of farmers of Chhattisgarh state

**Mahesh Kumar, Dr. DK Suryawanshi, PK Sangode, Vinay Bachkaiya and Dr. PK Panday**

### Abstract

The purpose of this study was to evaluate socio-economic evaluation of soil health card (SHC) on statuses of farmers of Chhattisgarh state. To serve this purpose, a sample size of 120 respondents were selected from 3 blocks of Mungeli district during the year 2020-21. The results of the study showed that majority of the SHC respondents were of middle age having '36-55 years old and were studied up to higher and higher secondary School. They were dependent only on agriculture for living and most of the respondent had (up to 1ha) land holding. The innovativeness of the SHC respondents found that majority of the respondents were medium level innovative (83.00%) having low level economic motivation, and were low cosmopolite. Most of the SHC respondents (65.83%) were information seeking and get the information from Krishi Vigyan Kendra (KVK) on regular basis.

**Keywords:** socio-economic evaluation, SHC (Soil health card scheme)

### Introduction

A Soil Health Card is used to assess the current state of soil health and, over time, to identify changes in soil health that are influenced by land management. A Soil Health Card displays soil health indicators as well as the descriptive terms associated with them. In most cases, the indicators are based on farmers' practical experience and knowledge of local natural resources. The card contains a list of soil health indicators that can be evaluated without the use of technical or laboratory equipment. The soil health card scheme is one of the flagships programmers of the Government of India, which was launched on February 19, 2015. Scheme managed by the Integrated nutrients Management Division (INM) of the Ministry of Agriculture Cooperation and Farmers Welfare (AC&FW), Government of India (GoI) SHC is a printed report that is given to a farmer for each of his holdings. It will include the status of his soil in terms of 12 parameters, including N, P, K (Macronutrients); S (Secondary-nutrient); Zn, Fe, Cu, Mn, Bo (Micronutrients); and pH, EC, OC. Based on this, the SHC will recommend fertilizer and soil amendments for the farm. A socio-economic evaluation of soil health card (SHC) on statuses of farmers of Chhattisgarh state and its influence on nutrient management practices was aimed in present study. Total no. of soil health card distributed in India during the year 2015- to 2017 no of farmers covered (1.10.74) crore soil health card were distributed to farmers in cycle II 2017-19 (11.69) crore soil health card have been distributed to farmers across the country Total no. of soil health card distributed in Chhattisgarh state during the year 2017-18 to 2018-19 no of farmers covered (2.991.364) and Total no. of soil health card distributed in Mungeli district during the year 2017-18 to 2018-19 no of farmers covered (101.315) Total no. of soil health card distributed in Chhattisgarh state during the year 2019-20 to 2020-21 no of farmers covered (6.807) and Total no. of soil health card distributed in Mungeli district during the year 2019-20 to 2020-21 no of farmers covered (132)

### Materials and Methods

The study was conducted during the year 2020-2021 in the Mungeli district of Chhattisgarh state covering three blocks i.e., Mungeli Lormi and Patharia. Four villages were selected randomly from each of the block, making 12 Villages and 120 SHC respondent. The data was collected by personal interview with the help of well prepared, structured and pretested interview schedule. The data collected were tabulated and analyzed using appropriate statistical tools and methods.

## Results and Discussion

The findings regarding age of the respondents are presented in Table 1. The data revealed that majority (67.50%) of the respondents belonged to the middle age group (between 36 to 55 years), education status found that 50 percent of the farmers were educated from primary through middle school. The data regarding family size indicated that, 60.00 per cent of the respondents were having medium size of family (5 to 8 members), Regarding experience of farming, data shows that 65.97 per cent respondents had high farming experience (above 20 years), The results on occupation of the

respondents shows that main occupation of majority of the SHC respondent (80%) was agriculture and reveals that the maximum 59.17 per cent respondents were marginal farmers. The majority of respondents had up to 1 ha of land holding (marginal farmers). The result of the income analysis shows that majority of SHC respondents (67.50%) belonged to Rs 100000-250000 income group The data regarding cosmopolitaness are presented in the results show that majority of the respondents (85.83%) had low cosmopolitaness.

**Table 1:** Distribution of the respondents according to their socio-economic evaluation of SHC (soil health card scheme) on status of farmers

S. No.	Particular	SHC Respondents (n=120)	
		F	%
<b>1.</b>	<b>Age</b>		
i.	Young (Up to 35 years)	23	19.17
ii.	Middle (36 to 55 years)	81	67.50
iii.	Old (More than 55 years)	16	13.33
<b>2.</b>	<b>Education</b>		
i	Illiterate	31	25.83
ii	Primary (Up to 5th class)	33	27.50
iii	Middle (6th to 8th class)	35	29.17
iv	H. school /Higher secondary (9 <sup>th</sup> to 12 <sup>th</sup> class)	14	11.67
V	College level	07	5.83
<b>3.</b>	<b>Size of family</b>		
I	Small (< 4 members)	29	24.17
ii	Medium (5 to 8 members)	72	60.00
iii	Large (>8 members)	19	15.38
<b>4.</b>	<b>Farming experience</b>		
I	Low experience (Up to 10 Years)	08	6.67
ii	Medium experience (11 to 20 Year)	36	30.00
iii	High experience (more than 20 years)	76	65.33
<b>5.</b>	<b>Occupation</b>		
I	Agriculture	96	80.00
Ii	Agriculture +Business	04	3.33
Iii	Agriculture + Labour	12	10.00
Iv	Agriculture + Service	05	4.17
V	Agriculture + Other	03	2.5
<b>6.</b>	<b>Land holding</b>		
I	Marginal (up to 1 ha)	78	59.17
Ii	Small (1.1-2 ha)	38	31.67
Iii	Medium (2.1- 4 ha)	08	6.67
Iv	Large (>above 4 ha)	03	2.5
<b>7.</b>	<b>Annual income</b>		
I	<Rs. 100000	14	11.67
Ii	Rs. 100000-250000	81	67.50
Iii	Rs. 250000-500000	15	12.50
Iv	>Rs. 500000	10	8.33
<b>8.</b>	<b>Cosmopolitaness</b>		
I	Nil (Never)	07	5.83
Ii	Low (Once in a month)	103	85.83
iii	Medium (Once in a week)	06	5.00
Iv	High (Twice or more in a week)	04	3.33

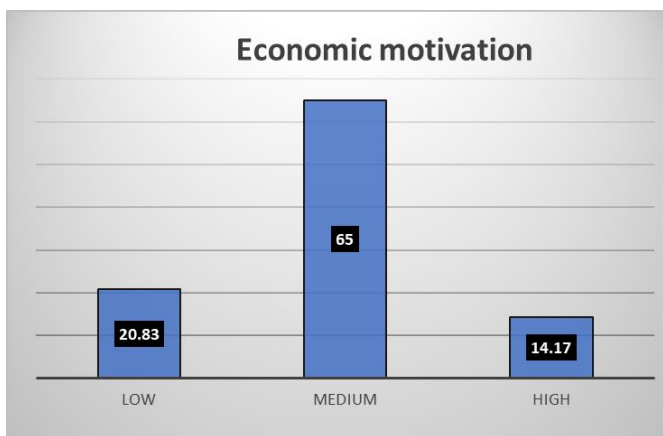
## Economic motivation

The data presented in Table 2 and Fig. 1 were subjected to percentage distribution of the respondents according to their economic motivation. The data indicates that majority of the respondents (65.00%) had medium level of economic motivation, while 20.83 per cent had low and 14.17 per cent had high level of economic motivation.

**Table 2:** Distribution of respondents on the basis of economic motivation

“(n=120)”			
S. No.	‘Category’	Frequency	Percentage
1.	Low	25	20.83
2.	Medium	78	65.00
3.	High	17	14.17
Mean	11.69	SD 3.46	

This may be due to the reason that the respondents were still not thinking agriculture as a business and the irregular climatic and marketing factors made them not to think about rainfall profits. Moreover, the uncertainty level in the respondents was increasing day-by-day because of these factors. Hence, such trend was noticed.



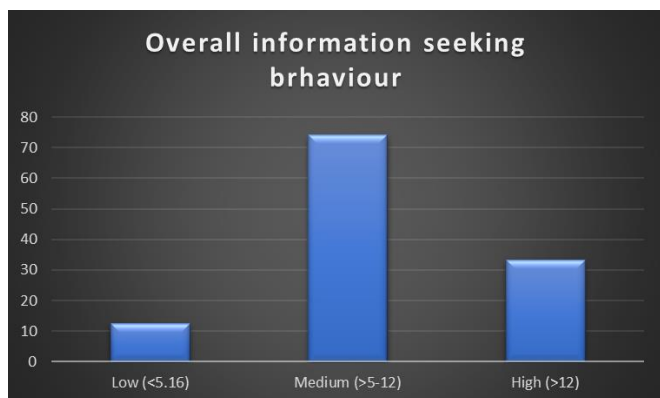
**Fig 1:** Distribution of respondents on the basis of economic motivation

**Information seeking behavior**

The information sources are the means of seeking new information, knowledge and guidance about any particular production technology. The source of information not only gives knowledge about the new production technology but also familiarize the farmer with the information as well. The distribution of respondents according to the degree of usage of information sources as seen in Table 3 The data in table furnished that 74.169 per cent of the respondents had “medium level” of exposure to various source of information for getting knowledge about soil health card scheme, followed by 12.5 per cent of the respondents had “low level” of exposure to various information sources and only 33.33 per cent of the respondents were found to have “high level” use of information sources.

**Table 3:** Distribution of the respondents according to their overall information seeking behavior

“(n=120)”			
S. No.	‘Category’	Frequency	Percentage
1.	Low (<5.16)	15	12.5
2.	Medium (>5-12)	89	74.16
3.	High (>12)	16	33.33
Mean		8.68	SD 3.52



**Fig 2:** Distribution of respondents on the basis of overall information seeking behavior”

**Correlation analysis of independent variables with dependent variable**

Correlation of “Recommended dose of application of plant nutrients and adoption of Soil Health Card based nutrient management practices by wheat crop respondents’ with independent variables was carried (Spearman’s rank correlation) out to test the correlation between independent variables with average application of plant nutrients of recommendation of soil health card by the respondent was given in tables 4 out of all three education, land holding, information seeking behaviour, variables was significance at 0.01 probability level and six variables age, family size, farming experience, occupation cosmopolitaness economic motivation, innovativeness was not significant.

**Table 4:** Correlation “average application of nutrients” adoption of Soil Health Card based nutrient management practices by wheat crops respondents’ with independent variables

(n=120)		
S. No.	Variables	Correlation coefficient
1.	Age	-0.149 <sup>NS</sup>
2.	Education	0.256 <sup>**</sup>
3.	Family size	-.168 <sup>NS</sup>
4.	Farming experience	0.129 <sup>NS</sup>
5.	Occupation	0.106 <sup>NS</sup>
6.	Land holding	0.523 <sup>**</sup>
7.	Cosmopolitaness	0.103 <sup>NS</sup>
8.	Economic motivation	0.043 <sup>NS</sup>
9.	Innovativeness	0.134 <sup>NS</sup>
10.	Information seeking behaviour	0.312 <sup>**</sup>

\* Significant at the 0.05 level of probability  
 \*\* Significant at the 0.01 level of probability  
 \*\*NS – not significant

**Conclusion**

Majority of the SHC respondents were of middle age having ’36 to 55’ years old and were studied to higher secondary level. Most of the respondent had marginal land (1 hectare land) holding with medium size of family. Farming experience respondents had high farming experience (above 20 years) Most of the SHC respondents having annual income of Rs. 100000 to 25,00,00 and dependent on agriculture as only profession having medium level innovative thinking, medium economic motivation, and medium cosmopolite. Most of the SHC respondents were information seeking and obtained information mostly from KVK on regular basis. However, over all information seeking behaviour reveals that majority of respondents (74.16%) have medium level of information seeking behaviour

**Reference**

- Acharya CL, Srivastava S. Soil Health Card. NAAS NEWS 2017;17(2):11-14. Available online: <http://naasindia.org/> Acharya N G Ranga Agricultural University, Bapatala, (A.P.)
- Bordoloi J, Das AK. Impact of soil health card scheme on production, productivity and soil health in Assam. Study No.148. Agro-Economic Research Centre for North-East India, Assam Agricultural University, Jorhat-Assam 2017. Available from: <http://www.aau.ac.in/data/reports/Impactof-Soil-Health-Card-Scheme.pdf>
- Digambar. study on utilization pattern of agricultural land by the farmers of Rajnandgaon district of Chhattisgarh M.Sc. (Ag) thesis, IGKV, Raipur (C.G.) 2016.

4. Dubey. Impact assessment of soil health card Scheme on income and nutrient management practices in major crops among the farmers of Raisen district in Madhya Pradesh 2018.
5. Narbaria S. A study on adoption level of system of rice intensification (SRI) technology among farmers in Dhamtari of Chhattisgarh, M.Sc. (Ag.) thesis, IGKV, Raipur (C.G.) 2013.