

# Relationship between Profile of the Farmers and Their Attitude towards Sustainable Agricultural Practices

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. Author JMD designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors SPD and SVK managed the analyses of the study. Author SPD managed the literature searches. All authors read and approved the final manuscript.*

## **Article Information**

DOI: 10.9734/CJAST/2020/v39i630564

### Editor(s):

(1) Dr. Sangita Sahni, Dr. Rajendra Prasad Central Agricultural University, India.

### Reviewers:

(1) Waspodo Tjipto Subroto, Universitas Negeri Surabaya, Indonesia.

(2) Romer C. Castillo, Batangas State University, Philippines.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/55755>

**Received 29 January 2020**

**Accepted 03 April 2020**

**Published 20 April 2020**

**Original Research Article**

## **ABSTRACT**

The present study was conducted in Latur district from Marathwada region of Maharashtra state during the years 2018-19. Three talukas viz., Latur, Ausa and Renapur of Latur District were selected randomly and four villages from each taluka were selected randomly. From each village ten members were randomly selected constituting the sample size 120. A number of profile characteristics were selected as independent variables to find out profile of farmers from the study area. All profile characteristics, age, education, family size, annual income, social participation, extension contacts, sources of information, knowledge level were found in medium category while majority of the respondents were having marginal land holding. It was observed from that variables like age and family size had found to be non-significant relationship with attitude of farmers towards sustainable agricultural practices. Variables like education, land holding, annual income, social participation and extension contact found to be positive and significant relationship with attitude of farmers towards sustainable agricultural practices. Variables like source of information and knowledge had positive and highly significant relationship with attitude of farmers towards sustainable agricultural practices.

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*Keywords: Sustainable agricultural practices; attitude.*

## 1. INTRODUCTION

Socio-economic condition of the farmers has been a matter of concern from last few decades. It has also been reported that many farmers willing to quite farming. But now a day India is one of the agricultural based nations with more than 58.00 per cent of the population out of 1150 million, pertaining to agricultural sector. The contribution of Agricultural sectors in India's Gross Domestic Product is continuing to decline. The emerging market for organic food worldwide and numerous advantages of organic farming and food led many farmers to adopt organic farming. Further, organic farming has been considered costly than conventional farming which need more technical knowledge too. It has also been promoted that sustainable agricultural practices to empower farmers and upgrade their socio-economic condition which is more or less depend on their productivity and profitability too. The Indian organic food sector has a great potential to produce almost a wide variety of organic products due to its multiple agro climatic conditions at various regions [1,2]. In many parts of the country, the inherited tradition of organic farming is an added advantage [3-5, 6].

Therefore, this study was carried to know the correlation between profile and attitude of farmers towards sustainable agricultural practices. This will assist policy-makers to know the how profile characteristics are having impact on attitude of farmers towards sustainable agricultural practices.

## 2. OBJECTIVES

- To study the profile of farmers.
- To find out relationship between the profile of farmers with their attitude towards sustainable agricultural practices.

## 3. METHODOLOGY

The present study was conducted in Latur district of Maharashtra state. In Latur district there are 10 talukas, out of which three talukas, namely Latur, Renapur and AUSA were randomly selected on the basis attitude of farmers towards sustainable agricultural practices. From each taluka 4 villages were randomly selected and from each village 10 farmers were randomly selected to comprise 120 respondents.

Ex-post facto research design was used for the study. Data were collected by personally interviewing the respondents with the help of pretested structural schedule. Collected data were tabulated properly. Mean and standard deviation, frequency, percentage, coefficient of correlation methods of statistics were used for interpretation of data.

## 4. RESULTS AND DISCUSSION

### 4.1 Personal and Socio-economic Characteristics of the Respondents

A number of profile characteristics were selected as independent variables to find out profile of farmers of the study area. It was clear from Table 1 that, more than half (62.50%) of the respondents belonged to middle age category followed by old age (19.16%) and young age (18.34%) categories respectively. As regards education, more than one fourth (27.50%) of members had education up to secondary school level, 24.16 per cent of members had education up to higher secondary school, 21.66 per cent of members had education up to primary school, 16.66 per cent of members had education up to graduate level whereas, 10.00 per cent members were illiterate. As regards family size majority (78.33%) of the respondents belonged to the medium family size category followed by 15.83 per cent respondents belonged to large family size category and remaining 05.83 per cent of respondents belonged to small family size category. As regard to land holding, less than one third (27.50%) of the respondents found in marginal land holding, followed by those with small (25.83%), semi medium (21.66%), medium (20.00%) and 05.00 per cent was found in big category of land holding.

Majority (79.16%) of members categorized under medium level of annual income followed by 11.66 per cent of members had high level of annual income and 09.16 per cent members had low level of annual income. It was observed that more than half (64.16%) of the respondents had medium social participation while 22.50 per cent had low social participation and 13.33 per cent of them were found in high social participation category. As regards extension contact more than half (60.83%) of the respondents had medium contacts with extension personnel. However, 24.16 per cent had low contact with

extension personnel and 15.00 per cent had high contacts with the personnel of different extension agencies. As regards sources of information, majority (70.00%) of the respondents had medium use of sources of information followed by 16.66 per cent of the respondents had less use of sources of information and 13.33 per cent respondents had high use of sources of information. Additionally, majority (78.33%) respondents were belonged to the medium knowledge category, followed by 16.66 per cent of the respondents were belonged to the low knowledge category and 05.00 per cent of the

respondents were belonged to the high knowledge category.

#### 4.2 Relationship between Profile of the Farmers and their Attitude towards Sustainable Agricultural Practices

##### 4.2.1 Age and attitude

The data in the Table 2 revealed that there was a non-significant correlation between age and attitude of farmers towards sustainable agricultural practices.

**Table 1. Distribution of respondents according to their profile (N=120)**

Sr. No.	Variable	Frequency (F)	Percentage (%)
1.	<b>Age</b>		
	Low	22	18.34
	Medium	75	62.50
	Big	23	19.16
2.	<b>Education</b>		
	Illiterate	12	10.00
	Primary school	26	21.66
	Secondary school	33	27.50
	Higher secondary school	29	24.16
	Graduate and above	20	16.66
3.	<b>Family size</b>		
	Small	7	05.83
	Medium	94	78.33
	Big	19	15.83
4.	<b>Land holding</b>		
	Marginal (up to 1.00)	33	27.50
	Small(1.01 to 2.00)	31	25.83
	Semi-medium (2.01 to 4.00)	26	21.66
	Medium (4.01 to 10.00)	24	20.00
	Big (10.01 and above)	06	05.00
5.	<b>Annual income</b>		
	Low	11	09.16
	Medium	95	79.16
	High	14	11.66
6.	<b>Social participation</b>		
	Low	27	22.50
	Medium	77	64.16
	High	16	13.33
7.	<b>Extension contact</b>		
	Low	29	24.16
	Medium	73	60.83
	High	18	15.00
8.	<b>Source of information</b>		
	Low	20	16.66
	Medium	84	70.00
	High	16	13.33
9	<b>Knowledge</b>		
	Low	20	16.66
	Medium	94	78.33
	High	06	05.00

**Table 2. Correlation between profile of the farmers and their attitude towards sustainable agricultural practices**

Sl. No.	Independent variables	Co-efficient of correlation
1.	Age	-0.521 <sup>NS</sup>
2.	Education	0.456**
3.	Family size	-0.180 <sup>NS</sup>
4.	Land holding	0.200*
5.	Annual income	0.198*
6.	Social participation	0.225*
7.	Extension contact	0.196*
8.	Source of information	0.308**
9.	Knowledge	0.266**

\* Significant at 0.05 level of probability. \*\* Significant at 0.01 level of probability. <sup>NS</sup> Non significant

It means that level of attitude was not depending on the age of respondents. It can be inferred that level of attitude was decreased with increase in age of respondents due to which age might have established negative and non-significant relationship with attitude.

The findings reported by Fayoka et al. [7] Sadati et al. [8] and Hasan et al. [9].

#### 4.2.2 Education and attitude

The data in the Table 2 revealed that there was a positive and highly significant correlation between education and attitude of farmers towards sustainable agricultural practices.

The probable reason education directly effects on farmers understanding of the things, object or any kind of idea. Education had increase literacy level of respondents with its possible influence on attitude of farmers towards sustainable agricultural practices. The level of education also helps an individual to get himself acquainted with the skills that are required for undertaking the modern techniques of agriculture. This might be resulted in establishing the positive and significant relationship between education and attitude.

#### 4.2.3 Family size and attitude

The data in the Table 2 revealed that there was a negative and non-significant correlation between family size and attitude of farmers towards sustainable agricultural practices.

It could be concluded that family size and attitude were non- significantly related with each other. Thus family size has non-significant influence over the attitude of respondents about sustainable agricultural practices.

The findings of the study were similar to that of Sadati et al. [8] and Hasan et al. [9].

#### 4.2.4 Land holding and attitude

The data in the Table 2 revealed that there was a positive and significant correlation between land holding and attitude of farmers towards sustainable agricultural practices.

This clearly shows that increase in land holding, also increases the level of attitude. Respondents with larger size of land holding could afford to use modern information for the sustainable agricultural practices due to which land holding might be established positive and significant relationship with attitude.

#### 4.2.5 Annual income and attitude

The data in the Table 2 revealed that there was a positive and significant correlation between annual income and attitude of farmers towards sustainable agricultural practices.

From this result it could be concluded that the annual income determines the economic status of the respondents. This clearly helps in developing the attitude of farmers. Annual income of the respondents therefore, could establish positive and significant relationship with attitude towards sustainable agricultural practices.

The findings of the study were similar to that of Sadati et al. [8] and Singh et al. [10].

#### 4.2.6 Social participation and attitude

The data in the Table 2 revealed that there was a positive and significant correlation between social participation and attitude of farmers towards sustainable agricultural practices.

Better social participation of respondents would have enabled them to contact various sources of information for increasing the attitude of farmers regarding sustainable agriculture.

#### 4.2.7 Extension contact and attitude

The data in the Table 2 revealed that there was a positive and significant correlation between extension contact and attitude of farmers towards sustainable agricultural practices.

It is obvious that respondents with higher level of contact with extension agency are generally favourably predisposed to acquire more information, skills and other factors relating to enterprises consequently, level of attitude. Thus, in this study positive and significant relationship must have been established between contact with extension agency and attitude.

The findings of the study were similar to that Ghosh and Shaikh [11].

#### 4.2.8 Source of information and attitude

The data in the Table 2 revealed that there was a positive and highly significant correlation between source of information and attitude of farmers towards sustainable agricultural practices.

An individual develops an attitude if he has an opportunity to expose with more number of sources of information. A respondent who use more source of information has higher exposure and it enriches their level of attitude. Use of more sources of information helps in clarifying the contents of the message received through any source. It might be the reason that use of source of information could express the positive and highly significant relationship with attitude.

The findings of the study were similar to those Sadati et al. [8], Singh et al. [10] and Hasan et al. [9].

#### 4.2.9 Knowledge and attitude

The data in the Table 2 revealed that there was a positive and highly significant correlation between knowledge and attitude of farmers towards sustainable agricultural practices.

This indicates that the higher the knowledge, higher is the level of attitude towards sustainable agricultural practices. It is therefore concluded

that, knowledge was found to be positive and highly significantly related to attitude of farmers towards sustainable agricultural practices.

The findings of the study were similar to that Fayoka et.al. [7] Sadati et al. [8] Hasan et al. [9].

## 5. CONCLUSION

- The study indicated that, the profile of the farmers attitude towards sustainable agriculture practices concluded that majorities of the respondents were having medium level of age, secondary school level of education, medium level of family size, annual income and marginal land holding category. Further it could be observed that majority of the respondents had medium level of social participation, extension contact, sources of information, knowledge.
- Independent variables like age and family size had found to be non-significant relationship with attitude of farmers towards sustainable agricultural practices. Variables like education, land holding, annual income, social participation and extension contact found to be positive and significant relationship with attitude of farmers towards sustainable agricultural practices. Variables like source of information and knowledge had positive and highly significant relationship with attitude of farmers towards sustainable agricultural practices.

## CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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