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Socio-economic profile and attitudinal analysis of farmers towards organic farming

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Abstract

Organic farming has gained global recognition as a sustainable alternative to conventional agriculture, offering benefits such as improved soil health, biodiversity conservation, and reduced environmental impact. However, its adoption remains limited due to economic constraints, lack of awareness, and perceived productivity challenges. This study examines the socio-economic profile and attitudinal analysis of farmers towards organic farming in Chitrakoot district of Uttar Pradesh. A descriptive research design was employed, selecting 250 farmers from 25 villages across five blocks using simple random sampling. Data were collected through structured questionnaires and personal interviews, followed by descriptive statistical analysis. The findings indicate that middle-aged farmers (35-58 years) form the majority, with a high literacy rate influencing their agricultural decisions. Joint family systems and medium-sized landholdings are predominant, shaping collective farming practices. Attitudinal analysis reveals that most farmers have a favorable perception of organic farming, particularly regarding soil conservation, long-term profitability, and environmental benefits. However, concerns persist about labor intensity, lower yields, and economic viability, which hinder widespread adoption. The study emphasizes the need for targeted extension programs, financial incentives, and policy support to bridge knowledge gaps and enhance organic farming adoption.

Keywords: Organic farming, socio-economic profile, attitude, agricultural extension, sustainable agriculture, farmer perception

Introduction

Today, organic farming is practiced worldwide and has grown into a multibillion-dollar industry. It is often seen as a key strategy in addressing global food security challenges while reducing the negative impacts of agriculture on the environment. Despite its growth, the debate over the efficiency and scalability of organic farming continues. Proponents argue that it offers long-term benefits for soil health and ecosystems, while critics raise concerns about lower productivity and higher costs compared to conventional farming.

Modern agriculture represents a relatively new phenomenon that relies heavily on artificial chemical inputs, monocultures, and intensive farming techniques. Concerning the environment and human health, there is a need for understanding on the production, sale, and consumption of organic foods. It also shows a desire to improve interactions within communities and communities at large. The organic movement will further help to reflect a return to values of handmade quality, accountability and a refined holistic aesthetic. Due to increased consumer awareness and health consciousness and rapid growth of organic food markets nationwide, a concept of organic farming is to be developed in our state too.

A number of surveys and research projects have looked at and contrasted conventional and organic agricultural practices. According to the majority of these surveys, organic farming is less harmful for the following reasons:

- Synthetic pesticides, some of which may be harmful to

the surrounding soil, water, and aquatic and terrestrial wildlife, are not used on organic farms.

- Organic farms are more effective than conventional farms at sustaining diverse ecosystems, which include populations of plants, insects, and animals.
- Organic farms consume less energy and produce less waste, such as chemical packing materials, as measured by area or yield.

Organic farming became internationally recognized as a viable alternative to conventional farming. Consumers' rising awareness of health and environmental degradation is resulting in a preference and demand for organic foods, and as a result, organic produce is fetching substantially higher costs in the markets of the United States, Europe, and Japan. The economic condition of people in countries such as India is largely dependent on agricultural productivity. Given the importance of organic farming in the farmer's economy, development agencies have stepped forward to promote organic farming on farmers' fields. Despite all efforts, there appears to be a significant gap between organic farming technology available and its acceptance in farmer fields. Knowledge is seen as one of the most significant determinants of human behaviour, which encourages farmers to adopt new technologies provided they have a clear grasp of the need for enhanced organic farming practices. In this context, knowledge is defined as the amount of information that farmers are aware towards regarding currently recommended practices. Adoption is

defined as the amount of recommended technology that farmers are actually using in the field. The extension education system has a clear understanding of how important it is for the organic farming community to embrace innovative technology and they cite scientific thinking and current technological awareness as key factors. This research has been designed to investigate farmers' awareness, adoption extent and attitudes regarding organic farming.

Research Methodology

This study employed a descriptive research design to examine the socio-economic profile and attitudinal analysis of farmers towards organic farming. The research was conducted in Chitrakoot district of Uttar Pradesh, known for its agricultural diversity and rural significance. The district comprises five blocks—Manikpur, Karwi, Pahadi, Ramnagar, and Mau—from which five villages were randomly selected per block, totaling 25 villages. A sample of 250 farmers was chosen through simple random sampling to ensure an unbiased representation of different farming experiences and perspectives. Data were collected using a structured questionnaire with both open-ended and closed-ended questions, designed to assess farmers' socio-economic conditions and attitudes towards organic farming.

The collected data were analyzed using descriptive statistical techniques, including mean scores, frequency distributions, and percentage analysis. Farmers' attitudes were measured using a Likert scale, providing a structured evaluation of their perceptions towards organic farming. This systematic methodology facilitated a comprehensive understanding of the socio-economic factors influencing organic farming adoption, paving the way for targeted strategies and policy recommendations to promote sustainable agricultural practices.

Results and Discussion

Socio-Economic Profile of the respondent

Age composition

Table 1: Distribution of the participants based on Age N=250

S. No.	Categories (years)	Respondents	
		Frequency	Percentage
1.	Young age (up to 34)	46	18.4
2.	Middle age (35-58)	145	58
3.	Old age (58 and above)	59	23.6
	Total	250	100.00
	Mean	46.95	
	S.D.	12.77	
	Min	25	
	Max	80	

The above Table 1 indicates that the majority of respondents (58%) belonged to the middle age group (35-58 years), followed by 23.6% in the older age group (58 years and above) and 18.4% in the young age group (up to 34 years). The ages of the selected respondents ranged from 25 to 80 years, with a mean age of 46.95 years. This finding aligns with Savitha (2009) [7], who also reported that most respondents were in the middle age category.

This distribution is most likely due to the fact that most middle-aged people were more eager and dynamic when

engaging in various socioeconomic activities in general and organic farming in particular.

Education

Table 2: Distribution of the participants based on the Education N=250

S. No.	Categories	Respondents	
		Number	Percentage
A.	Illiterate	28	11.2
B.	Literate	222	88.8
I.	Primary school	20	8.0
II.	Middle school	43	17.2
III.	High school	39	15.6
IV.	Intermediate	62	24.8
V.	Graduate & Post graduate	58	23.2

The Table 2 indicates that the majority of respondents (88.8%) were literate, while 11.2% were illiterate. The educational levels of the respondents, listed in descending order, were as follows: 24.8% had intermediate education, 23.2% were graduates or postgraduates, 17.2% completed middle school, 15.6% attended high school, and 8.0% had primary school education. This indicates that the educational qualifications of the respondents were notably higher than the average literacy rates of both the state and the country. "Asih (2008) [2] reported similar findings, reinforcing the validity of these observations across multiple studies."

Marital status

Table 3: Distribution of the participants based on the Marital status N=250

S. No.	Categories	Respondents	
		Number	Percentage
1.	Unmarried	21	8.4
2.	Married	229	91.6
	Total	250	100.00

The Table 3 indicates that the majority of respondents (91.6%) were married, while 8.4% were unmarried. "Malkanthi (2020) [4] reported similar findings, noting that the majority of participants were married."

Caste category

Table 4: Distribution of the participants based on the Caste N=250

S. No.	Categories	Respondents	
		Number	Percentage
1.	General caste	90	36
2.	Other Backward classes	131	52.4
3.	Scheduled caste	29	11.6
4.	ST	0	0
	Total	250	100.00

Table 4 indicates that the majority of respondents (52.4%) belonged to other backward castes, followed by the general caste (36%) and the Scheduled caste category (11.6%). Therefore, it can be concluded that individuals from other backward castes were predominantly involved in organic farming in the study area. "The outcomes of this study are similar to those reported by Singh and George (2012) [8]."

Type of family

Table 5: Distribution of the participants based on the Family type
N=250

S. No.	Family type	Respondents	
		Number	Percentage
1.	Nuclear/Single family	116	46.4
2.	Joint family	134	53.6
	Total	250	100.00

The Table 5 indicates that joint families outnumber nuclear families. Specifically, 53.6% of respondents belonged to joint families, while 46.4% were part of nuclear families. This suggests that the joint family system is predominant in the study area. "The results of this study correspond with the findings of Singh *et al.* (2018).^[10]"

Size of family

Table 6: Distribution of the participants based on the family size
N=250

S. No.	Family size	Number	Percentage
1.	Small (up to 3)	18	7.2
2.	Medium (4-10)	189	75.6
3.	Large (11 and above)	37	14.8
	Total	250	100.00
	Mean	7.41	
	S.D.	3.44	
	Min	3	
	Max	18	

The Table 6 indicates that the largest proportion of respondents (75.6%) belonged to the medium category, which includes families with 4-10 members. This is followed by 14.8% of respondents in the category of families with 9 or more members and 7.2% in the category with up to 4 members. The average family size was found to

be 6 members, with a range from a minimum of 3 to a maximum of 15 members. This trend may be attributed to the prevalence of the nuclear family system in the study area. "Similar results were observed by Parmar and Sharma (2014)^[5]".

Size of land holding

Table 7: Distribution of the participants based on the land holding (hectares) N=250

S. No.	Categories (hectares)	Respondents	
		Number	Percentage
1.	Marginal farmers(>1hac)	22	8.8
2.	Small farmers (1 to 2 hac)	43	17.2
3.	Semi-medium (2 to 4 hac)	98	39.2
4.	Medium (4 to 10 hac)	70	28
5.	Large 10 hac	9	3.6
	Total	250	100.0
	Mean	1.17	
	S.D.	0.73	
	Min.	0.3	
	Max.	3	

Table 7 indicates that 39.2% of respondents fell into the semi-medium category, owning between 2 to 4 hectares of land. Additionally, the distribution of respondents among other categories was as follows: 28% were medium farmers, 17.2% were small farmers, 8.8% were marginal farmers, and 3.6% were large farmers. The average landholding size was found to be between 2 to 4 hectares, with a minimum of 0.5 hectares and a maximum of 15 hectares. Thus, it can be concluded that semi-medium and medium farmers predominantly populate the study area, which may be attributed to family fragmentation. "The results reported by Anup *et al.* (2010)^[1] reflect similar trends."

Attitude of the farmers towards organic farming

Table 8: Frequency distribution of farmer's attitude towards organic farming N=250

S. No.	Statements	Attitude Response (Scores)					Total Score
		Strongly Agrees	Agrees	Neutral	Disagree	Strongly Disagree	
1.	Increased soil productivity may be achieved through organic farming. (+)	485	468	87	14	0	1054
2.	In my opinion, field crops do not respond properly to organic cultivation. (-)	6	70	252	400	125	853
3.	An efficient way to enhance the subsoil's structure is through regular organic agricultural practices. (+)	420	488	120	8	0	1036
4.	I believe organic farming methods to be labor-intensive. (-)	20	166	171	312	45	714
5.	There are several opportunities to encourage organic farming as a means of managing integrated cropping. (+)	250	588	99	30	5	972
6.	Organic farming takes more time, in my opinion. (-)	9	184	231	224	70	718
7.	An efficient way to support the development of a sustainable agricultural environment is through organic farming. (+)	600	340	132	1	0	1073
8.	Organic farming, in my view, is only beneficial for forward-thinking farmers. (-)	19	138	204	340	45	746
9.	I think organic farming reduces soil erosion. (+)	235	392	222	56	3	908
10.	In my opinion, growing organic food is not a financially feasible way to increase output. (-)	11	180	180	368	135	874
11.	The greatest way to maximize long-term profit may be through organic farming. (+)	425	560	63	0	4	1052
12.	Organic farming, in my view, is an ineffective method of protecting plant nutrients. (-)	11	40	231	364	255	901
13.	One efficient way to improve the capacity of the soil to retain water is through organic farming. (+)	595	344	126	4	1	1070
14.	One possible source of sustainable agriculture is organic farming. (-)	20	94	360	220	40	734
	Total Score	3106	4052	2478	2341	728	12705
	Mean of Total Score	221.85	289.42	177	167.21	52	907.5

The Table 8 clearly indicates that among the 14 statements assessing attitudes toward organic farming, the majority of respondents exhibited an agreement with organic farming, reflected by a total mean score of 289.42. This was followed by those who strongly agreed (mean score of 221.85), maintained a neutral attitude (177), disagreed (167.21), and strongly disagreed (52). Therefore, it can be concluded that the majority of respondents demonstrated either an agreement or strong agreement regarding organic farming.

Farmers' attitudes toward organic farming practices:

Table 9: Degree of farmer’s attitude towards organic farming practices N=250

S. No.	Categories of attitude response	Total Score	Mean of Total Score	% On Mean of Total Score
1.	Strongly agree	3106	221.85	24.44
2.	Agree	4052	289.42	31.89
3.	Neutral	2478	177	19.50
4.	Disagree	2341	167.21	18.42
5.	Strongly disagree	728	52	5.73
	Total	12705	907.5	100.00

The Table 9 illustrates the attitudes of respondents toward organic farming practices. It is evident that the largest proportion of respondents (31.89%) fell into the "Agree" category, followed by those who "Strongly Agree" (24.44%), were "Neutral" (19.50%), "Disagree" (18.42%), and "Strongly Disagree" (5.73%). This indicates that the majority of respondents hold a positive attitude and show interest in organic farming practices.

Conclusion

The study on the Socio-Economic Profile and Attitudinal Analysis of Farmers towards Organic Farming highlights critical insights into the demographics, perceptions, and challenges associated with organic farming adoption in Chitrakoot district of Uttar Pradesh. The findings reveal that middle-aged farmers (35-58 years) constitute the majority of the farming population, and a significant proportion is literate, which positively influences their willingness to explore organic farming. The dominance of joint families and medium-sized landholdings suggests that collective decision-making plays a crucial role in adopting new agricultural practices.

The attitudinal analysis indicates that most farmers hold a positive perception towards organic farming, recognizing its benefits in soil health, sustainability, and long-term profitability. However, concerns regarding labor intensity, economic feasibility, and productivity limitations still persist, acting as barriers to widespread adoption. The study emphasizes the need for enhanced extension services, awareness programs, and financial support to bridge the gap between organic farming knowledge and its practical implementation. Targeted policy interventions, training programs, and market linkages can further encourage farmers to transition towards organic farming, ensuring sustainable agricultural development and environmental conservation in the region.

References

1. Anup U, Ahmed T, Singh AK. Evaluation of farmers

field school on All India Radio about organic farming. *J Commun Stud.* 2010;27:377-421.

2. Asih F. Development of organic rice farming in a rural area, Bantul Regency, Yogyakarta Special Region Province, Indonesia. *J Dev Sustain Agric.* 2008;3:135-148.

3. Chandhana B, Sashikala G, Reddy BKK, Madhavi K, Sudharani Smt K, Sadhineni SNM. A study on knowledge level and attitude of farmers towards organic farming in Ananthapuramu District, Andhra Pradesh, India. *Int J Environ Climate Change.* 2023;13(11):1344-1349.

4. Malkanthi SHP. Farmers’ attitude towards organic agriculture: A case of rural Sri Lanka. *Contemp Agric.* 2020;69(1-2):12-19.

5. Parmar VS, Sharma OP. Socio-personal characteristics of farm women in dairy occupation. *Guj J Extn Edu.* 2014;25:47-48.

6. Sarwar MG, Mondol MAS, Goswami P, Huda S. Attitude of the women farmers towards organic farming of Nilphamari district in Bangladesh. *Int J Agril Res Innov Tech.* 2022;12(1):174-181. <https://doi.org/10.3329/ijarit.v12i1.61049>.

7. Savitha B. Organic farming in Andhra Pradesh – Potential and constraints. A stakeholder analysis. PhD Thesis, Acharya N G Ranga Agricultural University, Hyderabad, India; 2009.

8. Singh, George. Organic farming: Awareness and beliefs of farmers in Uttarakhand, India. *J Hum Ecol.* 2012;37(2):139-149.

9. Singh A, Singh AS, Yadav B, Malik JS. Farmers' attitude towards organic farming in Uttar Pradesh. *Indian J Extn Educ.* 2024;60(3):33-36.

10. Singh BP, Doharey RK, Singh SN, Kumar S, Prasad HN, Verma A. Socio-economic status of vegetable growers in Bareilly district. *J Pharm Phyto.* 2018;7(6):632-635.