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RELATIONSHIP BETWEEN PROFILE CHARACTERISTICS OF THE FARMERS AND THEIR UTILITY PERCEPTION TOWARDS INTEGRATED FARMING SYSTEM

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ABSTRACT

Farmers in India. with marginal. and small landholdings face critical challenges such as low. income, low. productivity, limited. access to technology and high. production risks. The Integrated. Farming System (IFS) offers a holistic. approach by integrating crop. cultivation with allied agricultural enterprises, thereby enhancing productivity, sustainability and income. This study was undertaken in Anand district of Gujarat to assess the profile of farmers practicing IFS and determine the relationship between profile characteristics of the farmers and their utility perception. A total of 120 respondents were selected using simple random sampling. An ex-post-facto research design and structured interview schedule were used for data collection and statistical tools such as Excel and SPSS were employed for analysis. Correlation analysis revealed that thirteen variables including education, experience in IFS, annual income, land holdings, social and extension participation, agri-mass media exposure, economic motivation, credit and market orientation, scientific and management orientation and attitude towards IFS were significantly and positively related to utility perception, whereas age and family size were not significant. The findings highlight the importance of socio-economic and psychological factors in shaping farmer's perception towards IFS. The study suggests that enhancing farmer education, access to resources, and targeted extension support can significantly improve the utility and adoption of IFS, thereby contributing to farm sustainability and income enhancement.

Keywords*: integrated farming system, utility perception, profile characteristics, sustainability.*

INTRODUCTION

Farmers with marginal, tiny and scattered land holdings in India confront a variety of difficulties, including low productivity, low income, restricted use of technology, crop failure risk, deteriorated soil and inefficient resource usage (Gamit and Vinaya,. 2024; Vinaya and Gadde, 2025). The Integrated Farming System (IFS) can effectively manage these kinds of challenges by combining crop agriculture with poultry, fisheries, livestock rearing, pomology, olericulture, apiculture, floriculture and other related activities. This diversification promotes the prudent use of organic waste, water and land, which increases overall farm production, reduces risk and improves sustainability.

By diversifying operations, the Integrated Farming System reduces the chance of crop failure and guarantees farmers a steady and year-round income. In addition to lowering input costs and reliance on outside resources, it encourages resource recycling through the use of livestock manure as organic fertilizer. It contributes to environmental sustainability by increasing soil fertility, conserving water and reducing carbon emissions. Farmers may boost revenue, develop climate change resilience and attain long-term financial stability and food security by combining a variety of activities.

OBJECTIVES

(1) To study the profile characteristics of the farmers

(2) To ascertain the relationship between the profile characteristics of the farmers and their utility perception towards Integrated Farming System

METHODOLOGY

The study followed a positivist research philosophy, emphasizing objectivity and quantifiable measurement of relationship between profile characteristics of the farmers and their utility perception towards Integrated Farming System (IFS). A deductive research approach was adopted, beginning with existing theories of perception and testing them through empirical data. The quantitative methodological choice was employed using a survey research strategy to collect data from farmers across selected talukas. The study was cross-sectional, conducted in Anand district of Gujarat during 2025. Anand district was purposively selected as it represents

a progressive agricultural region where Integrated Farming System models are actively promoted by Anand Agricultural University. From four talukas *viz.,* Anand, Anklav, Borsad, and Khambhat with 120 farmers practicing IFS were chosen using simple random sampling.

An Ex-post-facto (Kerlinger, 1976) research design was used since the variables had already occurred. Primary data were collected through a structured interview schedule and analysed using Microsoft Excel (MS 365) and SPSS (version 16.0). Coefficient of correlation were applied as descriptive statistics.

RESULTS AND DISCUSSION

Characteristics of the farmers involved in integrated farming system

The data revealed in Table 1 observed that majority (71.67 %) of the respondents belonged to middle age group, followed by 18.33 per cent and 10.00 per cent of them belonged to old and young age group, respectively. Education status of the farmers indicating that more than one fourth (27.50 %) of the farmers possess secondary education, followed by 26.67 per cent, 20.84 per cent, 19.16 per cent and 05.83 per cent of them had primary education, higher secondary education, illiterate and graduate and above, respectively.

Table 1: Farmers according to their personal, socio-economic, communicational and psychological characteristics

(n=120)

Sr. No.	Characteristics of the farmers	Categories	Frequency	Per cent
Personal Variables				
1	**Age**	Young group (Up to 35 years)	12	10.00
		Middle group (between 36 to 50 years)	86	71.67
		Old group (Above 50 years)	22	18.33
2	**Education**	Illiterate	23	19.16
		Primary education (1st to 8th Std)	32	26.67
		Secondary education (9th & 10th Std)	33	27.50
		Higher secondary education (11th & 12th Std)	25	20.84
		Graduate and above	07	05.83
3	**Size of family**	Small (Up to 4 members)	38	31.67
		Medium (5 to 8 members)	62	51.67
		Large (Above 8 members)	20	16.66
4	**Experience in Integrated Farming System**	Up to 05.00 years	09	07.50
		05.01 to 10.00 years	54	45.00
		10.01 to 15.00 years	19	15.84
		15.01 to 20.00 years	27	22.50
		Above 20.00 years	11	09.16
Socio-Economic Variables				
5	**Annual income**	Up to ₹ 2,00,000/-	17	14.17
		₹ 2,00,001/- to ₹ 4,00,000/-	42	35.00
		₹ 4,00,001/- to ₹ 6,00,000/-	39	32.50
		₹ 6,00,001/- to ₹ 8,00,000/-	16	13.33
		Above ₹ 8,00,000/-	06	05.00
6	**Land-holdings**	Marginal (Up to 1.00 ha)	22	18.34
		Small (1.01 to 2.00 ha)	36	30.00
		Medium (2.01 to 4.00 ha)	39	32.50
		Semi-medium (4.01 to 10.00 ha)	17	14.16
		Large (Above 10.00 ha)	06	05.00
7	**Social participation**	No membership	34	28.34
		Membership in one organization	54	45.00
		Membership in two organization	19	15.83
		Membership in more than two organization	09	07.50
		Holding position in organization	04	03.33

Sr. No.	Characteristics of the farmers	Categories	Frequency	Per cent
Communicational Variables				
8	**Extension participation**	Very low (Up to 02.40 score)	09	07.50
		Low (02.41 to 04.80 score)	47	39.17
		Medium (04.81 to 07.20 score)	57	47.50
		High (07.21 to 09.60 score)	03	02.50
		Very high (Above 09.60 score)	04	03.33
9	**Agri-mass media exposure**	Very low (Up to 04.00 score)	02	01.66
		Low (04.01 to 08.00 score)	41	34.17
		Medium (08.01 to 12.00 score)	64	53.34
		High (12.01 to 16.00 score)	13	10.83
		Very high (Above 16.00 score)	00	00.00
Psychological Variables				
10	**Economic motivation**	Very Low (Up to 10.80 score)	00	00.00
		Low (10.81 to 15.60 score)	18	15.00
		Medium (15.61 to 20.40 score)	51	42.50
		High (20.41 to 25.20 score)	42	35.00
		Very High (Above 25.20 score)	09	07.50
11	**Market orientation**	Very low (Up to 10.80 score)	00	00.00
		Low (10.81 to 15.60 score)	35	29.17
		Medium (15.61 to 20.40 score)	55	45.84
		High (20.41 to 25.20 score)	26	21.66
		Very high (Above 25.20 score)	04	03.33
12	**Credit orientation**	Very low (Up to 21.60 score)	08	06.66
		Low (21.61 to 31.20 score)	24	20.00
		Medium (31.21 to 40.80 score)	22	18.34
		High (40.81 to 50.40 score)	61	50.84
		Very high (Above 50.40 score)	05	04.16
13	**Scientific orientation**	Very low (Up to 10.80 score)	01	00.83
		Low (10.81 to 15.60 score)	15	12.50
		Medium (15.61 to 20.40 score)	48	40.00
		High (20.41 to 25.20 score)	33	27.50
		Very high (Above 25.20 score)	23	19.17
14	**Management orientation**	Very low (Up to 16.80 score)	01	00.83
		Low (16.81 to 21.60 score)	14	11.66
		Medium (21.61 to 26.40 score)	43	35.84
		High (26.41 to 31.20 score)	46	38.34
		Very high (Above 31.20 score)	16	13.33
15	**Attitude towards Integrated Farming System**	Strongly unfavourable (Up to 32.40 score)	04	03.33
		Unfavourable (32.41 to 46.80 score)	13	10.83
		Neutral (46.81 to 61.20 score)	37	30.84
		Favourable (61.21 to 75.60 score)	37	30.84
		Strongly favourable (Above 75.60 score)	29	24.16

It can be stated from Table 1 that more than half (51.67 %) of farmers had medium sized family, followed by 31.67 per cent and 16.66 per cent of them had small and large sized family, respectively. Experience of the farmers pointed out that more than two fifth (45.00 %) of farmers belonged to 5.01 to 10.00 years of experience in Integrated Farming System followed by 15.01 to 20.00 years, 10.01 to 15.00 years, above 20.00 years and up to 5.00 years with 22.50 per cent, 15.84 per cent, 09.16 per cent and 07.50 per cent, respectively.

It is derived from table 1 about annual income of farmers that more than one third (35.00 %) of farmers having annual income ranging from ₹ 2,00,001/- to ₹ 4,00,000/-, followed by 32.50 per cent having annual income ranging from ₹ 4,00,001/- to ₹ 6,00,000/-, 13.33 per cent having annual income ranging Upto ₹ 2,00,001/-, 14.17 per cent having annual income ranging from ₹ 6,00,001/- to ₹ 8,00,000/-. Rest of them (05.00 %) having annual income above ₹ 8,00,000/- . Land-holdings pattern of the farmers revealed that nearly one third (32.50 %) of the respondents had medium land-holdings, followed by 30.00 per cent, 18.34 per cent, 14.16 per cent and 05.00 per cent having small, marginal, semi-medium and large land-holdings, respectively.

Based on the findings in Table 1 concluded that mare than two fifth (45.00%) of them had membership in one organization, followed by 28.34 per cent with no membership, 15.83 per cent with membership in two organizations, 07.50 per cent with membership in more than two organizations and only 03.33 per cent of them were holding position in any organization, respectively. Extension participation of farmers showed that nearly half (47.50%) of the respondents had medium level of extension participation, followed by 39.17 per cent, 07.50 per cent, 03.33 per cent and 02.50 per cent with low, very low, very high and high extension participation, respectively.

Table 1 reflects that more than half (53.34%) of the respondents had medium agri-mass media exposure, followed by 34.17 per cent, 10.83 per cent and 01.66 per cent with low, high and very low. None of the respondents had very high agri-mass media exposure, respectively. Economic motivation data suggested that more than two fifth (42.50%) of the respondents had medium level of economic motivation, followed by 35.00 per cent, 15.00 per cent, 07.50 per cent with high, low and very high level of economic motivation, whereas none of them were found in the very low category, respectively.

Table 1 illustrates that 45.84 per cent of respondents had medium market orientation, followed by 29.17 per cent, 21.66 per cent, 03.33 per cent with low, high and very high market orientation, whereas none of the respondents were observed in the very low category, respectively. Credit orientation of the farmers depicts that more than half (50.84%) of them had high credit orientation, followed by 20.00 per cent, 18.34 per cent, 06.66 per cent and 04.16 per cent with low, medium, very low and very high credit orientation, respectively.

The statistics outlined in Table 1 explained that exactly two fifth (40.00 %) of the respondents had medium scientific orientation, followed by 27.50 per cent, 19.17 per cent, 12.50 per cent and only 00.83 per cent with high, very high, low and very low scientific orientation, respectively. Management orientation of farmers founded that more than one third (38.34 %) of the farmers had high management orientation, followed by 35.84 per cent, 13.33 per cent, 11.66 per cent and only 00.83 per cent with medium, very high, low and very low management orientation, respectively.

The figures shown in Table 1 indicated that nearly one third (30.84 %) of the respondents had neutral and favourable attitude towards Integrated Farming System, followed by 24.16 per cent, 10.83 per cent and 03.33 per cent of them had strongly favourable, unfavourable and strongly unfavourable attitude towards the Integrated Farming System, respectively.

Relationship between profile characteristics of the farmers and their utility perception towards Integrated Farming System

Table 2: Relationship between the characteristics of the farmers and their utility perception towards Integrated Farming System (n=120)

Sr. No.	Independent Variables	'r' Value
X_1	**Age**	-0.074
X_2	**Education**	0.213*
X_3	**Size of family**	-0.117
X_4	**Experience in Integrated Farming System**	0.210*
X_5	**Annual income**	0.248**
X_6	**Land holdings**	0.297**
X_7	**Social participation**	0.245**
X_8	**Extension participation**	0.321**
X_9	**Agri-mass media exposure**	0.204*
X_{10}	**Economic motivation**	0.276**
X_{11}	**Market orientation**	0.243**
X_{12}	**Credit orientation**	0.227*
X_{13}	**Scientific orientation**	0.201*
X_{14}	**Management orientation**	0.254**
X_{15}	**Attitude towards Integrated Farming System**	0.303**

* Significant at 0.05 level of probability
** Highly significant at 0.01 level of probability

Age and utility perception

It is apparent from the data presented in the Table 2 that age of the respondents had negative and non-significant correlation (r = -0.074) with their utility perception towards Integrated Farming System. Hence, the null hypothesis (H_0) that "There is no relationship between the age of the respondents and their utility perception towards Integrated

Farming System" was accepted.

Concluding the finding it can be said that age of the respondents had non-significant influence on utility perception. Hence farmers of different age groups had uniform utility perception level and age did not play any key role in shaping utility perception of farmers towards Integrated Farming System. The findings of the study were in line with Ramya (2021).

Education and utility perception

The data presented in Table 2 indicate that education level of farmers had exerted positive and significant relationship (r = 0.213*) with their utility perception toward Integrated Farming System. This provides suitable ground to reject the null hypothesis (H_0) that "There is no relationship between education of the farmers and their utility perception towards Integrated Farming System".

To epitomize the result, there was more assessment of usefulness and satisfaction towards Integrated Farming System among high education group as compared to low education group of farmers as acquisition of formal education helps an individual to interact and implementation of new ideas resulted in to favourable disposition towards utility of Integrated Farming System, which had contributed to their significant relation with their utility perception towards Integrated Farming System. Thus, education is an important factor which determine the utility perception of farmers. This result is supported by Gour (2020).

Family size and utility perception

The data presented in the table 2 make it clear that there was negative and non-significant correlation (r = -0.117) between size of family of the farmers and their utility perception of respondents towards Integrated Farming System. Hence, the null hypothesis (H_0) that "There is no relationship between the family size of farmers and their utility perception towards Integrated Farming System" was accepted. This indicates that the size of the family did not have a direct influence on Integrated Farming System. This finding has been supported by Gopica *et al.* (2018).

Experience in IFS and utility perception

The data presented in the table 2 make it clear that experience as farmers had positive and significant correlation (r = 0.210*) with utility perception of respondents towards Integrated Farming System at 0.05 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the experience in Integrated Farming System of the farmers and their utility perception towards Integrated Farming System".

It can be concluded that positive influence of experience of the farmers on utility perception towards Integrated Farming System and also experienced farmers had high influence on utility perception towards Integrated Farming System rather than less experience farmers. This might be due to experienced farmers tend to be more aware about different techniques throughout their life, which are reduces some problems occurs among different components of Integrated Farming System. Because of this reasons experience did play significant role in deciding utility perception of farmers towards Integrated Farming System. This result is in line with the results reported by Ramya (2021).

Annual income and utility perception

The data presented in the table 2 make it clear that annual income of the respondents had established positive and highly significant relationship (r = 0.248**) with utility perception of respondents towards Integrated Farming System at 0.01 level of significance. Thus, the null hypothesis (H_0) that "There is no relationship between the annual income of farmers and their utility perception towards Integrated Farming System" was rejected.

Thus, to epitome the results, annual income of the respondents influenced their utility perception towards Integrated Farming System. The reason for this might be that farmers having higher level of income put their effort more to manage all the components of Integrated Farming System and easily accept new technologies which helps them to take more production and finally lead to form favourable utility perception towards Integrated Farming System and ultimately reflected in to these types of results. This result is supported by Gour (2020).

Land holdings and utility perception

The data presented in the table 2 make it clear that land holding had positive and highly significant correlation (r = 0.297**) with utility perception of respondents towards Integrated Farming System at 0.01 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the land holding of farmers and their utility perception towards Integrated Farming System".

Thus, it can be inferred that utility perception is better amongst farmers having more size of farm and a vice a versa. During field survey it was noticed that those farmers having higher size of land holding may allocate more resources for implementing IFS model in their farm and

get benefited directly resulted into formation of favourable perception about IFS, which ultimately reflected into this type of results. This result is in line with the results reported by Ramya (2021).

Social participation and utility perception

The data presented in the table 2 make it clear that utility perception of respondents towards Integrated Farming System had established positive and highly significant correlation (r = 0.245**) with their social participation at 0.01 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the social participation of farmers and their utility perception towards Integrated Farming System".

Thus, it can be inferred that farmers with more social participation had more positive influence on utility perception towards Integrated Farming System rather than farmers who have less social participation, probable reason might be farmers' interactions with experts and other progressive farmers often know about technical know-how of Integrated Farming System and take useful advices from them so that farmers could manage all the components of Integrated Farming System easily and getting more benefits from different components. Thus, social participation plays key role in shaping great influence towards Integrated Farming System. This result is contradictory with Gopica *et al.* (2018) and Madhuprasad *et al.* (2024).

Extension participation and utility perception

The data presented in the table 2 make it clear that extension participation of the respondents had exerted positive and highly significant correlation (r = 0.321**) with their utility perception towards Integrated Farming System at 0.01 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the extension participation of farmers and their utility perception towards Integrated Farming System".

This indicates that the frequency of participation made by the respondents with extension agencies enable them to acquire more and more information, improve their skills and increase their practical knowledge. Higher extension participation helps to broaden the outlook and facilitate to exchange of thoughts and ideas which may help to remove the obscure point of the respondents. Thus, extension participation is an important factor which determine the utility perception of farmers. This finding has been supported by Gopica *et al.* (2018), Ramya (2021) and Patel (2024).

Agri-mass media exposure and utility perception

The data presented in the table 2 make it clear that agri-mass media exposure had positive and significant correlation (r = 0.204*) with utility perception of respondents towards Integrated Farming System at 0.05 level of significance. Thus, the null hypothesis (H_0) that "There is no relationship between the agri-mass media exposure of farmers and their utility perception towards Integrated Farming System" was rejected.

These findings conclude that, agri-mass media had positive influence to form favourable utility perception towards Integrated Farming System. The probable reason for above situation might be that greater agri-mass media exposure leads to provide useful information about real application of different techniques involved in different components of Integrated Farming System and provide clue to solve their problems leads to develop more satisfaction towards Integrated Farming System. Consequently, the significant relation between agri-mass media exposure and utility perception highlights the significant role that media plays in shaping the perspectives, knowledge and utility perception of farmers towards Integrated Farming System. This result is in line with the results reported by Ramya (2021).

Economic motivation and utility perception

The data presented in the table 2 make it clear that economic motivation had positive and highly significant correlation (r = 0.276**) with economic motivation of respondents towards Integrated Farming System at 0.01 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the economic motivation of farmers and their utility perception towards Integrated Farming System".

Concluding the finding, economic motivation is the basic character upon which other motives and drives are built. When one develops higher level of economic motivation and wants to achieve it, he would strive hard and get internalize himself about different aspects of Integrated Farming System and hence, it is quite natural to expect the positive influence of economic motivation on utility perception. Hence economic motivation of farmers had significantly great influence towards Integrated Farming System. This result is supported by Gour (2020) and Usadadiya (2023).

Market orientation and utility perception

The data presented in the table 2 make it clear that market orientation of the respondents had influenced their utility perception towards as there was positive and highly significant correlation (r = 0.243**) between market orientation of the farmers and their utility perception towards occupation at 0.01 level of significance. This provides

sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the market orientation of farmers and their utility perception towards Integrated Farming System".

From the above findings, higher market-oriented farmers had more utility perception towards Integrated Farming System rather than farmers who had less market orientation. This might be due to market-oriented farmers can better appreciate the flexibility and economic resilience that Integrated Farming System offers by tapping into multiple markets and income sources. Their awareness of consumer preferences, market trends and value-added opportunities leads influence on utility perception towards Integrated Farming System. Because of this reasons market orientation did play significant role in utility perception of farmers towards Integrated Farming System. This finding has been supported by Ramya (2021).

Credit orientation and utility perception

The data presented in the table 2 revealed that there was positive and significant correlation (r = 0.227*) between credit orientation of farmers and their utility perception towards Integrated Farming System at 0.05 level of significance. Thus, the null hypothesis (H_0) that "There is no relationship between the credit orientation of farmers and their utility perception towards Integrated Farming System" was rejected.

To epitomize the result, more credit-oriented farmers had favourable utility perception towards Integrated Farming System due to utilization of credit facilities and the ability to access credit-oriented services have a favourable impact on their utility perception towards Integrated Farming System. By accessing financial resources, offering flexible payment options and leveraging relationships with financial institutions, farmers can enhance their business capabilities and opportunities for success. These factors contribute to a more significant and optimistic farmers' utility perception towards Integrated Farming System. Thus, credit orientation of the farmers is an important factor which determine the utility perception of farmers. This result is in line with the results reported by Gopica *et al.* (2018).

Scientific orientation and utility perception

The data presented in the table 2 make it clear that scientific orientation of the farmers and their utility perception towards Integrated Farming System as there was positive and significant correlation (r = 0.201*) between scientific orientation of the farmers and their utility perception towards Integrated Farming System at 0.05 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the scientific orientation of farmers and their utility perception towards Integrated Farming System".

From the above findings, scientific orientation develops trustworthiness in scientific methods of agricultural technology which ultimately build up confidence which act as catalyst in rational thinking about its use lead to its significant influence in developing favourable utility perception. Further, scientific methods help them understand the long-term economic benefits of IFS, such as improved soil fertility, reduced input costs and diversified income sources. Because of this reasons market orientation did play significant role in utility perception of farmers towards Integrated Farming System. This finding has been contradictory with reported by Gopika *et al.* (2018), Kalariya and Gulkari (2024).

Management orientation and utility perception

The data presented in the table 2 make it clear that management orientation of the farmers and their utility perception towards Integrated Farming System as there was positive and highly significant correlation (r = 0.254**) between management orientation of the farmers and their utility perception towards Integrated Farming System at 0.01 level of significance. This provides sufficient ground to reject the null hypothesis (H_0) that "There is no relationship between the management orientation of farmers and their utility perception towards Integrated Farming System".

From the above findings, farmers with high management orientation had more influence the utility perception towards Integrated Farming System rather than farmers who had less management orientation. Probable for this might be effective implementation of Integrated Farming System requires strong planning, decision-making and organizational skills. Farmers with high management orientation are more capable of coordinating multiple farming components - such as crops, livestock, poultry and fisheries in a systematic and efficient manner. Thus, management orientation is significantly associated with utility perception towards Integrated Farming System. This result is supported by Ramya (2021); Madhuprasad *et al.* (2024); Patel et al. (2022); Gamit and Vinaya,. (2024); Madhuprasad et al. (2024); Singh et al. (2025); Vinaya and Gadde, (2025)

Attitude towards IFS and utility perception

The data presented in the table 2 revealed that there was positive and highly significant correlation (r = 0.303**) between attitude of the farmers and their utility perception towards Integrated Farming System at 0.01 level of significance. Thus, the null hypothesis (H_0) that "There is no relationship between the attitude towards Integrated

Farming System of the farmers and their utility perception towards Integrated Farming System" was rejected.

From the above findings, farmers with highly disposed towards Integrated Farming System possess a positive mindset towards Integrated Farming System, they are more likely to adopt and implement the system effectively, which leads to better utilization of available resources such as land, water, labour and capital and hence attitude towards Integrated Farming System did play significant role in utility perception of farmers towards Integrated Farming System.

CONCLUSION

Study revealed that out of fifteen independent variables, thirteen variables *viz.*, education, experience in IFS, annual income, size of landholdings, extension participation, social participation, agri-mass media exposure, economic motivation, market orientation, credit orientation, scientific orientation, management orientation and attitude towards Integrated Farming System showed positive and significant influence on farmers' utility perception towards Integrated Farming System. Whereas, age and size of family failed to show any significant influenced on their utility perception towards Integrated Farming System.

POLICY IMPLICATIONS

(1) **Easy and Quick Access to Credit**

Provide low-interest loans and simplify documentation so farmers can easily manage the initial investment required for IFS.

(2) **Immediate Market Support**

Set up local collection centres, fair price shops and temporary market facilities to reduce price fluctuations and ensure farmers get stable returns.

(3) **Skill-Based Trainings**

Conduct regular, hands-on trainings on poultry, dairy, mushroom cultivation, apiculture and crop management to improve technical know-how.

(4) **Input and Resource Support**

Provide subsidies for seeds, feed, bio-fertilizers, small tools and low-cost storage units to reduce production costs.

(5) **Institutional Support & Extension Strengthening**

Enhance field-level extension services, farmer field schools and digital advisory platforms to promote continuous learning.

(6) **Market Linkages and Value Chains**

Develop long-term marketing networks, contract farming opportunities and farmer producer organizations (FPOs) for better bargaining power.

(7) **Sustainability and Resource Conservation Policies**

Encourage water harvesting, composting, and organic nutrient recycling to improve soil health and long-term environmental sustainability through IFS.

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CONFLICT OF INTEREST

All authors declare that they have no conflict of interest

REFERENCES

Gamit, R. A., & Vinaya Kumar H. M. (2024). Perception of farmers about natural farming. *Gujarat Journal of Extension Education,* 38(2), 195-200. https://doi.org/10.56572/gjoee.2024.38.2.0031

Gopika, M. H. and Lalitha, K. C. (2018) Perception of beneficiary and non-beneficiary farmers towards Integrated Farming System demonstration. *Mys. J. Agri. Sci.* 52(2): 227-233.

Gour M. (2020) *Assessment of utility of Integrated Farming Systems as perceived by small and marginal farmers of Berasia block of Bhopal District of Madhya Pradesh.* (Ph. D. (Agri.) Thesis College of Agriculture, Rewa Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur, Madhya Pradesh).

Kalariya, B. S. and Gulkari, K. D. (2024) Relationship between profile of the farmers of bhal region and their knowledge about soil reclamation practices. *Gujarat Journal of Extension Education* 38(1):1-5.

Kerlinger, F. N. (1976) Foundation of behavioural research. *Surjet Pub.* New Delhi, 129.

Madhuprasad, V. L., Ravindra, Usha and Harshitha, D. (2024) Livelihood security of scheduled caste farmers through integrated farming system. *Gujarat Journal of Extension Education,* 37(1):170-177.

https://doi.org/10.56572/gjoee.2024.37.1.0029.

Madhuprasad, V.L., Ravindra, U. and Harshitha, D. (2024) Development of scheduled caste farmers through Integrated Farming System in Bangalore rural District, India. *Int. J. Env. Cli. Cha.* 14(1):758-767.

Patel M. R., Vinaya Kumar H. M. and Chauhan N. B. (2022). A scale to measure self-confidence of rural youth about floriculture farming. *Gujarat Journal of Extension Education* 34 (2): 128-130. https://doi.org/10.56572/gjoee.2022.34.2.0028

Patel, P. C., Desai, J. D. and Bhatt, J. H. (2024) Relationship between the inland fish farmers' entrepreneurial competence and their profile. *Gujarat Journal of Extension Education*, 37(2):20-25.

Ramya, H. R. (2021). *Integrated Farming Systems in select agro-climatic zones of Karnataka: A socio-economic analysis.* (Ph. D. (Agri.) Thesis ICAR-SRS, National Dairy Research Institute (Deemed University) Adugodi, Bengaluru).

Singh, S., Riar, T. S. and Walia, S. S. (2025) Present status of integrated farming system in Patiala. *Gujarat Journal of Extension Education,* 39(1): 115–122. https://doi.org/10.56572/gjoee.2025.39.1.0018

Usadadiya, N. H., Prajapati, R. R. and Parikh, N. L. (2023) Relationship between dairy farmers' characteristics and their adoption of clean milk practices, *Gujarat Journal of Extension Education* 36(1):72-74.

Vinaya Kumar, H. M. and Gadde, S. (2025). A tool to measure livelihood vulnerability of climate-sensitive farming communities. *Indian Journal of Extension Education,* 61(4), 160–164. https://doi.org/10.48165/IJEE.2025.614RT01

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