

RELATIONSHIP BETWEEN PROFILE OF THE PAPAYA GROWERS AND THEIR ATTITUDE TOWARDS CONTRACT FARMING

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ABSTRACT

This study investigates the relationship between the profile of papaya growers and their attitude towards contract farming. District was selected purposively according to highest area of papaya cultivation under contract farming, proportionate sampling was used to select a sample size of papaya growers from the selected villages. Thus, a total of 150 papaya growers were chosen from villages in the Kapadvanj taluka in Kheda district. The research employed an ex-post-facto design to analyze the impact of various factors on attitude. The results indicate that the majority of respondents were middle age group, had higher secondary education and possessed above 4 to 6 years of farming experience. They had annual income ranging ₹ 4,00,001 to ₹ 6,00,000 and held semi-medium level of land under papaya cultivation. Social participation was very low, while extension contacts was moderate. Respondents exhibited high agricultural mass media exposure, medium innovativeness, very high level of risk orientation, very high level of scientific orientation, and high level of market orientation. Of the twelve independent variables analyzed, annual income, agricultural mass media exposure, risk orientation, scientific orientation and market orientation had exerted positive and significant influence in forming positivism towards contract farming. Conversely, age, education, experience in papaya farming, land under papaya cultivation, social participation, extension contacts and innovativeness had no influenced in determination of attitude of papaya growers towards contract farming. These findings provide valuable insights for designing targeted interventions to enhance the attitude of papaya growers and their attitude towards contract farming.

Keywords: attitude, papaya growers, contract farming, profile, innovativeness

INTRODUCTION

Agriculture, with its allied sectors, is the largest source of livelihoods in India. 70 per cent (Kekane, 2013) of its rural households still depend primarily on agriculture for their livelihood, with 82 per cent of farmers being small and marginal (FAOSTAT, 2018). The combined impact of inelastic nature of land, steadily increasing population density and continued dependence of a vast majority for their livelihood on agriculture and prevailing laws of inheritance has been causing division and fragmentation of land in India. The situation has only been worsening over time. The government clearly intended to enhance farmers' incomes by developing an alternative market mechanism that connects them to both domestic and global markets. A system known as "contract farming" involves large-scale buyers, such as agro processing, exporting, and trading companies, entering into a written agreement with the farmers to buy a predetermined quantity of any agricultural product at a predetermined price. The production, marketing and distribution of agricultural products are becoming sophisticated. Contract farming is seen as a way to raise small-farm income by delivering technology

and market information to farmers, incorporating them into remunerative new markets. The contracting sponsor offers all forms of production support, including extension services with full protection of land rights, to the contracted farmers. Sponsors of contract farming was not be able to transfer or dispose of ownership of land or other property. The acquisition of the whole quantity of one or more agricultural products, livestock, or contract agricultural products at the pre-agreed rate is guaranteed by the contract. To make it feasible to get there and resolve issues as quickly as possible, the provision for dispute settlement has been made at the lowest level.

In middle Gujarat recently papaya farming became very popular amongst the farmers of middle Gujarat. In the middle Gujarat agro-climatic zone of Gujarat state is favorable for production, the papaya is a highly significant perishable high-value crop. Having much production growers was drawn to it primarily to find solutions to issues like farm produce marketing, market risk, transportation, and uncertain revenue. For the solution of this problems faced by farmers they adopt the solution which is given by government as contract farming. By examining the profile of papaya growers

and their attitude, this study aims to fill this gap and offer targeted recommendations for enhancing contract farming.

OBJECTIVES

- (1) To study the profile of papaya growers
- (2) To explore the relationship between profile of the papaya growers and their attitude towards contract farming

METHODOLOGY

The present study was grounded in the positivist research philosophy, which emphasizes objective measurement and quantitative analysis of observable phenomena. In line with this, a deductive research approach was adopted, wherein a set of predefined independent variables related to socio-economic and psychological characteristics of papaya growers were examined systematically. The study employed a quantitative methodological framework, enabling the collection and analysis of numerical data to establish patterns and relationships among variables (Vinaya et al., 2013). A survey research strategy was utilized, as it is appropriate for gathering standardized information from a relatively large sample through structured instruments. The research followed a cross-sectional time horizon, wherein data were collected from respondents at a single point in time, providing a snapshot of the existing conditions among papaya growers. An ex-post-facto research design (Kerlinger, 1976) and simple random sampling technique were employed for the study. The study was conducted in the middle region of Gujarat, with Kheda district selected purposively due to its highest area under papaya cultivation under contract farming. Within the district, Kapadvanj taluka was further chosen based on the maximum area under papaya cultivation. A proportionate sampling technique was employed to select respondents from the identified villages, ensuring representation based on the distribution of papaya growers. Consequently, a total sample of 150 papaya growers was drawn for the study. Primary data were collected through personal interviews using a structured

and pre-tested interview schedule. The schedule was initially developed in English and subsequently translated into Gujarati to ensure clarity and respondent comprehension. Prior to final data collection, the instrument was pre-tested with 20 non-sampled respondents, and necessary modifications were incorporated to enhance reliability and validity. The study considered twelve independent variables, namely: age, education, experience in papaya farming, annual income, land under papaya cultivation, social participation, extension contacts, agricultural mass media exposure, innovativeness, risk orientation, scientific orientation, and market orientation. The collected data were systematically coded, classified and analysed using appropriate statistical techniques such as frequency, percentage, mean and correlation analysis. The analysis was carried out using the Statistical Package for the Social Sciences (SPSS), ensuring accuracy and reliability in the interpretation of results.

RESULTS AND DISCUSSION

Personal characteristics

The personal characteristics of the respondents play an important role in the attitude towards contract farming. Some of the following personal variables were selected, analysed and are presented in Table 1. From the Table 1, it can be concluded that around half (46.67%) of papaya growers belonged to middle age group followed by 29.33 per cent papaya growers belonged to young age group and 24.00 per cent papaya growers belonged to old age groups. These results are in line with Mistry *et al.* (2018). Less than half (42.00%) of the papaya growers had obtained higher secondary level of education followed by graduate and above level of education (30.67%), secondary level of education (18.67%) and primary level of education (8.66%). No papaya growers were illiterate. Less than half 40.00 per cent of papaya growers had medium level of experience followed by 20.00 per cent, 16.67 per cent, 13.33 per cent and 10.00 per cent of them had low, very low, high and very high level of papaya farming experience, respectively.

Table 1: Personal characteristics of papaya growers in attitude towards contract farming

(n = 150)

Sr. No.	Variables	Categories	Measurement	Frequency	Per cent
1	Age	Young group (up to 35 years)	Years	44	29.33
		Middle group (36 to 50 years)		70	46.67
		Old group (above 50 years)		36	24.00
2	Education	Illiterate	Standards	00	00.00
		Primary education (1 st to 8 th std)		13	08.66
		Secondary education (9 th to 10 th std)		28	18.67
		Higher secondary education (11 th to 12 th std)		63	42.00
		Graduation and above		46	30.67
3	Experience in papaya farming	Up to 2 years	Years	25	16.67
		Above 2 to 4 years		30	20.00
		Above 4 to 6 years		60	40.00
		Above 6 to 8 years		20	13.33
		Above 8 years		15	10.00

Social-Economical characteristics

Social Economical characteristics are attributes related to an individual's social-economic environment, including annual income and community involvement. From the Table 2, it can be observed that less than two-fifths (38.00%) of the respondents had medium-level annual incomes between ₹ 4,00,001 and ₹ 6,00,000 ₹. The remaining respondents 32.00 per cent, 25.33 per cent and 4.67 per cent had low, high and very low annual incomes between ₹

2,00,001 to ₹ 4,00,000, between ₹ 6,00,001 and ₹ 8,00,000 and ₹, up to ₹ 2,00,000. Slightly more than one third of the respondents (32.00%) had semi-medium level of land under papaya cultivation, followed by small amounts (26.00%), medium size (25.33%) and marginal (16.67%) of land under papaya cultivation. Exactly half 50.00 per cent of papaya growers had no membership in any organizations followed by membership in one organization and holding positions in an organization membership with 43.33 per cent and 6.67 per cent, respectively.

Table 2: Social-economical characteristics of papaya growers in attitude towards contract farming (n = 150)

Sr. No.	Variables	Categories	Measurement	Frequency	Per cent
1	Annual income	Up to ₹ 2,00,000	Rupees	07	04.67
		Between ₹ 2,00,001 to ₹ 4,00,000		48	32.00
		Between ₹ 4,00,001 to ₹ 6,00,000		57	38.00
		Between ₹ 6,00,001 to ₹ 8,00,000		38	25.33
		Above ₹ 8,00,000		00	00.00
2	Land under papaya cultivation	Marginal (Up to 1.0 ha)	Hectares	25	16.67
		Small (1.01 to 2.0 ha)		39	26.00
		Semi Medium (2.01 to 4.0 ha)		48	32.00
		Medium (4.01 to 10.0 ha)		38	25.33
		Large (Above 10.0 ha)		00	00.00
3	Social participation	No membership	Arbitrary method	75	50.00
		Membership in one organization		65	43.33
		Membership in more than one organization		00	00.00
		Position holder with membership		10	06.67
				07	04.37

Communicational characteristics

In attitude of contract farming communicational characteristics like extension contact and agricultural mass media exposure play an important role. The Table 3, showed that more than half (54.67%) of papaya growers had medium level of extension contact, followed by 28.00 per cent had

low level of extension contact, 9.33 per cent had very low level of extension contact and remaining 4.67 per cent had high level of extension contact, 3.33 per cent had very high level of extension contact. Fewer than two-fifths (39.33%) of the respondents had high-level exposure to agricultural mass media followed by medium and low exposure rates coming in at 34.67%, and 26.00%, respectively.

Table 3: Communicational characteristics of papaya growers in attitude towards contract farming (n = 150)

Sr. No.	Variables	Categories	Measurement	Frequency	Per cent
1	Extension participation	Very low (0.00 to 4.40 score)	Arbitrary method	14	09.33
		Low (4.41 to 08.80 score)		42	28.00
		Medium (8.81 to 13.20 score)		82	54.67
		High (13.21 to 17.60 score)		07	04.67
		Very high (17.61 to 22 score)		05	03.33
2	Agricultural mass media exposure	Very low (0.00 to 03.20 score)	Arbitrary method	00	00.00
		Low (03.21 to 06.40 score)		39	26.00
		Medium (06.41 to 09.60 score)		52	34.67
		High (09.61 to 12.80 score)		59	39.33
		Very high (12.81 to 16.00 score)		00	00.00

Psychological characteristics

In attitude towards contract farming practices psychological characteristics like innovativeness, risk orientation, scientific orientation and market orientation play major role. In the present study, Table 4, showed the psychological characteristics of the papaya growers. From the Table 4, it is implicit that, that slightly over half (60.00%) of the papaya growers had a high level of innovativeness, while the remaining 20.67 per cent, 16.00 per cent and 3.33 per cent had very high, medium and low levels of innovativeness, respectively. More than three-fifths (64.67%) of respondents, a very high level of risk orientation, while the remaining 16.00 per cent, 15.33 per cent and 4.00 per

cent of respondents had medium, high and low levels of risk orientation, respectively. The extremely low risk orientation categories do not include any papaya growers. More than half (53.33%) of papaya growers had very high level of scientific orientation, followed by 24.00 per cent, 21.34 per cent and 1.33 per cent of them had medium, high and very low level of scientific orientation, respectively. Slightly more than half (52.00%) of papaya growers had high level of market orientation, followed by 29.33 per cent, 14.00 per cent and 4.67 per cent and of papaya growers had very high, medium and low level of market orientation, respectively. Contrary to these results, similar findings were reported by Tabina *et al.* (2021).

Table 4: Psychological characteristics of papaya growers in attitude towards contract farming

(n = 150)

Sr. No.	Variables	Categories	Measurement	Frequency	Per cent
1	Innovativeness	Very low (05.00 to 09.00 score)	Arbitrary method	00	00.00
		Low (09.01 to 13.00 score)		05	03.33
		Medium (13.01 to 17.00 score)		24	16.00
		High (17.01 to 21.00 score)		90	60.00
		Very high (21.01 to 25.00 score)		31	20.67
2	Risk orientation	Very low (10.00 to 18.00 score)	Arbitrary method	00	00.00
		Low (18.01 to 26.00 score)		06	04.00
		Medium (26.01 to 34.00 score)		24	16.00
		High (34.01 to 42.00 score)		23	15.33
		Very high (42.01 to 50.00 score)		97	64.67
3	Scientific orientation	Very low (14.00 to 25.20 score)	Arbitrary method	00	00.00
		Low (25.21 to 36.40 score)		02	01.33
		Medium (36.41 to 47.60 score)		36	24.00
		High (47.61 to 58.80 score)		32	21.34
		Very high (58.81 to 70.00 score)		80	53.33
4	Market orientation	Very low (8.00 to 14.4 score)	Arbitrary method	00	00.00
		Low (14.41 to 20.80 score)		07	04.67
		Medium (20.81 to 27.20 score)		21	14.00
		High (27.21 to 33.60 score)		78	52.00
		Very high (33.61 to 40.00 score)		44	29.33

Relationship between profile of papaya growers and their attitude towards contract farming

A papaya grower's attitude towards contract farming varies due to differences in their personal characteristics, socio-economic conditions, communication characteristics and psychological traits. Thus, the extent to which papaya growers adopt contract farming can be influenced by these diverse factors. Hence, considering the importance of these characteristics, an attempt was made in this investigation to ascertain the relationship, if any, between personal, social, economic, communicational and psychological characteristics of papaya growers and their attitude towards contract farming.

A statistical method of Karl Pearson's coefficient correlation (r) was used to calculate relationship between the characteristics of papaya growers and their attitude towards contract farming. The results obtained are depicted in Table 5.

It is evident from the data presented in Table 5 that, among the twelve selected variables in the study, five variables had a positive and highly significant influence and one variable had a positive and significant influence on the attitude of papaya growers towards contract farming, while other six variables had a non-significant relationship. The independent variables like annual income (0.293**), scientific orientation (0.736**) and market orientation (0.674**) had

Table 5: Relationship between profile of papaya growers and their attitude towards contract farming
(n = 150)

Sr. No.	Independent variables	'r' value
X ₁	Age	-0.060
X ₂	Education	0.070
X ₃	Experience in papaya farming	0.082
X ₄	Annual income	0.293**
X ₅	Land under papaya cultivation	-0.074
X ₆	Social participation	0.118
X ₇	Extension contacts	0.136
X ₈	Agricultural mass media exposure	0.169*
X ₉	Innovativeness	0.613**
X ₁₀	Risk orientation	0.931**
X ₁₁	Scientific orientation	0.736**
X ₁₂	Market orientation	0.674**

* Significant at 0.05 per cent level of probability

** Significant at 0.01 per cent level of probability

positive and highly significant relationship with the attitude of papaya growers towards contract farming. Innovativeness (0.613**) and risk orientation (0.931**) (in line with Meena *et al.*, 2024; Anand *et al.*, 2024; Anand *et al.*, 2024; Desai *et al.*, 2023) also had positive and highly significant relationship with the attitude of papaya growers towards contract farming

whereas variables like agricultural mass media exposure (0.169*) had positive and significant relationship with the attitude of papaya growers towards contract farming. The variables like age (-0.060), experience in papaya farming (0.082), land under papaya cultivation (-0.074). Education (0.070), social participation (0.118) and extension contact (0.136) (in line with Patel *et al.*, 2018) failed to show any significant influence on the attitude of papaya growers towards contract farming.

CONCLUSION

It can thus be concluded from the above findings that the majority of respondents were middle age group, had higher secondary education and possessed above 4 to 6 years of farming experience. They had annual income ranging ₹ 4,00,001 to ₹ 6,00,000 and held semi-medium level of land under papaya cultivation. Their social participation was very low and they had a medium level of extension contacts. They exhibited high agricultural mass media exposure, medium innovativeness, very high level of risk orientation. Additionally, they demonstrated very high scientific orientation and high level of market orientation. Out of twelve independent variables, five variables *viz.*, annual income, innovativeness, risk orientation, scientific

orientation and market orientation exerted a positive and highly significant and agricultural mass media exposure exerted a positive and significant influence on the attitude of papaya growers towards contract farming. Whereas age, education, experience in papaya farming, land under papaya cultivation, social participation and extension contact failed to show any significant influence on their attitude of papaya growers towards contract farming.

RECOMMENDATIONS

- Enhance extension services to provide regular and updated information on disease and pest management. This can help farmers manage their crops better and reduce dependency on company-provided inputs.
- Establish a feedback mechanism where farmers can regularly communicate issues and suggestions to the company. This will foster a better relationship and trust between the two parties.
- Ensure transparency in all transactions, including the calculation of input costs, pricing of produce, and payment timelines.
- Encourage farmers to join agricultural cooperatives or farmer associations. This will give them a collective voice and bargaining power.
- Facilitate networking opportunities where farmers can share experiences and best practices. This can be through farmer meetings, agricultural fairs, or online platforms.

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CONFLICT OF INTEREST

All authors declare that they have no conflict of interest

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