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Attitude of grape growers towards grape cultivation and its relationship with selected characteristics in Sangli district of Maharashtra

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ABSTRACT

Grape cultivation is an important commercial agricultural enterprise in Maharashtra and involves considerable production, technological and market-related risks. The attitude of growers towards improved cultivation practices and risk-bearing plays an important role in shaping their decisions regarding adoption of improved technologies. The present study was conducted to assess the attitude of grape growers towards grape cultivation and to determine its relationship with selected personal, socio-economic, communicational and psychological characteristics. The study was conducted among 140 grape growers in Sangli district of Maharashtra. Data were collected using a structured interview schedule and analysed using appropriate statistical techniques, including frequency, percentage and correlation analysis. The findings revealed that a majority of the grape growers belonged to the middle-age category (54.29%), had secondary-level education (50.00%), medium experience in grape cultivation (63.57%), small land holdings (45.71%), medium annual income (69.28%), medium mass media exposure (62.15%), medium social participation (65.71%), medium extension contact (63.57%), medium scientific orientation (68.57%) and medium risk orientation (60.72%). With regard to attitude, 65.00 per cent of the grape growers had a favourable attitude towards grape cultivation, while 20.00 per cent had a less favourable and 15.00 per cent had a most favourable attitude. Correlation analysis indicated that education ($r = 0.219$), annual income ($r = 0.268$), mass media exposure ($r = 0.225$), social participation ($r = 0.210$), extension contact ($r = 0.199$), scientific orientation ($r = 0.197$) and risk orientation ($r = 0.198$) were positively and significantly associated with attitude. Age, experience and land holding did not show a significant relationship with attitude. The findings indicate the importance of educational, communication and extension-related interventions for strengthening favourable attitudes among grape growers.

Keywords: Attitude, Grape growers, Grape cultivation, Extension contact, Mass media exposure, Scientific orientation, Sangli

1. Introduction

Grape is an important commercial fruit crop of India which contributes to the maximum share of export of fresh fruits and vegetables from India to Europe and other parts of the world. Grape is one of the important fruit covering an area of 116 thousand hectares occupying 1.70% of the total area. Major grape-growing states are Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, and the north-western region covering Punjab, Haryana, western Uttar Pradesh, Rajasthan and Madhya Pradesh. Maharashtra ranks first in terms of production accounting for more than 82.56% of total production and highest productivity in the country. Maharashtra is the largest grape producing state in the country. The Government of Maharashtra has put up a proposal for setting up of Agri Export Zone encompassing Nasik, Sangli, Pune, Solapur, Satara and Ahmednagar to export table variety of grapes, as well as, the value-added products like wine in a coordinated manner. However, Nasik and Sangli districts are ahead in the production of grapes in a scientific manner.

Grape cultivation is an important commercial farming activity requiring substantial investment, technical knowledge and careful management of production and marketing risks. The performance of grape growers is influenced not only by the availability of production resources but also by their perceptions, attitudes, access to information and willingness to adopt improved agricultural practices.

Attitude represents an individual's predisposition to respond favourably or unfavourably towards a particular object, practice or situation. In agricultural production, growers' attitudes towards improved technologies, risk, innovation and scientific practices may influence their willingness to experiment with and adopt recommended practices.

Grape production is particularly sensitive to climatic variability, pest and disease incidence, input costs, labour availability and fluctuations in market prices. Consequently, growers require appropriate knowledge and a favourable orientation towards improved practices to manage production-related uncertainties.

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Personal characteristics, socioeconomic status, communication behaviour and psychological characteristics may contribute to differences in farmers' attitudes.

The present study was therefore undertaken to assess the attitude of grape growers towards grape cultivation and to examine the relationship between attitude and selected characteristics of grape growers in Sangli district of Maharashtra.

2. Objectives

The study was undertaken with the following objectives:

1. To study the personal, socio-economic, communicational and psychological characteristics of grape growers.
2. To assess the attitude of grape growers towards grape cultivation.
3. To determine the relationship between selected characteristics of grape growers and their attitude towards grape cultivation.

3. Materials and methods

3.1 Research design and sample

The study was conducted in Sangli district of Maharashtra. A total of 140 grape growers constituted the sample for the study.

3.2 Data collection

Primary data were collected from the selected grape growers through a structured interview schedule. Information was collected regarding personal, socio-economic, communicational and psychological characteristics and attitude towards grape cultivation. Variable studied were Age, Education, Experience in grape cultivation, Land holding,

Annual income, Mass media exposure, Social participation, Extension contact, Scientific orientation and Risk orientation while, Attitude towards grape cultivation was treated as the dependent variable.

3.4 Statistical analysis

The collected data were classified and tabulated using frequency and percentage distributions. Correlation coefficients were calculated to examine the relationship between the selected independent variables and attitude.

4. Results and discussion

4.1 Personal and socio-economic characteristics

The findings indicated in Table No. 1 opined that 54.29 per cent of grape growers belonged to the middle-age group of 36–50 years, followed by 25.71 per cent in the young-age group and 20.00 per cent in the old-age group.

Regarding education, half of the respondents (50.00%) had studied up to the secondary level. Another 21.43 per cent had higher-secondary education, while 17.15 per cent had completed graduation or higher education.

In terms of grape-growing experience, 63.57 per cent had medium experience, followed by 19.29 per cent with high experience and 17.14 per cent with low experience.

With respect to land holding, 45.71 per cent of the grape growers were small farmers having 1.01–2.00 ha of land, followed by 33.57 per cent with medium land holdings.

Annual income showed that 69.28 per cent of grape growers belonged to the medium-income category, while 17.15 per cent and 13.57 per cent belonged to the high- and low-income categories, respectively.

Table 1. Distribution of the grape growers according to their personal and socioeconomic characteristics

Sr. No.	Category	Frequency	Percentage
Age			
1.	Young (Up to 35)	36	25.71
2.	Middle (36 to 50)	76	54.29
3.	Old (51 & above)	28	20.00
	Total	140	100.00
Education			
1.	Illiterate (0)	3	02.15
2.	Pre-primary school (1-4)	4	02.85
3.	Primary school (5-7)	9	06.42
4.	Secondary school (8-10)	70	50.00
5.	Higher Secondary (11-12)	30	21.43
6.	Graduation and above (13)	24	17.15
	Total	140	100.00
Experience in Grape Cultivation			
1.	Small (Up to 10 yrs)	24	17.14
2.	Medium (11 to 29 yrs)	89	63.57
3.	Big (30 yrs & above)	27	19.29
	Total	140	100.00
Land Holding			
1.	Marginal (Up to 1 Ha.)	14	10.00
2.	Small (1.01 to 2.00 Ha.)	64	45.71
3.	Medium (2.01 to 4.00 Ha.)	47	33.57
4.	Semi Medium (4.01 to 10.00 Ha.)	12	08.57
5.	Big (10.00 Ha. Above)	03	02.15
	Total	140	100.00

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Sr. No.	Category	Frequency	Percentage
	Annual Income		
1.	Low (Up to Rs 6,76,625)	19	13.57
2.	Medium (Rs 6,76,626 to Rs 10,51,557)	97	69.28
3.	High (10,51,558 & above)	24	17.15
	Total	140	100.00

4.2 Communicational and psychological characteristics

Table 2 shows that a majority (62.15%) of the respondents had medium mass media exposure. Television was the most frequently used mass medium, with 63.33 per cent reporting regular viewing. Newspaper reading was predominantly occasional, with 50.00 per cent reporting occasional use.

Social participation was medium among 65.71 per cent of the respondents. Similarly, 63.57 per cent had medium extension contact. Scientific orientation was medium among 68.57 per cent of the grape growers, while 60.72 per cent had medium risk orientation. These findings indicate that most respondents occupied the middle category for the major personal, communication and psychological characteristics studied.

Table 2. Distribution of the grape growers according to their communicational and psychological characteristics

Sr. No.	Category	Frequency	Percentage
	Mass Media Exposure		
1.	Low (Up to 2)	19	13.57
2.	Medium (3 to 4)	87	62.15
3.	High (5 & above)	34	24.28
	Total	140	100.00
	Social Participation		
1.	Low (Up to 10)	18	12.85
2.	Medium (11 to 15)	89	63.57
3.	High (16 & above)	33	23.58
	Total	140	100.00
	Scientific Orientation		
1.	Low (Up to 18)	21	15.00
2.	Medium (19 to 25)	96	68.57
3.	High (26 & above)	23	16.43
	Total	140	100.00

4.3 Attitude towards grape cultivation

The statement-wise results indicated generally favourable responses towards risk-bearing, multiple cropping, improved grape cultivation and adoption of improved technologies.

A particularly high proportion of respondents strongly agreed that farmers should resort to multiple cropping to reduce the risk associated with growing a single crop (73.57%). Similarly, 75.00 per cent

strongly agreed that farmers who are capable of taking more risk than average farmers usually perform well financially.

Regarding improved technologies, 72.85 per cent agreed that adoption of improved grape cultivation technology could result in higher income. However, responses to the statement that there is no risk in improved grape cultivation technology were more varied, with 39.28 per cent somewhat agreeing, 20.71 per cent disagreeing and 21.57 per cent strongly disagreeing.

Table 3. Statement wise distribution of Grape growers with attitude

Sr. No.	Statement	S.A	A	S.W.A.	D.A	S.D.A
1	Farmer should resort multiple cropping to suppress risk involved in growing single crop	103 (73.57)	26 (18.57)	11 (7.86)	00 (0.00)	00 (0.00)
2	Farmer should take more of chances in making good profit than to be satisfied with similar with less risky profit	95 (67.85)	40 (28.57)	5 (3.58)	00 (0.00)	00 (0.00)
3	Farmer who have ability to take more risk than average farmer usually does good financially	105 (75.00)	30 (21.42)	5 (3.58)	00 (0.00)	00 (0.00)
4	It is good to farmer to take more risk when he knows his chances of	87 (62.14)	50 (35.71)	3 (2.15)	00 (0.00)	00 (0.00)

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Sr. No.	Statement	S.A	A	S.W.A.	D.A	S.D.A
5	success is high It is better to the farmer not to try innovative farming unless most of the farmer used it	19 (13.57)	92 (65.72)	26 (18.57)	3 (2.14)	00 (0.00)
6	Trying new practice in farming by farmer involving risk but it worth	69 (49.28)	47 (33.57)	21 (15.00)	3 (2.14)	00 (0.00)
7	Improved grape cultivation is adopted widely by the farmer	4 (2.85)	66 (47.14)	60 (42.85)	10 (7.14)	00 (0.00)
8	Bu adopting Improved grape cultivation technology, one got higher income	5 (3.75)	102 (72.85)	31 (22.14)	2 (1.42)	00 (0.00)
9	Improved grape cultivation is tool for social and economic change	6 (4.28)	85 (60.71)	49 (35.00)	00 (0.0)	00 (0.00)
10	There is no risk in improvement grape cultivation technology	1 (0.71)	26 (18.57)	55 (39.28)	29 (20.71)	30 (21.57)

(Figures in parentheses indicates the per cent) SA=strongly agree; A=agree; SWA=somewhat agree; D=disagree; SDA=strongly disagree

Table 4. Distribution of the grape growers according to their attitude

Sr. No.	Category	Frequency	Percentage
1.	Less favorable (Up to 20)	28	20.00
2.	Favorable (21 to 35)	91	65.00
3.	Most favorable (36 & above)	21	15.00
	Total	140	100.00

The overall distribution showed that 65.00 per cent of grape growers had a favourable attitude, followed by 20.00 per cent with a less favourable attitude and 15.00 per cent with a most favourable attitude.

4.4 Relationship between selected characteristics and attitude

The correlation analysis is presented below.

Table 5. Relationship between independent and dependent variables i.e. attitude

Sr. No.	Independent variables	Dependent variable
1	Age	0.157 ^{NS}
2	Education	0.219*
3	Experience in grape cultivation	0.107 ^{NS}
4	Land holding	0.167 ^{NS}
5	Annual income	0.268**
6	Mass media exposure	0.225*
7	Social participation	0.210*
8	Extension contacts	0.199*
9	Scientific orientation	0.197*
10	Risk orientation	0.198*

*0.05 per cent level of significance **0.01 per cent level of significance
NS Non-significant

The results revealed a positive and significant association between education and attitude. Annual income showed a positive and highly significant relationship with attitude. Similarly, mass media exposure, social participation, extension contact, scientific orientation and risk orientation were positively and significantly associated with attitude. On the other hand, age, experience in grape cultivation and land holding did not show significant relationships with attitude. The findings suggest that attitude was more closely associated with information,

communication and psychological characteristics than with basic demographic characteristics. However, the correlation results indicate association rather than causation.

5. Conclusion

The study revealed that the majority of grape growers had a favourable attitude towards grape cultivation and improved agricultural practices. Most growers belonged to the middle categories for education, experience, annual income, mass media exposure, social participation, extension contact, scientific orientation and risk orientation.

Education, annual income, mass media exposure, social participation, extension contact, scientific orientation and risk orientation were positively associated with attitude. Age, experience and land holding did not show significant associations.

The findings highlight the importance of strengthening agricultural communication, extension services, scientific awareness and access to reliable information among grape growers. Regular farmer training programmes, field demonstrations, farmer-to-farmer knowledge exchange and improved access to agricultural information may contribute to strengthening favourable attitudes towards improved grape cultivation practices.

6. Implications

Extension agencies should focus on:

1. Strengthening regular extension contact with grape growers.
2. Promoting scientific information through television, digital media and other accessible communication channels.
3. Conducting practical training and demonstrations on improved grape cultivation.
4. Encouraging farmer groups and social organizations as platforms for knowledge exchange.
5. Providing timely information related to production technologies and risk management.
6. Improving growers' access to reliable agricultural information to support informed decision-making.

References

1. Alam ASMJ, Khatun MM, Zomo SA, Patwary NH, Haque ME. Impact of food security project on crop production in Bangladesh. *International Journal of Natural and Social Sciences*. 2016;3(1):42-45.
2. Badhe DK. Farmers' Perception Regarding Environmental Risk in Use of Pesticides in Anand District of Gujarat State. Ph.D. (Agri.) Thesis, AAU, Anand; 2012.

3. Bhati GS, Ram, Patel K, Sunil R. Attitude of beneficiaries towards Mahatma Gandhi National Rural Employment Guarantee Act Programme. *Agric. Update*. 2016;11(2):118-123.
4. Mhaske DS. Status of livelihood vulnerability and diversified among Cotton growers M .Sc.(Ag) Thesis, MPKV, Rahuri, Maharashtra; 2020.
5. Raut MA. Attitude of beneficiaries towards Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) M.Sc. Agri. Thesis Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola (Maharashtra); 2018.

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