

RELATIONSHIP BETWEEN SELECTED CHARACTERISTICS OF MANGO GROWERS WITH ADOPTION OF RECOMMENDED PRODUCTION TECHNOLOGY

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ABSTRACT

Mango (*Mangifera indica* L.) is India's foremost fruit, widely recognized as the 'National Fruit' and the 'King of Fruits.' It is rightly known as the 'National Fruit of India' and the 'King of Fruits.' Optimum temperature during fruit development and maturity gives better quality fruits. The 'Gujarat Mango Hybrid-1 (GMH-1), known as Sonpari, was developed at the Agricultural Experimental Station, Paria, and released in 2000' for better readability. Sonpari is heavy yielder and regular in bearing. The present study was conducted in South Gujarat region. South Gujarat consists of seven districts. Out of seven districts Navsari district was selected purposively for present investigation because mango variety predominantly cultivated by farmers of this region. Navsari district have six talukas. All talukas were selected purposively by considering mango production technology. Four villages were randomly selected from selected taluka. Thus, the total number of villages for the study was twenty four. From each village, 5 mango growers will be randomly selected. Thus, the sample size will be 120 respondents for the studied. Ex-post facto research design was used. Ex-post-facto research was systematic empirical inquiry in which investigator does not have direct control of independent variables because their manifestations have already occurred or they were inherently not manipulable. The study revealed that, out of fourteen independent variables in the correlation analysis it was found that scientific orientation, risk orientation, innovativeness and mass media participation were found positive and highly significant. Education, annual income, land holding, economic motivation, farming experience, social participation, extension contact and market orientation were found positive significant relationship with level of adoption.

Keywords: mango, adoption of technology, Gujarat Mango Hybrid-1 (Gmh-1)

INTRODUCTION

Mango (*Mangifera indica* L.) is the premier fruit of India. Mango fruit is rightly known as 'National fruit of India' and is known as 'King of Fruits.' Mango occupies a unique importance in tropics, as that of apple in temperate zones. Among the top ten mangos producing countries India ranks first with the highest share of 44 per cent to world production of mango. India is the largest producer of mango in the world which accounts for 57.18 per cent of the total world mango production. Area under mango fruit crop during 2018-19 was 2259.0 million hectares with total production 22352.87 million tonnes with an average productivity 7.50 million tonnes /ha. In Gujarat mangos are mainly produces in eight district which cover about 83.00 per cent of state mango production. Thus, in Saurashtra Junagadh and Amreli districts are the major mango growing area. The Gujarat Mango Hybrid-1 (GMH-1) was released in the year 2000 from Agriculture Experimental Station, Paria by giving the name Sonpari. This mango hybrid was developed by taking Alphonso as female parent and Baneshan as male parent. Sonpari is heavy yielder and regular in bearing. The fruits are obliquely oval in shape like Baneshan, big in size weighing

360–550g. Fruit skin is smooth & become golden yellow in colour on ripening. The big sized brown lenticels moderate densely spread on skin give very characteristic look to the fruit.

OBJECTIVES

- (1) To know the profile of mango growers
- (2) To assess the relationship between profile of mango growers with adoption of mango production technology

METHODOLOGY

South Gujarat consists of seven districts namely Surat, Navsari, Valsad, Dang, Tapi, Bharuch, and Narmada. Out of seven districts Navsari district was selected purposively for present investigation because mango variety predominantly cultivated by farmers of this region. Navsari district has six talukas viz., Navsari, Gandevi, Chikhli, Vansada, Khergam and Jalalpor. All the talukas were selected purposively by considering mango production technology. Four villages were randomly selected from selected taluka. Thus, the total number of villages for the study was twenty four. The Student Advisory Committee has suggested to

restrict the respondent size up to 120. Ex-post facto research design was used. Forteen independent and two dependent variables were chosen. In light of the objectives, the interview schedules were prepared and respondents were interviewed

at their home and field. The collected data were analyzed by using percentage, mean, standard deviation, rank and correlation coefficient (r).

RESULTS AND DISCUSSION

Profile of mango growers

(n=120)

Sr. No.	Variable	Category	Frequency	Percentage
1	Age	Young	41	34.00
		Middle	51	43.00
		Old	28	23.00
2	Education	College/Post graduation	20	16.66
		High school	36	30.00
		Primary school	26	21.66
		Middle school	12	10.00
		Functionally literate	15	12.50
		Illiterate	11	09.18
3	Nuclear family	Joint	65	54.16
		Nuclear	55	45.84
4	Land holding	Small	34	28.33
		Medium	54	45.00
		Large	32	26.67
5	Annual income	Low	40	33.33
		Medium	46	38.34
		High	34	28.33
6	Social participation	Low	27	22.50
		Medium	47	39.17
		High	46	38.33
7	Extension contact	Low	17	14.17
		Medium	56	46.66
		High	47	39.17
8	Economic motivation	Low	20	16.68
		Medium	56	46.66
		High	44	36.66
9	Scientific orientation	Low	24	20.00
		Medium	60	50.00
		High	36	30.00
10	Risk orientation	Low	20	16.66
		Medium	51	42.50
		High	49	40.84
11	Farming experience	Low	22	18.33
		Medium	56	46.67
		High	42	35.00
12	Mass media participation	Low	24	20.00
		Medium	56	46.67
		High	40	33.33
13	Innovativeness	Low	24	20.00
		Medium	59	49.16
		High	37	30.84
14	Market orientation	Low	21	17.50
		Medium	63	52.50
		High	36	30.00

Relationship between profiles of mango growers with their adoption of mango production technology.

The correlation coefficient variables of mango growers with their extent of adoption of mango practices are furnished in table 1. The data manifested in table 1 revealed that the scientific orientation (0.2469**), risk orientation (0.3484**), innovativeness (0.3046**) and mass media participation (0.3190**) were found positive and highly significant. Type of family (0.0301^{NS}) was found positive but non-significant relationship with level of adoption. Education (0.1940*) annual income (0.2167*), land holding (0.2288*), economic motivation (0.2081*), Farming experience (0.1710*), social participation (0.1787*), extension contact (0.1955*) and market orientation (0.1904*) were found positive significant relationship with level of adoption. while the Age (-0.0595^{NS}) was found negative significant relationship with level of adoption.

Table 1 : Relationship between personal profile of respondents and extent of adoption (n=120)

Sr. No.	Variables	'r' value
X ₁	Age	-0.0595 ^{NS}
X ₂	Education	0.1940*
X ₃	Type of family	0.0301 ^{NS}
X ₄	Land holding	0.2288*
X ₅	Annual income	0.2167*
X ₆	Social participation	0.1787*
X ₇	Extension Contact	0.1955*
X ₈	Economic motivation	0.2081*
X ₉	Scientific orientation	0.2469**
X ₁₀	Risk orientation	0.3484**
X ₁₁	Farming experience	0.1710*
X ₁₂	Mass media participation	0.3190**
X ₁₃	Innovativeness	0.3046**
X ₁₄	Market orientation	0.1904*

NS non-significant * significant at 0.05 level,
** significant at 0.01 level

This findings are in agreement with the findings reported by Naik and Deshmukh (2016), Sriramana (2018) and Dodamani (2018), Patel *et al* (2018), Khodifad *et al* (2024), Dharasanda *et al* (2024), Dharasanda *et al* (2024), Ranoliya *et al* (2022).

CONCLUSION

In the correlation analysis, it was found that annual income, scientific orientation, innovativeness, education, size of land holding, social participation, mass media participation, innovativeness, extension contact, risk orientation, market

orientation and farming experience influence in increasing adoption of mango cultivation. Whereas age and type of family had no influence in increasing the adoption about mango cultivation.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest.

REFERENCES:

- Dharasanda, D S., Choudhary, M. and Chaudhary, K. L. (2024) Marketing behaviour of kesar mango among the mango growers. *Gujarat Journal of Extension Education*, 38(1):18-22. <https://doi.org/10.56572/gjoe.2024.38.1.0004>.
- Dharasanda, D S., Choudhary, M. and Chaudhary, K. L. (2024) Marketing behaviour of kesar mango among the mango growers. *Gujarat Journal of Extension Education*, 38(1):18-22. <https://doi.org/10.56572/gjoe.2024.38.1.0004>.
- Dodamani, (2018). A study on knowledge and adoption of recommended cultivation practices among Thompson seedless grape growers in bijapur district of Karnataka. M. SC. (Agri.) Thesis. University of Agricultural Sciences, GKVK, Bangalore.
- Khodifad, P. B., Chaudhari, M. V. and Chadhary, K. L. (2024) Adoption of good agricultural practices in mango cultivation. *Gujarat Journal of Extension Education*, 38(2):18-23. <https://doi.org/10.56572/gjoe.2024.38.2.0004>.
- Naik K. S. and Deshmukh P. R. (2016) Knowledge and adoption of recommended package of practices by banana growers. *Agri. Update*, 11(1): 41-44
- Patel, J. B., Chauhan, N. B. and Vinaya Kumar, H. M. (2018). Relationship between attitude of farmers towards fig and their profile in Anand district of Gujarat. *Guj. J. Ext. Edu.*, 29 (2): 174-177.
- Ranoliya, Priya D., Chauhan, N. M. and Chaudhary, K. L. (2022) Awareness level of value added techniques of mango growers. *Gujarat Journal of Extension Education*, 34(1):114-116. <https://doi.org/10.56572/gjoe.2022.34.1.0022>.
- Sriramana S.V. (2018). Knowledge and extent of adoption of cashew growers in Srikakulam district of Andhra Pradesh. M. Sc. (Agri.) Thesis. Acharya N. G. Ranga Agricultural University.