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A study of the profile characteristics of acid lime growers

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Abstract

The study was conducted in Ahilyanagar, Solapur and Jalgoan district of Maharashtra. To study the profile characteristics of acid lime growers, a total 360 respondents were randomly selected and data was collected using a structured interview schedule. The result revealed that 54.44 per cent of acid lime growers were middle aged; nearly half of the acid lime growers i.e. 47.00 per cent had educated up to higher secondary level, 51.66 per cent had small size of land holding, 80.83 per cent of growers had medium level of age of acid lime orchard, 68.50 per cent of respondents having agriculture was their main occupation, 55.00 per cent had medium annual income, 54.72 per cent of growers had medium area under acid lime, 45.83 per cent had well as irrigation source, 72.54 per cent had medium experience in acid lime cultivation, 71.67 per cent had medium level of source of information, 51.95 per cent had medium innovativeness, 74.44 per cent acid lime growers had medium level of marketing behaviour, 65.83 per cent had medium risk orientation and 75.39 per cent acid lime growers had medium level of economic motivation. It was observed that the overall climate smart practices followed index of the study area was 0.52 which is medium in nature.

Keywords: Acid lime, acid lime growers, characteristics, profile

Introduction

Acid lime (*Citrus aurantifolia* Swingle) is a remunerative and commercially important citrus fruit crop originated in South-East Asia. The most widely used types of acid lime are Sai Sarbati, Phule Sarbati, Vikram, Kagzi lime, and Coorg lime and so forth. The year-round demand for acid lime makes commercial lime cultivation one of the most lucrative and prosperous industries. Approximately 1,72,18,713 tons of acid lime are produced worldwide each year. Regarding India's position on the production of lemons and limes in the with an output of 23,64,000 tons, India is the world's largest producer of acid lime. Gujarat, Andhra Pradesh, Madhya Pradesh, Karnataka, Odisha, Maharashtra, Telangana, Tamil Nadu, Bihar, and other states are the primary growing regions for acid lime. Maharashtra rank third in acid lime (Kagzi lime) cultivation in India, particularly in the Vidarbha and Marathwada regions. India's acid lime production in the 2023-24 seasons reached approximately 3.83 million metric tons from about 0.32 million hectares, resulting in an average productivity of 12.02 tons per hectare, though productivity can vary significantly by state and specific cultivation practices.

Materials and Methods

In the study, Ex post facto research design was followed as the phenomenon had already occurred and the researcher does not have direct control over independent variables because their manifestations have been already occurred. The study was carried out in three districts i.e. Ahilyanagar, Solapur and Jalgaon which were purposively selected, where acid lime area was more. As a result, a total of nine tehsils were selected for study. four villages from each tehsil were selected which have a maximum area and number of acid lime growers. For the purpose of this research, a total of 36 villages were selected.

The data was collected by personal interview method through a structured interview schedule and analysed by employing suitable statistical methods. Fourteen independent variables were identified for the study.

Results and Discussion

Table 1: Distribution of acid lime growers according to their profile characteristics

Particulars	Category	Total	
		Frequency	Percentage
Age	Young (Up to 35)	88	24.44
	Middle (36 to 55)	196	54.44
	Old (56 and above)	76	21.12
Education	Illiterate (No schooling)	06	01.66
	Primary school (1st to 4th)	09	02.05
	Middle school (5th to 10th)	128	35.34
	Higher Secondary school (11th to 12th)	170	47.00
	Graduation (Degree and above)	47	13.50
Land Holding	Marginal (Up to 1.00 ha)	67	6.94
	Small (1.01 to 2.00 ha)	186	51.66
	Semi-medium (2.01 to 4.00	68	18.88
	Medium (4.01 to 10.00)	25	18.64
	Large (10.01 and above)	14	3.88
Age of Acid lime Orchard (yr)	Low (Up to 5)	24	06.67
	Medium (6 to 15)	291	80.83
	High (16 and above)	45	12.50
Occupation	Agriculture	245	68.50
	Agriculture + Dair/Poultry	55	15.29
	Agriculture + Business	43	11.65
	Agriculture + Service	17	4.56
Annual income	Low (Up to ₹ 4,00,000)	63	17.50
	Medium (₹ 4,00,000 to ₹10,00,000)	198	55.00
	High (₹ 10,000,01 to ₹ 17,000,00)	57	15.83
	Very high (₹17,000,01 and above)	42	11.67
Area under acid lime	Small (Up to 1.00)	153	42.50
	Medium (1.01 to 4.00)	197	54.72
	Large (4.01 and above)	10	02.78
Source of irrigation	Well	165	45.83
	Tube well	129	35.83
	Farm pond	40	11.11
	Canal	26	7.23
Experience in acid lime cultivation (yrs.)	Low (up to 7)	63	17.63
	Medium (8 to 18)	261	72.54
	High (19 and above)	36	9.83
Source of information	Low (up to 35)	54	15.00
	Medium (36 to 42)	258	71.67
	High (43 and above)	48	13.33
Innovativeness	Low (up to 47)	66	18.33
	Medium (48 to 58)	187	51.95
	High (59 and above)	107	29.72
Marketing behavior	Low (up to 47)	45	12.50
	Medium (48 to 58)	268	74.44
	High (59 and above)	47	13.06
Risk orientation	Low (up to 14)	41	11.38
	Medium (15 to 16)	237	65.83
	High (17 and above)	82	22.79
Economic motivation	Low (up to19)	29	08.05
	Medium (20 to 24)	273	75.39
	High (25 and above)	58	16.11

Table 1 shows that (54.44%) of the respondents belonged to middle age category followed by young (24.44%) and old age (21.12%) category respectively. The middle aged farmers were more enthusiastic had more knowledge and experience regarding cultivation aspects of acid lime. Majority (47.00%) of the respondents were educated up to higher secondary school followed by secondary school (35.34%) level, Graduation (13.50%), primary (02.05%) and only 01.66 per cent of the respondents were illiterate. Majority i.e. 51.66 per cent of famers belonged to small land holding category, followed by 18.88 per cent of semi-medium land holding category farmers, 18.64 per cent Medium category, 6.94 per cent farmers belonged to marginal land holding category and only 3.88 per cent of acid lime growers were having large land holding. The reason for this might be fragmentation of land holdings due to proneness towards nuclear family approach might have resulted in low land holdings among half of the farmers.

More than half of acid lime growers (80.83%) have medium i.e. 6 to 15 years of acid lime orchard, 12.50 per cent acid lime growers have high i.e. 16 and above years of acid lime orchard and only 6.67 per cent of acid lime growers have

low i.e. up to 5 years of acid lime orchard. Maximum respondents (68.50%) were involved in agriculture, followed by 15.29 per cent were engaged in agriculture + Dairy/poultry, 11.65 per cent were involved in agriculture + business and 4.56 per cent were involved in agriculture + service. The probable reason might be that agriculture being primary source of income. Half (55.00%) of the acid lime growers had medium level of annual income followed by low 17.50 per cent, high 15.83 per cent annual income and very high 11.67 per cent; respectively. The majority of responders had medium-sized land holdings, which may be the most likely explanation for this.

54.72 And 42.50 per cent of acid lime growers had Medium and small area under acid lime cultivation, respectively followed by only 2.78 per cent had large area under acid lime cultivation. Majority of acid lime growers (45.83%) were having well as sources of irrigation. Followed by 35.83 per cent have tube well, 11.11 per cent having farm pond and 7.23 per cent acid lime growers have canal as a sources of irrigation, respectively. Majority of the farmers were classified under medium experience in acid lime cultivation (72.54%), followed by low (17.63%) and high (9.83%) experience in acid lime cultivation. Majority of them were depending on agriculture as their main source of livelihood. As a part of their life, they might be continuing agriculture as the primary source of income and gained high farming experience. Majority (71.67%) of the respondents had medium source of information followed by low (15.00%) and high (13.33%) levels of source of information. Because they were buying inputs on credit, the majority of farmers were reliant on input dealers, which could be the cause. Conversely, forward-thinking farmers with more education may be turning to horticulture experts for diagnosis and appropriate advice for location-specific issues in acid lime growing.

51.95 per cent of the acid lime growers were in 'medium' innovativeness category, followed 29.72 per cent acid lime growers in 'high' and 18.33 per cent of the acid lime growers were in 'low' innovativeness category. Innovation has a bigger impact on people's personalities. A person who is more innovative than others can do tasks faster and with more accuracy. The study suggested that individuals with a medium degree of inventiveness have a greater awareness of climate change and are more likely to use adoption strategies. majority (74.44%) of the respondents had a medium level of marketing behavior, 13.06 per cent had a high level of marketing behavior, and only 12.50 per cent had a low level of marketing behavior.

Majority (65.83%) of the acid lime growers had medium risk orientation followed by high (22.79%) and low (11.38%) levels of risk preferences. It can be inferred that great majority (88.62%) of the acid lime growers had medium to high level of risk preference. It means that farmers with a medium to high level of mind for taking calculative risk were more interested in managing and implementing the recommended technology for the production of acid lime. Majority 75.39 per cent of the respondents were grouped under medium level of economic motivation followed by high (16.11%) and low (8.05%) levels of economic motivation.

Conclusion

In conclusion, before creating any programs or schemes for the benefit of acid lime growers, policymakers must have a thorough understanding of their profile characteristics. For any government intervention to be successful it must be need-based and follow a bottom-up methodology; hence, the socioeconomic characteristics of the recipients must receive the attention they require for the community's overall growth.

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