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PLANNING ABILITY OF GUAVA GROWERS REGARDING SCIENTIFIC CULTIVATION OF GUAVA IN FLOOD PRONE EASTERN PLAIN ZONE (IIIB) OF RAJASTHAN, INDIA

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ABSTRACT

The planning ability of the guava growers was directly affecting the managerial ability of guava growers which played a very important role in improving the guava production. This study was conducted by collecting the responses from 210 guava growers from randomly selected 20 villages of Sawai Madhopurdistrict and 10 villages of Bharatpur districtin the flood-prone eastern plain zone (IIIb) of Rajasthan. It was found that Majority of guava growers were having medium planning ability. In both Sawai Madhopurand Bharatpur district majority of guava growers were having medium planning ability. The guava growers of both Sawai Madhopur and Bharatpur districts had highest planning ability regarding "objectives in planning for the management of guava orchard". There was no significant difference between the farmers of selected districts with respect to their planning ability.

Keywords: Guava growers, scientific cultivation, flood prone eastern zone.

Introduction

Guava can be grown throughout India, According to Horticulture Statistics Division; DAC&FW in 2015-16, the total area of 255,000 hectares are dedicated to guava production in this country. This land area represents just over a 70% increase since the early 1990s. Cultivation has also increased by around 58%. India produces 40,48,000 metric tones of guava annually. Out of the total cultivated area, fruits occupy 63 lakh hectare and 901 lakh tones production.

Rajasthan is the largest state of India, its total area is 3,42,239 km^2 that is equivalent to the 10.40 per cent area of our country. The contribution of agriculture to the gross domestic product of the state is 52 per cent as against 26 per cent in the case of the country (2014). The area coverage under horticultural crops is only 1.97 per cent of the cultivated land with distribution under fruits, vegetables, and condiments are 0.12, 0.31, and 0.54 per cent, respectively. Despite poor status, the production of certain fruit crops in Rajasthan, state occupies an important place in the country.

The guava production in the flood prone eastern plain zone (IIIb) of Rajasthan is carried out by the farmers of Sawai Madhopur and Bharatpur districts. The guava growers have also to perform a role of manager to get maximum production from minimum available resources, in which their planning ability played a highly important role. Thus, the planning ability of the guava growers was directly affecting the managerial ability of guava growers which played a very important role in improving the guava production.

In view of these facts, it was highly considered necessary to carry out the study entitled "Planning ability of guava growers regarding scientific cultivation of guava in Flood Prone Eastern Plain Zone (IIIb) of Rajasthan".

Research Methodology

The Present investigation was conducted in the flood-prone eastern plain zone (IIIb) of Rajasthan. Out of these the flood-prone eastern plain Zone (IIIb) was selected purposively because this zone is having the maximum area and highest production and many guava growers were awarded at state and national level lies in this zone. Also, the area under guava cultivation is increasing regularly and the climatic conditions are suitable for quality production. From the purposely selected Sawai Madhopur and Bharatpur districts, 10 gram panchayat of Sawai Madhopur and 5 gram panchayat of Bharatpur district were selected because of having maximum area and production in their respective districts. Separate lists of all the guava growing villages from each the selected gram panchayat was prepared and 20 villages from Sawai Madhopurdistrict and 10 villages from Bharatpur district, comprising a total of 30 villages were selected randomly by proportional allocation method. From the selected villages, 7 guava growers having at least one acre guava orchard for the last three years and a total of 210 guava growers from all 30 villages were selected randomly for the study purpose.

To measure the planning ability of guava growers, the scale developed by Jadav and Popat (2004) was used with slight modification after getting the experts opinion. The data were collected with the help of a comprehensive interview schedule consisted of the suitable devices for measuring the planning ability of the respondents. The entire schedule was subjected to pre-testing before administering to the actual respondents. The schedule was improved and revised according to suggestions and comments received from the experts. The usual cares and precautions for interviewing the farmers were duly observed and before introducing the

schedule to the farmers, the investigator established rapport with farmers for obtaining factual information. Personal interview method was adopted to collect the information from the respondents. These data were classified, tabulated, statistically analyzed, and appropriated statistical tests were used to arrive at specific conclusions which led to the following findings-

Findings

The data presented in Table 1 indicated that 60.00 per cent of respondents were having medium planning ability, whereas 22.40 per cent and 17.60 per cent of them had low and high planning ability, respectively.

Table 1: Distribution of guava growers about their planning ability regarding scientific cultivation of guava

S. No	Category	Sawai Madhopur (n$_1$=140)		Bharatpur (n$_2$=70)		Total (n=210)	
		F	%	F	%	F	%
1.	Low planning ability (below 16.02 score)	27	19.29	20	28.60	47	22.40
2	Medium planning ability (from 16.02 to 25.42 score)	88	62.85	38	54.30	126	60.00
3	High planning ability (above 25.42 score)	25	17.86	12	17.10	37	17.60
	Total	140	100.00	70	100.00	210	100.00

x = 20.72 s = 4.70

The data in table 1, It can be described that majority of Sawai Madhopur (62.85per cent) and Bharatpur (54.30 per cent) districts guava growers were having medium planning ability to performs the various scientific cultivation practices in guava orchard. Whereas,19.29 per cent guava growers of Sawai Madhopur and 28.60 per cent of guava growers of Bharatpur district came under low planning ability and 17.86 per cent guava growers of Sawai Madhopur and 17.10 per cent of guava growers of Bharatpur district were fell under high planning ability to performs the various scientific cultivation practices in guava orchard.

Hence, it can be concluded that most of the respondents had possessed medium level planning ability about the recommended cultivation of guava. This might be due to the reason that majority of the guava growers managed their orchards themselves as per their managerial skill which is not up to the mark but they might have remained in contact with the extension personnel who might have increased their planning ability resulting in overall medium planning ability.

Managerial ability of guava growers about their planning ability regarding scientific cultivation of guava

A perusal of data in Table 2 reveals that the guava growers of the study area had highest planning ability about "objectives in planning for the management of guava orchard" (90.16 MPS) and was ranked first. The extent of the planning ability of the farmers about "forecast made in relation to guava orchard" (82.54 MPS) was ranked second by the guava growers. The least planning ability of the farmers in the study area was found about "consultation while planning" (66.67 MPS) which was on last ranked.

The analysis of data in table 2 further reveals that the guava growers of both Sawai Madhopur (92.86 MPS) and Bharatpur (84.76 MPS) districts had highest planning ability regarding "objectives in planning for the management of guava orchard". The second highest planning ability regarding "basis of future plan for guava orchard" had by guava growers of Sawai Madhour (84.52 MPS) district and "points considering for planning in management of guava orchard" had by guava growers of Bharatpur (83.93 MPS) district. The guava growers of Sawai Madhopur (69.64 MPS) district had least planning ability regarding "think about planning has been increases the guava yield" and "consultation while planning" for Bharatpur (66.67 MPS) district respectively.

The guava growers of Sawai Madhopur district had more planning ability (77.89 MPS) as compared to Bharatpur district (74.89 MPS) regarding "planning ability of guava growers to perform the various practices in guava orchard". However the overall planning ability of guava growers to perform the various practices in guava orchard was to be found 76.89 MPS.

Table 2: Extent of managerial ability of guava growers about their panning ability regarding scientific cultivation of guava

S. No.	Statements	Sawai Madhopur (n$_1$=140)		Bharatpur (n$_2$=70)		Total (n=210)	
		MPS	Rank	MPS	Rank	MPS	Rank
1	Objectives in planning for the management of guava orchard	92.86	I	84.76	I	90.16	I
2	Forecast made in relation to guava orchard	83.33	III	80.95	III	82.54	II
3	Basis of future plan for guava orchard	84.52	II	69.05	VIII	79.37	III
4	Points considering for planning in management of guava orchard	72.32	VIII	83.93	II	76.19	IV
5	Main strategies for planning in management of guava orchard	73.21	VII	78.57	IV	75.00	V
6	Planning about of irrigation, manure, fertilizer and plant protection chemicals needed	75.00	V	75.00	VII	75.00	V
7	Consultation while planning	75.89	IV	48.21	IX	66.67	IX
8	Think about planning has been increases the guava yield	69.64	IX	77.86	V	72.38	VIII
9	Planning about the marketing strategies/ tie-up to sale production	74.29	VI	75.71	VI	74.76	VII
Overall MPS		**77.89**		**74.89**		**76.89**	

District wise comparison of guava growers about their planning ability regarding scientific cultivation of guava

In order to find out the significance of difference between the guava growers of selected districts with respect

to the planning ability possessed by them, 'Z' test was applied. For this purpose, the following null hypotheses were tested and results of which are presented in Table 3.

$H_{01.2}$: There is no significant difference between the guava growers of two selected districts with respect of planning ability to perform the various practices in guava orchard.

Table 3: District wise comparison of guava growers about their planning ability regarding scientific cultivation of guava

S. No	Category of sample	Mean	S.D.	'Z' value
1.	Guava growers of Sawai Madhopur district	21.06	4.49	1.42 NS
2.	Guava growers of Bharatpur district	20.04	5.07	

NS = Non significant

Table 3 shows that the calculated value of 'Z' (1.42 NS) is less than its tabulated value at 5 per cent level of significance. It infers that there was no significant difference among the farmers of selected districts with respect to planning ability to perform the various practices in guava orchard. Further analysis of the data in table 4.28 shows that planning ability of respondents of Sawai Madhopur district possessed more than the respondents of Bharatpur district.

Conclusion

Majority of guava growers were having medium planning ability. In both Sawai madhopur and Bharatpur district majority of guava growers were having medium planning ability. The guava growers of both Sawai Madhopur and Bharatpur districts had highest planning ability regarding "objectives in planning for the management of guava orchard".There was no significant difference between the farmers of selected districts with respect to their planning ability.

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