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ASSOCIATION BETWEEN CROP GROWERS AND THEIR LEVEL OF ADOPTION ABOUT CRISIS AND ITS MANAGEMENT

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ABSTRACT

The present study was carried out in six districts of South Gujarat. Paddy, Mung, Tomato and Banana crops were taken under the present study. Out of six districts, 360 crop growers and 48 researchers were selected. Thus, total sample size was 408 respondents for the present study. The study discloses that out of twenty independent variables; education, occupation, annual income, farming experience, source of information, economic motivation, scientific orientation, management orientation, innovativeness, overall modernity and cropping pattern were positively and highly significantly correlated where age, land holding, social participation, risk orientation, market and credit-seeking behavior were positively and significantly correlated with the adoption of farmers about crisis and its management practices in crops. Scientific orientation were positively and highly significantly correlated while, age, source of information, risk orientation, economic motivation, management orientation, material possession and market orientation were positively and significantly correlated with the adoption of researchers about crisis and its management practices in crops.

Keywords: *crisis and its management practices, crop growers, adoption and association.*

INTRODUCTION

The crisis in Indian agriculture, which has been building up for decades, is not one of declining profitability but of non-viability of the bulk of landholdings. A crisis is a major, unpredictable event that threatens to harm an individual or organization and its stakeholders (Vinaya and Shivamurthy, 2021). Although crisis events are unpredictable, they are not unexpected. Crisis can affected all segments of society and are caused by a wide range of reasons. The practice of crisis management involves attempts to eliminate technological failure to avoid or to manage crisis situations. Crisis management consists of skills and techniques required to assess, understand, and cope with any serious situations, especially from the moment it first occurs to the point that recovery producer start.

In the context of present study, there were some prominent profile variables influencing the level of knowledge about crisis and its management practices in crops. The findings of the study would certainly be helpful for planners, extension personnel from government and private agencies to plan out a suitable program for crises management and mitigate the crisis in agriculture. Keeping the above facts in view, an attempt has been made to study the association between profile of crop growers and their level of knowledge about crisis and its management practices in crops.

OBJECTIVE

To ascertain the association between profile of crop growers with adoption about crisis and its management practices in crops

METHODOLOGY

Ex-post-facto research design was used in the present investigation. Paddy, Mung, Tomato and Banana crops were taken under the present study. The present study was carried out in six districts of Gujarat state *viz,* Navsari, Surat, Valsad, Tapi, Bharuch and Narmada of South Gujarat region were approached and dominated areas all four crops were identified. Three talukas from each district which possessed highest area under respective crops were selected purposively. Further, same procedure was followed to get one village from each talukas. In all, 18 talukas and 18 villages were selected from study area. At the end, a lottery method of randomisation was adopted to get five growers of the village for each crop. The crop wise lists prepared and 8 researchers were randomly selected from the each district. Thus, total 48 researchers were selected as respondents for the present study. In all, 360 farmers and 48 researchers, so total sample size were 408 selected as respondents for the study. Twenty independent variables were chosen. In light of the objectives, the interview schedule was prepared and data were collected by using the personal interview method. The collected data were analyzed by correlation coefficient (r).

RESULTS AND DISCUSSION

Table: 1 Association between profile of crop growers with level of adoption about crisis and its management practices in crops (n=408)

Sr. No.	Independent variable	Farmers (n=360)	Researchers (n=48)
X_1	**Age**	0.117*	0.366*
X_2	**Education**	0.400**	***
X_3	**Size of family**	-0.082NS	0.224NS
X_4	**Land holding**	0.110*	-0.012NS
X_5	**Occupation**	0.291**	***
X_6	**Annual income**	0.299**	***
X_7	**Farming experience**	0.444**	0.035NS
X_8	**Source of information**	0.247**	0.318*
X_9	**Social participation**	0.108*	***
X_{10}	**Risk orientation**	0.115*	0.289*
X_{11}	**Economic motivation**	0.220**	0.327*
X_{12}	**Scientific orientation**	0.176**	0.401**
X_{13}	**Management orientation**	0.191**	0.361*
X_{14}	**Innovativeness**	0.152**	***
X_{15}	**Overall modernity**	0.187**	0.255NS
X_{16}	**Material possession**	0.066NS	0.322*
X_{17}	**Irrigation facilities**	0.050NS	-0.084NS
X_{18}	**Cropping pattern**	0.230**	0.017NS
X_{19}	**Market orientation**	0.123*	0.315*
X_{20}	**Credit seeking behavior**	0.112*	-0.331*

* Significant at 5 per cent ** Significant at 1 per cent ^{NS} Non-significant

*** Due to the same score of all the researchers 'r' value is not worked out

The data evident in table 1 revealed that the education (0.400**), occupation (0.291**), annual income (0.299**), farming experience (0.444**), source of information (0.247**), economic motivation (0.220**), scientific orientation (0.176**), management orientation (0.191**), innovativeness (0.152**) overall modernity (0.187**) and cropping pattern (0.230**) were positively and highly significantly correlated with the adoption of farmers about crisis and its management practices in crops. However, age (0.117*), land holding (0.110*), social participation (0.108*), risk orientation (0.115*), market orientation (0.123*) and credit-seeking behavior (0.112*) were positively and significantly correlated with the adoption of farmers about crisis and its management practices in crops. Whereas the material possession (0.066^{NS}) and irrigation facilities (0.050^{NS}) were non-significantly correlated while, the size of family (-0.082^{NS}) was negative and non-significantly correlated with the adoption of farmers about crisis and its management practices in crops.

Same Table also shows that the scientific orientation (0.401**) were positively and highly significantly correlated while, age (0.366*), source of information (0.318*), risk orientation (0.289*), economic motivation (0.327*), management orientation (0.361*), material possession (0.322*) and market orientation (0.315*) were positively and significantly correlated with the adoption of researchers about crisis and its management practices in crops. Whereas the credit-seeking behavior (-0.331*) was negative and significantly correlated, while the size of family (0.224^{NS}), farming experience (0.035^{NS}), overall modernity (0.255^{NS}) and cropping pattern (0.017^{NS}) were non-significantly correlated, furthermore land holding (-0.012^{NS}) and irrigation facilities (-0.084^{NS}) were negative and non-significantly correlated with the adoption of researchers about crisis and its management practices in crops. This finding is supported by the findings of Morey et al. (2015), Gohil et al. (2016), Damor et al. (2017), Matto et al. (2018), and Tinde et al. (2018).

CONCLUSION

From the above finding it is concluded that education, occupation, annual income, farming experience, source of information, economic motivation, scientific orientation, management orientation, innovativeness, overall modernity and cropping pattern were positively and highly significantly correlated with the adoption of farmers about crisis and its management practices in crops while, age, land

holding, social participation, risk orientation, market and credit-seeking behavior were positively and significantly correlated with the adoption of farmers about crisis and its management practices in crops. In case of researchers the scientific orientation were positively and highly significantly correlated while, age, source of information, risk orientation, economic motivation, management orientation, material possession and market orientation were positively and significantly correlated with the adoption of researchers about crisis and its management practices in crops.

POLICY IMPLICATIONS

(1) **High occurrence of pests and diseases in the crop**

If a farmer is experiencing a high occurrence of pests and diseases, and they are working with or have access to an agricultural university, they should take advantage of the university's resources to effectively manage and solve the issue

(2) **Failure of crop due to heavy rainfall**

Crop failure due to heavy rainfall, they need to take immediate and long-term steps to recover and prevent future losses. Working with an Agricultural University, Extension Centre, KVK, Research Station and NGOS can provide expert guidance.

(3) **Unable to access a timely weather forecast**

Here are practical and expert-backed recommendations to solve this issue, farmers adopt weather forecasting mobile apps and services, Subscribe to SMS/Voice weather alerts, Agromet Advisory Services (AAS), Weekly weather-based crop advice, and Training programs like a teach farmers how to use weather tools.

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CONFLICT OF INTEREST

This is to declare that there is "No conflict of interest" among researcher.

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