

Innovativeness of Mango Growers of Tamil Nadu

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ABSTRACT

Mango known as king of fruits is grown widely in India and cultivated in tropical and subtropical regions. Mango cultivars cultivated in India have certain ecological and geographical requirements for best development and productivity. A significant impact is seen due to the incidence of pests and diseases on the quality of mangoes produced domestically and for export. Farmers should be the updated on the weather-related information and newer technologies to avoid yield losses and get secured gains. The farmers should be innovative to adopt the modern innovations more rapidly. The study analysed the innovativeness of Mango growers of Tamil Nadu state. A sample of 100 farmers was selected from four villages namely Kalvehalli, Chaparthi, Maruderi and Thatrahalli from Kaveripattinam block in Krishnagiri district was selected for the study. The findings of the study stated that 69 percent of the respondents belonged to medium category followed by 25 percent and 6 percent belonged to low and high levels of innovativeness respectively. The study illuminated the need to improve the innovativeness among the mango growers of Tamil Nadu

Key Words: Innovativeness, mango growers, Technology Adoption, Innovations

INTRODUCTION

Mango (Mangifera indica) known as the King of fruits due to its delicious flavour and high nutritional content. Mangoes are mostly produced in India in tropical and subtropical regions between sea level and 1500 m above sea level. The optimal temperature for mango development is around 27 °C. The majority of Indian mango cultivars have certain eco-geographical needs for best development and productivity. Pests and diseases have a significant impact on the quality of mangoes produced domestically and for export. The incidence of pests and diseases has become uncontrolled as a result of climate change, which has an enormous effect on mango growers' income prospects. It is important that farmers should know the weatherrelated updated information to act accordingly to avoid yield losses. In this paper, effort was made to analyse the innovativeness of mango growers that helps to think and adopt upgrading technologies and new production techniques that can mitigate the ill-effects of climate change. Innovativeness can be defined as the pace at which new innovations are adopted by the individuals. Farmers with higher innovativeness will have high flexibility and adopt newer innovations rapidly.

MATERIALS AND METHODS

An ex-post facto research design was adopted for the study. It is an organised empirical study in which the researcher has no direct influence over the independent variables. Krishnagiri district was

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purposively selected for this study as it ranks first in the area and production of the mango in Tamil Nadu state. Kaveripattinam block was purposively selected based on the same criterion. Four villages namely Kalvehalli, Chaparthi, Maruderi and Thatrahalli were selected randomly for the study. A sample size of 100 mango farmers was selected for the study. The data were collected using a well prepared and pre-tested interview schedule in personal interview mode.

Innovativeness refers to the respondent's earliness in adopting new ideas when compared to the other members of the social system. In this study, innovativeness was operationalized as the farmers rapidity in adopting new ideas to mitigate the impact of climate change. The scale followed by Sabyasachi Pradhan (2019) with suitable modifications was used for this study. It consists of four statements and the continuum for the response is YES or NO. A score of 2 is given for the response YES and 1 is given for NO. Based on the responses given by all the respondents the statements were ranked.

The score of an individual respondent calculated by adding the scores obtained from all the statements. Based on the overall score obtained by a respondent, the respondents were categorized into low, medium and high categories according to their mean and standard deviation.

RESULTS AND DISCUSSION

The data collected were tabulated, analysed using statistical techniques and inferences were drawn. The results of the study were presented here. The data (Table 1) revealed that the statement "Do you want to learn new ways of farming?" was given positive accord by majority of the respondents followed by the statement "If the government would help you to establish a farm elsewhere, would you move?" with the mean scores of 1.90 and 1.86, respectively.

The respondents were further categorized into low, medium and high categories according to the total score obtained by them and based on the overall mean and standard deviation. The mean and standard deviation were found to be 6.917 and 0.507 respectively. The results were furnished in Figure 1.

From the Figure 1 it was found that above two-thirds *i.e.*, 69 percent of the respondents belonged to medium category followed by onefourth of the respondents *i.e.*, 25 percent belonged to low category. Only a meagre amount i.e., 6 percent of the respondents belonged to high level of innovativeness. It was interpreted from these findings that 75 percent were possessing medium to high level of innovativeness and 25 percent of the respondents were having low level of innovativeness. The results of the study were congruent with the findings of Manjunath *et al* (2019) and Divya (2020).

The reason for this trend might be elucidated to the awareness among the mango growers of Tamil Nadu on changing climatic conditions and need to adopt newer and better technologies. The farmers of Krishnagiri district with good levels of education, having exposed to different weather based agro-advisory services and ample extension agency contacts were determined to follow any new

| Sr. No | Statement | Mean Score | Rank |
|--------|---|------------|--------|
| 1 | Do you want to learn new ways of farming? | 1.90 | First |
| 2 | If the government would help you to establish a farm elsewhere, would you move? | 1.89 | Second |
| 3 | Do you want to change your way of life? | 1.86 | Third |
| 4 | Do you attend to talks given by AEO on cultivation practices? | 1.14 | Fourth |

Table 1. Ranking of the statements.

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Figure 1. Distribution of the respondents according to their Innovativeness

innovative technologies that can mitigate the yield losses and improve productivity and enhances their returns.

CONCLUSION

The findings of the research depicted though three-fourth of the respondents had medium to high level of innovativeness, the remaining onefourth were still under traditional and conservative thinking. There was a need to improve the technological adaptability and mental flexibility among the growers of mango in Tamil Nadu state. Farmers could follow modern and improvised techniques if only they possess high levels of innovativeness.

REFERENCES

Devi S R (2013). "Profile characteristics of sugarcane farmers in Chittoor district of Andhra pradesh." J Res, ANGRAU 41 (1): 96-100.

- Khan M A (2013). "Adopter categories in respect to a transplanted monsoon rice variety in two selected villages of Bangladesh." *J. Agril Sci* **5(3):** 200-216.
- Reddy R J and Shenoy N S (2013). "Impact of SRI technology on rice cultivation and the cost of cultivation in Mahabubnagar district of Andhra Pradesh." *Int J Scientific and Research Publications* **3(8):** 14-17.
- Sriramana V (2014). Knowledge and extent of adoption of cashew growers in Srikakulam district of Andhra Pradesh, M.Sc. (Ag.), Thesis, ANGRAU, Hyderabad
- Divya G (2020). "A Holistic Study on Mango Growers in Krishnagiri District of Tamil Nadu." M.Sc. (Ag.), Thesis TNAU, Coimbatore
- Mahadik R (2014). "Analytical Study on Adoption of Ecofriendly Management Practices of Mango by Orchardists in Konkan Region., M.Sc. (Ag.), Thesis, MPUAT, Udaipur.
- Manjunath K and Bai DS (2019). "Profile analysis of mango growers of Karnataka." J Pharmacognosy and Phytochemistry 8 (2):904-908.
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