

## REGRESSION ANALYSIS OF ENTREPRENEURIAL BEHAVIOUR OF SWEET ORANGE GROWERS

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### ABSTRACT

*A sweet orange (Citrus sinensis L.) is an important fruit crop of Maharashtra state of India. It is grown on an area of 55,000 ha. The area under this fruit crop is increasing rapidly as a result of dynamic employment guarantee scheme launched by the Government of Maharashtra for fruit crops. Sweet Orange is a major fruit crop in Marathwada region of the State. 0.77 lakh hectares area is under this crop (Anonymous, 2014a). The development of any nation depends primarily on the important role played by entrepreneurs. Hence, the part played by entrepreneurs is of vital importance in a developing country like India. Thus in all economic development activities more attention is being given to entrepreneurship development. An entrepreneur is primarily concerned with changes in the formula of production over which he has full control. Further, it is commonly believed that an entrepreneur is basically an intelligent person and has a definite ability to create something new to prove its worthiness. The Ex-post-facto research design was used for the present study. The study was conducted in Aurangabad district. Three tahsils namely, Aurangabad, Paithan and Kannad were selected purposively on the basis of the maximum area under sweet orange cultivation. The main objective of this study is to study the regression analysis of entrepreneurial behaviour of sweet orange growers. It is revealed from that coefficient of determination ( $R^2$ ) of the independent variables was 0.5040. It means that 50.40 per cent of the total variation in entrepreneurial behavior of sweet orange growers was explained by the selected 10 independent variables i.e. Farming experience, Education, Family size, Occupation, Land holding, Annual income, Social participation, Mass media use, Economic motivation and Market orientation. The present study was used as a multistage sampling procedure. Collected data were classified, tabulated and analyzed by using multiple regression.*

**Keywords:** entrepreneurial behaviour and regression, sweet orange growers

### INTRODUCTION

India has the unique distinction to grow almost all the varieties of fruits and vegetables. India is second largest producer of fruits in the world 9 per cent after China. India is the second largest producer of fruits and vegetables in the world. A sweet orange (*Citrus sinensis* L.) is an important fruit crop of Maharashtra state of India. It is grown on an area of 55,000 ha with 6.5 lakh tones of production per year. The area under this fruit crop is increasing rapidly as a result of dynamic employment guarantee scheme launched by the Government of Maharashtra for fruit crops. Sweet Orange is a major fruit crop in Marathwada region of the State. 0.77 lakh hectares area is under this crop.

The development of any nation depends primarily on the important role played by entrepreneurs. Hence, the part played by entrepreneurs is of vital importance in a developing country like India. Thus in all economic development activities more attention is being given to entrepreneurship development. An entrepreneur is primarily concerned with

changes in the formula of production over which he has full control. Further, it is commonly believed that an entrepreneur is basically an intelligent person and has a definite ability to create something new to prove its worthiness.

The studies on entrepreneurial behaviour of farmers have not been conducted in a systematic way especially those involving sweet orange growers (Khandave et al., 2022). Even though number of studies have been conducted in India to find out differential characteristics of farmers in adopting farm practices, most of these studies have tried to find out association between knowledge and adoption, attitude, personal and socio-psychological characteristics. But, these studies have not tried to investigate on the role of entrepreneurial behaviour. However, only few research studies have been conducted in India on entrepreneurial behaviour of farmers.

Keeping above fact in view, the present study was designed to analyze the entrepreneurial behaviour of sweet orange growers in Marathwada region with the following specific objective.

**OBJECTIVE**

To study the regression analysis of entrepreneurial behavior of sweet orange growers.

**METHODOLOGY**

The study was conducted in Aurangabad district. Three tahsils namely, Aurangabad, Paithan and Kannad were selected purposively on the basis of the maximum area under sweet orange cultivation. Four villages from each tahsil were selected randomly. Ten farmers from each village were selected to comprise a sample of 120 respondents. In view with the above objectives, the multistage sampling was

used to select district, tahsil, village and farmers. Collected data were classified, tabulated and analyzed by Multiple regression.

**RESULTS AND DISCUSSION**

**Multiple regression analysis between profile of sweet orange and their entrepreneurial behaviour.**

Multiple regression analysis was carried out for determining the contribution of independent variables with entrepreneurial behaviour of sweet orange growers and the data, thus obtained, have been furnished in following table 1 .

**Table 1 : Multiple regression analysis between profile of sweet orange and their entrepreneurial behaviour**

(n=120)

Sr. No.	Variables	Regression Coefficients (B)	Standard Error (SE)	't' value
X <sub>1</sub>	Farming experience	0.029	0.238	0.124NS
X <sub>2</sub>	Education	1.361	0.752	1.808NS
X <sub>3</sub>	Family size	0.355	0.599	0.593NS
X <sub>4</sub>	Occupation	1.641	1.547	1.060NS
X <sub>5</sub>	Landholding	0.067	0.232	0.290NS
X <sub>6</sub>	Annual income	0.811	0.613	1.322NS
X <sub>7</sub>	Social participation	0.795	0.323	2.459*
X <sub>8</sub>	Mass media use	-0.255	0.577	-0.44NS
X <sub>9</sub>	Economic motivation	0.674	0.203	3.307**
X <sub>10</sub>	Market orientation	2.655	0.815	3.256**

R<sup>2</sup> = 0.5040      F = 11.0782      \* Significant at 0.05 level of probability.  
 \*\* Significant at 0.01 level of probability.      NS= non-significant.

It is revealed from Table 22 that coefficient of determination (R<sup>2</sup>) of the independent variables was 0.5040. It means that 50.40 per cent of the total variation in entrepreneurial behavior of sweet orange growers was explained by the selected 10 independent variables. The unexplained variation may be due to the factors not included in the study. It is also may be due to certain factors which were out of the scope of present study.

The value of 't' showed that entrepreneurial behavior of sweet orange growers had significantly related with social participation, economic motivation and market orientation. The regression coefficients of these variables were 2.459, 3.307 and 3.256 respectively which indicates that one unit change in the variables viz., social participation, economic motivation and market orientation would affect 2.459, 3.307

and 3.256 unit change in entrepreneurial behavior of sweet orange growers.

The overall contribution of all the selected 10 independent variables in entrepreneurial behavior of sweet orange growers was found 50.40 per cent. Hence, 3 variables were found most important variables in exercising influence on entrepreneurial behavior of sweet orange growers.

**CONCLUSION**

As it was revealed from the study that variables viz Social participation, Economic motivation and Market orientation were found most important variables in exercising influence on entrepreneurial behavior of sweet orange growers.

## CONFLICT OF INTEREST

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

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