# Entrepreneurial Behaviour of Mango Growers of Valsad District of Gujarat State

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## ABSTRACT

*Mango is a very important fruit crop of the country. India rank first having the highest share of 44 percent to world production of mango. Present research study conducted on Entrepreneurial behaviour of mango growers of Valsad district of Gujarat state. Mango growers from 10 villages who cultivated mango since five years were selected randomly. Majority of the mango growers were founds in medium to high level category as far as entrepreneurial behaviour is concerned. The indicators decision making was ranked first followed by market orientation (rank second) and economic motivation (rank third). Majority of respondents (73.00 per cent) were observed in the medium entrepreneurial behaviour category, thus, the entrepreneurial behaviour of the respondents was predominantly medium. Education, area under mango cultivation, annual income, social participation, awareness regarding value addition, mango yield index, employment generation, extension participation, mass media exposure, extent of adoption, management orientation, innovativeness, progressiveness and knowledge of mango growers had significant relationship with entrepreneurial behaviour of mango growers. Whereas age, land holding, irrigation facility, family size and cropping intensity had no association with entrepreneurial behaviour of mango growers.*

**Key words:** *Entrepreneurial Behaviour; Mango Growers;*

India occupies second position throughout the world by producing 49.8 million tones of fruits next to China with 11% share in world's total fruit production. India ranks first in the production of mango, papaya, banana, sapota and acid limes in the world. The five fruits (mango, banana, citrus, guava and apple) alone cover about 75 percent of total fruit production of the country. However, mango alone has contributed about 40 percent of total fruit production in country in the year 2008-09 *(Anonymous,2009).* Among the top ten mangos producing countries India ranks first with the highest share of 44 percent to world production of mango. The estimated annual demand of fruits will be more in next decade with 84 per cent rise than other commodities.

In India Uttar Pradesh, Bihar, Andhra Pradesh, Karnataka, Tamilnadu, Maharashtra, and Gujarat are the important mango producing states. In the year 2008-09 Gujarat contributed 2.5 per cent of the total production. In 2006-07 & 2007-08 it was up to 5.0-6.0 %. In Gujarat mangoes are mainly produced in eight districts which cover about 83.00 percent of state mango production amongst which Valsad district, the south eastern part of the state possesses the highest area under mango cultivation. Study on Entrepreneurial behaviour of growers has not been done in mango specially in Gujarat. Therefore, the present study entitled Entrepreneurial behaviour of mango growers of Valsad district of Gujarat state is undertaken with the specific objectives of measuring the entrepreneurial behaviour of mango growers as well as exploring the relationship between the personal, socio-economic & situational, extension communication and psychological characteristics of mango growers with their entrepreneurial behaviour.

## METHODOLOGY

The study was conducted in Valsad District of Gujarat state in the year 2009-10 .Out of five blocks in the Valsad district , only two blocks Valsad and Paradi occupying large area under mango cultivation were selected purposively. Five villages from each block and ten farmers from each village were selected randomly

thus comprising a total of 100 mango growers for this study.

The entrepreneurial behaviour of mango growers was measured by using entrepreneurial behaviour scale developed by *Solanki (2002)*, with slight modification. The selected main indicators were sent to judges for assigning rank. Based on the rank assigned by the judges to each of the selected and relevant indicators the scale values were calculated. Finally, ten indicators considered for this study were Risk taking ability, Self confidence, Decision making ability, Knowledge of improved mango technology, Economic motivation, Scientific orientation, Experience of mango cultivation, Market orientation, Ability to co-ordinate available resources and Achievement motivation. The collected data were classified, tabulated and analyzed with the help of statistical tools like percentage, mean, standard deviation and coefficient of correlation.

## RESULTS AND DISCUSSION

The results in Table 1 reveals that majority of respondents (73.00%) were observed in the medium entrepreneurial behaviour category, while 17.00 per cent respondents fall under the category of high entrepreneurial behaviour. The remaining 10.00 per cent respondents possessed low entrepreneurial behaviour. Thus, It can be concluded that the entrepreneurial behaviour of mango growers was predominantly medium. The finding was in the line with the findings of *Solanki (2002)*.

**Table 1. Distribution of respondents according to their overall entrepreneurial behavior (N= 100)**

| S.No. | Entrepreneurial behaviour levels | Respondents | |
|---|---|---|---|
| | | No. | % |
| 1 | Low (up to 72.21 score) | 10 | 10.00 |
| 2 | Medium (72.22 to 79.73 score) | 73 | 73.00 |
| 3 | High (above 79.73 score) | 17 | 17.00 |
| | Total | 100 | 100.00 |

*Relationship between characteristics of Mango growers and their entrepreneurial behavior:* To know the relationship of different characteristics of mango growers with their entrepreneurial behaviour, the zero order correlation coefficients were calculated. The results in Table 2 revealed that the age had negative and non-significant association with entrepreneurial behaviour. It means that there was no influence of age on entrepreneurial behaviour of mango growers. Similar finding was observed by *Solanki (2002)*.

**Table 2. Zero order correlation coefficient of independent variables with entrepreneurial behaviour of mango growers (N = 100)**

| S.No. | Independent variables | 'r' value |
|---|---|---|
| *I* | *Personal* | |
| X1 | Age | -0.05351$^{NS}$ |
| X2 | Education | 0.18320* |
| X3 | Land holding | -0.04812$^{NS}$ |
| X4 | Area under mango cultivation | 0.18352** |
| X5 | Irrigation facility | -0.01780$^{NS}$ |
| II | Socio-economic and situational | |
| X6 | Family size | -0.02142$^{NS}$ |
| X7 | Annual income | 0.19298** |
| X8 | Cropping intensity | 0.02605$^{NS}$ |
| X9 | Social participation | 0.53464** |
| X10 | Awareness regarding value addition | 0.28318** |
| X11 | Mango yield index | -0.28371** |
| X12 | Employment generation | 0.67307** |
| *III* | *Extension communication* | |
| X13 | Extension participation | 0.39531** |
| X14 | Mass media exposure | 0.21219** |
| *IV* | *Psychological* | |
| X15 | Extent of adoption | 0.56536** |
| X16 | Management orientation | 0.62517** |
| X17 | Innovativeness | 0.24952** |
| X18 | Progressiveness | 0.27651** |
| X19 | Knowledge of mango growers | 0.68633** |

*Significance at 0.05 level ** Significance at 0.01 level
NS = Non significance

The data on education indicated that the calculated correlation coefficient value was positive and significant. It means farmers having higher level of education had higher level of entrepreneurial behaviour. The calculated correlation coefficient value of land holding was negative and non significant at 0.05 level of probability. This might be due to the fact that land holding of the mango growers was a major mean of their livelihood. Hence, irrespective of their land holding they tried to get more economic return. The finding of *Kotadiya (2006)* was in conformity with present finding. But at the same time area under mango cultivation showed positive and highly significant relationship with entrepreneurial behaviour . Though the total land holding has not affected the entrepreneurial behaviour of growers with more area index, there is more expectation of higher gross yields which will ultimately lead returns in one stroke. It is also observed that the entrepreneurial behaviour and irrigation facility were independent from each other. It

means that similar level of entrepreneurial behaviour was observed among farmers having irrigation facility as well as farmers not having proper irrigation resources.

The data in Table 2 further shows that the value correlation coefficient was found negative and non-significant for family size. Thus the family size had no influence on entrepreneurial behaviour of mango growers. This finding is in conformity with the findings of *Solanki (2002)*. The annual income was found positive and highly significant in relation to entrepreneurial behaviour. The probable reason for positive relationship may be that farmers with higher level of annual income, have more chances of extension participation, social participation and mass media exposure leading to right decision making ultimately resulting into higher production and more entrepreneurial behaviour. The findings of *Javiya (2004)* were in conformity with these findings. It is also noticed from Table 2 that the cropping intensity was found non significant and hence entrepreneurial behaviour and cropping intensity were independent from each other. This might be because of farmers with more area under mango cultivation will always try to have all those qualities through which they can get maximum returns from it. However, it was not observed up to the level of significance. The findings of *Javiya (2004)* were in conformity with the present finding. The data on social participation indicated that it was highly significant. The probable reason might be participation in various social organizations helped them in taking right decisions leading to entrepreneurial behaviour. It is also noticed from Table 2 that the correlation coefficient value for awareness regarding value addition was positive and highly significant to their entrepreneurial behaviour. Awareness regarding value addition technology increases entrepreneurial behaviour of mango growers. Mango yield index was found negative and highly significant. Thus, it showed that mango yield index increases the entrepreneurial behaviour of mango grower decreases and vis a versa. The present finding was in line with the finding of *Kotadiya (2006).*The result also indicated that the r value was positive and highly significant for employment generation. It can be concluded that employment generation had positive and highly significant relationship with entrepreneurial behaviour index of mango growers.

Results related to extension participation indicated that the 'r' value was highly significant. The positive direction of relationship indicated that the entrepreneurial behaviour increased with the increase in extension participation. Similar finding was observed by *Javiya (2004)* and *Kotadiya (2006).* The data in relation to mass media exposure in Table 2 indicated that the r value was highly significant. This may be due to the fact that as the mass media exposure increases, the innovativeness and progressiveness of mango growers also increases, which in turn increase the entrepreneurial behaviour. Similar finding was also observed by *Kotadiya (2006).*

The data on psychological variables depicted in Table 2 indicated that the r value of variable extent of adoption was positive and highly significant at 0.01 level. The positive direction of relationship indicated that the entrepreneurial behaviour increased with increase in extent of adoption. The present finding was in line with the finding of *Javiya (2004)*. In case of variable management orientation, the 'r' value was positive and highly significant. This implies that proper and purposeful need based management orientation improves the knowledge and skill of mango growers and thereby increase the entrepreneurial behaviour of mango growers. The 'r' value was highly significant for innovativeness. The positive and highly significant relationship indicates that an increase in innovativeness of mango growers led to increase in their entrepreneurial behaviour. The finding was in the confirmity with the finding of *Chauhan et al (2003).*The result in Table 2 indicated that the correlation coefficient value was found highly significant for progressiveness. The positive and highly significant relationship between mango growers' entrepreneurial behaviour and their progressiveness shows that an increase in progressiveness of mango growers led to increase in their entrepreneurial behaviour. The result also shown that there was positive and highly significant relationship between mango growers' entrepreneurial behaviour and their knowledge regarding improved mango production technology. With more knowledge about improved mango production technology, farmer become more confident of getting good returns.

It can be concluded from above findings that the variables viz; education, area under mango cultivation, annual income, social participation, awareness regarding value addition, mango yield index, employment generation, extension participation, mass media

exposure, extent of adoption, management orientation, innovativeness, progressiveness and knowledge of mango growers all had significant relationship with entrepreneurial behaviour of mango growers. Whereas, age, land holding, irrigation facility, family size and cropping intensity had no association with entrepreneurial behaviour of mango growers.

*Share of main indicators in entrepreneurial behavior and distribution of respondents according to their category in each main indicators*: The analysed data presented in Table 3 reveals that the indicator decision-making was ranked first followed by market orientation and economic motivation. It means that these three indicators has played important role in shaping the entrepreneurial behavior of mango growers. Whereas, the indicators, achievement motivation and experience of mango growers were ranked 9th and 10th respectively means there was no much influence of these two indicators on entrepreneurial behaviour of mango growers. It can be summarized that majority (76.00%) of mango grower had medium decision making ability. With respect to knowledge of mango growers, majority (72.00%) of the respondents were found in medium category, which might be due to the medium level of scientific orientation and experience of improved mango cultivation. It was also observed that majority (68.00%) of mango grower had medium level of economic motivation, and scientific orientation (92.00%). This might be due to higher mass media exposure and social participation.

As regard to the experience of mango growers great majority of mango growers (93.00%) had experience of mango cultivation from more than five years. Whereas, in case of market orientation, 72.00 per cent of mango growers had medium level of market orientation. The probable reason might be that the mango growers produced mango in plenty in the season and due to the improper marketing facility, they have to sale it immediately, as mango is a perishable fruit. With reference to ability to co-ordinate available resources and achievement motivation 73.00 per cent and 90 per cent of mango growers were found in medium level category, respectively. This might be due to the reason that the marketing period of mango is very short and

**Table 3. Share of main indicators in entrepreneurial behavior and distribution of respondents according to their category in each main indicator.**

| S.No | Main Indicator | Category Frequency (Percentage) | | | Mean EBI of each indicator |
|---|---|---|---|---|---|
| | | Low | Medium | High | (Rank) |
| 1 | Risk taking ability | Below 4.93 12 (12%) | 4.94 to 6.75 65(65%) | Above 6.75 23(23%) | 5.84 (VIII) |
| 2 | Self confidence | Below 25.89 13(13%) | 25.90 to 30.00 72(72%) | Above 30.00 15(15%) | 27.99 (IV) |
| 3 | Decision making ability | Below 44.31 09(9%) | 44.32 to 49.11 76(76%) | Above 49.11 15(15%) | 46.43 (I) |
| 4 | Knowledge of improved mango technology | Below 23.44 09(9%) | 23.45 to 31.64 72(72%) | Above 31.64 19(19%) | 27.54 (V) |
| 5 | Economic motivation | Below 36.25 12(12%) | 36.26 to 39.23 68(68%) | Above 39.23 20(20%) | 37.74 (III) |
| 6 | Scientific orientation | Below 15.89 02(2%) | 15.90 to 19.39 92(92%) | Above 19.39 06(6%) | 17.59(VII) |
| 7 | Experience of mango cultivation | Below 00.98 03(3%) | 00.99 to 02.09 93(93%) | Above 02.09 04(4%) | 1.56 (X) |
| 8 | Market orientation | Below 35.17 12(12%) | 35.18 to 43.97 72(72%) | Above 43.97 16(16%) | 39.57 (II) |
| 9 | Ability to co-ordinate available resources | Below 18.57 05(5%) | 18.58 to 24.09 73(73%) | Above 24.09 22(22%) | 21.33 (VI) |
| 10 | Achievement motivation | Below 03.50 04(4%) | 03.60 to 04.50 90(90%) | Above 04.50 06(6%) | 4.00 (IX) |

during these short spans they have to sale their produce immediately. Therefore, good ability to co-ordinate available resources is very necessary.

## CONCLUSION

Area under mango cultivation, Annual income, Social participation, Awareness regarding value, Mango yield index, Employment generation, Extension participation, Mass media exposure, Extent of adoption, Management orientation, Innovativeness, Progressiveness and Knowledge of mango growers had positive and significant relationship whereas the variables Age, Land holding, Irrigation facility, Family size and Cropping intensity had non significant relationship with entrepreneurial behaviour of mango growers. The three indicators decision-making, market orientation and economic motivation played significant role in shaping the entrepreneurial behavior of mango growers.

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