

## International Journal of Agriculture Extension and Social Development

Volume 9; Issue 5; May 2026; Page No. 680-687

Received: 22-02-2026  
Accepted: 25-03-2026

Indexed Journal  
Peer Reviewed Journal

### The personal socio-economic and psychological characteristics of mango growers in Konkan Region

<sup>1</sup>Ajit P Kharge, <sup>2</sup>BA Ruikar, <sup>3</sup>JR Kadam, <sup>4</sup>HV Borate, <sup>5</sup>DB Malave, <sup>6</sup>KV Malshe and <sup>7</sup>SC Warwadekar

<sup>1</sup>Ph.D. Scholar, Department of Agricultural Extension Education, College of Agriculture, DBSKKV, Dapoli, Maharashtra, India

<sup>2</sup>Department of Social Work, Tilak Maharashtra Vidyapeeth Pune, Maharashtra, India

<sup>3</sup>Ex Head and Professor, Department of Agricultural Extension Education College of Agriculture, Dapoli, Maharashtra, India

<sup>4</sup>Professor (CAS), Department of Agricultural Extension Education College of Agriculture, Dapoli, Maharashtra, India

<sup>5</sup>Ex Associate Professor, Department of Agricultural Economics College of Agriculture, Dapoli, Maharashtra, India

<sup>6</sup>Agronomist, Regional Coconut Research Station, Bhatye, Ratnagiri, Maharashtra, India

<sup>7</sup>Head and Professor, Department of Agricultural Extension Education College of Agriculture, Dapoli, Maharashtra, India

DOI: <https://www.doi.org/10.33545/26180723.2026.v9.i5i.3758>

Corresponding Author: Ajit P Kharge

#### Abstract

The present study was undertaken with the main objective of study the personal socio-economic and psychological characteristics of mango growers in *Konkan* region. The study was conducted in South Konkan region, it comprises of the two districts, namely Ratnagiri and Sindhudurg. These district has two distinct zones i.e. coastal belt as well as foothill belt, comprise two tehsils were selected. Thus totally eight tahsils and from each belt were selected. 'Six' villages from each tahsil along with representing belt were randomly selected. Total '48' villages constituted the sample. Five farmers from each village were randomly selected. Total '30' respondents were selected from each tahsils, making a sample of '240' respondents for the present study. The 'ex-post-facto' research design was adopted for the present study. The data were collected through personal interviews by the researcher using the final interview schedule. The data was collected was analyzed using some statistical tools like frequency, percentage, mean and standard deviation. The analysis of data reported that, out of total mango growers 65.42 per cent of the respondents belonged to the 'middle' age group, with 'small' size area under mango cultivation (40.00 per cent), 'medium' level of mango yield (48.33 per cent), 'medium' level of farming experience (63.75 per cent), 'middle' level of socio-economic status (30.42 per cent), 'medium' use of social media (48.33 per cent), 'medium to long (4 to 54 Km) distance from seashore (58.75 per cent) 'medium' level of social affiliation (67.50 per cent), 'medium' level of risk taking ability (58.33 per cent), 'medium' scientific orientation category (64.17). 'medium' level of traditionalism (44.58 per cent), 'medium' level of community infrastructural facilities (57.08 per cent) and 59.58 per cent of the respondents had 'moderately favourable' attitude of mango growers towards use of climate resilience management practices.

**Keywords:** Mango growers, Konkan region, Personal socio-economic and psychological characteristics

#### Introduction

Mango (*Mangifera indica* L.), belonging to the family *Anacardiaceae*, is one of the most important and commercially grown fruit crops in India. It is known as the "National Fruit of India" and often referred to as the "King of Fruits" mango holds a special place in the country's agricultural, cultural, and economic landscape. Mangoes are rich in vitamins, particularly vitamin C, and contain significant levels of dietary fiber and antioxidants, contributing to their popularity worldwide. Mango also has deep cultural and religious significance in India. In the *Konkan* region of Maharashtra, mango cultivation spans over 1,26,241 hectares, yielding an annual production of 2,19,589 metric tonnes. However, the region's productivity is relatively low at 1.74 tonnes per hectare, which is about three to four times lower than the national average of 9.60

tonnes per hectare. The *Konkan* region, particularly the southern districts of Ratnagiri and parts of Sindhudurg, Raigad, and Palghar, are renowned for producing high-quality Alphonso mangoes. Despite the favorable climate, the region's mango production faces challenges, including declining productivity due to climate change and other factors (Source: Anonymous, 2022) [5]. The *Konkan* region accounts for approximately 10% of India's total mango cultivation area, with Alphonso mango (locally called 'Hapus') dominating almost 90 per cent of this area. Alphonso mangoes hold a significant share of India's mango exports, contributing over 35 per cent to the total mango export market (Holkar, 2021) [14]. The major objective of the study is to assess the personal socio-economic and psychological characteristics of mango growers in Ratnagiri and Sindhudurg district.

## Materials and Methods

The present study was conducted in South *Konkan* region, it is comprises of the two districts, namely Ratnagiri and Sindhudurg which has been declared as 'Horticulture districts' by the State Government. Area under mango cultivation is also higher in these districts as compared to other districts of *Konkan* region. So, these two districts were selected for the present study. The Ratnagiri and Sindhudurg district has two distinct zones i.e. coastal belt as well as foothill belt, comprise two tehsils were selected. Four tahsils namely Dapoli and Ratnagiri from Ratnagiri district, Devgad and Vengurle from Sindhudurg district each representing coastal belt. Khed and Mandangad from Ratnagiri district, Vaibhavwadi and Kankavli from Sindhudurg district representing foothill belt. Thus totally eight tahsils and from each belt were selected for the present study. 'Six' villages from each tahsil along with representing belt were randomly selected. Total '48' villages constituted the sample. Five farmers from each village were randomly selected. Total '30' respondents were selected from each tahsils, making a sample of '240' respondents for the present study. The 'ex-post-facto' research design was adopted for the present study. The data were collected through personal interviews by the researcher using the final interview schedule. The primary data on personal socio-economic and psychological variables like Age, area under mango cultivation, mango yield, farming experience, socio-economic status, use of social media, distance from sea shore, social affiliation, risk taking ability, scientific orientation, traditionalism, community infrastructural facilities and attitude of mango growers towards use of climate resilience management practices. The data was collected was analyzed using some statistical tools like frequency, percentage, mean and standard deviation ( $\sigma$ ).

## Results and Discussion

### 1. Age

Aging is a natural process that occurs in the life of every human being. It is generally understood that young farmer is energetic, more active and more willing to experiment with frequent changes, while middle age farmer usually stable in ideas as well as behaviour. An old age farmer is often shows resistance to changes and adopts innovations only gradually. The data regarding age of the respondents and they were then grouped into three categories as presented in Table 1 reported that that nearly two-thirds (65.42 per cent) of the respondents belonged to the 'middle' age group, followed by 'old' age (19.17 per cent) and rest 15.42 per cent of the respondents in 'old' age group. The average age of the respondents was 50 years.

**Table 1:** Distribution of the mango growers according to their age.

| Sl. No. | Category (Years)          | Respondents (N=240) |            |
|---------|---------------------------|---------------------|------------|
|         |                           | Number              | Percentage |
| 1       | Young (Up to 38)          | 37                  | 15.42      |
| 2       | Middle (Between 39 to 62) | 157                 | 65.42      |
| 3       | Old (63 and above)        | 46                  | 19.17      |
|         | Total                     | 240                 | 100.00     |
|         | Mean (years)              | 50                  |            |
|         | S.D. ( $\sigma$ )         | 12.32               |            |

The probable reason might be that middle-aged mango growers are quite experienced in mango cultivation. This might be due to the realization of profitability and stability in mango cultivation due to adoption of climate resilience management practices. In *Konkan* area most of young generations are migrated to the cities for the higher education and further available job opportunities might be one of the reasons for higher percentage of 'middle' age category of respondents in the study sample. The results in this respect similar with Singh and Mankar (2007)<sup>[37]</sup>, Kota (2011)<sup>[20]</sup> and Maheshkumar (2020)<sup>[23]</sup>. The dissimilar findings reported of Manjunath (2015)<sup>[25]</sup>, Abhishek (2017)<sup>[1]</sup> and Farakte (2017)<sup>[11]</sup>.

### 2. Area under mango cultivation

Area under mango cultivation has been considered as one of the important factors that determine potentiality of mango grower to go for new climate resilience management technology on farm. In fact, size of land holding has important role in maintaining the families and socio-economic development of the respondents. The data regarding area under mango cultivation of the respondents and they were then grouped into five categories as presented in Table 2 indicated that two-fifths (40.00 per cent) of the respondents had 'small' size area under mango cultivation, remaining nearly three-eighths (37.50 per cent) and less than one fifth (16.67 per cent) of the respondents had 'semi-medium' and 'marginal' size area under mango cultivation. Only 05.00 per cent and 00.83 per cent of the respondents having 'medium' and 'big' size area under mango cultivation respectively. It means that the mango growers in the study area tend to have 'small' and 'semi-medium' land holdings compared to regular farmers. Owing to typical geographical situation as well as location of *Konkan* region, the average size of land holding is comparatively low. However respondents in study area have put a substantial area under mango cultivation, which could be considered as viable proposition.

**Table 2:** Distribution of the mango growers according to their area under mango cultivation

| Sl. No. | Category (ha)              | Respondents (N=240) |            |
|---------|----------------------------|---------------------|------------|
|         |                            | Number              | Percentage |
| 1       | Marginal (upto 1.00)       | 40                  | 16.67      |
| 2       | Small (1.01 to 2.00)       | 96                  | 40.00      |
| 3       | Semi-medium (2.01 to 4.00) | 90                  | 37.50      |
| 4       | Medium (4.01 to 10.00)     | 12                  | 05.00      |
| 5       | Big (10.01 and above)      | 02                  | 00.83      |
|         | Total                      | 240                 | 100.00     |

The similar findings are in line with the findings of only Kawale (2011), and dissimilar with the findings of Waghmode (2015)<sup>[42]</sup>, Kadam *et al.* (2016)<sup>[16]</sup> and Holkar (2021)<sup>[14]</sup>.

### 3. Mango yield

It means that actual yield of mango fruits obtained in the previous year in tons per hectare from his/her orchard. Total quantity of mango produced by the mango growers in a year from own orchard and expressed in ton was considered for the sample. The data regarding mango yield of the respondents and they were then grouped into three

categories as presented in Table 3 noted that, nearly half (48.33 per cent) of the respondents had 'medium' mango yield, followed by 34.58 per cent and 17.08 per cent of respondents had 'low' and 'high' mango yield, respectively. The average mango yield of the respondents was 3.23 tons/ha. The findings indicated that majority of the respondents were 'medium' level of mango yield category. The probable reason for this finding might be that, changing climatic conditions, affect the quality as well as quantity of mango produce. Another reason for low productivity of mango from *Konkan* region is that the orchards are normally neglected because of most of the owners being absentee land lords.

**Table 3:** Distribution of the mango growers according to their mango yield

| Sl. No. | Category (t/ha)         | Respondents (N=240) |            |
|---------|-------------------------|---------------------|------------|
|         |                         | Number              | Percentage |
| 1       | Low (upto 1.34)         | 83                  | 34.58      |
| 2       | Medium (1.35 to 5.12)   | 116                 | 48.33      |
| 3       | High (5.13 and above)   | 41                  | 17.08      |
|         | Total                   | 240                 | 100.00     |
|         | Mean (t/ha)             | 3.23                |            |
|         | (1/2) S.D. ( $\sigma$ ) | 1.90                |            |

The similar findings are in line with the findings of Sneha Godse (2010)<sup>[12]</sup> and Holkar (2021)<sup>[14]</sup> and dissimilar with the findings of Sajeev *et al.* (2014)<sup>[35]</sup>, Abhishek (2017)<sup>[1]</sup> and Dhenge (2018)<sup>[10]</sup>.

#### 4. Farming experience

"Experience is the best teacher" according to these pro-verb respondents learn a lot of useful information from our own experience. Farming experience is an important variable for the decision making and adopting climate resilience technologies as well as it helps in better utilization and management of various inputs. Farming experience also helps in developing maturity and the ability to face varied situation which ultimately improve the individual. The data in this regard are presented in Table 4, that more than three-fifths (63.75 per cent) of the mango growers were belonged to 'medium' experience category, while 18.33 per cent and 17.91 per cent of the respondents belonged to 'high' and 'low' experience in mango cultivation category, respectively. The average experience in mango cultivation of the respondents was 24 years. The probable reason for the finding might be that, mango was considered as a main traditional fruit crop and it is cultivated generation to generation with this the farming experience could be enhanced by encouraging more of middle aged and young aged respondents in farming activities at the early age.

**Table 4:** Distribution of the mango growers according to their farming experience

| Sl. No. | Category (Years)          | Respondents (N=240) |            |
|---------|---------------------------|---------------------|------------|
|         |                           | Number              | Percentage |
| 1.      | Low (Up to 10)            | 43                  | 17.92      |
| 2.      | Medium (Between 11 to 36) | 153                 | 63.75      |
| 3.      | High (37 and above)       | 44                  | 18.33      |
|         | Total                     | 240                 | 100.00     |
|         | Mean (Years)              | 23.83               |            |
|         | S.D. ( $\sigma$ )         | 13.42               |            |

The similar findings are in line with the findings of Manjunath *et al.* (2019)<sup>[24]</sup> and Nikita Kadaskar (2022)<sup>[17]</sup> and dissimilar with the findings of Verma (2017)<sup>[41]</sup> and Dhenge (2018)<sup>[10]</sup>.

#### 5. Socio-economic status

Socio-economic status means that position of an individual or a family occupies with reference to the prevailing average standard of cultural possession, effective income, material possession and participation in group activity of the community. It is the status and position of the respondents in the society. It is thus an important factor in bringing about change in the outlook of a respondent. The data regarding socio-economic status of the respondents and they were then grouped into five categories as presented in Table 5 observed that less than one-third (30.42 per cent) of the respondents had 'middle' level of socio-economic status, remaining one-fifth (20.00 per cent) and more than one-sixth (18.33 per cent) of the respondents had 'low' and 'lower middle' level of socio-economic status. Only 15.83 per cent and 15.42 per cent of the respondents having 'high' and 'upper middle' level of socio-economic status, respectively.

**Table 5:** Distribution of the mango growers according to their socio-economic status

| Sl. No. | Category (Score)        | Respondents (N=240) |            |
|---------|-------------------------|---------------------|------------|
|         |                         | Number              | Percentage |
| 1       | Low (upto 46)           | 48                  | 20.00      |
| 2       | Lower middle (47 to 52) | 44                  | 18.33      |
| 3       | Middle (53 to 65)       | 73                  | 30.42      |
| 4       | Upper middle (66 to 72) | 37                  | 15.42      |
| 5       | High (73 and above)     | 38                  | 15.83      |
|         | Total                   | 240                 | 100.00     |
|         | Mean                    | 58.80               |            |
|         | S.D. ( $\sigma$ )       | 13.06               |            |

The result concluded that most of the mango growers possessing 'middle' level of socio-economic status. The probable reason for the finding might be that mango cultivation in *Konkan* region is predominantly carried out by 'small' and 'marginal' category of mango growers with limited land holdings, and reliance on agriculture as the primary income source. Mango is a low-input, perennial crop that provides stable but not exceptionally high returns, 'middle to low' level of socio-economic status due to challenges like market fluctuations, middlemen exploitation, pests, and limited access to climate resilience technology. The similar findings are in line with the findings of Archana Thatikonda (2017)<sup>[39]</sup> and dissimilar with the findings Swati Mungase (2019)<sup>[37]</sup>, Alimul Islam *et al.* (2021)<sup>[3]</sup> and Gurjar *et al.* (2023)<sup>[13]</sup>.

#### 6. Use of social media

Use of social media means frequency of the use of different social media platforms in day-to-day life in order to get information about agriculture, weather advisories and updates regarding upcoming weather forecasts. Social media tools are online systems of websites whose main objectives include interacting, socializing, maintaining relationships and accessing proper information. Social media plays crucial role for dissemination of new technology to the

farmers. The data regarding use of social media of the respondents and they were then grouped into three categories as presented in Table 6 indicated that, nearly half (48.33 per cent) of the respondents had 'medium' use of social media. While, remaining 31.25 per cent of the respondents had 'high' and 20.42 per cent of the respondents had 'low' use of social media. The result concluded that most of the mango growers use social media to a 'moderate' extent because of mobile network issues, poor internet connectivity and load shedding/ power cutting. These several problems faced by respondents ultimately use limited concerns and also, they are not received any training on how to use social media to climate resilience.

**Table 6:** Distribution of the mango growers according to their use of social media

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Low (upto 9)        | 49                  | 20.42      |
| 2       | Medium (10 to 13)   | 116                 | 48.33      |
| 3       | High (14 and above) | 75                  | 31.25      |
|         | Total               | 240                 | 100.00     |
|         | Mean                | 11.87               |            |
|         | S.D. ( $\sigma$ )   | 2.62                |            |

The similar findings are in line with the findings of Datir *et al.* (2023) <sup>[9]</sup> and Tejashree Dahiphale (2023) <sup>[8]</sup> and dissimilar with the findings of only Sheikh *et al.* (2023) <sup>[36]</sup>.

## 7. Distance from sea shore

It refers to the actual geographic distance of mango orchards from the Arabian seashore was taken consideration. It was measured in terms of Kilometers (Km). The data regarding distance from sea shore of the respondents and they were then grouped into three categories as presented in Table 7 shown that the nearly three-fifths (58.75 per cent) of mango orchards were found to be 'medium to long (4 to 54 Km) distance from seashore, followed by 22.92 per cent and 18.33 per cent of the mango orchards were established on 'long' and 'near' distance from sea shore, respectively. The result mentioned that the rocky type of soil is generally found on west belt of the Konkan and it found from 'near to medium' long distance from coastal area. The probable reason for the finding might be that west belt of minimum 4 to maximum 50 Km away from seashore provides conducive environment for mango. Therefore, most of the respondents had established their mango orchards in the west belt of the Konkan rather than some of the east part-near to the Sahyadri ranges.

**Table 7:** Distribution of mango growers according to their distance of mango orchards from sea shore (Km)

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Near (up to 3)      | 44                  | 18.33      |
| 2       | Mid-long (4 to 54)  | 141                 | 58.75      |
| 3       | Long (55 and above) | 55                  | 22.92      |
|         | Total               | 240                 | 100.00     |
|         | Mean (km)           | 28.72               |            |
|         | S.D. ( $\sigma$ )   | 26.01               |            |

The similar findings are in line with the findings of Jadhav (2021) <sup>[15]</sup> and dissimilar with the findings of Murthy (2019) <sup>[28]</sup>, Kabir *et al.* (2020) and Raghuwanshi *et al.* (2022) <sup>[33]</sup>.

## 8. Social affiliation

It is defined as extent of a respondents desire to feel a sense of belonging or involvement with in a social group. It is the extent to which a respondent is connected with other people or organizations to influence or to overcome the stressful situations. The data regarding social affiliation of the respondents and they were then grouped into three categories as presented in Table 8 observed that more than two-thirds (67.50 per cent) of the respondents had 'medium' level of social affiliation, followed by 16.67 per cent and 15.83 per cent of respondents had 'high' and 'low' level of social affiliation, respectively. The results indicated that, majority of the respondents were having medium level of social affiliation. The probable reason for the finding might be that due to limited land holding the most of respondents must be maintaining distance from others and scrupulously focusing on operational aspects of the own business and aims at increasing the production and profits. This perhaps resulted in medium followed high social affiliation among the some number of respondents.

**Table 8:** Distribution of mango growers according to their social affiliation

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Low (upto 10)       | 38                  | 15.83      |
| 2       | Medium (11 to 16)   | 162                 | 67.50      |
| 3       | High (17 and above) | 40                  | 16.67      |
|         | Total               | 240                 | 100.00     |
|         | Mean                | 13.55               |            |
|         | S.D. ( $\sigma$ )   | 3.06                |            |

The similar findings are in line with the findings of Swetha Muddam (2013) <sup>[26]</sup> and Archana Thatikonda (2017) <sup>[39]</sup> and dissimilar with the findings of Amanda Baby (2021) <sup>[4]</sup>, Lankati (2021) <sup>[22]</sup> and Yuvaraj and Sailaja (2023) <sup>[45]</sup>.

## 9. Risk taking ability

It is defined as the degree to which the respondent is oriented towards taking risk and facing uncertainty in farming. The data regarding risk taking ability of the respondents and they were then grouped into three categories as presented in Table 9 indicated that less than three-fifths (58.33 per cent) of the respondents had 'medium' level of risk taking ability, followed by 29.17 per cent and 12.50 per cent of the respondents had 'low' and 'high' level of risk taking ability respectively.

**Table 9:** Distribution of the mango growers according to their risk taking ability

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Low (upto 9)        | 70                  | 29.17      |
| 2       | Medium (10 to 13)   | 140                 | 58.33      |
| 3       | High (14 and above) | 30                  | 12.50      |
|         | Total               | 240                 | 100.00     |
|         | Mean                | 10.98               |            |
|         | S.D. ( $\sigma$ )   | 2.31                |            |

The results mentioned that, most of the respondents were having medium level of risk taking ability. The probable reason for the finding might be that, risk taking ability of the respondents was satisfactory. The size of mango orchard coupled with satisfactory educational level, might have favorably changed the attitude of respondents towards new ideas, which involve somewhat risk. The similar findings are in line with the findings of only Chaudhari (2014)<sup>[7]</sup> and dissimilar with the findings of Waghmode (2015)<sup>[42]</sup> and Pabba *et al.* (2021)<sup>[30]</sup>.

## 10. Scientific Orientation

The process of adoption of climate resilience mango production technology requires firm decision by an individual respondent. It is a degree to which individual is oriented to the use of scientific methods in decision making in relation to adoption behaviour plays an important role. It is a main psychological factor in decision making process of the respondents. The data regarding scientific orientation of the respondents and they were then grouped into three categories as presented in Table 10 shown that majority (64.17 per cent) of the respondents were in the 'medium' scientific orientation category, while 21.25 per cent and 14.58 per cent of the respondents were in 'low' and 'high' scientific orientation category respectively.

**Table 10:** Distribution of the mango growers according to their scientific orientation

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Low (upto 10)       | 51                  | 21.25      |
| 2       | Medium (11 to 16)   | 154                 | 64.17      |
| 3       | High (17 and above) | 35                  | 14.58      |
|         | Total               | 240                 | 100        |
|         | Mean                | 13.43               |            |
|         | S.D. ( $\sigma$ )   | 3.11                |            |

The results are indicating that majority of the mango growers had 'medium' level of scientific orientation. In other words it can be said that farmers with medium level of positivism towards the use of new and scientifically proven highly production-oriented technology were more involved in the adoption of mango climate resilience technology. The similar findings are in line with the findings of Manjunath (2015)<sup>[25]</sup>, Abhishek (2017)<sup>[1]</sup>, and Ranoliya *et al.* (2022)<sup>[34]</sup> and dissimilar with the findings of Panda (2017)<sup>[31]</sup> and Raghuvanshi (2018)<sup>[32]</sup>.

## 11. Traditionalism

It is defined as the extent of agreement about relationship that is believed to exist between the cultural beliefs, religious practices and farming. The data regarding traditionalism of the respondents and they were then grouped into three categories as presented in Table 11 mentioned that four-ninths (44.58 per cent) of the respondents had 'medium' level of traditionalism, followed by 34.58 per cent and 20.83 per cent of the respondents had 'high' and 'low' level of traditionalism respectively.

**Table 11:** Distribution of mango growers according to their traditionalism

| Sl. No. | Category (Score)    | Respondents (N=240) |            |
|---------|---------------------|---------------------|------------|
|         |                     | Number              | Percentage |
| 1       | Low (upto 9)        | 50                  | 20.83      |
| 2       | Medium (10 to 15)   | 107                 | 44.58      |
| 3       | High (16 and above) | 83                  | 34.58      |
|         | Total               | 240                 | 100.00     |
|         | Mean                | 11.75               |            |
|         | S.D. ( $\sigma$ )   | 2.73                |            |

The result shows that most of the respondents followed 'medium' level of traditionalism. The probable reason for the finding might be that, most of the respondents belonged to middle aged category (39 to 62 years) having more beliefs towards their culture, traditions, rituals and religion. They believe that being in this position is due to the blessings of the god showered on them and are more superstitious in nature. Hence majority of the respondents are with 'high' followed by 'low' level of traditionalism. The similar findings are in line with the findings of Swathi (2012)<sup>[38]</sup> and dissimilar with the findings of Archana Thatikonda (2017)<sup>[39]</sup>, Nikitha (2017)<sup>[29]</sup> and Vasanthapriya (2020)<sup>[40]</sup>.

## 12. Community infrastructural facilities

Community infrastructural facilities were measured in terms of infrastructure possessed by the community members. Community infrastructural facilities encompass availability of services related to transport, finance, education, health and communication. Though, the community infrastructural facilities available in the village were common to all residing households in the village, but ease of access varies among the respondents. The data regarding community infrastructural facilities of the respondents and they were then grouped into three categories as presented in Table 12 noted that more than half (57.08 per cent) of the respondents had 'medium' level of community infrastructural facilities followed by 22.50 per cent and 20.42 per cent of the respondents had 'high' and 'low' level of community infrastructural facilities respectively.

**Table 12:** Distribution of mango growers according to their community infrastructural facilities

| Sl. No. | Category (Score)   | Respondents (N=240) |            |
|---------|--------------------|---------------------|------------|
|         |                    | Number              | Percentage |
| 1       | Low (upto 4)       | 49                  | 20.42      |
| 2       | Medium (5 to 8)    | 137                 | 57.08      |
| 3       | High (9 and above) | 54                  | 22.50      |
|         | Total              | 240                 | 100.00     |
|         | Mean               | 6.47                |            |
|         | S.D. ( $\sigma$ )  | 2.35                |            |

The result shows that most of the respondents were having medium level of community infrastructural facilities. The probable reason for the finding might be that, in coastal area proper availability of services related to transport, finance, education, health and communication but in case of hilly area poor and non-availability of all weather road, mobile network issue and poor electricity supply are problems faced by the respondents. The similar findings are in line with the findings of Koshti (2013)<sup>[19]</sup> and Singh (2017)<sup>[37]</sup>

and dissimilar with the findings of Yadav (2018) <sup>[43]</sup> and Kanwal (2019) <sup>[18]</sup>.

### 13. Attitude of mango growers towards use of climate resilience management practices

It refers to the degree of positive or negative feeling of mango growers towards climate resilience management practices. Attitude is the positive and negative feeling associated with a psychological object. The data regarding attitude of mango growers towards use of climate resilience management practices of the respondents and they were then grouped into three categories as presented in Table 13 indicated that nearly three-fifths (59.58 per cent) of the respondents had 'moderately favourable' attitude of mango growers towards use of climate resilience management practices, followed by 23.33 per cent of the respondents with 'highly favourable' and only 17.08 per cent per cent had 'less favourable' attitude of mango growers towards use of climate resilience management practices.

**Table 13;** Distribution of the mango growers according to their overall attitude of mango growers towards use of climate resilience management practices

| Sl. No. | Category (Score)                 | Respondents (N=240) |            |
|---------|----------------------------------|---------------------|------------|
|         |                                  | Number              | Percentage |
| 1       | Less favourable (upto 36)        | 41                  | 17.08      |
| 2       | Moderately favourable (37 to 45) | 143                 | 59.58      |
| 3       | Highly Favourable (46 and above) | 56                  | 23.33      |
|         | Total                            | 240                 | 100        |
|         | Mean                             | 41.15               |            |
|         | S.D. ( $\sigma$ )                | 4.97                |            |

It evident from above data sample mentioned that, maximum number of the mango growers had 'medium' level of attitude of mango growers towards use of climate resilience management practices. This might be due to the majority of the respondents had middle aged group category. So, they think positively more as compare to negative thinking. Another reason might be the 'medium to high' level of farming experience of mango growers, affected the attitudes of mango growers towards the use of climate resilience management practices. The similar findings are in line with the findings of Alagu and Bose (2019) <sup>[3]</sup> and Kumar (2021) <sup>[21]</sup> and dissimilar with the findings of Yeragorla and Naberia (2021) <sup>[44]</sup> and Boda (2022) <sup>[6]</sup>.

### Conclusion

The study on mango growers in south *Konkan* region revealed that out of total mango growers majority of the respondents belonged to the 'middle' age group, with 'small' size area under mango cultivation and 'medium' level of mango yield. Majority of the respondents had 'medium' level of farming experience with 'middle' level of socio-economic status. Nearly half of the respondents had 'medium' use of social media. Most of mango orchards were found to be 'medium to long' distance from seashore. More than two-thirds of the respondents had 'medium' level of social affiliation. More than half of the respondents had 'medium' level of risk taking ability and 'medium' scientific orientation category. Nearly half of the respondents had 'medium' level of traditionalism. Most of

the respondents had possessed 'medium' level of community infrastructural facilities (57.08 per cent) and three-fifths per cent of the respondents had 'moderately favourable' attitude of mango growers towards use of climate resilience management practices. The study has brought to light the personal socio-economic and psychological characteristics of mango growers involved in production of Alphonso mango production. On the basis of these, it would be possible for extension students, officers and other agencies to improve the profile of respective categories. Further, they may consider these all characteristics while planning and executing programs for the development of climate resilient production of Alphonso mangoes in the *Konkan* region.

### References

1. Abhishek PS. Effect of climate change on Alphonso mango as perceived by the farmers from south Konkan coastal zone of Maharashtra [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2017.
2. Alagu Niranjana D, Bose DK. Farmer's attitude towards effects of climate change and climate resilient practices in Virudhunagar district of Tamil Nadu. International Archive of Applied Sciences and Technology. 2019;10(3):87-91.
3. Alimul Islam, Bose DK, Alam N. Impact of training program on adoption behavior of mango growers in Faizabad district of Uttar Pradesh. Asian Journal of Agricultural Extension, Economics and Sociology. 2021;39(2):76-81.
4. Amanda B. A study on knowledge and adoption of eco-friendly cultivation practices in cardamom in Idukki district of Kerala [MSc (Agriculture) thesis]. Tirupati, Andhra Pradesh: Sri Venkateswara Agricultural College, Acharya NG Ranga Agricultural University; 2021.
5. Anonymous. Hapis. 2022. Available from: <http://asps.dac.gov.in>
6. Boda MN. A study on climate resilient agricultural technologies in Telangana [PhD (Agriculture) thesis]. Varanasi, Uttar Pradesh: Banaras Hindu University; 2022.
7. Chaudhari P. An attitude of mango growers towards pesticides in Ratnagiri district of Konkan region [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2014.
8. Dahiphale T. Agroforestry systems followed by farmers from Ratnagiri district of the Konkan Region [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2023.
9. Datir PR, Tekale VS, Koshti NR, Bhople PP. Utilization pattern of social media by orange growers. International Journal of Extension Education. 2023;19:139-147.
10. Dhenge SA. Management orientation of commercial mango growers in Konkan region of Maharashtra [PhD (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2018.
11. Farakte A. Influence of social values on adoption of the commercial mango production technology [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr

- Balasaheb Sawant Konkan Krishi Vidyapeeth; 2017.
12. Godse S. Plant protection practices followed by mango growers in Sindhudurg district [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2010.
  13. Gurjar K, Lal B, Choudhary RS, Pramod, Kishnawat LS, Natwadia R. Socio-economic status of onion growers regarding integrated pest management practices. *The Pharma Innovation Journal*. 2023;12(10S):1771-1774.
  14. Holkar SC. Assessment and refinement of mango production technologies generated by the DBSKKV in the south Konkan region of Maharashtra State [PhD (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2021.
  15. Jadhav PB. Socio-economic factors affecting on adoption of climate resilient technologies by the mango growers [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2021.
  16. Kadam JR, Patil VG, Dhenge SA. Profile of the commercial mango growers with reference to commercial mango production technology. *Advances in Life Sciences*. 2016;5(17):6911-6915.
  17. Kadaskar N. Adoption of recommended dose of fertilizers by the mango growers from south Konkan Region [MSc (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2022.
  18. Kanwal S. Marketing behaviour of fruit growers: A study in Kumaon hills of Uttarakhand [MSc (Agriculture) thesis]. Pantnagar, Uttarakhand: GB Pant University of Agriculture and Technology; 2019.
  19. Koshti NR. Farmer perception and adaptations towards climate change and variability in distress prone districts of Vidarbha [PhD (Agriculture) thesis]. Akola, Maharashtra: Dr Panjabrao Deshmukh Krishi Vidyapeeth; 2013.
  20. Kota SK. Knowledge and adoption of export oriented practices followed by the mango growers [MSc (Agriculture) thesis]. Rahuri, Maharashtra: Mahatma Phule Krishi Vidyapeeth; 2011.
  21. Kumar A. Adoption of improved mango cultivation practices by the farmers in Lucknow district of Uttar Pradesh [MSc (Agriculture) thesis]. Kumarganj, Ayodhya, Uttar Pradesh: Acharya Narendra Deva University of Agriculture and Technology; 2021.
  22. Lankati M. Perception and adaptability of the cotton growers towards climate variability in Telangana State [PhD (Agriculture) thesis]. Parbhani, Maharashtra: Vasant Rao Naik Marathwada Krishi Vidyapeeth; 2021.
  23. Maheshkumar KC. An analysis of mango production and its post-harvest management practices among mango growers in Srinivasapura taluk of Kolar district, Karnataka [MSc (Agriculture) thesis]. Raichur, Karnataka: University of Agricultural Sciences; 2020.
  24. Manjunath, Amaresh Kumar K, Shashikala Bai D. Profile analysis of mango growers of Karnataka. *Journal of Pharmacognosy and Phytochemistry*. 2019;8(2):904-908.
  25. Manjunath. Study on entrepreneurial behaviour of mango growers of Karnataka [MSc (Agriculture) thesis]. Shivamogga, Karnataka: University of Agricultural and Horticultural Sciences; 2015.
  26. Muddam S. A study on empowerment of women entrepreneurs in Medak district [MSc (Agriculture) thesis]. Hyderabad, Andhra Pradesh: Acharya NG Ranga Agricultural University; 2013.
  27. Mungase SS. Socio-economic status of pomegranate growers [MSc (Agriculture) thesis]. Rahuri, Maharashtra: Mahatma Phule Krishi Vidyapeeth; 2019.
  28. Murthy MA. Climate resilience management level among farmers in agriculture in eastern dry zone of Karnataka [PhD (Agriculture) thesis]. Bengaluru, Karnataka: University of Agricultural Sciences; 2019.
  29. Nikitha P. A study on learning styles and suitability of extension teaching methods as perceived by farmers of Telangana State [MSc (Agriculture) thesis]. Hyderabad, Telangana: Professor Jayashankar Telangana State Agricultural University; 2017.
  30. Pabba AS, Naik RV, Rani SV. Adoption of climate resilient agricultural technologies by farmers in Nalgonda district of Telangana State. *Indian Journal of Extension Education*. 2022;58(2):30-34.
  31. Panda A. Awareness and constraints in adoption of climate smart agricultural technologies among rice-pulse growing farmers in Puri district of Odisha [MSc (Agriculture) thesis]. Bengaluru, Karnataka: University of Agricultural Sciences; 2017.
  32. Raghuvanshi R. Assessing climate change vulnerability of farmers in Himalayan region of Uttarakhand [PhD (Agriculture) thesis]. Pantnagar, Uttarakhand: GB Pant University of Agriculture and Technology; 2018.
  33. Raghuvanshi K, Jaiswal DK, Dubey MK, Naberia S. A study on profile characteristics of farmers on knowledge, attitude and accessibility towards privatization of agricultural extension services. *The Pharma Innovation Journal*. 2022;11(3S):1537-1540.
  34. Ranoliya PD, Chuhan NM, Chaudhary KL. Awareness level of value added techniques of mango growers. *Gujarat Journal of Extension Education*. 2022;34(1):114-116.
  35. Sajeev MV, Saroj PL, Lakshmisha R. Socio-economic correlates and determinants of cashew productivity: An analysis of Dakshina Kannada district. *Journal of Plantation Crops*. 2014;42(2):215-222.
  36. Sheikh MM, Riar TS, Walia SS, Garg L. Integrated Farming Systems (IFS): A comparative status in Punjab, India and northern part of Bangladesh. *Journal of Community Mobilization and Sustainable Development*. 2023;18(1):19-26.
  37. Singh M, Mankar DM. Adoption of Paclobutrazol technology by mango growers of Ratnagiri district of Maharashtra State. *Asian Journal of Extension Education*. 2007;26(1-2):64-71.
  38. Swathi G. A study on agro-biodiversity in tribal region of Visakhapatnam district of Andhra Pradesh [MSc (Agriculture) thesis]. Hyderabad, Andhra Pradesh: Acharya NG Ranga Agricultural University; 2012.
  39. Thatikonda A. A study on adaptive capacity and technologies adopted by farmers for climate resilient agriculture in drought prone area [PhD (Agriculture) thesis]. Hyderabad, Telangana: Professor Jayashankar Telangana State Agricultural University; 2017.

40. Vasanthapriya S. An analytical study on off-seasonal migration of hilly tribes in Tiruvannamalai district [PhD (Agriculture) thesis]. Coimbatore, Tamil Nadu: Tamil Nadu Agricultural University; 2020.
41. Verma SK. A study on awareness and adoption strategies of climate smart agriculture in Sultanpur district of Uttar Pradesh [PhD (Agriculture) thesis]. Varanasi, Uttar Pradesh: Banaras Hindu University; 2017.
42. Waghmode YJ. Attitude of the mango growers towards GLOBAL GAP certification in Konkan region [PhD (Agriculture) thesis]. Dapoli, Maharashtra: Dr Balasaheb Sawant Konkan Krishi Vidyapeeth; 2015.
43. Yadav S. A study on managerial skills of extension personnel of department of agriculture in Telangana State [MSc (Agriculture) thesis]. Hyderabad, Telangana: Professor Jayashankar Telangana State Agricultural University; 2018.
44. Yeragorla VH, Naberia S. Farmers' attitude towards the climate-resilient technologies of NICRA project in Anantapur district. *International Journal of Environment and Climate Change*. 2021;11(11):274-278.
45. Yuvaraj C, Sailaja N. Effectiveness of recommended climate smart agriculture (CSA) practices in Telangana State. *Journal of Emerging Technologies and Innovative Research*. 2023;10(3):472-479.