

Accessibility of Orchard of the Commercial Mango Growers for Scientific Management of Mango Orchard

Sevak A. Dhenge¹, Jagdish R. Kadam¹, M. C. Ahire² and R. G. Mardane¹

Dept. of Agricultural Extn. and Communication, Dr. B. S. Konkan Krishi Vidyapeeth, Dapoli - 412 715 (India)

Corresponding authors email : sevak1989@rediffmail.com

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Abstract

The present investigation was carried out to analyze the Accessibility of orchard of the commercial mango growers for scientifically management of mango orchard by interviewing 240 commercial mango orchard growers have been cultivated their orchard for market purpose. This investigation conducted in Ratnagiri and Sindhudurg districts of Konkan region of Maharashtra state. Purposive sampling methods was study for this investigation. Total six tahsils were selected, eight villages were selected on the basis of large of commercial mango growers. From 48 villages 240 respondents were selected on the basis they have possess minimum 2 ha. of mango orchard on marketing purpose. Finding of this investigation, more than one third of the commercial mango growers were having their orchards in 'two' places. One fourth of the commercial mango growers had their mango orchard '7.01 to 9.00 km' away from main road, one fourth of the commercial mango growers had their mango orchard 6.01 to 9.00 km away from their home one fourth (27.91%) of the commercial mango growers were having their orchards in 'Hilly + plain + undulating' type of land. One sixth (30.41%) of the commercial mango growers were having 'pathway + rough + tar' type of road to reach the orchard. Majority of respondents fell under fair overall accessibility categories.

Key words : Accessibility, commercial mango growers, scientifically management.

Mango crop considered as a "King of fruits in India. In the global scenario, India is the top producer of mangoes among the fruits crops.. India has the richest collection of mango cultivars. All the enterprises are basically interested in increasing the productivity. Agriculture being an enterprise is not an exception to this. The farmers as the manager of the enterprise are expected to bring about maximum profit with available resources. Irrespective of the economic, social, cultural, physical and technological environment, the farmers manage a production system to get a return from it, consciously or unconsciously.

Technological explosion in India is taking place at a faster rate in the area of agriculture and allied fields. These vocations are looked as

industry than merely as livelihood, partly because of increasing pressure on various production inputs. The cost of these inputs is increasing at an alarming rate in the past one decade and this has compelled the farmers to go in for commercialization of agriculture. Many resourceful farmers have switched over to commercial farming but for the less resourceful farmers, although there is a prepared mind to go in for high value crops but the situation is not permitting nevertheless, given the opportunity. It is natural that majority of farmers are likely to go in for more profitable crops. The policy of Government particularly liberalization and globalization of agriculture has provided a favourable climate for the enterprising farmers, particularly commercial farming enterprises which are fast emerging. Mango production is the promising and important commercial enterprise as compare to other areas of fruits crops. Today the mango production has attained

1. Department of Agricultural Extension and Communication, DBSKKV, Dapoli and 2. Department of Agricultural Extension and Communication, MPKV, Rahuri

the status of industry and it has emerged as the major venture on the world scenario. Many people believe that there is money in mango production and it is getting a boost to enter world market, thus globalizing agriculture agriculture/horticulture. Many educated entrepreneurs are engaged in high-tech mango production with the intention to enter export market and to commercialize mango production trade. Many kinds of fruits crops grown for domestic and international trade in both developed and developing countries of the world. Today, Mango production is recognized as lucrative profession with a much higher potential returns per unit area. Accessibility is very important role the mango production. More accessible mango orchard should have better inputs management, timely harvesting, controlling insect/pest and disease, transportation and marketing of produce as compare to less mango orchard. Looking to the importance role of accessibility in commercial mango production an attempt has to made to investigate accessibility of orchard of the commercial mango growers for scientifically management of mango orchard

Materials and Methods

The present study was conducted in Konkan region of Maharashtra state. Purposive sampling methods was study for this investigation. Ratnagiri and Sindhudurg districts were selected on the basis highest area under commercial mango cultivation. Each district three tahsils were selected, thus total six tahsils were selected on the basis of maximum number of commercial mango growers. Each Tahsil eight villages were selected on the basis of large of commercial mango growers. Thus total 48 villages were selected based on the maximum area under commercial mango cultivation. Five commercial mango growers from each selected village were selected randomly. Thus, total 240 respondents were selected. Responses were collected from

the commercial mango growers by using survey method. The primary data were obtained through personal interview and observation using critically well designed tested questionnaire from the experts then calculated it with scoring. The secondary data and other relevant information were obtained through documentary study such as reports, research papers, reference books, bulletins, journals and periodicals originated from several institutions and literatures. Frequency, percentage, mean, standard deviation statistical were used for this study.

Results and Discussions

Fragmentation of mango orchards :

The data presented in Table 1 revealed that, more than one third (47.92%) of the commercial mango growers were having their orchards at 'two' places. One fourth (25.00%) of them were having their orchard at 'one' place. Less than one sixth (12.08%) of them were having their orchard at 'three' places. Only 8.75 per cent and 6.25 per cent respondents were having their orchards located at 'four' and 'five' spots, respectively. The scattered mango orchards were observed obviously due to fragmented land holding in Konkan region.

Distance of the orchard from main road :

It quick look at Table 2 revealed that, more than one fourth (38.34%) of the

Table 1. Distribution of the respondents according to their number of mango orchards

No. of plots	Respondents (N=240)	
	Number	Percentage
Five	15	6.25
Four	21	8.75
Three	29	12.08
Two	115	47.92
One	60	25.00
Total	240	100.00

commercial mango growers had their mango orchard '7.01 to 9.00 km' away from main road. Nearly equal number (20.84% and 20.00%) of the respondents had their mango orchard '3.01 to 5.00 km' and '5.01 to 7.00 km' away from the main road, respectively. Nearly one sixth (14.58%) of the respondents had their mango orchard '9.01 and above km' away from the main road. Only 4.58 per cent and 1.66 per cent of the respondents had had their mango orchard '1.01 to 3.00 km' and 'upto 1 km' away from the main road, respectively. This clearly indicates that respondents had developed their mango

Table 2. Distribution of the respondents according to the distance of the mango orchards from main road

Average distance from main road (km.)	Respondents (N=240)	
	Number	Percentage
Upto 1	04	1.66
1.01 to 3.00	11	4.58
3.01 to 5.00	50	20.84
5.01 to 7.00	48	20.00
7.01 to 9.00	92	38.34
9.01 and above	35	14.58
Total	240	100.00

orchards at interior sites and average age of the orchard were 34 years due to the non availability of infrastructural facilities during planting time hence it is a probable reasons behind this.

Distance of the orchard from home : It is apparent from Table 3 that, more than one fourth (29.58%) of the commercial mango growers had their mango orchard 6.01 to 9.00 km away from their home. Little more than one fourth (26.25%) of the respondents had their orchard 'Upto 1.00 km' away from their home. One sixth (16.26%) of the respondents had their orchard '12.01 and above km' away from their home. Nearly one seventh (12.08%) of the respondents had their orchard in between '1.01

Table 3. Distribution of the respondents according to the distance of the mango orchards from their home

Average distance from home (km.)	Respondents (N=240)	
	Number	Percentage
Upto 1.00	63	26.25
1.01 to 3.00	29	12.08
3.01 to 6.00	23	9.58
6.01 to 9.00	71	29.58
9.01 to 12.00	15	6.25
12.01 and above	39	16.26
Total	240	100.00

to 3.00 km' from their home. Only 9.58 per cent and 6.25 per cent of the respondents had their orchard in between '3.01 to 6.00 km' and '9.01 to 12.00 km' from their home, respectively. Mango is grown mostly on varkas land at the foothills in the Konkan region. Due to this reason, majority of the mango orchards might have been observed at distant location from the place of residence of the mango growers.

Type of land : It can be observed from Table 4 that, more than one forth (27.91%) of the commercial mango growers were having their orchards in 'Hilly + plain + undulating' type of land. One fifth (20.00%) of the respondents were having their orchards in 'Plain +

Table 4. Distribution of the orchards and respondents according to the type of land

Type of land	Respondents (N=240)	
	Number	Percentage
Hilly	16	6.67
Plain	34	14.17
Undulating	19	7.92
Hilly + plain	24	10.00
Hilly + undulating	32	13.33
Plain + undulating	48	20.00
Hilly + plain + undulating	67	27.91
Total	240	100.00

undulating' type of land. One seventh (14.17%) of the respondents were having their orchards in 'Plain' type of land. Nearly one seventh (13.33 per cent) of the respondents were having their orchards in 'Hilly + undulating' type of land. One tenth (10.00%) of the respondents were having their orchards in 'Hilly + plain' type of land. Only 7.92 per cent and 6.67 per cent of the respondents were having their orchards in 'Undulating' and 'Hilly' type of land, respectively. It is observed that the productivity of the Alphonso mango grown on the hill slopes is higher than that of the plain lands. The geography of the Konkan region provides such situations. These might be the reasons behind establishment of mango orchards on hilly, plain and undulating land.

Type of road : It is clear from Table 5 that, little less than one sixth (30.41 per cent) of the commercial mango growers were having 'pathway + rough + tar' type of road to reach the orchard. Nearly one fifth (19.17%) of the respondents were having 'rough + tar' type of road to reach the orchard, followed by 'pathway + rough' (15.00%), 'rough' (11.25%), 'tar' (10.00%), 'pathway + tar' (8.75 per cent) and 'pathway' (5.42%). Considering average of plantation there was lack of transport and communication infrastructure in Konkan region. Further, mango plantations are located mostly at distant and remote places, which are not easily approachable. Due to this, the mango growers are compelled to use the available pathways and rough roads.

Overall accessibility of orchard : The information pertaining to overall accessibility of the respondents to orchard was presented in Table 6 and diagrammatically depicted in Fig. 1.

A perusal of data displayed in Table 6 clearly indicated that, majority (84.58%) of the respondents were in 'fair' category of overall accessibility of orchard, while 9.17 per

Table 5. Distribution of the orchards and respondents according to the type of road to reach the orchard

Type of road	Respondents (N=240)	
	Number	Percentage
Pathway	13	5.42
Rough	27	11.25
Tar	24	10.00
Pathway + rough	36	15.00
Pathway + tar	21	8.75
Rough + tar	46	19.17
Pathway + rough + tar	73	30.41
Total	240	100.00

Table 6. Distribution of respondents according to their overall accessibility of orchard

Accessibility of Orchards (Score)	Respondents (N=240)	
	Number	Percentage
Poor (Upto 11)	22	9.17
Fair (12 to 21)	203	84.58
Good (22 and above)	15	6.25
Total	240	100.00
Mean = 16		
S.D. = 5		

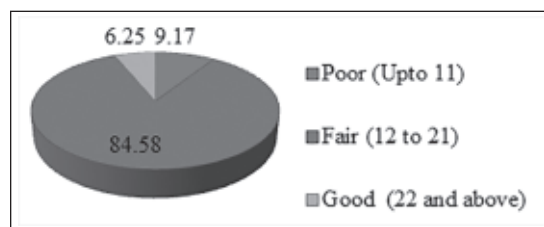


Fig. 1. Distribution of respondents according to their overall accessibility of orchard

cent and 6.25 per cent were in 'poor' and 'good' category, respectively. The average accessibility of orchard of the respondents was 16. From the above findings, it can be inferred that majority of the commercial mango growers had medium accessibility to their mango

orchards. This finding is in covenant with the finding of reported by Kadam (2006).

Conclusion

It may be concluded that the majority of respondents fell under fair overall accessibility categories. More than one third of the commercial mango growers were having their orchards at 'two' places. One fourth of the commercial mango growers had their mango orchard '7.01 to 9.00 km' away from main road, one fourth of the commercial mango growers had their mango orchard 6.01 to 9.00 km away from their home one fourth (27.91 per cent) of the commercial mango growers were having their orchards in 'Hilly + plain + undulating' type of land. One sixth (30.41 per cent) of the commercial mango growers were having 'pathway + rough + tar' type of road to reach the orchard. By less accessible mango orchards is more care as compare to larger. It was also suggested that farmers should also be taken into consideration while planting mango orchard on commercial basis. Training should also be imparted to farmers for pro and cons of the accessibility.

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