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# Constraints faced by the mango growers in adoption of selected mango production technologies

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#### Abstract

The present study was conducted in Ratnagiri and Sindhudurg districts of Konkan region of Maharashtra state with the major objective to study the constraints faced by the mango growers in adoption of selected mango production technologies developed by DBSKKV. The sample was comprised of randomly selected 240 mango growers from 48 villages in six tahsils from two districts, which was personally interviewed with the help of specially designed interview schedule. The statistical tools like frequency and percentage were used for analysis. The constraints analysis revealed that majority of the mango growers had faced the constraints like, dependency on nature, non-availability of skilled labour during peak period, difficulty in getting inputs in time, no choice for selection of input, high fluctuations in the market price, market price depend on broker and difficulty in get branded insecticides and pesticides.

Keywords: Constraint, adoption and mango production technologies

#### Introduction

Mango (*Mangifera indica* L.) is one of the most ancient fruits of India and deserves to be the national fruit. It is the favourite fruit of almost every Indian and has been repeatedly acclaimed as the "King of Fruits". Mango is believed to be originated to South East Asia, Indo-Burma region, in foot hills of the Himalayas (Mukherjee, 1951) [9]. Due to its good qualities and high medicinal values, it is enjoyed by masses and classes from each corner of the world. It has an intimate association with cultural, religious, aesthetic and economical life of Indians since time immemorial. It occupies the same position in India as is occupied by apple in temperate and grapes in sub-tropical areas. Its common name 'Aam' means common. Mango is grown in about 87 countries but it is greatly valued in India. In India, about 1,500 varieties of mangos are grown, including 1000 commercial varieties. Among these, Dashehari, Langra and Chausa are the popular varieties of the northern regions of the country, while Alphanso and Pairi are popular in Deccan Plateau and Western regions. Totapuri, Neelam and Benishan are the important varieties of South India (Ravikumar *et al.* 2013).

In Maharashtra, mango is occupying an area of 157131 ha with annual production of 564240 M.T. with productivity of 3.59 M.T./ha (Source: Directorate of Horticulture, Govt. of Maharashtra 2018) [1]. Ratnagiri, Sindhudurg, Thane, Raigad, Mumbai, Aurangabad, Beed, Hingoli, Jalna, Latur, Nanded, Osmanabad, Parbhani these districts are major mango producing belt of Maharashtra. Alphanso, Kesar, Ratna, Mankurad, Pairi and Sindhu are the major cultivars of Maharashtra.

Konkan region on the west coast of Maharashtra is one of the largest mango growing belt which contributes nearly 10 per cent of total mango area in the country, occupying 1,02,820.00 ha area under mango cultivation, out of which almost 90 per cent area is covered by the single cultivar only i.e. Alphonso, which is locally called as 'Hapus'. This variety has major export share to the tune of over 35 per cent of total mango export.

In *Konkan*, 1,02,820.00 ha area is under mango cultivation having annual production of 3,08,480 M.T. The productivity of mango in Konkan is about 2.83 M.T. /ha, which is three to four times less than the average productivity of the country (Source: Directorate of Horticulture, Govt. of Maharashtra 2018.) [1]. The warm and humid climate throughout the year and rain free season from November to May prevalent in Konkan region is ideal for mango in general and Alphonso in particular (Pawar, 2013) [10]. Quality Alphonso fruits are produced in the *Konkan* region, the best quality however comes from the southern districts of Ratnagiri and south-northern parts of Sindhudurg, including regions around Devgad Taluka. Ratnagiri, Sindhudurg, Raigad, Palghar and Thane are the major Alphonso producing districts of Konkan region of Maharashtra states.

Due to diverse soil and climatic conditions, availability of huge cultivable waste land and number of schemes initiated by the Government and Semi-Government organizations as well as, extension efforts made by the University and State Department of Agriculture, the area under mango crop is increasing remarkably. A considerable portion (25 -30 %) of the total produce is lost during harvesting stage, packaging, transportation, storage and marketing due to faulty postharvest practices. Time of harvesting, method of harvesting, packaging, grading, use of chemical substances for controlling fungal and bacterial diseases during storage etc. are very important in commercial mango production technology.

Keeping above fact in view, the present study was designed to analyse assessment and refinement of mango production technologies generated by the DBSKKV in the South *Konkan* Region of Maharashtra State with the following specific objective

 To study the constraints faced by the mango growers in adoption of selected mango production technologies developed by DBSKKV.

#### Methodology

The study was conducted in South Konkan region of Maharashtra state i.e. Sindhudurg and Ratnagiri district. The ex-post-facto research design was adopted for the present study. A multistage sampling technique was used for the selection of districts, tahsils and villages. The tahsils having maximum number of mango growers were selected.

Accordingly, the tahsils namely Ratnagiri, Lanja and Rajapur from Ratnagiri district and Vengurla, Malvan and Deogad from Sindhudurg district were selected. Total numbers of 48 villages were selected for the study. The farmers having minimum 40 mango trees on commercial basis were considered respondents for this study. Five respondents from each selected village were selected randomly. Thus, total 240 respondents were selected for this study. The statistical tools like frequency and percentage were used for analysis.

#### **Results and Discussion**

The findings of the present study as well as relevant the discussion has been summarized under the following heads:

# Constraints faced by the mango growers in adoption of selected mango production technologies developed by DBSKKV

The constraints were kept open ended. The constraints were divided into four categories i.e. constraint pertaining planning, constraints pertaining production, constraint pertaining marketing constraint pertaining agrochemicals. The responses were noted in the schedule itself. The frequency for each constraint was worked out and converted in to percentage elucidated in Table 1.

### **Constraints pertaining planning**

It appears from the Table 1 that cent per cent of the mango growers have faced the constraint of 'dependency on nature'

Sl.	Constraints	Respondents (N=240)	
No.	Constraints	Number	Percentage
A	Constraints pertaining planning		
1.	Dependency on nature	240	100.00
В	Constraints pertaining production		
1	Non availability of skilled labour during peak period	228	95.00
2	Difficulty in getting inputs in time	215	89.58
3	No choice for selection of inputs	195	81.25
С	Constraints pertaining marketing		
1	High fluctuations in the market price	240	100.00
2	Market price depend on brokers	240	100.00
D	Constraints pertaining agrochemicals		
1	Difficulty to getting branded insecticide and pesticides	193	80.41

Table 1: Distribution of the respondents according to their constraints faced by the mango growers

### **Constraints pertaining production**

The result presented in the Table 1 showed that the constraints namely, non-availability of skilled labour during peak period was faced by the 95.00 per cent of the mango growers, followed by 'difficulty in getting inputs in time' (89.58 per cent), and 'no choice for selection of inputs' (81.25 per cent)

## Constraints pertaining marketing

It could be seen from the Table 1 that the major important constraints faced by the all the mango growers in marketing were 'high fluctuations in the market price' and 'market price depend on brokers'

#### **Constraints pertaining agrochemicals**

The result presented in the Table 1 showed that the constraints namely, 'difficulty to getting branded insecticide and pesticides' was faced by the 81.41 per cent of the mango growers.

The results of the above discussion led to the conclude that mango growers faced different problems while taking mango production. Concern agencies should look after these constraints for solution so that mango growers were get rid of these constraints.

### Conclusion

The mango growers had faced some constraints in adoption of mango production technologies recommended by the university. Dependency on nature, non-availability of skilled labour during peak period and high fluctuations in the market price were the major constraints. The concerned agencies should think of the strategy in the light of these constraints for increasing extent of adoption of mango production technologies by the growers.

### References

- 1. Anonymous. Directorate of Horticulture, Govt. of Maharashtra, 2018a.
- Dhenge SA. Management orientation of commercial mango growers in Konkan region of Maharashtra. Ph.D. (Agri) Thesis, Dr. Balasaheb Sawant Konkan Krishi

- Vidyapeeth, Dapoli, Ratnagiri, Maharashtra, 2018.
- Farakte Aruna. Study on influence of social values on adoption of the commercial mango production technology. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri, Maharashtra, 2017.
- 4. Jawale SV, Ghulghule JN. Constraints and suggestions of Kesar mango production in export zone of Marathwada region. International Journal of Commerce, Business and Management. 2015;4(5):713-721.
- 5. Jaypatre GS, Patel KS, Awaghad PR., Price spread, marketing efficiency and constraint in marketing of mango in South Gujarat region. International Research Journal of Agricultural Economics and Statistics. 2011;2(1):75-78.
- 6. Katkar VJ. A study of adoption of mango production technology in Akole tahsil of Ahmednagar district. M.Sc. (Agri.) Thesis, MPKV, Rahuri (M.S.), 2001.
- Leonardo RD, Quintos N. Adoption of mango production, technologies in Pangasinan, 2006. (www. neda.gov.ph/com.)
- 8. Mahadik RP, Malshe KV. Market oriented constraints in adoption of eco-friendly management practices of mango. Journal of Communication Studies. 2017;XXXV:54-59.
- Mukherjee SK. The origin of mango. Indian Journal of Genetics. 1951;2:49.
- Pawar AM. Knowledge and use of eco-friendly management practices by mango growers in Konkan region. Ph.D. Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri, Maharashtra, 2013.
- 11. Tandel BM, Patil SJ, Patel SD. Constraints faced by mango growers and nursery man regarding mango malformation in Navsari district, International Journal of Chemical Studies. 2017;5(4):1480-148.