AN EMPIRICAL STUDY ON THE PROBLEMS OF MANGO CULTIVATION AND MARKETING IN TAMILNADU STATE

R.Venkatesh Kumar,
Ph.D Research Scholar, Sri Vidya Mandir Arts and Science College, Uthangari
aacvenkatesh@gmail.com

Dr.A.Subangini Devi,
Assistant Professor, Department of Management studies, Sri Vidya Mandir Arts and Science College, Uthangari

Dr.R.Murugesan,
Head-Department of Management studies, Sri Vidya Mandir Arts and Science College, Uthangari

Abstract

India is familiar as an agrarian economy in the world. The country deserves a mention in the world for its vivid variety of fruits, vegetables and flowers. The country depends to a great extent on this sector for GDP, employment, and foreign exports. A few fruits like Mango deserve a special mention as India stands first in the production of mangoes in the world. Though India is successfully claiming the tag of being the first in production but the overall productivity has taken a down turn over the period of time. From the details of the data provided by a study taken up by the use of the secondary data drawn from government in respect of various criteria's like area, manufacturing and productivity and export of mango. The results were noticed that India was the highest in production and foreign trade of mangoes among progressing economies. Tamil Nadu is determined as the sovereign in fruit cultivation followed by Maharashtra. The present study makes an attempt to address the issues encountered by the farmers for marketing mangoes in the country with reference to Tamil Nadu.

Keywords: Mango, Productivity, Farmers, Marketing.
1. Introduction

“The roots of education are bitter, but the fruit is sweet”.

The tag of being an agrarian economy especially for a developing nation like India matters a lot as it’s the major contributor to GDP as well the primary source of employment for many. Henceforth proper attention and due care is imparted on this particular sector of the nation. The horticulture field has in the recent era, evinced itself as the medium to attain boom in the sector to develop yield, supply producing job opportunities, enhancing monetary wellbeing of agricultural network also the businessmen engaged in irrigation and farming sectors accordingly improving foreign trade also competent enough for generating a good-sized foreign exchange.

Fruits, greens and plantation plants prove to be the essential issue of horticultural plants. Besides these, vegetation and nuts also are critical. Agricultural produce is presumed as safeguarding eatery as it supports in broadening the self-protection technique in human beings. Amongst all fruits, mango has an outstanding location in phrases of vicinity, production and importance. Mango is known as “The King of fruits” desired by almost all sections of people for its delicious flavor, taste, attractive color, nutritive price and advanced fragrance. India leads the world in mango production.

It’s by far the main fruit crop of India cultivated in approximately 1.28 Million hectares, with overall production about 10.81 tones, with an average productivity of 8.44 tons per hectare. The absolutely ripened fruit isn't simply considered scrumptious desk fruit however extensively utilized inside the arrangements like jam, jelly, squash, syrups etc. The botanical name for the mango is Mangifera Indica L. The mango belongs to the dicotyledonous family, Anacardiaceae, which includes 64 genera, on the whole of timber or shrubs. I The phrase mangifera is derived from the phrase ‘Mankay’ (The Tamil call for mango) and Fera (meaning “to bear”). The word Indica stands for the Call of Indian species.

Mango is the primitive crop of the country. It was installed in India during the pre-Christian period. Its cultivation in India is envisioned at extra than 4,000 to 6,000 years old. In the ancient epics like the Ramayana and the Mahabharata within the forests and gardens, the mango has been noticed. It's been held in high esteem amongst the Hindus. Its blossoms are used for the worship of the goddess Saraswathi and, garlands of mango leaves are strung over doors on auspicious occasions. The mango has exercised amazing spell on the Indian thoughts through the ages and the tree has been defined as “kalpavriksha” or the wish granting tree. Its common vernacular call “Aam” refers ‘the usual’ it isn't just commonplace all through India; however is also the fruit of the not common people. Its name “Amra” utilized in Sanskrit literature has been used as a suffix to mark difference and adoration for humans and things.

With the help of government support Indian horticulture and climatic situations of agro has achieved sustainable support. Differed soil culture and climatic conditions support the cultivation and growth of the varied varieties of Mango in the country. Indian horticulture
system only support for the crowd those who are belongs to horticulture but it doesn’t support for nutritional support for the improving the productivity (Singh 2010).

The Indian fruit processing sector is by default a sector with enormous scope and opportunities. The authorities of India have taken plenty of tasks and policy choices for commercializing agriculture with precise importance on high tech horticulture and developing the fruit processing, protection and packaging sectors to its complete capacity. The fruit processing zone is unexpectedly being transformed into an excessive quantity profit making industry. A unique shift is observed in the pattern of consumption and preferences of the customers for processed, prepared and packaged fruit products in not just the developed economies but also the developing economies like India. This shift and increased fruit consumption over the time period has increased the need to explore and evaluate the problems and prospects confronting the production and marketing of Mango cultivation in India with special reference to Tamil Nadu.

2. Objectives
1. To study the viability and benefits of Mango cultivation in Tamil Nadu.
2. To evaluate the problems and prospects encountered by mango growers in production and advertising.
3. Provide the necessary suggestions to improve the marketing of Mango in Tamil Nadu.
4. To know government help provided to develop the Mango cultivation in the country.

3. Review of Literature
Fruits and veggies section proved to be a motivating source for deriving wholesome boom pattern in the agriculture sector of India. Provided growing proportion of costlier utilities within general price of the agricultural produce and their increase ability. In Tamil Nadu, Mango is cultivated in about 125104 ha with production of approximately 537780 heaps with average productiveness of 4.30t/ha. Predominant mango growing districts are Dharmapuri, Krishnagiri, Vellore, Dindigul, Tiruvallur and Theni.

‘Mango’ popularly known as the king of fruits; is thought to have its starting place in South-East Asia mostly in northeast India, north western Myanmar, and Bangladesh, from these noted gene centers the mango later spread all-around the Asia and the world through themselves method certainly and with the help of people. Taxonomic and molecular evidences additionally assist an evolution of mango within a bigger location together with northwestern Myanmar, Bangladesh, and northeastern India. Mango is grown in more than

---

90 nations of the sector in different agro-climatic conditions and is the maximum critical commercially grown fruit crop in India.

Subrahmanyam and Mruthyunjaya (1978) have rightly found that the advertising and advertising of harvest & greens linked through completely different section of situations that directs the undertaking hard & rather volatile. First off, the nature of the produce handled itself, due to excessive perish capacity it's hard to generate time and space benefits. The other thing in the advertising of fruits and veggies are the existing limited number of investors inside enterprise. Those elements have a lot of have an effect on the contemporary advertising and marketing machine of different agriculture commodities.

Rajagopal (2008) through his research on the advertising of seasonal fruits end result stated that a manufacturers role in the ultimate pricing was noticed greatest in apple proceeded by mango and guava. Price of advertising and promotion was higher for guava next for mango & apple. It was found that apple production was feasible to small farmers as well. He also suggested that sales and income via cooperatives need to be encouraged to offer greater percentage to manufacturer’s inside very last fee of the crop.

Vadivelu et al (2013) in their integrated work exists no question that in any promotional efforts there exists a purpose aiming at income included also on equal tenure advertising and promotion primarily dependent on sure prices, concepts and theories which includes providing desirable and truthful rates to the farmers work effectively till the end. Arranging vital strategies together with the greater fee research strategy thru regulated marketplace gadget will help streamline and improve agricultural advertising. Advertising of agriculture may be made adequate if its miles appeared through the gathered efforts through different sectors through the way of dealing with the agriculturist, intermediaries, scientists and management. It's time that we introduced our great techniques in agricultural advertising with progressive and innovative methods to carry end result of labor to the farmers.

Gummagolmath (2000) has recognized the issues in manufacturing and marketing of mango. The survey disclosed that the hassle of opportunity incomes become expressed through cent percent growers in every class of agronomist. Trouble of unattainable manpower became ad dressed by using more of the average farms (66.67%) followed through minor farms (40%) and huge farms (33.37%). Out of advertising and promotional issues, the issue of rate variations turned out to be 44.44 percent of minor, 36.8 % of average and 50 % of large orchardists and different issues had been excessive fee and prevalence of limited business among intermediaries.

---


Kumar (2003) discovered that “law of the mango market may be viable in which all advertising and advertising strategies may be regulated and each individual participated in advertising mango attain their required percentage.

4. Problems faced by Mango Cultivators
   1. Several intermediaries in the marketing process of mangoes hampers the smooth sale of mangoes.
   2. Limited quality infrastructure like storage, packaging, transportation creates problem in the marketing process.
   3. Less or no transparency in prices.
   4. The nature of mangoes being seasonal also impacts the sales and marketing of the fruit.
   5. The perishable nature of mangoes and the loss incurred because of that poses problem of gap in the demand and supply situation.
   7. Lead time from production to consumption.
   8. Lack of proper knowledge on the latest technologies for the marketing of mangoes.

5. Research Methodology
   For the purpose of the article, the researcher targeted the farmers especially Mango cultivators of Tamilnadu were selected on a stratified random basis. Sample size calculator was used for finalizing the sample size. 778 sample sizes were determined at the 0.035 margin of error and 95% confidence level. Structured Questionnaire was used for the gathering the responses from the mango cultivators.

5.1. Analysis and Interpretation
   Associating with the leading retailers shows connection among independent variables and dependent variables. From the diagram it is revealed that, the independent variables Participation of intermediaries, less variety, Absenteeism, Loss of farming knowledge And Fewer suppliers for the marketing are mediated with the help of Associating with the leading retailers. Associating with the leading retailers gives the effect that Modern technological knowhow, improved cultivation and income, Export potentials, Sustainable cultivation, Adaption of advanced technology And Enhanced level of marketing.

---

### STRUCTURAL MODEL - STANDARDISED REGRESSION WEIGHT

**FACTOR LOADINGS**

<table>
<thead>
<tr>
<th>Factor loadings between dependent and independent factors</th>
<th>estimate</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation of intermediaries ---&gt; Associating with the leading retailers</td>
<td>0.66</td>
<td>5.399</td>
<td>***</td>
</tr>
<tr>
<td>Less variety ---&gt; Associating with the leading retailers</td>
<td>0.72</td>
<td>6.377</td>
<td>***</td>
</tr>
<tr>
<td>Absenteeism ---&gt; Associating with the leading retailers</td>
<td>0.84</td>
<td>7.625</td>
<td>.032</td>
</tr>
<tr>
<td>Loss of farming knowledge ---&gt; Associating with the leading retailers</td>
<td>0.77</td>
<td>5.114</td>
<td>***</td>
</tr>
<tr>
<td>Fewer suppliers for the marketing ---&gt; Associating with the leading retailers</td>
<td>0.73</td>
<td>5.675</td>
<td>***</td>
</tr>
<tr>
<td>Associating with the leading retailers ---&gt; Modern technological knowhow</td>
<td>0.68</td>
<td>6.399</td>
<td>***</td>
</tr>
</tbody>
</table>
Factor loadings between dependent and independent factors

<table>
<thead>
<tr>
<th></th>
<th>estimate</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associating with the leading retailers</td>
<td>0.87</td>
<td>5.377</td>
<td>***</td>
</tr>
<tr>
<td>improved cultivation and income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associating with the leading retailers</td>
<td>0.64</td>
<td>2.625</td>
<td>***</td>
</tr>
<tr>
<td>Export potentials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associating with the leading retailers</td>
<td>0.71</td>
<td>5.114</td>
<td>***</td>
</tr>
<tr>
<td>Sustainable cultivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associating with the leading retailers</td>
<td>0.55</td>
<td>3.675</td>
<td>***</td>
</tr>
<tr>
<td>Adaption of advanced technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associating with the leading retailers</td>
<td>0.79</td>
<td>1.983</td>
<td>***</td>
</tr>
<tr>
<td>Enhanced level of marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1, represented the standardized model based on the Five independent variables Participation of intermediaries, less variety, Absenteeism, Loss of farming knowledge And Fewer suppliers for the marketing. Table 1 presents the results of Covariance relationship estimate among dependent, independent and mediating variable. For the significance of the data, the critical value is to be more than 1.96 (David Garson, 2016).

The critical value of independent variables Participation of intermediaries (5.399), Less variety (6.377), Absenteeism (7.625), Loss of farming knowledge (5.114) and Fewer suppliers for the marketing (5.675) shows positive impact on the Associating with the leading retailers. Associating with the leading retailers shows the positive critical values on the Modern technological knowhow (6.399), improved cultivation and income (5.377), Export potentials (2.625), Sustainable cultivation (5.114), Adaption of advanced technology (3.675) And Enhanced level of marketing (1.983).

5.2. Suggestions
1. As a lot of the study details and jumps to conclusions that India stands behind in the productivity and quality of mangoes mainly due to the low adoptability of low technology henceforth the mango cultivators on the latest technologies in mango cultivation.
2. Promote online trading of mangoes to make it more familiar.
3. Grading fruits is very important for the better outlook of the fruit. Mangoes need to be graded.
4. Linkages with familiar and giant retail outlets will be beneficial for the marketing of mangoes.
5. Promoting activities like mango-pulp preparation, mango pickles, jams and other similar mango products during the off season promotes mango marketing.
6. Recognition on marketable clean and processed premium sorts for the duration of peak season.
7. Branding Indian mangoes as the Indian mangoes are popular for their taste and aroma.
8. Involving MSMEs and SSIs in mango production and harvesting helps in increasing the sale of mango.

6. Conclusion

Production of fruits leads to the fitness, wellbeing and success of human beings. Quality of life of human beings may be values by inception & intake of healthy lifestyles which comprises of fruits importantly to a great extent. Mango, the sector's most luscious fruit, which is quite popular and familiar as "king of fruits” since times immemorial. The field and growth of fruits preferred and mango, specifically, accelerated extensively over past 15 years. It has additionally led to lots of troubles in regards to advertising and marketing of the end result. The perishable tendency of the fruit has put farmers exposed to various troubles which needs to be addressed in a while which is not possible. The various marketing centers vital for monetary disposal of the produce have, but no longer been capable of preserve tempo with the short increasing fruit sector. The profits from mango farming is based upon, at the side of numerous other factors, the fine of fruit, which in flip is decided by the point of choosing, care taken in grading and packing, time taken in transportation and so on. Storing cloth also has additionally turned into a hassle through growth of manufacturing of the fruit within Tamil Nadu. Maintaining the stated types of varieties thoughts, most important advertising & promotional issues of the mango cultivators with special reference to Tamil Nadu are discussed in detail on this paper. It has been discovered that Tamil Nadu has the necessary topography for the growth and development of Mango. Also, the possible suggestions addressing the above-mentioned marketing issues of mango growers have been detailed at length.

References
3. ASSOCHAM, 2013. The Associated Chamber of Commerce and Industry of India, Horticulture Sector in India- State level experience. New Delhi:

