

A Study on Production and Marketing of Mango Cultivation in Sendurai Village, Dindigul District

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Abstract

Agriculture is the backbone of our Indian economy. Even today, the situation is still the same, with almost the entire economy being sustained by agriculture, which is the mainstay of the Indian villages. Indian agriculture sector accounts for 18 per cent of India's gross domestic product (GDP) and provides employment to 50% of the country's workforce. India is the world's largest producer of pulses, rice, wheat, spices and spice products. Growth of agriculture is essential not only for self-reliance but also to earn valuable foreign exchange. Indian farmers, particularly the 86% who are small and marginal (owning less than 2 hectares), demonstrate remarkable resilience and efficiency. For the 2025-26 crop years, India is projected to reach a record total food grains production of approximately 362.5 million tonnes. Most of the agriculturists adopt improved agriculture technology as efficiently as farmers in developed countries and less in India. In 2026, the strategic provision of quality inputs and accessible financial tools is considered the cornerstone of India's push for total food and nutritional security. This approach aims to transform the productivity of small and marginal farmers, who comprise roughly 86% of all landholdings. The king fruit of the mango is an antioxidant-rich health fruit in Indian population. Less calories and high vitamins are C, A and B, and minerals, mangoes make for a nutritious treat of Indian peoples. Mangoes offer many nutrients and minerals that boost our health. The mango has served as a vital herb in Ayurvedic and indigenous medicine for over 4,000 years, with every part of the tree utilized for therapeutic purposes. It is one of the most important commercial fruit crop worldwide in terms of production, marketing and consumption and is found in wild as well as cultivated form in India, China, Mexico, Pakistan, Indonesia, Nigeria, Thailand, South Central America, Philippines, Brazil, Australia and Egypt. Presently, these colorful, sweet fruits are a mainstay of Indian cuisine and are popular throughout the world. In 2026, the year-round availability of mangoes

in grocery stores is a result of advanced agricultural techniques, global trade networks, and sophisticated supply chain logistics.

Keywords: *Production, Marketing and Problems*

Introduction

Agriculture is the backbone of our Indian economy. Even today, the situation is still the same, with almost the entire economy being sustained by agriculture, which is the mainstay of the Indian villages. Indian agriculture sector accounts for 18 per cent of India's gross domestic product (GDP) and provides employment to 50% of the country's workforce. India is the world's largest producer of pulses, rice, wheat, spices and spice products. Growth of agriculture is essential not only for self-reliance but also to earn valuable foreign exchange. Indian farmers, particularly the 86% who are small and marginal (owning less than 2 hectares), demonstrate remarkable resilience and efficiency. For the 2025-26 crop years, India is projected to reach a record total food grains production of approximately 362.5 million tonnes.

Mango² is an edible stone fruit produced by the tropical tree *Mangifera Indica* which is believed to have originated from the region between north western Myanmar, Bangladesh, and north eastern India. *Indica* has been cultivated in south and Southeast Asia since ancient times resulting in two distinct types of modern mango cultivars the "Indian type" and the "southeast Asian type. Other species in the genus *Mangifera* also produce edible fruits that are also called "mangoes" the majority of which are found in the Malaysian Eco region Worldwide, there are several hundred cultivars of mango depending on the cultivar, mango fruit varies in size, shape, sweetness, skin colour, and flesh colour which may be pale yellow gold, green, or orange. Mango is the National fruit of India, Pakistan and the Philippines while the mango tree is the national tree of Bangladesh.

It is one of the sweet, most delicious ^C, seasonal fruit. Mangoes are the important in Indian cuisine and are popular throughout the world countries. The fruit has established its medicinal properties for decades. Still it is not a fruit which is commonly consumed as this is a seasonal. Mango (*Mangifera indica Linn*) is the most important fruit of India and is known as "King of fruits". The fruit is cultivated in the largest area i.e. 2,312 thousand ha and the

production is around 15.03 million tons, contributing 40.48% of the total world production of mango. The main mango producing states in India are Uttar Pradesh (23.86%), Andhra Pradesh (22.14%), Karnataka (11.71%), Bihar (8.79%), Gujarat (6.00%) and Tamil Nadu (5.09%). Total export of mangoes from India is 59.22 thousand tons, valuing Rs. 162.92 crores during 2010-11. India exports mango to over 40 countries worldwide. The major importing countries of India's Mangoes during the period of 2010-11 were UAE (61.79%), Bangladesh (11.41%), UK (8.92%), Saudi Arabia (3.79%), Kuwait (2.32%), and Bahrain (2.19%) respectively.

Objectives of the Study

1. To study the socio-economic condition of the mango cultivators in sendurai village.
2. To understand the marketing problems of the mango cultivators in the study area.
3. To suggest the measure to increase the production of mango in the study area.

Scope of The Study

This study deals with cost of production, Productivity, returns, marketing and which are useful for the economic evaluation of mango production. It's identifies the strategy for helping farmers solve their production problems.

Period of study and Tools of Analysis

The required primary data for the study were collected from all the selected mango cultivation farmers during 2021 to 2022. Percentage method, Bar and diagrams have used for analyze the data.

Review of Literature

P. Vijayalakshmi, Dr. G. Periasami, (2020)³, the study reported that the sale of mango distress by manufacturers is widespread. Producers sell their products long before the harvest season at prices well below those that prevail in the market in order to overcome their financial difficulties with creditors and commissions. It is anticipated that financial institutions should provide adequate financial assistance at a moderate interest rate to meet their financial needs.

Desh Pal Singh, Satya Prakash, Vikas Kumar, Krishna Kumar Singh and Prerna Sharma, (2020)⁴, the study concluded that constraints faced by mango growers in adoption of mango

production technology and suggestions for suitable extension strategies to overcome the problem them. Constraints divided into five groups. Among the input constraints, it is concluded that unavailability of quality chemicals like plant growth regulator, water soluble fertilizers and plant protection chemicals at Government sale Centre got first rank with 78.18 percent followed by the unavailability of quality sapling of mango at Government nursery. Among the technological constants, lack of knowledge about organic farming of mango got first rank with 93.18 percent respondents followed by lack of knowledge about drip irrigation schedules (91.82 percent). The highest percentage of respondent (90.00 percent) found by the lack of coordination among the beneficiary and state/district horticulture department followed by inadequate extension activity were conducted by state/district horticulture department (80.00 percent) among the sociopsychological constraints. Among the market constraints, exploitation of mango growers by middleman got first rank with 91.36 percent respondent followed by lack of quality storage facility (88.64 percent). Among the financial constraints, lack of government initiative in funding of loan and granting of subsidies got first rank with 94.55 percent followed by high labour charges (91.82 percent).

The world production of mangoes is nearly 42 million tones with India accounting for 42% (18 million tons). They are several major countries to importing Indian mango. Indian mangoes are exported to more than 150 countries in all over the world now we see the top leading importers are as following.

Table 1.1 :Major Importing countries by Indian Mango

| Country | Country |
|----------------------|-------------|
| United Arab emirates | France |
| United kingdom | New Zealand |
| Saudi Arabia | Switzerland |
| Nepal | Iran |
| Kuwait | Maldives |
| Qatar | Germany |
| United states | Brunei |
| Canada | Sweden |
| Oman | Italy |

India's diverse climates ensure availability of all varieties of fresh fruits & vegetables. It ranks second in fruits and vegetables production in the world, after China. As per National Horticulture database published by the National Horticulture Board during 2014-2015 India produced 86.603 million metric tonnes of fruits and 170 million metric tons of vegetables.

The notable places for the cultivation of mangoes in India are the states of Gujarat, Uttar Pradesh, Andhra Pradesh, Bihar, Karnataka, Kerala, Tamil Nadu, and Assam. After Mango and Banana, which holds the first and second position respectively, citrus fruits rank third in area and production. Mangoes are an excellent source of vitamin A and C both important antioxidant nutrients. Vitamin C promotes healthy immune function and collagen formation. Vitamin A is important for vision and bone growth.

Mango Varieties

India is the home of about 1,000 varieties. Most of them are the result of open pollination arisen as chance seedlings. However, only a few varieties are Alphonso, Bangalora, Banganapalli, Gulab Khas, Bombay Green, Dashehari, Fajri, Fernandin, Himsagar, Kesar, Kishen Bhog, Neelum, Vanraj, Suvernarekha, Samarbehisht Chausa, Zardalu and Hybrids varieties of Mangoes are Amrapali, Mallika, Arka Aruna commercially cultivated throughout India.

Mango Production in India

Production volume of mango across India from financial year 2012 to 2020 with an estimate for 2021. Mangoes contributed about 439 billion Indian rupees in the Indian economy in fiscal year 2019. This value was lower than the previous year gross value. Mangoes made up the largest share of GVO within fruit production in Southeast Asian country.

Mango is grown almost in all the states of India. Uttar Pradesh tops the list of mango producing states. Other major producing states are Andhra Pradesh, Maharashtra, Karnataka, Bihar and Gujarat. Rest of the states has quite less production.

Table 1.2: Production of mango in Financial Year 2014 to 2021

| Financial Year | Value's (in billion Indian rupees) |
|----------------|------------------------------------|
| FY 2021 | 419 |
| FY 2020 | 411 |
| FY 2019 | 439 |
| FY 2018 | 441 |
| FY 2017 | 412 |
| FY 2016 | 385 |
| FY 2015 | 392 |
| FY 2014 | 392 |

Over an area of 2300 thousand hectares, there is an annual production of 12750 thousand metric tons. Uttar Pradesh ranks first in mango production with a share of 23.47% and high productivity. India produces high-quality mangoes, among which western countries highly qualify Alphonso. In Punjab, it is cultivated whole of the sub mountain belts and has also spread to arid and irrigated areas of Northern India. Let's take a look at India's growing belts state-wise to understand it more easily. India has scattered its land for 2,400,000 acres for the produce of mango.

Mango Production in Tamil Nadu

Mango is an important fruit crop and it has greater economic importance among fruit crop since it is one of the leading commodities in agricultural in Tamil Nadu. Mango and banana is the leading food crop in Tamil Nadu accounting for over 81% of the total production. In mango area (Ha) 1,52,569. Production (M.T)12,68,017. Productivity (M.T/ ha) 8.31. in mango fruit majorly growing Krishnagiri, Dharmapuri, Dindigul, Vellore and Tiruvallur.

The major mango cultivating states are Dindigul, Dharmapuri, Krishnagiri, Salem, Theni, Thiruvallur, and Vellore. Mango cultivation is most important and it occupies 22% of land utilized for different fruit cultivation. In India, several fruits are cultivated nearly 3.35 million hectares and mangoes alone are cultivated nearly in 2.4 million hectares

TABLE 1.3: Major mango producing district of Tamil Nadu in the year 2013-2014

| S.NO | District | Area in (Ha) | Production | Productivity (tonnes/Ha) |
|------|-------------|--------------|------------|--------------------------|
| 1 | Krishnagiri | 36889 | 141619 | 3.38 |
| 2 | Dharamapuri | 1036 | 58030 | 5.6 |
| 3 | Dindigul | 16283 | 90907 | 5.58 |
| 4 | Madurai | 6594 | 17185 | 2.16 |
| 5 | Tiruvallur | 10593 | 82327 | 7.77 |
| 6 | Vellore | 11599 | 153306 | 13.22 |
| 7 | Tirunalveli | 6221 | 77815 | 12.51 |
| 8 | Selam | 4871 | 12874 | 2.64 |
| 9 | sivagangai | 2220 | 25514 | 11.49 |
| 10 | Namakkal | 2536 | 14706 | 5.8 |

Source from: Tamil Nadu Horticulture department Hand Book 2013-2014.

Analyses of The Study

Table 1.4: Income From Mango Cultivation

| Sl.No | Income (in Rs.) | No.of Respondents | Percentage |
|-------|-----------------|-------------------|------------|
| 1 | Less than 25000 | 2 | 4 |
| 2 | 25001 - 30000 | 9 | 18 |
| 3 | 30001 - 50000 | 28 | 56 |
| 4 | 50000 and above | 11 | 22 |
| | Total | 50 | 100 |

Source: primary data

The above table show that the income received from Mango cultivation. In this study 56 per cent of the respondents are able to earn sum of Rs 30001 to 50000, 22 percent of the respondents are able to earn 50001and more, 18 percent of the respondent are able to earn 25001 to 30000 and only 4 percent of respondent are able to earn sum of Less than Rs. 25000.

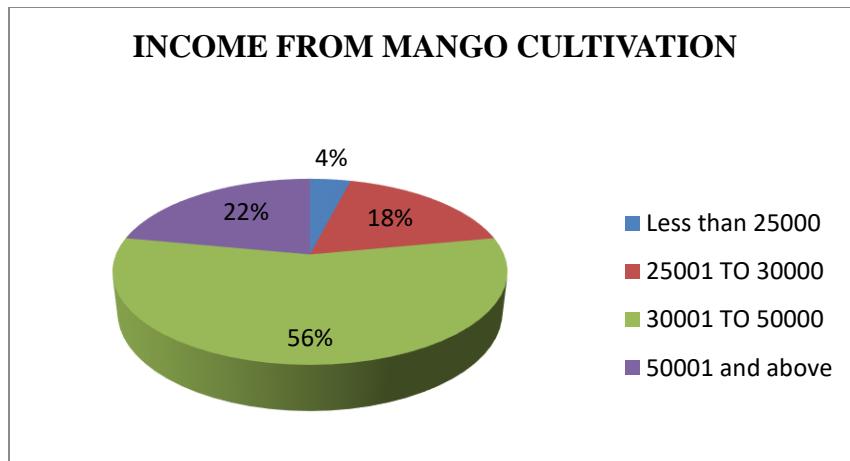


Table 1.5: The Sources of Credit

| S.NO | THE SOURCES OF CREDIT | NO. OF RESPONDENT | PERCENTAGE |
|------|-----------------------|-------------------|------------|
| 1 | Bank | 22 | 44 |
| 2 | Money lenders | 12 | 24 |
| 3 | Whole sale Traders | 5 | 10 |
| 4 | Friends and relatives | 11 | 22 |
| | TOTAL | 50 | 100 |

Source: primary data

From the above table we understand that the source from getting credit from institution in to four categories. 44 percent of respondent are getting credit from bank, 24 percent of respondents getting credit from money lenders, 10 percent of respondents getting credit from whole sale traders and remaining 22 percent of respondents getting credit from their friends and relatives.

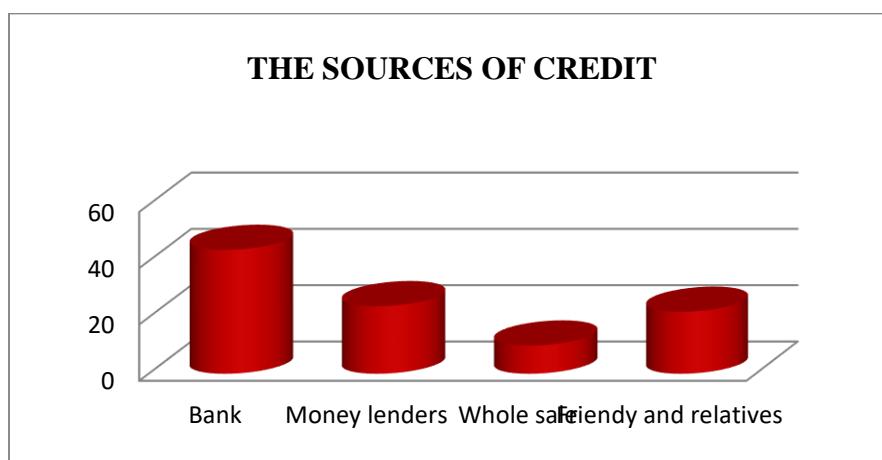


Table 1.6: Price Fixation of Mango

| S NO | ON WHAT BASIS A PRICE FIXED FOR MANGO | NO OF RESPONDENT | PERCENTAGE |
|------|---------------------------------------|------------------|------------|
| 1 | Demand and supply | 7 | 14 |
| 2 | Competition | 7 | 14 |
| 3 | Size of the mango | 27 | 54 |
| 4 | Regulated price | 9 | 18 |
| | TOTAL | 50 | 100 |

Source: primary data

The above table shows on what basis a price fixed for mango in market they are four different type Demand and supply, competition, size of the mango, regulated price. 14 percent of respondent are demand and supply, and another 14 percent of respondent are fixed the price by competition, 54 percent of respondent are told size of mango are fixed the price of mango and 18 percent of respondent says regulated price to fixed the mango.

Table 1.7: The Problem Relating to Marketing Of Mango

| Sl. NO | THE PROBLEM RELATING TO MARKETTING THE MANGO | NO OF RESPONDENT | PERCENTAGE |
|--------|--|------------------|------------|
| 1 | Poor quality of mango | 8 | 16 |
| 2 | Lack of storage facility | 10 | 20 |
| 3 | Lack of transport facility | 32 | 64 |
| | TOTAL | 50 | 100 |

Source: primary data

The above the table shows the problem relating to marketing the mango the major marketing problem are poor quality of mango, lack of storage facility, lack of transport facility. 64 percent of respondent are lack in transport facility in marketing, 20 percent of respondent are lack of storage facility in marketing the mango and another 16 percent of respondent are poor quality of mango to face the problem in marketing.

Suggestions

1. The government of Tamil Nadu should help mango cultivating growers to create cooperative societies.
2. To supply various resources at the right price, including seedlings seeds, fertilizers and pesticides at subsidized rates and to provide marketing support to growers.
3. In coming year more number of market areas must be started in the District.
4. Better and suitable irrigation methods must be implemented by the cultivators.
5. Banks to facilitate more and easy credit availability to the mango cultivators.
6. There must be ensuring of timely availability of inputs to the mango cultivators.
7. Crop insurance schemes must be implemented properly in the study area.
8. To adopt modern technological farming methods instead of old or traditional methods.
9. Transport facilities and Marketing facilities should be avail by the Government.
10. Farmers may use climate resilient Seed materials in their own land.
11. Research Centre must be strengthened in the study area as well as district level.
12. Government must ensure the reasonable price to the mango cultivators.

Conclusion

Many of the mango cultivators are facing many problems in the sphere of production and marketing in India. In this study deals with the production and marketing related problems faced by the mango growers in Dindigul district, particularly in the study area. The mango industry plays an important role in rural areas for bringing radical changes. They not only modernize agriculture from subsistence to a commercial proposition but have also brought a far-reaching socio-economic development in the rural areas. The highly volatile price pattern, lack of storage facilities, and stranglehold of middlemen are some of the crippling roadblocks faced by the mango cultivators in the study area.

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