

Working Paper Series No.15



Government of Kerala

**A Case Study on Mango Processing Unit
Kuttiattoor Grama Panchayat
in Kannur District**

**Evaluation Division
Kerala State Planning Board
November 2012**

Abstract

Kerala State which had a low base in agricultural production in the country continued to face serious challenges in retaining farming area and improving production and productivity of important crops. Besides, the state lack well developed agro-based industries. The present study was conducted to enlighten the major problems faced by an agro-based industry – the mango processing unit in Kuttiaattoor grama panchayat.

The mango processing unit in Kuttiaattoor grama panchayat started its functioning in the year 2010. The total investment made for setting up of the mango processing unit stood at ₹ 17.90 lakh. Out of this, ₹ 10.95 lakh allotted by various government agencies. The unit was selected purposively for the study. For assessing the existing situation of the unit, data was collected through primary source of information.

From the study it was found that lack of better marketing facilities and infrastructural facilities were the major factors influencing the working of mango processing unit.

Disclaimer

This working paper has been prepared by Shri. Pradeesh. A, Research Assistant, District Planning Office, Kannur. The facts and figures in the report are based on quick field survey done by the author and do not reflect the views or policies of Kerala State Planning Board. The purpose of this document is to provide a comprehensive overview of the scheme/project implemented by the Local Self Government during XI Five Year Plan.

Project Profile

Mango (*mangifera indica* L) belonging to family Anacardiaceae is the most important commercially grown fruit crop of our country. It is called the King of fruits. India rank first among world's mango producing countries. The area of mango cultivation in Kerala during 2010-11 was 62200 ha. Among the 14 districts in Kerala Palakkad, Kozhikode and Kannur districts stands 1st, 2nd and 3rd position respectively. Area under cultivation of mango in Kannur district is 6750 ha. The district stands 2nd position among the districts in the production of mango with 52680 tonnes in 2010-11

Kannur district is located in the northern part of Kerala. The district has one district panchayath, 11 block panchayaths, 6 municipalities and 81 grama panchayaths. Agriculture is the main activity of the people in this district. Kuttiaattoor a remote village in Kannur district was once famous in worldwide for the rare variety of Kuttiaattoor mango or otherwise named Nambiar mangoes. Kuttiaattoor mango is mostly found in Kuttiaattoor panchayath and its adjacent areas. Kuttiaattoor mango has its own unique place in the mango market. A society of mango lovers actively craving to retrieve the fame back to its home. Their objective is to trace back the valley of a unique variety of mango which was duntrodden by the greed of some people.

Objectives of the Study

The major objectives of this study are

1. To understand the present working condition of the firm
2. To find out the major problems faced by the firm

Methodology

The study is based on primary data which is directly collected from the production unit.

Kuttiattoor Mango Processing Unit was started its functioning in 12th August 2010 under the leadership of Kuttiattoor Mavu Karshaka Samithi. Infrastructural facilities like land and buildings were provided by the Kuttiattoor grama panchayath. The society has received ₹ 5.40 lakh from the central government scheme – RKVY (Rashtriya Krishi Vikas Yojana) for purchasing machineries for the unit and ₹ 95000 were collected from members of the society and well-wishers. It has also taken loan amounting ₹ 6.00 lakh from the Co operative Bank, Kuttiattoor.

In the experimental spirit they produced mango squash at first then they extent their activities for producing mango jam and mango pickles.

Table No. 1
Total Production and Sale in 2011-12

Sl. No.	Item	Production in the year 2011-12 (Kg)	Sales in the year 2011-12 (Kg)
1	Squash	855	747.600
2	Pickle	505	495
3	Jam	1100	750

Source: Primary data

From the above table we can see that the production of squash, pickle and jam in the year 2011-12 are 855 kg, 505 kg and 1100 kg respectively. While compared to squash and pickle, jam has less demand in the market.

Table No. 2
Cost of Production and Unit Price

Sl.No.	Item	Cost / Kg	Unit Price/Kg	Profit
1	Squash	75	120	45
2	Pickle	54	100	46
3	Jam	125	160	35

Source: Primary data

The cost of production and unit price of each kilograms of squash, pickle and jam shows that while selling each item the producer will get a profit of ₹ 45, ₹ 46 and ₹ 35 respectively. It is shown in the table given above.

Table No. 3
Number of Labourers Working in Each Day in the Unit and Wage Rate

Sl.No.	Sector	No. of Labourers	Wage per day
1	Production	4	150
2	Sales	4	150
3	Organisation	1	100

Source: Primary data

Twelve persons got special training in mango processing. But the production unit has not in a position to employ these twelve trained persons at a time. Hence they arranged a shift system among employees to get minimum two day work for each person in a week and they are paid to ₹ 150 per day. It is given in the Table 3.

Table No. 4
Employment Status of 2011-12

Sl. No.	Sector	No. of working days in the year 2011-12	No. of labours
1	Production	146	4
2	Sales	35	4

Source: Primary data

Total number of working days in the year 2011-12 for production was 146 days and 35 days were spent for marketing the product.

Table No. 5
Fixed Assets

Sl.No.	Assets	Value
1	Building	2000000
2	Machinery	433400
3	Tools	107650

Source: Primary data

Infrastructural facilities like land and building were provided by Kuttiaattoor grama panchayath. Machineries and tools were purchased by the funds from central government scheme (Rashtriya Krishi Vikas Yojana). Finance for the working capital was collected from members and well wishers.

Table No. 6
Expenditure Statement of 2011-12

Sl. No.	Item	Amount paid (in ₹)
1	Wages	100855
2	Mango	95000
3	Other raw materials	24000
4	Electricity	4200
5	Transport	27700
6	Stationary	600
7	Sticker	3000
8	Food	12000
9	Interest over loan	30000
10	Others	1000
	Total	298355

Source: Primary data

From the above table it is clear that the working capital is very high for the firm. The high average working capital for producing a unit of product is due to the under utilization of the available resources.

Table No. 7
Financial Assistance

Sl. No.	Name of the agency	Year	Amount
1	Rashtriya Krishi Vijnan Yojana	2010-11	540000
2	Kuttiattoor Grama Panchayath	2007- 08, 2009- 10, & 2011-12	474000
3	Kuttiattoor Co operative Bank		600000
4	Share from beneficiaries	2011-12	60000
5	Loan from well-wisher	2011-12	35000
Total			1709000

Source: Primary data

During the year 2011-12 the firm has produced 855kg of squash, 505 kg of pickle and 1100 kg of jam. Out of this 747.60 kg of squash, 495 kg of pickle and 750 kg of jam were sold in the market. In this way the firm has earned an income of ₹ 259212 during the financial year 2011-12. The total expenditure incurred during the same period for the production of these three items was ₹ 298355. As unsold stock 107.4 kg of squash, 10 kg of pickle and 350 kg of jam is kept in its godown. That means the firm has an asset worth of ₹ 69888 in its hand in the form of stock. And also it has stocked 750 kg of pulp and 2000 kg of salted mango for future use (valuing ₹ 290000). So the marketing of the unsold products and productive use of stock will determine the future of the firm.

Findings

- The firm has succeeded to a certain extent in protecting the name of Kuttiattoor mango.
- Each labourer (12) got an average of 57 working days in the year 2011-12.
- It helps to increase the income of the mango cultivators in Kuttiattoor grama panchayath.

Major Problems Faced by the Firm

- Boiling machine (cost ₹ 70000) and Mango slicing machine (cost ₹ 150000) are not using at present due to some technical problems.
- The pulper machine can produce the pulp of 2 tonnes of mangoes every day, but at present the firm is using the machine for making pulp of around 150 kg of mangoes per day. It is of under utilization of the resources.
- The unit has not obtained license from the competent authority for the production and sale of mango product.
- Infrastructural facilities are not adequate for the functioning of the unit in its full capacity.

Storage capacity : At present the unit has the capacity of storing only 2 tonnes of mangoes at a time.

Cooling facility : There is no cooling facility to preserve the produced pulp for a long time for future use.

Work area : Work area is not much spacious

Waste management : There is no better drainage system and waste disposal system in the unit.

- Lack of efficient management system leads to the under utilisation of resources.

- Effective monitoring system is not implemented properly.
- Marketing techniques are not utilizing for enhancing sales.
- Effective monitoring system is not implemented properly.
- Marketing techniques are not utilised for enhancing the sales.

Suggestions

- Adequate Infrastructural facilities should be provided for the maximum utilisation of human and capital resources
- Training may be arranged in modern techniques for manufacturing and marketing
- Chances for Product variety has to be utilised
- Fuller existing facilities can be used for producing various products of other fruits also
- Advertisement through different medias can be used to increase demand

Conclusion

The area and quantity of agricultural production in Kerala is decreasing day by day. Moreover a large number of the agriculture based industries are also in the edge of extinction. In this circumstance the effort taken by a group of farmers in Kuttiaattoor village is appreciable. However they have to utilize the modern techniques in production and marketing of manufactured goods for survival.