

Production of Papaya and Carrot *Tuti-Fruiti*

INTRODUCTION

A fruit/vegetable preserve is made from properly matured fruit/vegetable, cooking in whole or in large or small pieces in heavy syrup till it becomes tender and transparent. In its preparation not less than 45 parts of fruit/vegetable is used for every 55 parts of sugar and cooking is continued till a concentration of at least 68 percent soluble solids is achieved.

Freshly prepared preserves are wholesome and attractive. Fruits generally used for making preserves, candy and glazed products are apple, amla, green papaya, green mango, strawberry, raspberry, pear, cherry, carrot etc. Vegetables like carrot, ash gourd, ginger etc. are also used for making preserves.

A fruit/vegetable impregnated with sugar as above and subsequently drained and dried is called a candied product. A candied product is covered with a thin transparent layer/coating of sugar is called a glazed product. When a candied product is coated with sugar crystal either by rolling it in finely powdered sugar or by allowing sugar crystals to deposit on it, is called crystallized product.

Papaya tuti-fruti and carrot tuti - fruti both are candied products made under standardized conditions and having good shelf life when packed and stored suitably.

RAW MATERIAL

Raw Carrot, Papaya, Citric acid, Colour, Flavor, Preservatives and Sugar.

PLANT & EQUIPMENTS

Principle Equipments: Preparation tables, Fruit washing tank, Fruit cubing machine, Syrup making tank, Steam jacketed Kettle, Tray dryer and Sealing machine.

Auxiliary Equipment: Platform weighing scale, Boiler, Generator, Water pump, Materials handling equipments (vessels, knives, crates, buckets, trolleys)

USES OF THE PRODUCTS:

1. Bakery products: Like buns, cakes, bread, pizza, rolls etc.
2. Ice creams & puddings: Fruity ice cream, jellies and puddings.
3. Confectionery: Sweetmeats, hard-boiled candy etc.
4. In sweet/sour preparations at home: In payasam, curd rice
5. Chewing pans; Sweet pans
6. Salads: Along with dry fruits
7. Mouth freshener

PROJECT COST – FIXED COST – WORKING CAPITAL
(in Rs. '000) (Estimate for a model project)

a)	Land & Land development (1200 m ²)	156.00
b)	Building and civil works (300 m ²)	738.00
c)	Plant and machinery	435.00
d)	Miscellaneous fixed assets	490.00
e)	Pre-operative expenses	229.00
	Total fixed capital	2048.00
	Working capital margin	274.00
	Total Project cost	2322.00
	Total working capital required at 15% of turnover	750.00

Means of finance

- Promoters contribution	580.50
- Term loan	1741.50

PRODUCTION CAPACITY-(estimate)

1. Products manufactured: 1) Papaya Tutti frutti : 100 MT/Annum
2) Carrot Tutti frutti : 100 MT/Annum
2. Production Schedule : 1) Papaya Tutti frutti : 1000 kg/day 100 days 100 MT
2) Carrot Tutti frutti : 1000 kg/day 100 days 100 MT
3. Expected capacity : 300 days per Annum **TOTAL 200 days 200 MT**

TECHNOLOGY/MANUFACTURING PROCESS – Availability

The technology for the manufacture of Tutti - frutti has been developed at CFTRI, Mysore, using appropriate equipments for optimal product recovery of right quality. The CFTRI has the necessary expertise to provide technical assistance and guidance for setting up the project. The CFTRI can offer further technical assistance for project implementation under technical consultancy arrangements.