Mango Processing & Canning Unit



Introduction

Mango Pulp is the concentrated mango juice obtained on processing of various varieties of mangoes. The processed mango pulp has enhanced shelf life and has significant export potential. The mango pulp can further be used to produce downstream products like mango jelly. The canned mango pulp has about 2 years of shelf life without using a cold storage. The Yield of pulp from Mango is about 55%.

Products

Canned Mango Pulp.

Usage/Application

Canned Mango pulp is consumed as a fruit juice and in the processing of mango jelly.

Objective

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of Fruit & Vegetable Powder. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

Critical Success Factors

The food processing industry is one of the largest industries in India & ranks 5th in terms of production, consumption & exports. As per the estimates for FY15, food processing sector stood at USD258 billion. In FY16, food processing industry constituted more than 8 per cent to India's GDP through manufacturing. India is the world's 2nd largest producer of fruits and vegetables. The government expects the processing in this sector to grow by 25 per cent of the total produce by 2025. In 2015- 2016, the

total production in horticulture (fruits & vegetables) is estimated at 282.5 million tones. Above Stats indicate that there is a huge market potential for the proposed unit.

Raw Material

Basic Raw material for the proposed unit is "Mango".

Capacity

The capacity of the project is 2 TPH, assuming the working capacity of the machinery is 16 Hrs per day for 120 working days.

Manufacturing Process

Fully ripe mangoes are subjected to first thorough washing followed by inspection and cutting simultaneously. Mangoes are cut longitudinally manually and then conveyed to pulping unit through bucket elevator. Generally two stage pulping unit is used in the most of canning plant to crush mangoes into pulp. Skins and stones are separated in pulping unit and are collected from different chutes. Fibrous pulp produced in first stage is further refined to remove fibers from it. Thus prepared pulp is collected in dosing or collection tank. It is then pumped into a standardization tank where if necessary, sugar, citric acid, etc. are added to get required brix and acidity. The standardized pulp is then pasteurized and pumped to break-pressure tank of filling station. The pulp is filled into pre-sterilized OTS cans of required size through rotary can filling machine. Cans are then seamed, sterilized in retorts and cooled in a water tank before labeling and packing.

Land Area Requirement

Land should be located near to the growing Agri-cluster area easily connected with the Road and Rail. The Project Land should also have easy availability of the water and electricity. The ideal land require for the project is 8000 Sqm.

Implementation Schedule

It will take Eighteen (18) months to complete all the formalities before starting the commercial production.

Financial Aspects

S.No.	Particulars	Cost (Rs. in Crore)
1.	Civil Infrastructure	0.37
2.	Plant & Machinery	0.95
3.	Other Expenses	0.28
Total Project Cost		**1.60**

Means of Finance

S.No.	Particulars	Cost (Rs. in Crore)
1	Equity Contribution (30 %)	0.48
2	Bank Finance (70 %)	1.12
Cost of Project		**1.60**

- **Estimated Turnover of the project will be around Rs. 3.85 Crore with Positive IRR of 50%.**

Government Incentives

1. Government of India has designed a Pradhan Mantri KisanSampada Yojana, In Which Capital Grant from Rs. 5 to 10 Crore is being provided as per the scheme guidelines.
2. Considering Agro and Food Processing as a priority sector various state government are also providing Incentives like Capital Investment Subsidy, Interest Subsidy, Labour Subsidy, Tax Benefits etc.

Our firm Provides following Services

» **Project Management Services**
- Pre-feasibility Study of the Project and existing market analysis of the product to be manufactured.
- Conceptualization of the Project and Finalization of Project Components.
- Bankable/Detailed Project Report
- Assistance in Grant/ Subsidy
- Detailed Design and Engineering of the Project
- Technology Sourcing
- Project Management Consultancy
- Supply Chain Management
- Agriculture Advisory Services etc.

» **Food Product Development Services**
- Suitable & Innovative Packaging as per product characteristics
- Bio-Degradable Packaging
- Development of range of variant of product with suitable packaging as per the requirement of product.

» **Food Safety & Quality Licenses**
- **FSSAI**
- **APEDA**
- **Spice Board of India**
- **DGFT**

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