

Osmo air-dried jackfruit

INTRODUCTION

Jackfruit bulbs are a rich source of vitamins and mineral constituents especially calcium. Much of the raw jackfruit is consumed locally for curry preparation and after ripening the bulbs are relished as such in India as it is considered to be a good appetizer. Products such as fruit bars, jam, candy etc. can be prepared from this fruit. However, it has not so far been fully exploited by the fruit preservation industry.

The osmo-air dried product prepared from jack fruit bulbs may be consumed as snack. It can also find use in military rations in suitable packing. The osmo-air dried fruit products can be used in ready to eat type of foods, ice-creams, fruit salad, kheer, cakes and bakery products.

RAW MATERIAL

Raw material required: Ripened Jackfruit, Sugar, Citric acid and Water

PROCESS

Jack fruit bulb → Separation of seed → Cutting → Osmotic- treatment → Drying → Packing

PLANTS AND MACHINERY

Principal equipments: Drier, S.S. Jacketed kettles, Sealing machine, Boiler, Auto clave, Refractometer, Top loading balance

Auxiliary equipments: Filter press machine, Digital balance, S.S. Sieves and S.S. Vessels

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

a) Land (625m ²)	83.00
b) Building (70 m ²)	424.00
c) Plant and machinery	954.00
d) Miscellaneous fixed assets	470.00
e) Pre-operative expenses	266.00

Total fixed capital	2197.00
Working capital margin	263.00
Total Project cost	2460.00
Total working capital required at 15% of turnover	879.00

Means of finance

- Promoters contribution	695.00
- Term loan	1765.00

PRODUCTION CAPACITY-estimate

Suggested economic capacity	: 200 kg of osmo-dried jackfruit per shift
Working days	: 150
Installed capacity	: 30 tonnes/annum
Optimum capacity utilization	: 70%

TECHNOLOGY/MANUFACTURING PROCESS - Availability

The technology for processing of jackfruit bulb into osmo-dried jackfruit bulb form has been developed at CFTRI, Mysore using appropriate equipment for optimal product recovery of right quality. The Institute has the necessary expertise to provide technical assistance and guidance for setting up the project. The CFTRI can also offer further technical assistance for project implementation under technical consultancy arrangement.

Note: CFTRI does not guarantee the performance of the machine. Indenter may kindly confirm the performance, etc., from the fabricator of the machine, before a decision is taken to purchase the same.