

## DEHYDRATED DRUM STICK POWDER

(Process code – CFV 3320)

### INTRODUCTION

Vegetables are used to supplement the staple food but some are grown to please the taste and drumstick (*Moringa oleifera Lam*) is one of them which is also known as horse radish. Drumstick is a tropical vegetable, which is very popular in South India and other parts of the country. It gives a very distinct palatable taste and is one of the richest sources of glutamic acid among the vegetable kingdom. It works as an energy food. Product characteristics are

- i) Product enhances the flavour of food
- ii) Product has good shelf life
- iii) Product has richest source of glutamic acid

The powder prepared from drumstick can be used as a flavoring agent for various non-vegetarian dishes to enhance the flavour of chicken or meat and can also be used for drumstick soup preparation by adding spice powder and other ingredients. In addition, it can also be used as a thickening agent for Sambar and chutney preparation, instant soup powder and in parotta along with potato as a flavour enhancer.

### RAW MATERIAL

Raw materials required for the production of drumstick powder are fresh green tender green drumstick pods and potassium metabisulfite.

### PLANT AND MACHINERY

**Principal equipments:** Dryer, Hammer mill, Sealing machine, Baby boiler & Vegetable cutting machine.

**Auxiliary equipments:** Autoclave, Washing tank, SS Sieves & weighing scale.

### PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. '000)

*(Estimate for a model project)*

a) Land & Land development (500 m <sup>2</sup> )	144.00
b) Building and civil works (200 m <sup>2</sup> )	486.00
c) Plant and machinery	1895.00
d) Miscellaneous fixed assets	100.00
e) Pre-operative expenses	327.00

Total Fixed Capital	2952.00
Working capital margin	2536.00
Total Project cost	5488.00
Total working capital required at 20% of turnover	8140.00

**Means of Finance**

- Promoter's contribution	1969.00
- Term loan	3519.00

**PRODUCTION CAPACITY- (estimate)**

- a. Product: Dehydrated drumstick powder 1 Tone / day
- b. 300 working days/annum
- c. Optimum capacity utilization: 70%

**TECHNOLOGY/MANUFACTURING PROCESS- Availability**

CFTRI has standardized the technology and general methods of processing of dehydrated drumstick powder. Apart from this procedure for quality control, packing and packaging material specifications, equipment details are also provided by the institute.

The process consists of dehydrating the drumsticks of optimum maturity after adequate preparations to bring down the moisture to the required level. The product is then ground and sieved and packed in suitable type of packaging material to give the desired shelf life.

The manufacturers have to take a license under FPO (Government of India).

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.