

SHELF-STABLE CHAPATIS

1. Introduction:

The *chapati*, also known as the roti, is a flat unleavened baked product, which forms the staple food of the majority of the population in the Indian subcontinent. *Chapatias* are normally made and served hot at breakfast, lunch or dinner, and are eaten along with other adjuncts in households, restaurants and industrial canteens. The readily available product can cut down the drudgery of the house wives especially working class people who have an alternative by way of shelf-stable product.

2. Market potential:

The preserved *chapatis* can be marketed through bakery shops, groceries/ provisional stores, departmental stores and is a convenient ready-to-serve product (after warming in microwave or tawa at low temperature).

3. Raw materials and packaging materials.

Raw materials needed are whole wheat atta, refined vegetable oil, common salt, potable water and permitted food additives cleared under Prevention of Food Adulteration Act (PFA). Appropriate packaging materials are suggested to be used to get the desired shelf-life.

4. Plant and machinery:

Swifter, Continuous chapati machine, planetary mixer, sealing machines weighing scale, packing table etc

5. Project Cost – Fixed Cost – Working Capital (Rs. in Lakhs): (Estimate for a model project)

a. Land (450 Sq. m)	11.25
b. Building (150 Sq. m)	9.00
c. Plant and machinery	16.59
d. Other fixed items	2.40
e. Pre-operative expenses	3.25
Total fixed cost	42.49
Working capital margin	2.39
Total project cost	44.88

6. Production Capacity – (estimate):

The installed capacity of the unit is 12000 chapatis per day and working for 300 days in a year. Average cost of production works out to Rs.1.4-1.5. The preserved chapatis are having good acceptability upto 10-12 days.

7. Technology / Manufacturing Process – availability:

CFTRI has standardized the appropriate technology and general methods of producing shelf stable chapatis. Apart from the procedure for quality control, packaging and packaging material specifications, the institute also provides equipment details.