

1 RICE FLAKES

1.1 Introduction

Rice flakes are prepared from paddy. It is also popularly known as "Poha". It is a fast moving consumer item and generally eaten as breakfast item. It can be fried with spices and chilly to make hot and tasty food item or milk or curd is mixed with it and then eaten. It is also used in large quantities for making 'Chevda' (a farsan item) and many caterers use it for thickness of gravy. Since it is made from paddy, it is easily digestible. Most of its preparations can be made at a short notice and hence bulk of the households stores it on regular basis. With proper storage, its shelf life is 2-3 months. This is a common product and can be produced anywhere in the country.

1.2 Objective

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of rice flakes. 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.

1.3 Raw Material Availability

The most critical material will be good quality paddy. The production of paddy in the year 2004-05 in the state is 1583.

1.4 Market Opportunities

Rice flakes or poha is an important breakfast in semi-urban and rural areas and middle class families of urban India. Spicy or sweet preparations made from it are not only easy to make but they can be made at a short notice as well. Therefore it is extensively used all over the country round the year.

1.5 Project description

Applications

Rice flakes are made from paddy and hence they are easy to digest. Spicy as well as sweet preparations are made from them in the category of fast food items. Since the manufacturing process involves roasting of rice, the shelf life of flakes is longer.

Capacity of the Project

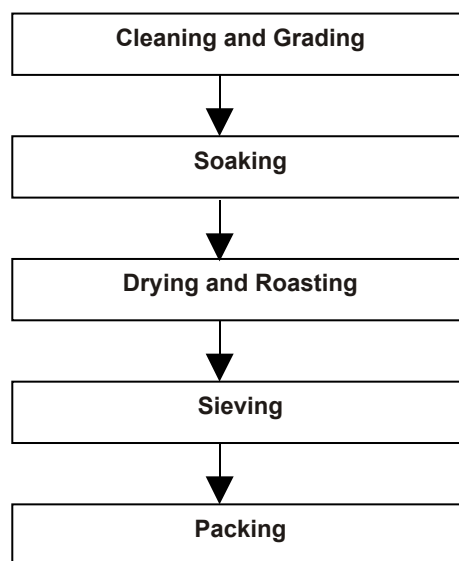
The total capacity of the unit of rice flakes is 960 MT per annum.

Critical success factors

Apart from households, its spicy preparations are sold in restaurants, roadside dhabas or eateries, canteens etc. There is also a fairly large bulk market. Farsan makers use it to make Chevda and it is also used to increase thickness of gravies. Thus, the manufacturer has to cater both these segments.

Manufacturing process

It is very well established and simple. Paddy is cleaned and graded to remove impurities and then it is soaked in hot water for about 45 minutes. Then it is dried and roasted. Subsequently, it is taken to mill for processing and flakes are passed through sieves to separate bran and broken flakes and to obtain flakes of fairly even size. During this process, process loss and wastage are about 10% and balance 10% is bran which is used by cattle feed producers. The process flow chart is as under:



1.6 Project component and cost

Major components of the projects and their costs are described in the table hereunder:

1.7 Land and Building

Particulars	Unit	Qty	Cost/unit	Total
LAND & BUILDING				11.30
Land	SqM	260	250.00	0.65
Land Development				
Land Area		260	500.00	1.30
Building				
Production Block				
Main Production Area	SqM	100	5,000.00	5.00
Misc Handling Area	SqM	70	5,000.00	3.50
Contingencies		10%		0.85
PLANT & MACHINERY				6.91
Poha mills with accessories with electric motors	No	3	50,000.00	1.50
Roasters	No	3	90,000.00	2.70
Furnace	No	1	40,000.00	0.40
Paddy soaking pans	No	6	6,000.00	0.36
Sieves	No	6	5,000.00	0.30
Sealing machine and weighing scales	LS	1	50,000.00	0.50
Contingencies		20%		1.15
MISCELLANEOUS FIXED ASSETS				3.60
Misc Exp	LS	1	300,000	3.00
Contingencies		20%		0.60
PRE-OPERATIVE EXPENSES				8.75
Establishment		1	725,000	7.25
Professional Charges		1	50,000	0.50
Security Deposits		1	100,000	1.00
TOTAL				30.56

The cost of the various components will depend on the location of the project. Item wise assumptions are as under:

1.8 Plant and Machinery

The main machineries required for the Poha mills with accessories with electric motors, Roasters, Furnace, Paddy soaking pans, Sieves etc. The machinery for this unit will cost Rs. 6.91 lakhs.

1.9 Building

The construction of the building will cost around Rs. 9.35 lakhs.

1.10 Miscellaneous Assets

A provision of Rs. 3.60 lakhs would take care of other items like furniture and fixtures, storage facilities, packing tables etc.

1.11 Preliminary & Pre-operative Expenses

There will be many pre-production expenses like registration, administrative and traveling charges, interest during implementation, trial run expenses etc. for which a provision of Rs. 8.75 lakhs is made.

1.12 Working Capital Requirement

ITEMS	Year 1	Year 3	Year 5
STOCK OF RAW MATERIAL & PACKING MATERIAL	3.53	4.54	4.54
SUNDRY DEBTORS	12.10	15.55	15.55
TOTAL	15.62	20.09	20.09
MARGIN	3.91	5.02	5.02
MPBF	11.72	15.07	15.07
INTEREST ON WC	1.29	1.66	1.66

1.13 Means of Finance

EQUITY CAPITAL			25.00%	8.62
MOFPI SUBSIDY	25%	50.00	25.00%	8.62
TERM LOAN				
FINANANCIAL INSTITUTIONS		10.00%	50.00%	17.23
-Payable half yearly Installments	10	1.70		
TOTAL			100%	34.47

1.14 Cash flow statement

PARTICULARS	Year 1	Year 3	Year 5	Year 7
SOURCES OF FUNDS				
EQUITY CAPITAL	-	-	-	-
SUBSIDY				
NET PROFIT	2.62	6.50	4.94	3.33
(INTEREST ADDED BACK)				
DEPRECIATION	1.31	1.31	1.31	1.31
PRELIMINARY EXP.W/O	1.25	1.25	1.25	1.25
INCREASE IN TERM LOAN	-	-	-	-
INCREASE IN BANK BORROWINGS-WC	11.72	1.67	-	-
TOTAL	16.90	10.74	7.50	5.89

1.15 Projected balance sheet

PARTICULARS	Year 1	Year 3	Year 5	Year 7
LIABILITIES				
EQUITY CAPITAL	8.62	8.62	8.62	8.62
RESERVES & SURPLUS	8.22	13.41	19.48	23.53
TERM LOAN	15.53	8.73	1.93	(0.00)
BANK BORROWINGS-WC	11.72	15.07	15.07	15.07
TOTAL	44.09	45.83	45.10	47.21

1.16 Projected profit and loss account

Particulars	Year 1	Year 3	Year 5	Year 7
INCOME	80.64	103.68	103.68	103.68
EXPENDITURE	75.46	94.61	96.18	97.79
VARIABLE	52.41	67.19	67.19	67.19
FIXED	23.05	27.42	28.99	30.60
GROSS PROFIT	5.18	9.07	7.50	5.89
PROFIT BEFORE TAX	(0.40)	3.72	2.83	1.67
RETAINED PROFIT	(0.40)	3.72	2.83	1.67

1.17 Key Indicators

NET PRESENT VALUE at current Inflation (Rs. in lakhs)	33.19
INTERNAL RATE OF RETURN %	23.50
AVERAGE DSCR	1.45
BREAK EVEN POINT %	95.43
PAY BACK PERIOD (YEARS)	5.34

1.18 Manpower Requirement

PARTICULARS	NO.
SUPERVISORY STAFF	
PRODUCTION SUPERVISORS	1
ACCOUNTANT	2
WORKERS	
SKILLED WORKERS	6
SEMI-SKILLED LABOUR	8

1.19 Assumptions

Project & Financing			
Contingencies on Building			10%
Contingencies on Equipment			20%
Term Loan			50%
Rate of Interest on Term Loan			10%
Subsidy Considered	Subject to ceiling		25%
Expected time of Installation	Months		10
Moratorium	Months		6
CAPACITY			
Rated Capacity Per Annum	80% of Installed capacity	TPA	960
Number of Operational Days	DAYS		300
Working Hours Per day	Hrs		8
CAPACITY UTILIZATION			
Year I			70%
Year II			80%
Year III			90%
SALES PRICE			
W S Price			12000
OTHER EXPENSE			
Commission			7.5%
Marketing Expenses			2.5%
POWER			
Connected Load	HP		25
DEPRICIATION AS PER COMPANY'S ACT			
BUILDING			3.34%
PLANT & MACHINERY			10.34%
MISC. FIXED ASSETS			7.07%
LAND & SITE DEVELOPMENT			1.63%
MAINTENANCE			
BUILDING			2.00%
PLANT & MACHINERY			3.00%
MISC. FIXED ASSETS			2.00%
LAND & SITE DEVELOPMENT			1.50%

Sources of technology

- S P Engineering Works, Fazal Gunj, Kanpur
- AMS Engg, Station Rd., Patna
- Prabhat Agency, Siwan.
- Gurunanak Engg. And Foundry Works, 166, Foacl Point, Mehta Rd., Amritsar-143039. Tel No. 2583542/7943, Fax: 2587944
- Indopol Food Processing Industry Pvt. Ltd., 28, Sector 27-C, Faridabad-121003. Tel No. 2276161/62, Fax : 2270549

The actual cost of projects may deviate on change of any of the assumptions.