

Khadi and Village Industries Commission Mumbai

TEXTURISED SOYA PROTEIN

Introduction :

Soyabeans are rich in proteins and are becoming popular day-by-day. States like MP, UP, Maharashtra, Gujarat etc. are producing substantial quantities with MP being the largest producer. Bulk of the soyabeans are processed by solvent extraction plants for oil leaving large quantities of defatted soya flakes. These flakes or deoiled soya cake can be converted into nuggets or chunks by extrusion. Hence the project should be preferably located close to the soyabean extraction plants.

Process of Manufacture: It is imperative to have good quality solvent extracted flour for processing with the Nitrogen solubility index in the range of 45% to 50%. Other parameters are 7.5 to 8.5% moisture, 53 to 54% proteins, less than 10% fat, 2 to 3 % fiber and yellow to light brown colour. Extracted flour with these characteristics is suitable for extrusion. Extrusion technology is based on high temperature short time processing. Rice and Baking powder in a small quantity are mixed with the deoiled soya flour or cake. The chunks are dried after extrusion. The chunks can also be converted into flakes or granules. **MIXING of INGREDIENT+Extraction +Drying + Packing**

1 **Name of the Product :** **TEXTURISED SOYA PROTEIN**

2 **Project Cost :**

a Capital Expenditure

Land	:			Own
Workshed in sq.Mt. 150		On rent	Rs.	96,000.00
Equipment	:		Rs.	1,415,000.00

Mixing-cum-grinding machine with 5 HP motor & other accessories-1, Soya Nugget extrusion plant with 30 HP motor & complete set of screws, barrel & suitable dies-1, Vibrating sieve with 3 HP motor-1, 200 kg, capacity platform type weighing scale-1, bag sewing machine-1.

Total Capital Expenditure			Rs.	1,511,000.00
b Working Capital			Rs.	420,000.00
TOTAL PROJECT COST :			Rs.	1,931,000.00

3 **Estimated Annual Production Capacity:**

(Rs. in 000)

Sr.No.	Particulars	Capacity in tonnes.	Rate	Total Value
1	Soya Protine	600.00	18000.00	2541.54
TOTAL		600.00	18000.00	2541.54

4 **Raw Material** : **Rs.** **775,000.00**

5 **Lables and Packing matters** **Rs.** **28,000.00**

6 **Wages (8-Skilled & 8- Unskilled)** : **Rs.** **1,175,000.00**

7 **Salaries** : **Rs.** **120,000.00**

8	Administrative Expenses	:	Rs.	65,000.00
9	Overheads	:	Rs.	100,000.00
10	Miscellaneous Expenses	:	Rs.	12,000.00
11	Depreciation	:	Rs.	146,300.00
12	Insurance	:	Rs.	15,110.00
13	Interest (As per the PLR)			
	a. C.E.Loan	:	Rs.	196,430.00
	b. W.C.Loan	:	Rs.	54,600.00
	Total Interest		Rs.	251,030.00
14	Working Capital Requirement	:		
	Fixed Cost		Rs.	408,540.00
	Variable Cost		Rs.	2,132,600.00
	Requirement of WC per Cycle		Rs.	423,523.00

15 Cost Analysis

	Particulars	Capacity Utilization(Rs in '000)			
		100%	60%	70%	80%
1	Fixed Cost	408.54	245.12	285.98	326.83
2	Variable Cost	2133.00	1279.80	1493.10	1706.40
3	Cost of Production	2541.54	1524.92	1779.08	1819.93
4	Projected Sales	3000.00	1800.00	2100.00	2400.00
5	Gross Surplus	458.46	275.08	320.92	366.77
6	Expected Net Surplus	312.00	129.00	175.00	220.00

Note : 1. All figures mentioned above are only indicative.

- Total Cost of Project will be reduced.
- Profitability will be increased.
- Interest on C.E.will be reduced.