

1.	Product	:	Laundry Soap
2.	BIS Standards	:	IS 285 (1992): Laundry Soaps
3.	NIC Code (2008)	:	20231
4.	Production Capacity	:	Quantity- 55metric ton per annum Value Rs. 27,50,000/-
5.	Month & year of Preparation	:	June2020
6.	Prepared by	:	Leather & Footwear Division
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Laundry Soap

Introduction-

Since the beginning of its history in Babylonian times, soap has been made of natural ingredients including plant oils or the acids from animal fat, now referred to as alkali salts of fatty acids. This also means that it is biodegradable. However due to historical shortages and the expense of production, synthetic cleaners were introduced and labelled as detergents. Unfortunately, now the vast majority of the products which are used for cleaning today are actually detergents. These detergents when get mixed with water, they wreak havoc on the natural environment by introducing a number of harmful chemicals which can not be removed by ordinary water purification plant. Furthermore, these chemicals can be harmful to our skin, especially the tender skin of babies. Laundry soaps are used to clean our dirty clothes.

Soaps are obtained from animal oils, fats and strong alkali solutions. Chemically speaking, these are potassium or sodium fatty acids salts produced from the hydrolysis (adding of water molecules) of fats through a procedure called **saponification**. Water molecules have a tendency to stick together, due to a phenomenon called surface tension of water. In order to make water molecules spread/diffuse on a given surface, one has to reduce their surface tension. Soaps contain surfactants in significant amounts, which help water spread uniformly over clothes, thereby removing the dirt & grime from the cloth.

Plant Capacity (Per Annum)-

- Quantity- 55 Metric tone per annum
- Value Rs. 27,50,000/-

Market & Demand Aspect-

The soap manufacturing industry is one of the oldest industries operating in the FMCG sector in India, and accounts for more than 50% of the consumer goods sector. The soap and detergent industry covers laundry and toilet soaps, and synthetic detergents in the form of liquid, powder, and bar. Bar soaps can be classified into three sections--premium, popular, and economic.

Around 50% of soaps produced are sold in rural markets. Increasing awareness of hygienic standards in rural areas is providing growth opportunities to several players. Manufacturers are introducing soaps in different sizes and ranges, targeting consumers from low-income groups. Currently, there are around 5.0 millions retail outlets in India which sell soaps, out of which 3.75 millions operate in rural areas.

Raw Material-

Hydrocarbons used in soap generally come from plants or animals. The addition of an alkali to the mixture creates a surfactant molecule that will not bond with the minerals in hard water, thus avoiding the accumulation of precipitates.

Manufacturing Process & Source of Technology-

Oil is heated in iron vessels and when the oil is sufficiently hot, caustic soda is added to the oil. Caustic soda is to be added to the hot oil slowly with constant stirring. The saponification process starts then and it ends when the mixture becomes thick, the surface becomes shining and frothing stops.

This mixture is allowed to cool with occasional stirring. If a coloured soap is to be produced, a little colour is added to the mixture, while it is still boiling. Perfume can also be when the mixture is still cooling. The mixture is then passed through the soap plodder machine to cut the mixture into bas of soap. The soap bars, are then cut, stamped and packed for despatch.

Basis of Project Selection & Presumptions-

This project profile is prepared based on the following presumptions:

1. The unit will run on single shift basis of eight hours duration with 300 working days in a year.
2. The unit will use 70% of its installed capacity in the first year of commencement of commercial production and will attain its maximum capacity of 85% by the end of second year of commercial production.
3. The prices of raw materials as shown in this project profile are as per the prevailing market rate and may vary time to time.
4. The prices of machinery & equipment as shown in this project profile are as per the prevailing market rate and may vary time to time.
5. The salary & wages shown in this project profile is as per the prevailing rate and conforms to the minimum wages act enacted by the state government.
6. Promoter's contribution for the project is taken @ 5% of the total cost of the project and will be financed under PMEGP.
7. The rate of interest for the loan is taken @ 11% per annum.
8. The pay back period of the loan is assumed to 7 years after the moratorium period.
9. The cost of land and building as shown in the project profile is approximate one and the same may vary from place to place
10. The project will be implemented in three months from the date of conception of the project idea.

Financial Aspects-

- **Fixed Capital:**

A. **Land & Building:** Rented Premises of 1200 sqft area, @ Rs. 3,000/- per month.

B. **Machinery & Equipment**

Sl. No.	Description	Rate (Rs)	Quantity	Value (Rs)
1.	Equipment like (Kadai, Moulds, Conical Pan, Slab Cutter, Cutting machine, stamping machine etc.)	LS	-	1,75,000.00
Total				Rs. 1,75,000.00

- **Working Capital-**
 - A. **Salary & Wages (Per Month)**

Sl. No.	Designation	Salary (Rs)	No	Amount (Rs.)
1.	Supervisor-cum Chemist	12,000/-	1	12,000.00
2	Skilled Worker	7,000/-	1	7,000.00
3.	Semi Skilled Worker	6,000/-	1	6,000.00
4.	Unskilled Worker	5,000/-	2	10,000.00
			Total	Rs. 35,000.00

B. Raw Material Estimation (Per Month)

Sl. No	Item	Rate (Rs)	Quantity	Total (Rs)
1	Raw Material	63/-	4585 kg	1,25,000.00
			Rs.	1,25,000.00

C .Miscellaneous Expenditure (Per Month)

1.	Rent	3,000.00
2.	Transportation Charge	1,500.00
3.	Communication, Postage & Stationary	500.00
4.	Insurance	500.00
5.	Advertising & publicity	3,000.00
6.	Sales Expenditure	4,500.00
7.	Other Misc Expenditure (including fuel & electricity)	5,000.00
Total		18,000.00

D. Total Working Capital (Per Month)

Sl No.	Component	Amount (Rs)
1	Salary & Wages	35,000.00
2	Raw Material	1,25,000.00
3	Miscellaneous Expenditure	18,000.00
Total		Rs. 1,78,000.00

- **Total Capital Investment**

Sl. No.	Type of Capital	Amount (Rs.)
1.	Fixed Capital	1,75,000.00
2.	Working Capital for 3 Months	5,34,000.00
Total		Rs. 7,09,000.00

- **Means of Financing**

Sl. No.	Means of Finance	Amount (Rs.)
1.	Promoter's Contribution (5%)	35,450.00
2.	Bank loan under PMEG	6,37,550.00
Total		Rs. 7,09,000.00

- **Financial Analysis-**

A. Cost of Production (Per Annum)

Sl. No.	Items of Cost	Amount (Rs.)
1.	Total Recurring Cost	21,36,000.00
2.	Depreciation on fixed assets @ 20%	35,000.00
3.	Interest on Bank loan	70,130.00
Total		22,41,130.00

B. Turnover (Per Annum)

Item	Rate	Qty	Amount
Soap Bar	50.00	55,000 kg	27,50,000.00

C. Gross Profit (Per Annum)

Gross Profit = Sales Turnover - Cost of Production

Gross Profit – Rs. 27,50,000 - Rs. 22,41,130.00

= Rs. 5,08,870.00

D. Profit Rate on Sales

$$\begin{aligned} \text{Profit Rate on Sales} &= \frac{\text{Gross Profit} \times 100}{\text{Turnover}} \\ &= \frac{5,08,870 \times 100}{27,50,000} \\ &= 18.50\% \end{aligned}$$

E. Rate of Return on Investment

$$\begin{aligned} \text{Rate of Return on Investment} &= \frac{\text{Gross Profit} \times 100}{\text{Total Capital investment}} \\ &= \frac{5,08,870 \times 100}{709000} \\ &= 71.77\% \end{aligned}$$

F. Break Even Analysis

$$\text{Break Even Point} = \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}}$$

Fixed Cost (Per Annum)

Sl. No.	Items	Amount (Rs.)
1.	Depreciation	35,000.00
2.	Interest on Bank Loan	70,130.00
3.	40% Salary & Wages	1,68,000.00
4.	40% of Misc Expenses	86,400.00
	<u>Total</u>	<u>3,59,530.00</u>

$$\begin{aligned} \text{Break Even Point} &= \frac{3,59,530 \times 100}{3,59,530 + 5,08,870} \\ &= 41.40\% \end{aligned}$$
