ALMOND CREAM MANUFACTURING

1. INTRODUCTION

The Almond Cream Manufacturing Project is designed to tap into the growing demand for plant-based and natural products in both the culinary and cosmetic industries. Focused on producing high-quality almond cream, the project aims to establish a manufacturing unit strategically located for optimal access to raw materials and market reach. With consumer trends increasingly leaning towards health and wellness, almond cream stands out for its nutritional value and versatility. The project's core objective is to create a sustainable business model that not only caters to this demand but also contributes positively to the environment and local community. Emphasizing sustainability in production and sourcing, the venture seeks to create a reputable brand known for quality and purity, while offering employment opportunities and engaging in responsible business practices. This introduction sets the stage for a detailed exploration of the product's applications, market potential, manufacturing processes, and financial planning in the subsequent sections of the profile.

2. PRODUCT & ITS APPLICATION

Almond cream, derived from high-quality almonds, is a nutritious and versatile product gaining popularity in diverse sectors. In the culinary world, it's valued as a dairy-free alternative, ideal for vegan diets and those with lactose intolerance. The cosmetic industry leverages almond cream for its moisturizing properties, enriching various skincare products. Additionally, its health benefits, particularly high vitamin E content, make it a desirable ingredient in nutritional supplements.

3. DESIRED QUALIFICATION FOR PROMOTER

The ideal promoter for the almond cream manufacturing project should possess a blend of educational and practical experience. A background in Business, Food Technology, or related fields is advantageous, complemented by experience in the food or cosmetics industry. Key skills include a strong understanding of market trends, business development, and sustainable practices. A visionary approach focused on quality and sustainability is essential.

4. INDUSTRY OUTLOOK AND TRENDS

The almond cream industry is riding the wave of increased demand for plant-based products. This trend is fueled by growing health consciousness among consumers and a shift towards vegan and lactose-free diets. Additionally, the industry is influenced by the rising emphasis on sustainability and ethical sourcing in both food and cosmetic sectors.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

The almond cream market, part of the broader global almond industry, shows promising growth, especially relevant for a new venture in Uttarakhand, India. The global almond market, a key indicator for almond-based products like almond cream, was valued at USD 6.55 billion in 2019 and is expected to reach USD 15.62 billion by 2027, growing at a CAGR of 11.2%. This growth trajectory suggests a substantial opportunity for almond cream manufacturing in regions like Uttarakhand, known for their focus on health-conscious and natural products. Key global players in the almond market include Blue Diamond Growers, California Almonds, and Almondco Australia, whose market strategies and product offerings could provide valuable insights for a new enterprise in this sector.

Setting up an almond cream manufacturing project in Uttarakhand, however, comes with its challenges. The primary concern is the high cost of almonds, impacting production costs and final pricing. The competition with other nut-based and dairy creams, prevalent in the Indian market, poses another challenge. To establish a strong market presence in Uttarakhand, it's essential to focus on strategic pricing and innovative marketing that emphasizes the health benefits and culinary versatility of almond cream. This approach, coupled with maintaining high product quality and a resilient supply chain, will be crucial in tapping into the growing demand for plant-based, healthy food options among Indian consumers.

6. RAW MATERIAL REQUIREMENTS

The primary raw material is high-quality almonds, preferably organic and sustainably sourced to ensure the final product's quality and appeal. Depending on the product formulation, additional natural ingredients may be incorporated to enhance the cream's properties and meet diverse consumer needs. Typically, the raw materials required for almond cream production include: Almonds, Sugar, Flavoring agents, Emulsifier. The almond content in almond milk is 5%, with 8–10% sugar, 0.3% emulsifier, and 0.02% flavor. The pH value of the prepared almond milk is 7.1.

7. MANUFACTURING PROCESS

The manufacturing process of almond cream is a meticulous journey that begins with the careful selection of premium almonds. These almonds are first inspected for quality, with any spoiled ones being removed, followed by a thorough cleaning and sorting. The almonds are then soaked and blanched to prepare them for grinding into a fine paste. This paste forms the base of the almond cream and is mixed with water and other ingredients to achieve the desired consistency. The mixture is homogenized to ensure a smooth texture, then heated and pasteurized to eliminate any harmful bacteria, ensuring the safety of the product and extending its shelf life. Following pasteurization, the almond pulp is filtered out, leaving behind the creamy base.

The final product is then packaged using hygienic and sustainable methods, preserving its quality and appeal. Almond creams are available in a variety of packaging sizes to cater to different needs and preferences. For instance, the Glamour Almond-Milk Nourishing Cream is offered in both 100 g and 200 g sizes, while Kavita's Herbal White Almond Massage Cream is available in a 500 g package. For those requiring larger quantities, the Honey Tree Almond Cream and Amina Honey & Almonds Rejuvenating Skin Cream are both available in 800 g and 800 ml sizes, respectively. Additionally, some almond creams, such as the Pure Roots Almond & Honey Lotion and The Body Care Almond Cream, come in packs of two, providing options for 200 ml and 500 g sizes. This wide range of packaging options reflects the versatility and appeal of almond cream as a nourishing skincare product.

Here are some BIS standards for cosmetics:

- IS 6608 (2004): This standard covers the requirements and methods of sampling and testing for skin creams. It also specifies that skin creams should be in the form of a thick emulsion or unctuous mass with a pleasant odor.
- IS 4011: 2018: This standard covers methods of testing for the safety evaluation of cosmetics.

8. MANPOWER REQUIREMENT

Sr. No	Particulars	No. of Person	Months	Monthly Wages Amount/Person (Rs in Lakhs)	Monthly Wages - Total (Rs in Lakhs)	Annual Expenses (Rs in Lakhs)

1	Skilled	3	12	0.22	0.66	7.92
2	Semi-skilled	2	12	0.18	0.35	4.20
3	Unskilled	2	12	0.14	0.28	3.36
	Total					**15.48**

9. IMPLEMENTATION SCHEDULE

Sr. No.	Activity	Time Required *(in months)*
1	Acquisition of premises	2
2	Construction (if applicable)	1
3	Procurement & installation of Plant & Machinery	4
4	Arrangement of Finance	3
5	Recruitment of required manpower	1
Total time required (some activities shall run concurrently)		**10-11**

10. COST OF PROJECT

Sr. No.	Particulars	Amount (Rs in Lakhs)
1	Pre-operative Expenses	4.00
2	Land and Building	6.00
3	Machinery	12.35
4	Equipment and Furniture	1.05
5	Working Capital	8.00
	Total Project Cost	**31.40**

11. MEANS OF FINANCE

Bank-term loans are assumed @ 75 % of fixed assets.

Sr. No.	Particulars	Percentage Share	Amount (Rs in Lakhs)
1	Promoter's Contribution	25%	7.85
2	Bank Finance	75%	23.55
	Total		**31.40**

12. LIST OF MACHINERY REQUIRED

A. Machinery

Sr. No.	Particulars	Unit	Unit Cost (Rs in Lakhs)	Amount (Rs in Lakhs)
1	Almond Grinding Machine	1	1.500	1.50
2	Pasteurization Unit	1	2.000	2.00
3	Mixing and Blending Equipment	1	1.000	1.00
4	Filling and Packaging Machine	1	2.500	2.50
5	Storage Tanks	2	0.500	1.00
6	Quality Control Lab Equipment	1	1.500	1.50
	Total Amount			**9.50**
	Tax, Transportation, Insurance, etc.			1.90

	Electrification Expenses (Wiring)	0.95
	Grand Total	**12.35**

B. Furniture & Equipment

Sr. No.	Particulars	Unit	Unit Cost (Rs in Lakhs)	Total Amount (Rs in Lakhs)
1	Office Furniture	Set	0.65	0.65
2	Computers and printers	1	0.40	0.40
	Total			**1.05**

13. SALES REALIZATION CALCULATION

Sr. No	Product	Quantity (in units)	Sales in Percentage	Total Sales (Rs in Lakhs)
1	Almond Cream	14000	100%	70.00
	Total		100%	70.00

14. PROFITABILITY CALCULATIONS

Sr. No	Particulars - Amount (Rs.)	Year-I (Rs in Lakhs)
A.	Sales Realization	
	Sales (Assuming 15% growth per year)	70.00
	Other Income (Assuming constant)	
	Total Sales Realization	70.00
B.	Cost of Production	
	i) Raw Materials	37.10
	ii) Utilities (Assuming constant)	0.45
	iii) Manpower (Salaries/wages)	15.48
	iv) Administrative Expenses (Assuming constant)	0.35
	v) Selling & Distribution Expenses (Assuming constant)	0.40
	viii) Interest (Assuming constant)	3.14
	Total Cost of Production	56.92
	No of Units Produced	14,230
	Cost of Goods Sold	0.004
	Gross Profit/Loss (A – B)	13.08
	Less: Depreciation	2.52
C.	PBIT (Profit Before Interest and Tax)	10.57
D.	Income-tax (Assuming 28% tax rate)	2.96
E.	Net Profit/Loss (C - D)	7.61
F.	Repayment	3.14
	Retained Surplus (E - F)	4.47

15. BREAKEVEN ANALYSIS

Fixed cost	**Year-I (Rs in Lakhs)**
Depreciation	2.52
Interest	3.14
Manpower	4.64
Total Fixed cost	10.30
Variable cost	
Raw materials	37.1
Utilities	0.45
Manpower	10.84
Administrative expenses	0.35
Selling & distribution expenses	0.4
Total Variable cost	49.14
Contribution margin	**20%**
Break-Even Point in Value	51.50

16. STATUTORY/GOVERNMENT APPROVALS

For establishing a rose water manufacturing unit in Uttarakhand, India, the following statutory and government approvals are typically necessary:

- Business Registration:
  - Registration of Firm: Register the business as a sole proprietorship, partnership, LLP, or private limited company, as applicable.
  - GST Registration: Mandatory for conducting a taxable supply of goods or services.
- Environmental Clearance:
  - Consent to Establish (CTE) and Consent to Operate (CTO) from the State Pollution Control Board, ensuring compliance with environmental standards.
  - Food Safety and Standards Authority of India (FSSAI) License: Necessary for businesses involved in the food sector, even if the product is non-consumable but derived from a food source (like roses).
- Agricultural and Processed Food Products Export Development Authority (APEDA) Registration: If planning to export the rose water, registration with APEDA is required.
- Quality Certifications: Certifications like ISO, if aiming for a broader market reach and ensuring product quality.
- Trade License: From the local municipal authority.
- Other Licenses and Approvals:
  - A drug license from the Drug Control Authority is required if the rose water is intended for medicinal use.
  - Factory License if the manufacturing unit meets certain size and capacity criteria.
  - NOC from the fire department, depending on the scale and location of the manufacturing unit.

- Labor Laws Compliance: If employing workers, compliance with labor laws such as the Factories Act, Minimum Wages Act, Provident Fund regulations, etc., is mandatory.

17. BACKWARD AND FORWARD INTEGRATIONS

A. Backward Integration

Backward integration refers to the process of a company taking control of its supply chain by acquiring or managing the companies that supply the raw materials or components. For the Rose Water manufacturing project, this could involve:

Raw Material Sourcing: Establishing direct connections with rose cultivators in Uttarakhand or starting a company-owned cultivation program. This ensures a steady supply of high-quality organic roses, crucial for product quality.

Component Production: In-house production or control of key components like distillation units, packaging materials, or organic solvents, if applicable, to reduce costs and ensure quality.

Quality Control: Implementing strict quality control measures at every stage of raw material procurement and component production. This could involve setting up a quality control lab and regular testing protocols.

B. Forward Integration

Forward integration is when a company controls the post-production process, from distribution to final sales. For the Rose Water project, it includes:

Distribution and Sales: Developing an in-house distribution network or partnering with established distributors to maximize market reach. This could involve online sales platforms, tie-ups with retailers, or direct-to-consumer sales strategies.

Repair and Maintenance Services: Although less relevant for a product like rose water, maintaining customer service for any equipment sold with the product (like diffusers or application tools) can enhance customer satisfaction.

Diversification: Expanding the product line beyond rose water to include related products such as rose-infused beauty products, essential oils, or aromatherapy products, leveraging the existing manufacturing and distribution channels.

18. TRAINING CENTERS AND COURSES

For entrepreneurs entering the Rose Water manufacturing business, acquiring the right knowledge and skills is crucial. There are specialized institutes that offer relevant training and certification in areas like agriculture, botany, chemical engineering, and business management. These courses can provide essential knowledge in rose cultivation, distillation processes, quality control, and business operations.

- Entrepreneurship Development: Focuses on the entrepreneurial process of creating new businesses, creativity, and innovation in start-ups, managing family-owned companies, social innovation, and financing entrepreneurial firms. Course Link
- Production and Operation Management: Offers insights into operations management, its relation to other functional areas in an organization, types of problems faced by operations managers, and common decision-making approaches. Course Link
- Innovation, Business Models and Entrepreneurship: Covers various aspects of innovation, creativity, evolving business models, incubation, and entrepreneurship. Course Link

Swayam portal (link: https://swayam.gov.in/) can also be accessed for enhanced learning on business commerce, accounting, production, marketing, and areas of entrepreneurship.

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