BREAD MAKING

INTRODUCTION

The "Bread Making" project profile is aimed at promoting micro and small-scale investments in the Uttarakhand region of India. Uttarakhand, with its serene environment and growing urban population, presents a promising opportunity for entrepreneurs to venture into the bread-making industry. This project aims to provide a comprehensive overview of the venture, including its product, qualifications required for promoters, and a glimpse into the industry's outlook and trends.

1. PRODUCT & ITS APPLICATION

The primary product of this venture is high-quality bread, including a variety of bread types such as white bread, whole wheat bread, multigrain bread, and specialty bread like garlic bread or fruit bread. These bread products cater to the diverse tastes and preferences of consumers in the Uttarakhand region. Bread serves as a staple food item and finds its application in various culinary creations, from sandwiches and toast to accompaniments in local dishes.

2. DESIRED QUALIFICATION FOR PROMOTER

To carve out a successful niche in Uttarakhand's bread-making industry, aspiring entrepreneurs must equip themselves with a blend of culinary skills, business savvy, and regulatory knowledge. Mastery in bakery arts, particularly bread-making techniques, forms the foundation of this venture. Such expertise can be honed through formal culinary training, apprenticeships, or hands-on experience in the field. Beyond the art of baking, a solid grasp of business fundamentals—encompassing budgeting, marketing, and inventory management—is crucial. Whether gained through academic courses or real-world entrepreneurial endeavors, this business acumen will steer the venture towards profitability. Equally important is a thorough understanding of food safety standards to ensure the production of wholesome and hygienic bread products, achievable through specialized training and certifications. An intimate knowledge of the local market dynamics,

including consumer tastes and competitive landscape, will guide effective strategic planning and market positioning. Success also hinges on securing the necessary infrastructure and modern baking equipment to streamline production processes. Lastly, strict adherence to all pertinent food production regulations, securing the necessary licenses, and permits underscores a commitment to legality and quality, setting the stage for a thriving breadmaking business in Uttarakhand.

3. INDUSTRY OUTLOOK AND TRENDS

The bread-making sector in Uttarakhand is experiencing a significant upswing, fueled by various trends and driving forces that hint at a bright future for the industry. A key factor is the increasing health consciousness among consumers, which has spiked the demand for healthier bread options like whole wheat and multigrain varieties. Additionally, the state's urbanization trajectory is broadening the customer base for bakery items, including bread, by swelling the urban population. Uttarakhand's appeal as a leading tourist hotspot further bolsters the demand for bakery products across hotels, restaurants, and local cafes, catering to the diverse tastes of visitors. The industry is also witnessing a wave of innovation with the introduction of specialized bread types such as gluten-free, organic, and artisanal offerings, meeting the demands of niche markets and enhancing the business's value proposition. Emphasizing the use of locally sourced ingredients taps into the growing trend towards sustainability and supports the "Make in India" initiative, appealing to ecoconscious consumers. Moreover, the expansion of e-commerce platforms is revolutionizing distribution methods, opening up new avenues for bread products to reach a wider audience. Together, these factors are shaping a promising outlook for the bread-making industry in Uttarakhand, indicating robust growth and transformation in the years to come.

4. MARKET POTENTIAL AND MARKETING ISSUES; IF ANY

The market potential for bread-making in Uttarakhand is considerable, driven by a growing population, particularly in urban areas. With the state's popularity as a tourist destination, there's an additional demand for bakery items, including sandwiches and rolls. Changing consumer preferences towards healthier and artisanal bread options, such as whole wheat

and multigrain, provide an opportunity for diversification. The rise of retail and e-commerce outlets in Uttarakhand offers varied distribution channels for bread products.

However, despite the promising potential, certain marketing issues need consideration. The bakery industry in Uttarakhand is competitive, demanding a focus on product quality, branding, and differentiation. Distribution challenges, especially in hilly and remote areas, may affect the timely delivery of fresh bread. Seasonal variations driven by tourist demand fluctuations and the need for brand awareness pose additional considerations.

Revenue in the Bread market amounts to US\$58.36bn in 2024. The market is expected to grow annually by 8.13% (CAGR 2024-2028).

In the Indian bakery market, key players include Britannia Industries Limited, Parle Products Pvt. Ltd, ITC Limited, and Surya Food and Agro Limited. Noteworthy companies also include Anmol Industries Ltd, Jubilant FoodWorks Limited, Ravi Foods Pvt. Ltd, Mondelez International, Inc, Mrs Bectors Food Specialities Ltd, and Patanjali Ayurved Limited. While specific statistics may vary, the overall trend indicates a thriving market with opportunities for innovative bread products and strategic brand positioning.

5. RAW MATERIAL REQUIREMENTS

For successful bread production, a comprehensive list of raw materials is essential, each contributing to the quality and uniqueness of the final product. At the heart of breadmaking is flour, predominantly wheat flour, which must be of high quality and free from any contaminants to ensure the bread's foundational integrity. Yeast plays a crucial role in the fermentation process, giving the bread its rise and texture; both active dry yeast and instant yeast are suitable for this purpose. Water, another critical ingredient, must be clean and potable, as its quality directly influences the dough's taste and texture.

The addition of sugar to the dough not only enhances its flavor but also aids in the yeast's fermentation process, while salt is integral for flavor enhancement, dough structure strengthening, and fermentation control. Fats, such as vegetable oil or butter, are

incorporated to improve the bread's texture and flavor, contributing to a longer shelf life. To further enhance dough quality and extend the bread's shelf life, improvers and conditioners like ascorbic acid, enzymes, and emulsifiers are also utilized.

For those aiming to produce more specialized varieties of bread, additional ingredients such as seeds, nuts, herbs, or spices may be included. These not only add unique flavors and textures but also cater to consumer demand for diverse and health-oriented bread options.

Here are some flour suppliers:

- Grains Flour. Drona Sales Pvt Ltd. Business Type: Trading Company. Dehradun.
- 100% Chemicals Free Mandua Flour. Jagriti Foods. Business Type: Manufacturer |
 Supplier. Pauri.
- Wheat Flour. Shah Industries. Business Type: Manufacturer. Jaspur.

6. MANUFACTURING PROCESS

The bread-making process is a meticulous sequence of steps, each critical to achieving the desired quality and texture of the final product. It begins with mixing, where essential ingredients such as flour, water, yeast, sugar, salt, and fats are combined to form a dough. This can be achieved through manual kneading or with the aid of automated mixers. Following mixing, the dough undergoes fermentation for about 1-2 hours, a crucial period where the dough rests and rises, allowing flavors and textures to develop.

After fermentation, the dough is divided and shaped into various bread forms, including loaves, rolls, or buns, depending on the desired end product. The shaped dough is then proofed for an additional 30 minutes to 1 hour, enabling it to rise and expand before it enters the oven. Baking is the next step, where the proofed dough is subjected to specific temperatures and durations tailored to each bread type, solidifying its structure and forming a crust. Once baked, the bread is cooled on racks to room temperature to prevent moisture buildup, which could affect the quality.

Packaging follows cooling, with the bread being wrapped in suitable materials to preserve freshness and ensure hygiene, accompanied by labeling that provides product information and branding. The final step is distribution, where the packaged bread products are delivered to various sales points, including retail outlets and supermarkets.

The packaging process also takes into account the need for varying bag sizes to accommodate different bread types, such as French bread, baguettes, and Cuban bread, with dimensions specifically tailored for each. For instance, French bread typically uses bags measuring 4.5in x 2.5in x 24in, baguettes fit into 4.5in x 2.5in x 28in bags, and Cuban bread is suited to 5in x 3.5in x 24in bags. Larger loaves or multiple smaller baked goods can be accommodated in bread loaf packing bags that measure 18in x 4in x 8in when fully extended, ensuring versatility in packaging for a wide range of products.

The Bureau of Indian Standards (BIS) has a specification for bread, IS1483:1979. This standard is for white bread and is in the Food and Agriculture division, under the Foodgrains, Starches, and Ready to Eat Foods section.

The standard states that the bread should be baked in a conventional form or any other form agreed upon by the vendor and the purchaser. The crust should be free of blisters and should be a uniform, golden to light brown color. The crust should not be burnt and should be free of soot and any foreign matter.

7. MANPOWER REQUIREMENT

Sr. No	Particulars	No. of	Months	Monthly Wages	Monthly	Annual
		Person		Amount/Person	Wages - Total	Expenses
				(Rs in Lakhs)	(Rs in Lakhs)	(Rs in Lakhs)
1	Skilled	1	12	0.18	0.18	2.16
2	Semi-skilled	1	12	0.13	0.13	1.56
3	Unskilled	2	12	0.10	0.20	2.40
	Total					6.12

8. IMPLEMENTATION SCHEDULE

Sr. No.	Activity	Time Required (in months)
1	Acquisition of premises	1
2	Construction (if applicable)	1.5
3	Procurement & installation of Plant & Machinery	1.5
4	Arrangement of Finance	1
5	Recruitment of required manpower	1
Total time required (some activities shall run concurrently)		4

9. COST OF PROJECT

Sr. No.	Particulars	Amount (Rs in Lakhs)
1	Pre-operative Expenses	0.45
2	Land and Building	8.00
3	Machinery	6.93
4	Equipment and Furniture	0.65
5	Working Capital	2.00
	Total Project Cost	18.03

Assumed production capacity is 200 Bread Packets per day.

10. 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%	4.51
2	Bank Finance	75%	13.52
	Total	•	18.03

11. LIST OF MACHINERY REQUIRED

A. Machinery

Sr. No. Particulars	Unit	Unit Cost	Total Amount
---------------------	------	-----------	--------------

			(Rs in Lakhs)	(Rs in Lakhs)
1	Commercial Oven	1	2.00	2.00
2	Dough Mixer	1	0.50	0.50
3	Proofer	1	0.30	0.30
4	Bread Slicer	1	0.20	0.20
5	Refrigeration System	1	0.80	0.80
6	Baking Trays	100	0.005	0.50
7	Packaging Machine	1	0.60	0.60
8	Weighing Scales	2	0.05	0.10
9	Bread Racks	10	0.01	0.10
10	Proofing Baskets	20	0.002	0.04
11	Bread Cutting Board	5	0.005	0.03
12	Utensils and Tools	Set	0.15	0.15
	Total Amount			5.32
	Tax, Transportation, Insurance, etc.			1.07
	Electrification Expenses (Wiring)			0.54
	Grand Total			6.93

B. Furniture & Equipment

Sr. No	Particulars	Unit	Unit Cost	Total Amount
			(Rs in Lakhs)	(Rs in Lakhs)
1	Office Furniture	-	0.30	0.30
2	Display Shelves	5	0.03	0.15
3	Point of Sale System	1	0.20	0.20
	Total Amount			0.65

1. Modern Machines

Canal Road, opposite Inspiration School, Near Nainital Bank, Kathgodam, Haldwani, Uttarakhand 263139

2. Jass Trading Co.

10/11, New, Patel Nagar,

Dehradun, Uttarakhand 248001

3. Dev Engineering Works:

Road, opp. hotel viceroy inn,

Sewla Kalan, Niranjanpur,

Dehradun, Uttarakhand 248001.

12. Sales Realization Calculation

Sr. No	Product	Quantity	Sales in	Total Sales
		(in piece)	Percentage	(Rs in Lakhs)
1	Bread Packets	70000	100%	56.00
	(800 gms - 1 kg)			
	Total		100%	56.00

13. PROFITABILITY CALCULATIONS

Sr. No	Particulars - Amount (Rs.)	Year-I (Rs in Lakhs)
A.	Sales Realization	
	Sales (Assuming 15% growth per year)	56.00
	Other Income (Assuming constant)	
	Total Sales Realization	56.00
B.	Cost of Production	
	i) Raw Materials	29.15
	ii) Utilities (Assuming constant)	0.7
	iii) Manpower (Salaries/wages)	6.12
	iv) Administrative Expenses (Assuming constant)	0.6
	v) Selling & Distribution Expenses (Assuming constant)	0.45
	viii) Interest (Assuming constant)	1.81

	Total Cost of Production	38.83
	No of Units Produced	70,587
	Cost of Goods Sold	0.0006
	Gross Profit/Loss (A – B)	16.18
	Less: Depreciation	1.45
C.	PBIT (Profit Before Interest and Tax)	14.74
D.	Income-tax (Assuming 28% tax rate)	4.13
E.	Net Profit/Loss (C - D)	10.61
F.	Repayment	1.81
	Retained Surplus (E - F)	8.81

14. BREAKEVEN ANALYSIS

Fixed cost	Year-I (Rs in Lakhs)
Depreciation	1.45
Interest	1.81
Manpower	1.84
Total Fixed cost	5.10
Variable cost	
Raw materials	29.15
Utilities	0.7
Manpower	4.28
Administrative expenses	0.6
Selling & distribution expenses	0.45
Total Variable cost	35.18
Contribution margin	20%
Break-Even Point in Value	25.50

15. STATUTORY/GOVERNMENT APPROVALS

In the state of Uttarakhand, India, establishing and operating a bread-making business involves several statutory and government approvals. Ensuring compliance with these regulations is critical for the successful initiation and operation of your project. Here are some of the key approvals and permits required:

Business Registration:

- Business Entity Registration: Register your business as a sole proprietorship, partnership, limited liability partnership (LLP), or private limited company, as per your preference.
- GST Registration: Obtain a Goods and Services Tax (GST) registration to comply with India's taxation regulations.

Food Safety Regulations:

• **FSSAI License:** Apply for a license from the Food Safety and Standards Authority of India (FSSAI) to ensure compliance with food safety standards.

Manufacturing Permits:

- Factory License: Depending on the scale of your production, you may need to obtain a factory license under the Factories Act.
- Trade License: Acquire a trade license from the local municipal authority to operate your bread-making unit.

Environmental Clearances:

 Consent to Operate: If your manufacturing process generates environmental impacts, you might require a consent to operate from the State Pollution Control Board.

Labor Regulations:

 Labor Compliance: Comply with labor laws, including obtaining the necessary labor licenses, and adhere to minimum wage requirements.

Local Permits and Clearances:

- Local Health Department Clearance: Ensure your premises meet hygiene and sanitation standards set by the local health department.
- **Fire Safety Clearance:** Obtain a fire safety clearance certificate from the relevant authorities to ensure workplace safety.
- Zoning and Land Use Permissions: Verify that your chosen location complies with zoning regulations and land-use permissions for commercial bakery operations.

16. BACKWARD AND FORWARD INTEGRATIONS

A. Backward Integration

Backward integration involves activities related to the supply chain that move you closer to the source of raw materials and inputs required for bread production. In the context of your project in Uttarakhand, consider the following:

- Wheat Sourcing: Explore options to establish direct contracts or partnerships with local wheat farmers or suppliers to ensure a steady and quality supply of wheat flour, a key raw material for bread production.
- Storage Facilities: Consider establishing or leasing storage facilities for wheat and other raw materials to ensure adequate inventory management and reduce supply chain vulnerabilities.
- Quality Control: Implement quality control measures at the raw material procurement stage to maintain consistent quality in your bread products.

B. Forward Integration

Forward integration involves activities that move your business closer to consumers and distribution channels. For your bread-making project in Uttarakhand, consider the following:

 Distribution Network: Develop a well-structured distribution network to efficiently deliver your bread products to local retailers, supermarkets, restaurants, and other sales points.

- Branding and Packaging: Invest in attractive packaging and branding to make your bread products appealing to consumers. Consider creating your own retail outlets or partnering with local retailers to showcase your products.
- Online Sales: Explore e-commerce and online delivery options to reach a broader consumer base, especially considering the growing trend of online shopping in the region.
- Cafeteria or Bakery Outlets: Consider opening your own bakery outlets or cafeteriastyle establishments to directly sell your bread products to consumers.

17. TRAINING CENTERS AND COURSES

For entrepreneurs looking to venture into the bread-making industry in Uttarakhand, it is essential to acquire the necessary knowledge and skills. There are various training centers and courses available to help individuals gain expertise in bread production, food safety, and bakery management. Here are some options:

- National Institute of Food Technology Entrepreneurship and Management (NIFTEM):
 Located in Kundli, Haryana, NIFTEM offers diploma and certificate programs in bakery technology. These programs cover various aspects of bakery science and technology, including bread production techniques and quality control.
- Central Food Technological Research Institute (CFTRI): CFTRI, based in Mysuru, Karnataka, offers short-term courses and workshops in bakery science and technology.
 These programs provide hands-on training in bread making, ingredient selection, and food safety practices.
- Local Agricultural Universities and Institutes: In Uttarakhand, there are agricultural
 universities and institutes that offer courses related to food processing and technology.
 These institutions may provide training in bakery and bread production as part of their
 curriculum.

- Online Courses: There are numerous online platforms and educational websites that
 offer courses in bakery and bread making. These courses are often self-paced and can
 be convenient for individuals who cannot attend in-person classes.
- Government Skill Development Programs: Keep an eye on government-sponsored skill
 development programs and initiatives. These programs may offer training in bakery and
 food processing skills, including bread making, at subsidized rates or even for free.
- Local Bakery Associations: Contact local bakery associations or industry groups in Uttarakhand. They may organize workshops, seminars, and training sessions for aspiring bakers and entrepreneurs.
- Private Baking Schools: Some private baking schools and culinary institutes in India
 offer comprehensive bakery and patisserie courses. While they may be more expensive,
 they often provide in-depth training and hands-on experience.

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

When considering training options, it's essential to choose a program that aligns with your specific goals and the scale of your bread-making project in Uttarakhand. Additionally, verify the credibility and reputation of the training center or course provider to ensure you receive quality education and practical knowledge that will be valuable for your venture.

Disclaimer

Only few machine manufacturers/institutes are mentioned in the profile, although many machine manufacturers/institutes are available in the market. The addresses given for machinery manufacturers/institutes have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.