# Wheat-Based Rusk Manufacturing Unit in Uttarakhand







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#### 1. Introduction

Wheat-based rusk is a popular baked snack consumed across India as a breakfast accompaniment and tea-time item. Setting up a wheat-based rusk manufacturing unit in Uttarakhand offers a promising opportunity due to the increasing demand for packaged bakery products in both urban and semi-urban markets. The proposed unit will produce high-quality, hygienically packed rusks using locally sourced wheat flour and other ingredients, catering to the growing appetite for ready-to-eat and shelf-stable bakery items.

Uttarakhand's agro-climatic conditions support wheat cultivation, ensuring a steady supply of raw material for rusk production. This localized sourcing reduces transport costs and ensures fresher inputs, making the product more competitive in the market. The venture can leverage the state's expanding network of retail shops, supermarkets, and online grocery platforms to market its products effectively.

Establishing this unit will not only create direct employment opportunities in production, packaging, and distribution but also support indirect employment in farming, logistics, and allied sectors. It will contribute to the local economy by creating value addition to raw agricultural produce and promoting agro-based industries in the state.

## 2. Industry Overview

The Indian bakery industry is the third largest among processed food industries, and the rusk segment has seen steady growth due to its long shelf life, affordability, and widespread acceptance. With changing lifestyles and growing demand for packaged and convenient foods, the bakery industry is projected to continue its upward trend. The rusk market is dominated by small and medium enterprises that cater to local and regional markets.

In Uttarakhand, the bakery industry has been expanding rapidly due to urbanization, increased tourism, and changing consumption habits. Local bakeries are now venturing into packaged product lines to reach broader markets. There is a growing preference for hygienically prepared, branded rusk products over loose, unpackaged options.

Rising disposable incomes, a growing working-class population, and expanding retail infrastructure in towns and hill districts are expected to further fuel demand for packaged rusks. This creates a favorable environment for establishing new manufacturing units within the state.



## 3. Products and Application

The main product will be wheat-based rusk, which is a double-baked bread product known for its crispness and long shelf life. The unit will produce various variants including plain sweet rusk, milk rusk, elaichi (cardamom) rusk, and butter rusk to cater to different consumer preferences. The products will be packed in airtight pouches to preserve freshness and increase shelf life.

Rusk is consumed as a ready-to-eat snack, often with tea or coffee, and is popular among people of all age groups. It is also used in catering services, hotel breakfasts, and institutional canteens due to its convenience and storability. With a longer shelf life compared to regular bread, rusk is suitable for retail distribution even in distant hill districts.

Value addition can also be done by introducing sugar-free or multigrain variants targeted at health-conscious consumers, which can attract premium pricing and higher margins for the enterprise.

## 4. Desired Qualification

The promoter of the unit should preferably have a background in food processing, bakery technology, or business management. Prior experience in food manufacturing or marketing would be beneficial, though not mandatory. Entrepreneurial skills and an understanding of production planning, quality control, and distribution channels will be crucial.

Technical staff like bakery technologists and production supervisors should be hired to ensure consistent quality. The promoter should also be familiar with FSSAI regulations, food safety practices, and packaging norms, as compliance is essential for selling packaged food products.

Training programs offered by institutions like CFTRI, NIFTEM, or state food processing departments can help the entrepreneur and staff build technical expertise before starting operations.

#### 5. Business Outlook and Trend

The outlook for the wheat-based rusk industry is positive, with increasing demand from both rural and urban markets. The product's long shelf life, affordability, and widespread acceptability make it resilient to market fluctuations. The packaged rusk segment is witnessing brand diversification, better packaging, and product innovation to capture new market segments.

Trends include the introduction of healthy variants like multigrain or low-sugar rusk, premium packaging for urban markets, and tie-ups with e-commerce platforms. There is also a trend towards automation of production lines to ensure consistency and cost efficiency.



In Uttarakhand, rising tourism and urbanization are further pushing demand for packaged bakery products, making it a favorable time to enter this market with a localized production unit.

#### 6. Market Potential and Market Issues

The market potential for rusk is strong across Uttarakhand's plains and hill districts, with rising consumption in both household and institutional segments. Local production can ensure freshness and lower logistics costs compared to products sourced from outside the state. The growing presence of supermarkets and online grocery platforms provides additional distribution channels.

However, the market faces challenges such as price competition from established brands, fluctuating raw material costs, and the need to ensure consistent quality and hygiene. Consumer trust takes time to build, and marketing efforts will be needed to create brand awareness in a competitive market.

Ensuring timely distribution in remote hill districts and maintaining product freshness during transportation are other logistical challenges that need to be addressed through robust supply chain planning.

#### 7. Raw Material and Infrastructure

The primary raw materials are wheat flour (maida or atta), sugar, edible oil or butter, yeast, milk solids, and permitted flavors like cardamom. All these ingredients are readily available from local suppliers and agro-wholesale markets in Uttarakhand. Packaging materials like poly pouches, cartons, and labels will also be procured locally.

Infrastructure will include a production hall with baking ovens, dough mixers, slicing machines, and packing machinery, along with storage areas for raw materials and finished goods. A quality control lab and administrative office space will also be required. A production area of about 3000 square feet will be adequate for a medium-scale unit.

Utilities like water supply, electricity, ventilation, and waste disposal systems will be set up as per food safety standards to ensure hygienic production conditions.

## 8. Operational Flow and Flow Chart

The operational process will begin with procurement and inspection of raw materials. The ingredients will be weighed, mixed, and kneaded into dough, which will be fermented, shaped into loaves, and baked. The baked loaves will be cooled, sliced, and baked again at lower temperatures to make them crisp rusks. The finished rusks will be cooled, packed, and stored for dispatch.



Quality checks will be done at each stage to ensure hygiene and consistency. Batch-wise production records will be maintained for traceability and compliance. Packaging will be done in moisture-proof, sealed pouches to extend shelf life.

#### Flow Chart:

Raw Material Procurement  $\rightarrow$  Dough Preparation  $\rightarrow$  Fermentation  $\rightarrow$  First Baking  $\rightarrow$  Cooling  $\rightarrow$  Slicing  $\rightarrow$  Second Baking  $\rightarrow$  Cooling  $\rightarrow$  Packing  $\rightarrow$  Storage  $\rightarrow$  Dispatch

## 9. Target Beneficiaries

The primary beneficiaries will be local consumers across Uttarakhand who will get access to fresh, hygienically packed rusks at affordable prices. Institutional buyers like hotels, schools, and canteens will benefit from consistent supply and bulk pricing.

Farmers producing wheat will benefit indirectly from local value addition to their produce. The unit will also create employment for local youth in production, packaging, sales, and logistics roles, thus supporting rural livelihoods.

Retailers and distributors will gain from having a reliable local source of rusk, improving their margins compared to products sourced from outside the state.

## 10. Suitable Locations

Suitable locations for setting up the unit include industrial estates in Dehradun, Haridwar, Rudrapur, and Kashipur due to their proximity to raw material markets, good road connectivity, and access to urban retail hubs. These areas also offer availability of skilled manpower and industrial infrastructure.

For catering to hill districts, sub-distribution centers can be set up in towns like Almora, Pithoragarh, and Chamoli to reduce logistics costs and delivery times. Cold and dry storage facilities should be set up at these hubs to maintain product quality during transit.

Locating near existing food processing clusters or integrated industrial estates will also help avail government incentives and shared infrastructure facilities.

## 11. Manpower Requirement

Initially, the unit will require around 30 employees including 1 production manager, 3 bakery technologists, 12 production workers, 6 packaging workers, 3 quality control staff, and 5 sales and administrative personnel.



As production scales up, additional shifts can be introduced with a proportionate increase in manpower. Skill development training will be provided to workers on food safety, hygiene practices, and machine operation.

An incentive-based wage structure and regular skill upgradation workshops will be adopted to improve employee retention and productivity.

# 12. Implementation Schedule

Activity	Timeline (Months)
DPR preparation and registration	0–2
Land development and construction	2–4
Machinery procurement and installation	4–6
Recruitment and training of staff	6–7
Trial production and quality approvals	7–8
Commercial production launch	8–9

# 13. Estimated Project Cost

Cost Head	Amount (INR)
Land and building development	15,00,000
Plant and machinery	25,00,000
Furniture and office equipment	2,00,000
Pre-operative expenses and licenses	3,00,000
Salaries and wages (first year)	12,00,000
Marketing and working capital	8,00,000
Total Estimated Cost	65,00,000



#### 14. Means of Finance

The project can be financed through 30% promoter equity, 60% term loan from banks or NABARD under the food processing sector, and 10% subsidy under PMFME or state MSME schemes. Collateral-free loans can be availed under the CGTMSE scheme for small enterprises.

Working capital limits will be arranged through cash credit facilities from banks. Financial support from venture funds or food processing incubators can also be explored for equity infusion.

Clear financial planning will ensure adequate funds for initial setup, marketing, and operational sustainability till the unit reaches break-even.

#### 15. Revenue Streams

Revenue will be generated from wholesale and retail sales of various rusk variants under the unit's brand. Bulk supply contracts with hotels, restaurants, caterers, and institutional canteens will provide stable income.

Distribution through supermarkets, kirana stores, and online platforms will broaden the market reach. Customized packaging for private label buyers can be offered as an additional revenue source.

Introducing premium variants and festive packaging can fetch higher margins and seasonal revenue spikes.

# 16. Profitability Streams

Profitability will be driven by economies of scale, higher production volumes, and strong brand recall. As fixed costs are spread over higher output, unit production costs will come down, improving profit margins.

Selling value-added variants like milk or elaichi rusk at premium pricing will further enhance profitability. Building long-term institutional contracts will stabilize cash flows and reduce marketing costs.

Continuous process optimization, reduction in wastage, and bulk procurement of raw materials at negotiated rates will also improve margins.



## 17. Break-even Analysis

Parameter	Estimate
Total project cost	65,00,000
Average monthly sales revenue	10,00,000
Average monthly operating expenses	6,00,000
Monthly net surplus	4,00,000
Break-even period	18–20 months

## 18. Marketing Strategies

Marketing will focus on brand positioning as a fresh, local, and hygienic rusk brand from Uttarakhand. Attractive packaging, sampling campaigns, and point-of-sale promotions will be used to build awareness.

Tying up with local retailers, supermarkets, and wholesalers will ensure wide availability. Digital marketing, social media ads, and participation in local food exhibitions will be used to generate brand visibility.

Incentives and credit facilities will be offered to distributors and retailers to build a strong sales network across the state.



## 19. Machinery Required and Vendors

Equipment	Quantity	Purpose	Suggested Vendors (Uttarakhand)
Dough kneader and planetary mixers	2	Mixing and kneading dough	Haridwar bakery machinery suppliers
Bread moulding and fermentation chambers	2	1 0	Dehradun food machinery dealers
Baking ovens (deck or rotary)	2	First and second baking of loaves and rusk	Rudrapur industrial equipment vendors
Bread slicers and cooling racks	2	Slicing and cooling baked bread before rusk making	
Packing machine (horizontal flow wrap)	1	Sealed packaging of rusks	Haldwani packaging equipment suppliers

### **20.** Environmental Benefits

The unit will promote local value addition and reduce the carbon footprint associated with transportation of rusks from outside the state. This supports localized food production and reduces packaging waste from long-distance logistics.

Energy-efficient ovens and machinery will be installed to reduce electricity consumption. Proper waste management systems will be implemented to handle bakery waste, including composting of organic waste.

By using recyclable and biodegradable packaging materials, the unit will contribute to sustainable packaging practices and environmental conservation.

## 21. Future Opportunities

Future opportunities include expanding the product line to include biscuits, cookies, and other bakery products, which will allow diversification and better utilization of production infrastructure. The brand can also be extended to neighboring states to increase market share.



Developing sugar-free, multigrain, and fortified rusk variants can cater to health-conscious urban consumers and open new premium market segments. Online and direct-to-consumer sales can be developed as demand for packaged food through e-commerce grows.

In the long term, the unit can be scaled into a fully integrated bakery enterprise, contributing to the establishment of Uttarakhand as a hub for quality packaged bakery products.

#### Disclaimer

Only a few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers 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 imply any recommendation.

