

## Project Profile

# WHOLE WHEAT COOKIE PRODUCTION



## 1. INTRODUCTION

Ladakh, known for its stark landscapes and resilient communities, has cultivated a distinctive culinary heritage deeply rooted in its Buddhist traditions and high-altitude ecology. Among its many time-honored recipes, *Tagi-Puli* stands out as a cherished traditional delicacy. This wholesome, hand-shaped cookie—crafted from stone-ground whole wheat flour and naturally sweetened with locally sourced jaggery or sun-dried apricot jam—is more than just a snack; it is a cultural emblem. Typically prepared in communal tandoor ovens during festive occasions such as *Losar* (Tibetan New Year) and traditional weddings, *Tagi-Puli* evokes a sense of warmth, togetherness, and Ladakhi hospitality.

Despite its nutritional benefits—rich in dietary fiber, low in refined sugar, and entirely plant-based—*Tagi-Puli* remains largely overlooked in commercial food markets. Its production is still confined to household kitchens and seasonal gatherings, leaving its potential untapped in a world increasingly leaning toward sustainable and authentic food experiences.

This project seeks to bridge this gap between tradition and market opportunity. By establishing a scalable, community-owned production unit for *Tagi-Puli*, we aim to bring this indigenous snack to wider audiences—both within India and globally. The initiative will leverage Ladakh's native resources, including organically grown wheat, heritage apricot orchards, and environmentally responsible production techniques that generate minimal waste. At its heart, this venture is also a vehicle for social impact—empowering local women's cooperatives with skill development, income generation, and ownership in a growing market.

With a focus on authenticity, health-conscious innovation, and ethical sourcing, the project aspires to position *Tagi-Puli* as a premium artisanal product that honors Ladakh's culinary legacy while contributing to sustainable rural livelihoods and cultural preservation.

## 2. PRODUCT & ITS APPLICATION

### PRODUCT UNIQUENESS

- Heritage Recipe, Modern Appeal:** Authentic recipe (stone-milled whole wheat, *chutagi* butter, apricot/sea buckthorn jam) with minimal processing. No preservatives, refined sugar, or additives.
- Nutritional Powerhouse:** High fiber, complex carbs, and healthy fats ideal for energy sustenance in cold climates. Vegan and diabetic-friendly variants possible.
- Climate-Smart Ingredients:** Uses drought-resistant Ladakhi wheat (*Ladakhi 1, Pusa Lalthan*) and underutilized apricot byproducts (jam from "seconds" grade fruit).

- **Cultural Storytelling:** Each pack narrates Tagi-Puli's role in Ladakhi festivals, linking consumers to Himalayan traditions.

## Core Offerings:

- **Traditional Tagi-Puli:** Whole wheat cookies sweetened with apricot/jaggery, flavoured with cardamom.
- **Variants:** Sugar-free (dates/honey), gluten-free (buckwheat), and fortified (sea buckthorn).
- **Packaging:** Eco-friendly pouches (biodegradable/compostable).

## Applications:

- Snack for tourists, trekkers, and local households.
- Souvenirs reflecting Ladakhi culture.
- Health-conscious consumers seeking low-sugar, high-fibre options.

## 3. DESIRED QUALIFICATION FOR PROMOTER

- **Education:** Diploma/Degree in Food Technology, Bakery, or Agri-Business.
- **Experience:** 2+ years in FMCG, bakery, or traditional food processing.
- **Skills:** Recipe standardization, quality control, and branding.
- **Local Knowledge:** Understanding Ladakhi culinary traditions and sourcing networks.
- **Certifications:** FSSAI, HACCP, and PMFME training.

## 4. INDUSTRY LOOKOUT AND TRENDS

The global food industry is undergoing a significant transformation, driven by growing consumer awareness around health, sustainability, and cultural authenticity. This evolution is particularly evident in the snacks segment, which is increasingly shaped by the demand for nutrient-rich, clean-label, and culturally inspired options.

### *Global Demand for Healthy Snacks*

The healthy snacks market is projected to expand at a robust **Compound Annual Growth Rate (CAGR) of 6.1% from 2023 to 2030**, according to recent industry reports. Consumers across the globe are shifting away from highly processed and sugar-laden products, instead favoring wholesome

alternatives that align with their wellness goals. Functional ingredients, traditional recipes, plant-based formulations, and minimally processed foods are gaining widespread popularity—creating a fertile market for innovations rooted in heritage.

### *Emerging Trends Shaping the Sector*

1. **Clean-Label Products:** Transparency is becoming a cornerstone of consumer trust. Snacks made with simple, recognizable ingredients—free from artificial additives, preservatives, and refined sugars—are in high demand. Tagi-Puli, made from whole wheat, jaggery, and natural apricot jam, naturally aligns with this trend.
2. **Organic and Locally Sourced Ingredients:** Consumers are increasingly seeking products that are not only healthy but also ethically and sustainably produced. Ladakh's organic wheat fields and native apricot orchards offer a unique opportunity to meet this growing expectation, while also highlighting regional biodiversity.
3. **Culturally Inspired and Heritage Foods:** There's a rising appreciation for traditional foods that tell a story and connect consumers to different parts of the world. Tagi-Puli, with its centuries-old roots in Ladakhi celebrations and community life, stands as a compelling product in this trend toward culinary storytelling.
4. **Functional and Energy-Boosting Snacks:** Snacks that offer real nutrition—especially those that are high in fiber, naturally sweetened, and rich in micronutrients—are being preferred by busy urban consumers, travelers, and wellness enthusiasts alike.

### *Ladakh-Specific Market Dynamics*

Ladakh presents a unique niche within this global shift, offering both supply-side strengths and demand-side opportunities:

- **Tourism-Driven Demand:** With Ladakh emerging as a prominent eco-tourism and cultural tourism destination, there is increasing demand among tourists for authentic, portable, and memorable food items that reflect the region's identity. Tagi-Puli, being lightweight, travel-friendly, and culturally rooted, is well-positioned to cater to this segment.
- **Cultural Branding Potential:** In the growing space of region-branded products (e.g., Himachali pickles, Sikkim teas), Tagi-Puli can be promoted as a signature Ladakhi snack—contributing to place-based branding and rural entrepreneurship.
- **Local Entrepreneurship & Women-Led Models:** There is an increasing emphasis on promoting women-led microenterprises, especially in rural and remote areas. This project taps into these policy and funding trends by building a women-centric production model that links tradition with economic empowerment.

## 5. MARKET POTENTIAL AND MARKETING ISSUES

### Potential/ Opportunity

Target Segment	Demand Drivers	Strategy
<b>Tourists (1L+ annual)</b>	Demand for authentic, portable souvenirs; "organic Ladakh" brand trust	Bundling with eco-tours; hotel partnerships; airport retail
<b>Urban Health Markets</b>	Growth in organic snacks (25% CAGR); demand for "clean label" ethnic foods	E-commerce (BigBasket, Amazon); specialty stores (Fabindia, Nature's Basket)
<b>Diaspora &amp; Gifting</b>	Nostalgia for Ladakhi flavors; corporate gifting for sustainability narratives	Seasonal gift boxes; D2C website with cultural content
<b>Defense/Paramilitary</b>	Need for non-perishable, high-energy rations for high-altitude postings	Bulk supply tenders via CAPEX/CSD canteens

## Challenges:

- **Seasonality:** Tourism peaks (May–October) vs. winter sales slump.
- **Shelf Life:** Limited preservative-free shelf life (2–3 months).
- **Competition:** Mass-produced biscuits (Britannia, Parle).

## Marketing Strategies:

- Brand as "Taste of Ladakh's Mountains" with storytelling packaging.
- Partner with travel agencies, homestays, and airport kiosks.
- Social media campaigns targeting eco-conscious millennials.

## 6. RAW MATERIAL REQUIREMENTS

- **Primary:** Organic whole wheat flour, apricot jam/jaggery, ghee/khakla(Hand churned Butter)
- **Secondary:** Cardamom, baking soda, eco-friendly packaging.
- **Sourcing:** Local wheat farmers, apricot cooperatives.

## 7. MANUFACTURING PROCESS

1. **Mixing:** Blend flour, ghee/khakla, sweetener/salt, and spices.
2. **Kneading:** Form dough and roll into small discs.
3. **Baking:** Oven-bake at 180°C for 12–15 minutes.
4. **Cooling & Packaging:** Airtight pouches with oxygen absorbers.

## 8. MANPOWER REQUIREMENT

- **Skilled:** 2 bakers, 1 quality control supervisor.
- **Semi-Skilled:** 4 helpers for mixing and packaging.
- **Sales:** 1 marketing executive, 1 delivery personnel.

## 9. IMPLEMENTATION SCHEDULE

Phase	Activity	Timeline
1	Recipe finalization, FSSAI approval	Months 1–2
2	Kitchen setup and raw material procurement	Month 3
3	Trial production and taste testing	Month 4
4	Branding, packaging, and market launch	Month 5

## 10. COST OF PROJECT

Component	Cost (INR)
Baking equipment (oven, mixer)	3 lakhs
Raw materials (3 months)	2 lakhs

Component	Cost (INR)
Packaging and branding	1.5 lakh
Marketing and distribution	1 lakh
Contingency	0.5 lakh
<b>Total</b>	<b>8 lakhs</b>

## 11. MEANS OF FINANCE

- **Equity:** 4 lakhs (promoter's contribution).
- **Debt:** 3 lakhs (MUDRA Loan @8% interest).
- **Subsidy:** 1 lakh (PMFME Scheme).

## 12. LIST OF MACHINERY REQUIRED

- Electric oven, dough mixer, rolling/cutting tools.
- Packaging machine, weighing scales.

## 13. PROFITABILITY CALCULATIONS

- **Revenue (Year 1):** 10,000 packs  $\times$  ₹80/pack = ₹8 lakh.
- **Operational Costs:** ₹5 lakh (ingredients, labour, utilities).
- **Net Profit:** ₹3 lakh (pre-tax).

## 14. BREAKEVEN ANALYSIS

- **Fixed Costs:** ₹3 lakh (equipment, rent).

- **Variable Costs:** ₹30/pack.
- **BEP:** ₹3 lakh / (₹80 – ₹30) = **6,000 packs annually.**

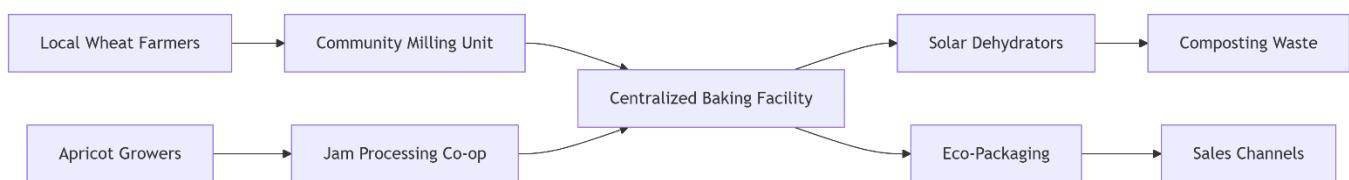
## 15. STATUTORY/GOVERNMENT APPROVALS

- **FSSAI License.**
- **GST Registration.**
- **NOC** from Leh Municipal Committee.
- **Fire Safety Certificate** (for commercial kitchen).

## 16. BACKWARD AND FORWARD INTEGRATIONS

- **Backward:** Partner with wheat farmers and apricot cooperatives.
- **Forward:** Supply to Ladakhi emporiums, Amazon, and Flipkart.

## 17. SUSTAINABLE VALUE CHAIN



## 18. TRAINING CENTERS AND COURSES

- **KVK Leh:** Food processing and packaging workshops.
- **PMFME Scheme:** Entrepreneurship and hygiene training.
- **Local Bakeries:** Skill transfer for traditional recipes.

Supplier	Contact	Ladakh Benefits
<b>Sifter International</b>	<a href="http://www.sifter.in">www.sifter.in</a>	15% discount for women SHGs
<b>Ecolibrium Energy</b>	ecolibrium.in	Free altitude optimization
<b>Khadi Village Ind.</b>	kviconline.gov.in	35% subsidy under PMEGP scheme
<b>GELGOOG Machinery</b>	gelgoog.com (via IndiaMart)	Sea shipping to Mumbai + road convoy to Leh

## Disclaimer

Only a few training centres are mentioned in the profile, although many are available in the market. The addresses given for centres have been taken from reliable sources, to the best of our 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.