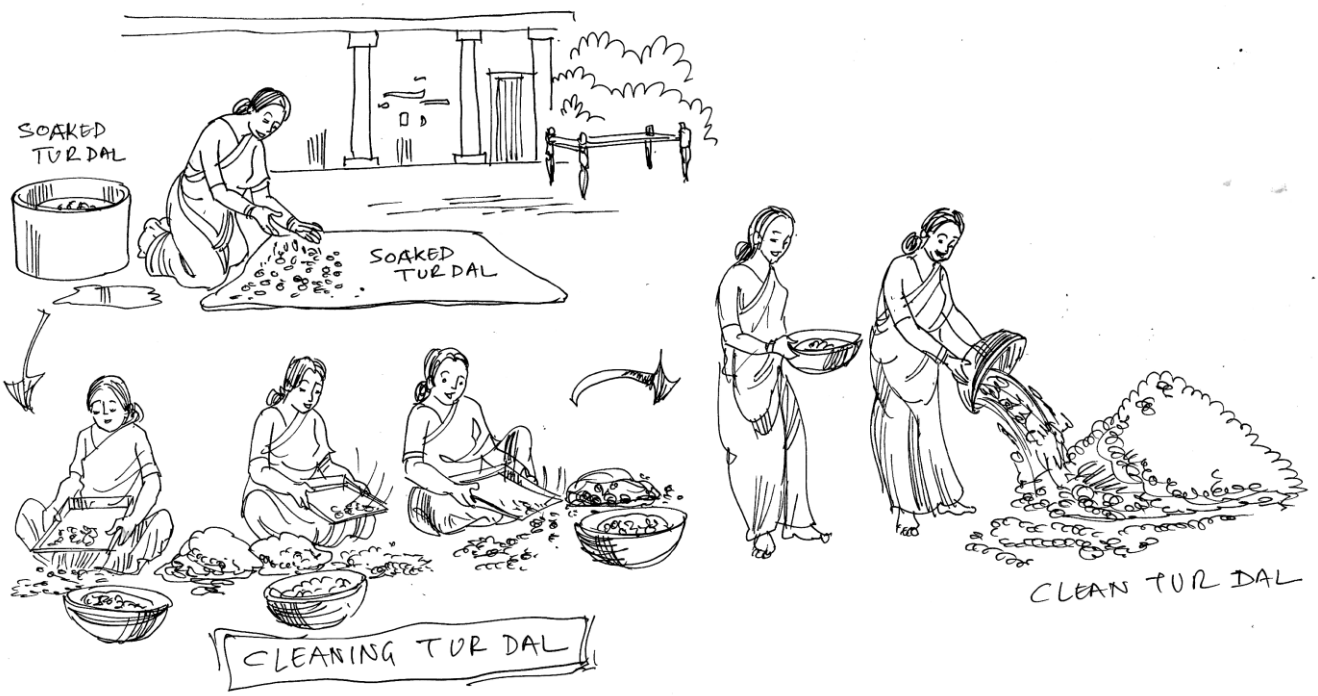
The Midas touch to a healthy diet

Innovation in Red Gram Processing



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Introduction

In an era dominated by industrialization, traditional food processing techniques—rooted in community, sustainability, and cultural heritage—continue to thrive through the efforts of women-led Self-Help Groups (SHGs). These collectives revive age-old practices like hand-pounding grains, sun-drying produce, and natural fermentation, transforming harvests into nutrient-rich, year-round staples. By blending shared labor with intergenerational knowledge, SHGs not only safeguard culinary traditions but also empower women economically, turning locally processed millets, pulses, and spices into marketable goods. Beyond preserving flavors and healthful diets, these initiatives foster resilience, proving that time-honored methods, driven by collaboration and care, remain vital in addressing modern challenges of food security, nutrition, and cultural identity. The innovation detailed below narrates one such effort.

Context and Background

In the heart of Kundgol Taluk, Dharwad District, Karnataka, a 16-member Self-Help Group (SHG) comprising women from landless families has charted a remarkable path from laborers to entrepreneurs. Since 2000, the group has evolved through diverse economic ventures—beginning with handloom weaving and later transitioning to agriculture and pulse processing, supported by initiatives like the **CROPS4HD project** and **Sahaja Samrudha**.

Initially leasing an acre of land during the CROPS4HD project, the group leveraged their farming expertise as former laborers to cultivate pulses, peanuts, and foxtail millets in a mixed-cropping system, eventually specializing in seed production.

Building on this success, they established a **pulse processing unit** in 2023 with machinery and training provided by the project. However, a critical challenge emerged: while machine processing was efficient, the taste of the lentils failed to align with local preferences.

Undeterred, the women pivoted to **traditional processing methods**—labor-intensive and time-consuming, yet cherished for preserving the authentic flavor and texture desired by their community. This shift uncovered a market niche: demand for traditionally processed pulses outstripped supply, allowing the group to command prices **50% higher** than machine-processed alternatives. Despite the inefficiencies, their commitment to quality and cultural resonance transformed a hurdle into an opportunity.

The Experimentation

In Kundgol Taluk, Karnataka, a women-led Self-Help Group (SHG) of 16 landless members has pioneered a unique, labor-intensive red gram processing model that blends agro-ecological principles with traditional techniques.

Committed to delivering chemical-free lentils, the group sources red gram exclusively from local farmers practicing organic methods. Their meticulous process begins with **machine-assisted grading** to separate high-quality grains from chaff and impurities. The grains are then soaked for 3–4 hours to swell, sun-dried with vigilant manual labor, and milled using project-supported machines to remove husks. Finally, the lentils are hand-sorted into three grades—premium whole grains, smaller intact grains, and broken pieces—a painstaking but critical step to meet local taste preferences. The process of soaking helps in the removal and killing of pests and its eggs and imbibes water followed by drying under sunlight helps in the shrinkage of the grains. The process makes it easy in removing the coat of the seeds without having to polish them. The grains have a rustic non polished look – preferred by those having traditional culinary sense.

Despite the labor-heavy approach, the group has carved a niche by prioritizing quality and authenticity. They sell Grade 1 lentils at Rs.190/kg, Grade 2 at Rs.130/kg, and Grade 3 (broken grains) at Rs.60/kg, while converting 54 kg of byproduct per quintal into cattle feed, sold at Rs.20/kg to local farmers. With operational costs at Rs. 7,935 per quintal (including raw material), their innovative model yields a **profit of Rs. 511 per quintal**, demonstrating how sustainability and tradition can coexist with economic viability. It is worth noting that the labour component in processing is worth Rs 3450. The SHG owns this component and get them distributed among themselves.

Learnings

The Kundgol Taluk SHG's red gram processing experiment highlights a critical lesson: traditional methods, though labor-intensive, hold *premium value* in markets where taste and quality outweigh cost concerns. By prioritizing agro-ecological sourcing and heritage techniques—soaking, sun-drying, and hand-sorting—the group taps into a niche demand, allowing them to sell Grade 1 lentils at **Rs 190/kg** (about 50% marked up over the conventional prices). Yet, overwhelming demand has exposed bottlenecks: manual processes limit output, prompting plans to adopt **solar dryers** and **grading machines**. These upgrades aim to reduce labor without compromising authenticity, balancing efficiency with the cultural essence that justifies their premium pricing.

Beyond profitability (Rs.511/quintal), the initiative thrives on circularity: selling 54 kg of byproducts as cattle feed adds Rs.1,080/quintal, offsetting costs. Strategic mechanization could amplify this success, enabling scale while preserving tradition. The group now seeks partnerships for funding machinery, aiming to meet demand and expand their brand as “heritage-processed.”.

Conclusion

Their journey underscores a replicable model: blending selective technology with indigenous knowledge empowers rural women to transform local food systems, proving that cultural pride and market savvy can coexist in sustainable entrepreneurship

The SHG's resolve to blend tradition with targeted mechanization has proven transformative. Solar dryers and graders will certainly reduce drudgery but also stabilize output, allowing the group to capitalize on their agro-ecological edge and market reputation. By investing in these tools, they balance cost savings with the artisanal care that defines their brand, securing higher profits and expanding access to urban markets. This approach not only safeguards cultural food practices but also empowers rural women as custodians of sustainable agriculture, proving that smart innovation can elevate heritage into a competitive, future-ready enterprise.