

Cultural Dimensions of Millet Farming among Tribal Communities of Odisha, India

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Abstract

Millet farming in Odisha transcends its role as an agricultural practice and represents a complex cultural system deeply embedded in the lives of tribal communities. This study explores the cultural, ecological, and socio-economic dimensions of millet cultivation among tribal groups in Odisha. Drawing on traditional ecological knowledge, ritual practices, gender roles, and subsistence economies, the paper highlights how millet farming sustains both livelihoods and cultural identity. The findings indicate that millet cultivation is integrally linked to biodiversity conservation, food security, and community cohesion. However, increasing commercialization and the introduction of hybrid seeds pose challenges to indigenous practices and cultural continuity. The study underscores the need to recognize millet farming as a biocultural heritage system essential for sustainable development.

Keywords: millets, tribal agriculture, Odisha, traditional ecological knowledge, food systems, seed sovereignty

Date of Submission: 08-04-2026

Date of acceptance: 20-04-2026

I. Introduction

Odisha is home to 64 tribal groups, many of whom have historically practiced millet cultivation in regions such as Koraput, Malkangiri, and Rayagada (Government of Odisha, 2020). Among these communities, agriculture functions not merely as an economic activity but as a cultural institution embedded in social and spiritual life. Millets, particularly finger millet (*Eleusine coracana*), have been cultivated for generations using indigenous knowledge systems (Berkes, 2012).

Recent scholarship emphasizes the importance of traditional farming systems in ensuring ecological sustainability and climate resilience (Altieri, 2004). This study examines millet farming among tribal communities of Odisha as a cultural system that integrates ecological knowledge, ritual practices, and social organization.

II. Millet Farming as Traditional Ecological Knowledge

Millet cultivation reflects a sophisticated understanding of local ecosystems. Practiced in rainfed and upland terrains, it is adapted to marginal environments where high-input agriculture is not viable (Padulosi et al., 2015). Tribal farmers cultivate indigenous landraces such as Ladu, Bati, Tumika, and Bhalu, which exhibit resilience to drought and climatic variability.

Practices such as shifting cultivation (podu), mixed cropping, and crop rotation reflect what Berkes (2012) defines as Traditional Ecological Knowledge (TEK)—a cumulative body of knowledge transmitted across generations. These methods prioritize biodiversity conservation and sustainability over yield maximization (Altieri, 2004).

III. Rituals, Beliefs, and Sacred Associations

Millets occupy a central place in the ritual life of tribal communities. Agricultural cycles are closely tied to spiritual beliefs and ceremonial practices (Nabhan, 2009).

Among the Paroja tribe, millet cakes are offered to ancestral spirits during the Puspuni festival and consumed during fertility-related rituals. Similarly, the preparation of *landa*, a fermented millet beverage among the Durua tribe, carries ritual significance beyond its nutritional value.

These practices illustrate that agriculture is embedded in a cosmological framework where humans, nature, and supernatural forces interact (Descola, 2013).

IV. Food Culture and Nutritional Identity

Millets form the core of tribal diets in Odisha. Finger millet and other small millets are consumed as porridges, breads, and fermented foods. These grains are nutritionally rich, providing essential micronutrients such as calcium, iron, and dietary fiber (FAO, 2018).

Food practices are communal and seasonal, reflecting agricultural cycles and reinforcing social cohesion. Millet-based diets also serve as markers of cultural identity, distinguishing tribal communities from dominant agrarian systems (Counihan & Van Esterik, 2013).

V. Gender Roles and Social Organization

5.1 Gender Division of Labour in Millet Farming

Millet farming is characterized by a gendered division of labour, with women playing a central role in seed selection, sowing, processing, and storage. Studies indicate that women are primary custodians of agrobiodiversity in traditional farming systems (Howard, 2003).

Table-1: Gender-wise Division of Labour in Millet Farming

Activities	Male	Female
Land Preparation	Ploughing	Removing pebbles, composting, weeding
Seed Procurement	Buying seeds	Selecting indigenous seeds
Nursery Raising	Seed bed preparation	Sowing and transplanting
Crop Management	Chemical inputs	Organic manure application
Harvesting	Threshing, transport	Crop cutting, carrying loads
Post-Harvest	Packaging	Drying and storage
Marketing	Transport to markets	Local selling

Women play a central role in millet farming, particularly in seed selection, preservation, processing, and storage (Table-1). Their knowledge is crucial for maintaining biodiversity and ensuring food security.

5.2 Decision-Making in Agriculture

Table-2: Gender Role in Crop Selection Decisions

Category	Percentage
Young Male	1.41%
Young Female	0.20%
Joint Decision	50.71%
Male	39.39%
Female	8.28%

Table-3: Gender Role in Seed Selection Decisions

Gender	Percentage
Male	26%
Female	74%

Data (Table-2 & Table-3) indicate that decision-making on crop selection is largely joint (50.71%), while seed selection is predominantly controlled by women (74%). This highlights the critical role of women in knowledge transmission and biodiversity conservation. These findings highlight the significant role of women as custodians of traditional agricultural knowledge and decision-makers in seed selection processes.

VI. Subsistence Economy and Community Practices

Millet farming operates largely within a subsistence framework, with most households producing for self-consumption and selling only a small proportion in local markets. This reflects a moral economy where food security takes precedence over profit (Scott, 1976).

Local markets (haats) serve as socio-economic hubs that facilitate exchange, social interaction, and cultural continuity.

VII. Cultural Resistance and Seed Sovereignty

The introduction of hybrid and high-yielding varieties has created tensions within tribal farming systems. Indigenous seeds are valued not only for their ecological adaptability but also for their cultural significance.

Scholars argue that seed sovereignty is central to maintaining cultural autonomy and biodiversity (Shiva, 2016). Tribal resistance to hybrid seeds highlights the importance of preserving traditional agricultural systems.

VIII. Festivals, Identity, and Cultural Continuity

Millets are integral to festivals such as Choita Parab, Pusha Parab, and Nua Khai, which celebrate agricultural cycles and community life. These festivals involve ritual offerings, communal feasting, and symbolic practices that reinforce collective identity.

Such cultural expressions ensure the transmission of knowledge and values across generations (Turner, 1969).

IX. Discussion

The findings demonstrate that millet farming among tribal communities is a multidimensional system integrating ecological, cultural, and economic elements. It represents a sustainable alternative to industrial agriculture and contributes to climate resilience.

However, policy interventions often overlook these cultural dimensions, leading to erosion of traditional practices. There is a need for inclusive policies that recognize indigenous knowledge systems and promote agroecological approaches.

X. Conclusion

Millet farming in Odisha represents a holistic system that sustains ecological balance, cultural identity, and food security. Recognizing it as a biocultural heritage system is essential for sustainable development.

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