

# Folk Rice Varieties and Cultural Heritage

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## Abstract

Within India and the other rice growing countries of Southeast Asia, there is a plethora of rice-related cultural heritage diversity. Rice has featured in agronomic, culinary, medicinal, social and spiritual practices which has influenced the development of rice genetic diversity. The landraces or folk rice varieties were developed by innovative farmer experiments on the substratum of available genetic diversity. These folk rice varieties play an intrinsic role in cultural survival.

**Key words:** Rice genetic diversity, Folk rice varieties, folklore, cultural heritage

## 1. Introduction

Domestication of rice that occurred more than 8000 years ago led to a series of developments in rice culture over millennia<sup>1</sup>. At the same time centuries of rice domestication and farmer experiments created an astonishing number of its folk varieties or landraces. In South Asia, more than 100,000 folk landraces of the indica group of rice were distributed in remote villages<sup>2</sup>, where they co-evolved with crop pathogens, pests and their predators. Over 62,000 landraces of the Indian rice (*Oryza sativa* var *indica*) have been recorded from the Indian subcontinent alone<sup>3</sup>.

Studies have asserted the need to understand the inter-connectedness of folkloric diversity and agro-biodiversity, including how farmers incorporate new crops and varieties in their current repertoire to meet cultural and environmental needs of society and its farming systems<sup>4</sup>. Within India and the other rice growing countries of Southeast Asia, the evolution of rice-related cultural diversity in agronomic, culinary, medicinal, social, and spiritual practices involving rice has both paralleled and influenced the development of rice genetic diversity in a two-way process.

- a) Rice-based traditions have ensured the maintenance of certain ancestral folk rice varieties. In West Bengal the folk rice varieties Jamai Nadu and Jamai-sal are grown in many villages only to make a special treat for the son-in law (jamai) on the Jamai Shasti ceremony<sup>5</sup>.
- b) Folk varieties or landraces developed to yield under adverse environmental conditions. As a result, there are a multitude of rice breeds adapted to different types

of soil conditions such as dry upland, inundated lowland, rain-fed medium land and to climatic vagaries like drought, late rain, early rain, too much rain, excessive cold etc<sup>6</sup>. Thousands of folk rice landraces constitute a storehouse of valuable genes for important agronomic traits include submergence tolerance, drought tolerance, osmotic stress tolerance, culm elongation in response to flood water, aroma, and resistance to diverse pests and pathogens. Indigenous farmers of the western, low-rainfall zone of Bengal used to grow Bhutmoori, Bombai mugi, Noichi, Kalo gorah and Kelas, which are drought tolerant and resilient to a wide range of environmental stresses<sup>5,7</sup>.

Rice has been associated in folklore (myths, legends, traditions, cultivation practices, songs, sayings, riddles, proverbs, folk sayings, folk literature, etc.) of different ethnic groups located in different regions of India<sup>8</sup>. In addition to being a staple food and an integral part of social rites, rituals, and festivals in almost all Asian countries, it has a medicinal value too, which was clearly recognized by the medicine systems of the region centuries ago<sup>9</sup>.

For more than half of humanity, rice is life. Every third person on earth eats rice every day in one form or another. Rice is grown on about 250 million farms in 112 countries<sup>10</sup>. It is the grain that has shaped the history, culture, diet and economy of billions of people of Asia. Throughout the past years of Asian history rice has been pivotal to all aspects of human activity whether fostering societal and community development, waging war or seeking peace, creating wealth or enduring poverty, enjoying good health or surviving famine or providing a foundation for spiritual worship of deities<sup>11,12</sup>.

Rice has interwoven itself into the very fabric of Asian culture from time immemorial. Rice has fed more people over history than any other grain<sup>13</sup>. This single crop binds India, China, Bangladesh, Philippines, Thailand, Burma, Vietnam and all the other traditional 'rice-nations'. Rice permeates all aspects of the life of people from all walks of life. Rice is in music, particularly folk songs. It is in various forms of the arts from poems to paintings to sculptures. It is in tradition, folklore, ritual and even language. For most of us, life without rice is simply unthinkable. Yet rice is almost always taken for granted. As societies become more affluent, they are becoming less attached to rice. The rich rice cultural heritage is fast disappearing,

The Year of Rice Action (YORA) launched by Pesticide Action Network Asia and the Pacific (PAN AP) was a whole year (from 4 April 2009 to 4 April 2010) of activities dedicated to saving the rice of Asia. The theme of YORA was "Rice for Life and Livelihood" reflecting the importance of rice to the lives and livelihoods of the people of Asia. "Rice for Life" represents the cultural, spiritual, and nutritional significance of rice to Asia.

## 2. Folk or Traditional rice varieties

Folk varieties are the heterogeneous crop populations that humans deliberately cultivate<sup>14</sup> and are not the product of modern plant breeding<sup>15</sup>. Folk rice varieties are the farmers' variety that are selected and maintained for one or more distinctive properties. They are passed from generation to generation of farmers and are exposed to natural and human selections in a

local environment<sup>16</sup>. These landraces or folk varieties were developed by innovative farmer experiments on the substratum of available genetic diversity<sup>17</sup>.

### 3. Folk Rice Varieties and Cultural Heritage

Rice grains are ubiquitous in temple offerings and ritualized rice cycle reenactments at various stages of crop growth to honor rice deities in Buddhist, Hindu, Shinto, and animistic ceremonies throughout Southeast Asia. The value of diversity both biological and cultural for increasing the stability of natural and anthropogenic ecosystems has been addressed extensively in the biological and social sciences<sup>18</sup>. There are many instances where there are common traditions involving rice throughout South- East Asia.

In most rice-growing countries of Asia, the spirit of rice resides in the Rice Mother or the Rice Goddess. In Indonesia, Dewi Sri is the rice mother and goddess of life and fertility. This reverence for rice is found in India too. South Indians call rice Anna Lakshmi. Anna means "food" and Lakshmi is the Goddess of prosperity. From ancient times, Goddess Lakshmi has been depicted holding a few panicles of rice in her hand. In Thailand, the Rice Goddess is Mae Posop. Interestingly Mae Posop is presented in all paintings and statues always holding a rice shaft or several rice shafts in her hand much like the goddess Lakshmi of India.

### 4. Rice in Rituals and Ceremonies

In several households in West Midnapore district rice of the Banshkathi and Sitasail folk varieties are cooked to entertain special guests<sup>5</sup>. Muri or puffed rice is a popular snack especially in rural Bengal. Kelas, Dahar Nagra, Moul and Nalpai folk rice varieties are used for making 'muri'. During winter the Bengali is fond of a special aromatic sweet known as 'Joynagar er moa' made of fragrant 'khoi' or popped rice. This 'khoi' is made from the folk rice variety Kanakchur grown in the Joynagar area of South 24 Parganas, West Bengal. The variety Kanakchur is conserved because there is a great demand for the 'Joynagar moa'.

Various cultural rituals have contributed to the conservation of several folk rice varieties. Husked rice is always present in even the simplest Hindu 'puja' as one of the offerings. Rice is often directly associated with prosperity and fertility, hence the custom of throwing rice at newlyweds. Annaprashana is the first rice eating ceremony of a newly born baby in Bengali culture. The rice for this ceremony is usually a scented folk variety like Badshabhog, Govindobhog or Mohonbhog.

India abounds with scores of indigenous aromatic short grain cultivars and land races, grown in pockets in various states. Most of the scented rice is highly area specific; hence each Indian state has its own special scented rice<sup>19</sup>. Some aromatic or scented traditional or folk varieties of West Bengal are Radhunipagol, Badshabhog, Kalonunia, Kataribhog, Sitabhog, Gandheswari, Tulsibhog, Mahishadan, Govindobhog, Tulaipanji. The traditional varieties like Gobindobhog, Sitabhog or Badshabhog are used to prepare 'payesh' in Bengal. Many states have a collection of native popular scented varieties which are known for their

adaptation and cultivation and particularly Uttar, Madhya Pradesh, Bihar, Orissa, West Bengal and Assam have a wealth of genetic diversity of short grain aromatic types<sup>20</sup>.

## 5. Folk rice variety of Bengal and Bengali folklore

There are numerous traditional folk varieties of rice grown in West Bengal and also rice features in numerous traditions and rituals of West Bengal. The greatest diversity of cultivated rice is found in a belt from North East India to South East China<sup>21</sup>. West Bengal, a state of India in this belt has rich rice genetic wealth<sup>5</sup>. The different folk or traditional rice varieties were based on differences in the size, shape, color, cooking quality, fragrance, taste and traditional use<sup>22</sup>.

The names of many folk rice varieties of Bengal are exotic like Agniban, Ashphal, Babuilata, Bansh-pata, Bishmoni, Bou-dulali, Chinapankhari, Chiniatap, Dudheswar, Gheus, Kalonunia, Khejurchari, Magursail, Malabati, Mohonbhog, Paan, Panchali, Sonajhuli, Swapandali, Valki etc. Some of the rice landraces have coloured or pigmented husks like Meghi, Jal Kamini, Kalojira, Rani kajal, Kelas, Noichi, Kalonunia, Bhut moori<sup>3,5</sup>.

**Rice in Bengali ‘Chhara’ (rhyme):** Folk rhymes or ‘chhara’ are rhyming couplets like nursery rhymes of the West. This tradition is the creation of the rural folk, transmitted orally from one generation to the next. Food items like rice find their place in many Bengali chharas. Some examples are given below with their loose translation.

### Folk rhyme 1:

*Chhele ghumalo para juralo  
borgi elo deshe,  
Bulbulite dhan kheyeche  
khajna debo kishhe?  
Dhan furalo pan furalo khajna debo kee?  
Ar kotadin sobur koro rasun bunechhi.*

Translation of Folk rhyme 1:

Kids slept, locality silent, looters came,  
Birds have eaten the **paddy**,  
how can I pay the tax?  
The **rice** and betel leaf are finished,  
what would I pay as tax?  
Kindly wait a few days, I have sown garlic<sup>23</sup>.

**Rice in Khanaar Bachaan.** The sayings of *Khanaa* or *Khanaar Bachaans* are the reservoir of traditional wisdoms of agro-ecosystem management<sup>24</sup>. The life philosophy of rural Bengal is reflected after the traditional wisdoms as in *Khanaar Bachans*, composed in rhymes for easy memorization and dissemination among the farmers of rural Bengal. Rice features in *Khanaar Bachans* alongside sayings of other crops and a few of them are given below with their relevance in agriculture.

**Bachan 1.**

*Asharer poncho dine ropon je kore dhan  
Bare tar krishibol, krishikarje hoi safol.*

**Translation of the Khanaa's Bachan:**

A farmer who sows **rice** within first five days in Ashar (i.e. approximately 15 June to 15 July), can increase his agricultural property and become successful in farming.

So this bachan recommends sowing seeds of 'aman' rice between 15 and 20 June, which coincides with the first five days of the Bengali month Ashar. As the aman varieties are generally photosensitive deviation from this date may lead to low yield.

The onslaught of modern technologies was silently eroding the traditional wealth. There is an urgent need to conserve these varieties that are fast disappearing under the pressure of high-yielding varieties and other cash crops. Greater efforts therefore, should be undertaken to strengthen the capacity of local communities to document and develop methodology to promote activities that will interface indigenous knowledge and scientific disciplines. For if appropriately utilized, traditional knowledge can bring much benefit to the community through equitable access and benefit sharing when such knowledge is used by modern industries and research activities.

**6. Survival of folk rice varieties and cultural heritage**

Culture plays a significant role in determining the extent of use, maintenance, and preservation of the elements of biodiversity<sup>25</sup>. Folk varieties, however, survive alongside modern varieties if they are characterised by distinctive traits that make them relevant in the farming system or demanded in the market<sup>26</sup>. Folk or traditional rice varieties are important reservoirs of valuable traits and need special attention for future conservation<sup>27</sup>. Folk varieties may embody certain cultural values, which may serve to conserve the genetic diversity of this crop<sup>28</sup>. Any change in the status of rice will affect all sectors of our society, directly and indirectly, as rice has become an inherent part of our life, culture and value systems<sup>29</sup>.

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