



कोटि-कोटि-कण्ठ-कल-कल-निनाद-कराले



NATURE & AGRICULTURAL TRADITIONS *of* BHARAT

भारत की प्रकृति और कृषि परंपराएँ





अपनी मिट्टी से उगता
दिलों में उत्साह भरता
विविधता और कृषि धन
भारतीय मन
जैविक अन्न
नया बचपन

|| Kisaan, kheti,
the culture of a deep relationship with land,
soil and various elements of Nature.
A tribute to the farmer communities of Bharat
who have been serving the nation and the
society for generations, with a deep sense of
devotion to the civilization of Bharat ||



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NATURE & AGRICULTURAL
TRADITIONS *of* BHARAT

Gyan Gunjan Compilation

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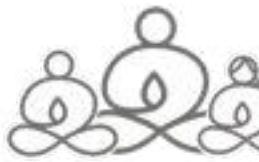
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TIES to the EARTH:
NATURE & AGRICULTURAL TRADITIONS of BHARAT



परिवार, समुदाय और सामाजिक व्यवस्था

ROOTS of CULTURE:
FAMILIES, COMMUNITIES & SOCIAL STRUCTURE



ज्ञान स्रोत

KNOWLEDGE & LEARNING:
PRESERVING BHARATIYA SHIKSHA ACROSS GENERATIONS



कला धरोहर एवं सांस्कृतिक वैभव

EXPRESSIONS & CRAFTS of BHARAT:
ART HERITAGE & CULTURAL RICHNESS



ग्राम व्यवस्था

VILLAGE GOVERNANCE:
ECONOMY, SOCIETY & LOCAL ADMINISTRATION

Mandali



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A B O U T

G Y A N G U N J A N P R O J E C T



The Gyan Gunjan (ज्ञान गुंजन) Project aims to respond to one simple question, namely, amidst the enormous Bharatiya (भारतीय) diversity that we see around us, what is the unity? We know how we are a culturally diverse nation. The diversity we see around us, is it really an expression of different world views or is it a plurality of expression of some underlying unifying thought processes? How are we one?

Indeed, for centuries, visiting scholars and outside observers of India have often marvelled at the ability of Bharat (भारत) to remain as one nation which to us is natural. We all know from our lived experiences that there is something that binds us all together. But what exactly is it, after all?

Through the Gyan Gunjan Project, we show that the unifying factor is the Bharatiya Jeevan Darshan (जीवन दर्शन), our life philosophy, manifested in a variety of forms, but deeply, offering the same guideline for our actions. The plurality of expressions in various walks of life gives the freedom for individual expression, specific practices in every community while binding them together as inseparable Bharatiyas.

We attempt to understand Jeevan Darshans by looking at the gyan parampara (ज्ञान परम्परा - knowledge transfer) and laukik prayojan (लौकिक प्रयोजन - practical utility) that it manifests in. We do this by collecting stories from various parts of Bharat, and in each of those stories with diverse forms of gyan parampara and laukik prayojan, we identify the same underlying Jeevan Darshan.

For the Project, we look at five Jeevan Darshans:

- Our relationship with Nature and Agriculture: We are part of nature, not separate from it
- Families and Communities: Families and communities are important to us
- Sources and Methods of Learning: Our knowledge systems are action based, and carry generational learning methods
- Tradition of Arts and Crafts: Art has an everydayness for the communities that practice it, and is passed through generations
- Village Self-Governance: Villages are highly decentralized, and embody a true swaraj for managing their local affairs

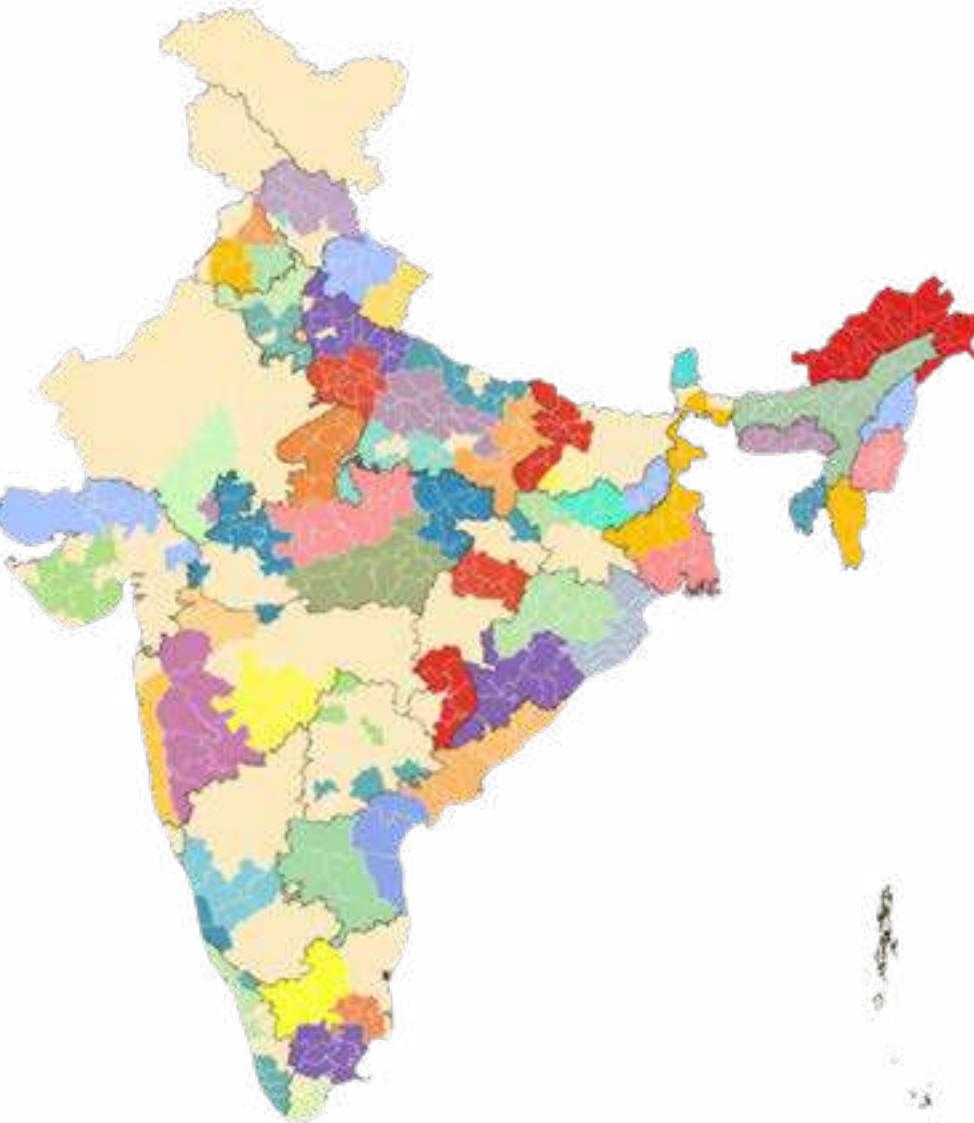


The Many Regions of Bharat

So far, we have explored Bharat (भारत) across its 36 states and union territories. Now, we delve deeper, identifying 100 representative regions, each reflecting its unique culture and traditions. From these regions, we gather stories that embody the five philosophies, or Jeevan Darshan (जीवन दर्शन - life philosophy). These narratives, each showcasing different facets of Gyan (ज्ञान - knowledge), Vigyan (विज्ञान - science), and Jeevan Darshan, illustrate Bharat's rich heritage. Despite our diversity, a unifying thread of shared values binds us together, captured in the essence of Gyan Gunjan - Koti Koti Kanth Kal Kal Ninaad Karaale (ज्ञान गुंजन - कोटि कोटि कंठ कल कल निनाद कराले), symbolizing the collective harmony of our cultural tapestry.

Spatial Distribution of Stories

Nature & Agricultural Traditions of Bharat





Shri Dharmendra Pradhan
*Honorable Union Minister of Education,
Government of India*



*Honorable Secretary of Higher Education,
Government of India*

PREFACE



Prof. Anil Sahasrabudhe
NETF Chairman,
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Few things have given us as much delight and inspiration as the IKS Gyan Gunjan Project. The daunting, yet profound question that we started this journey with, was, where do we find the ‘unity’ in the enormous diversity of Bharat. We went around the country in search of answers. And we (re)discovered that the answers were lying in the wisdom, knowledge and practices arising from the lived experiences of the people of Bharat since time immemorial. There it was in plain sight, plurality of the expression of the same truth in diverse forms echoing the eternal wisdom of the Vedas, “I am one who resides in many एको बहुनामसि (eko bahunaamasi-Rigved).

This is indeed, the essence of Indian Knowledge Systems (IKS). The IKS comprises Gyan, Vigyan and Jeevan Darshan of the people of Bharat that is continuously arising out of the deep experience, observation and experimentation of our people. We have developed traditions of validating and putting into practice our wisdom and knowledge, and transmitting it through textual, oral and artistic traditions.

Our travels across the lengths and breadths of the country, we find that the underlying plurality of practices and cultural expressions arise from the same Jeevan Darshan. Whether it's Baisakhi, Bihu, Pongal or Makar Sankranti, we celebrate harvest everywhere, and in doing so, we express our gratitude to Mother Nature. Whether it's Kathputli craft, Madhubani paintings or Warli art, we find the same sentiment of family traditions, wisdom passed down through generations, and where art is not a mere vocation, but a way of life.

There can be no better dividend than to discover oneself through discovering one's people. This is what this

project is about. Collected through travels and a network of numerous scholars and students, we have curated hundreds of stories, parampara, and lived experiences of Bharatvaasis, from all over the country, and made an attempt to weave them in these book series, each exhibiting a particular Jeevan Darshan that underlies our practices and experiences. To those koti koti kantha, who built the Bharatiyata as we know it through their everyday practices, we dedicate this book.

Each story is real. Each story and each photograph belongs to one of our people. Each page is a celebration of their lives. Each page is a thread of an intimate weave of the oldest civilization of the world. And therefore, each page is an invitation to go out and discover Bharat further. In doing so, you will discover yourself.

We hope readers find these pages inspirational. We also hope that universities, colleges and schools are able to use this vast repertoire of documentation on the Gyan, Vigyan and Jeevan Darshan reflecting the lived experiences of our people, useful. We hope these ideas become fountainheads to help develop new IKS courses, begin deeper conversations and build newer forms of engagements on ‘understanding Bharat’.

Professor Ganti S Murthy, Delhi
Professor Yugank Goyal, Pune

February 2025
Magha, Krodhi



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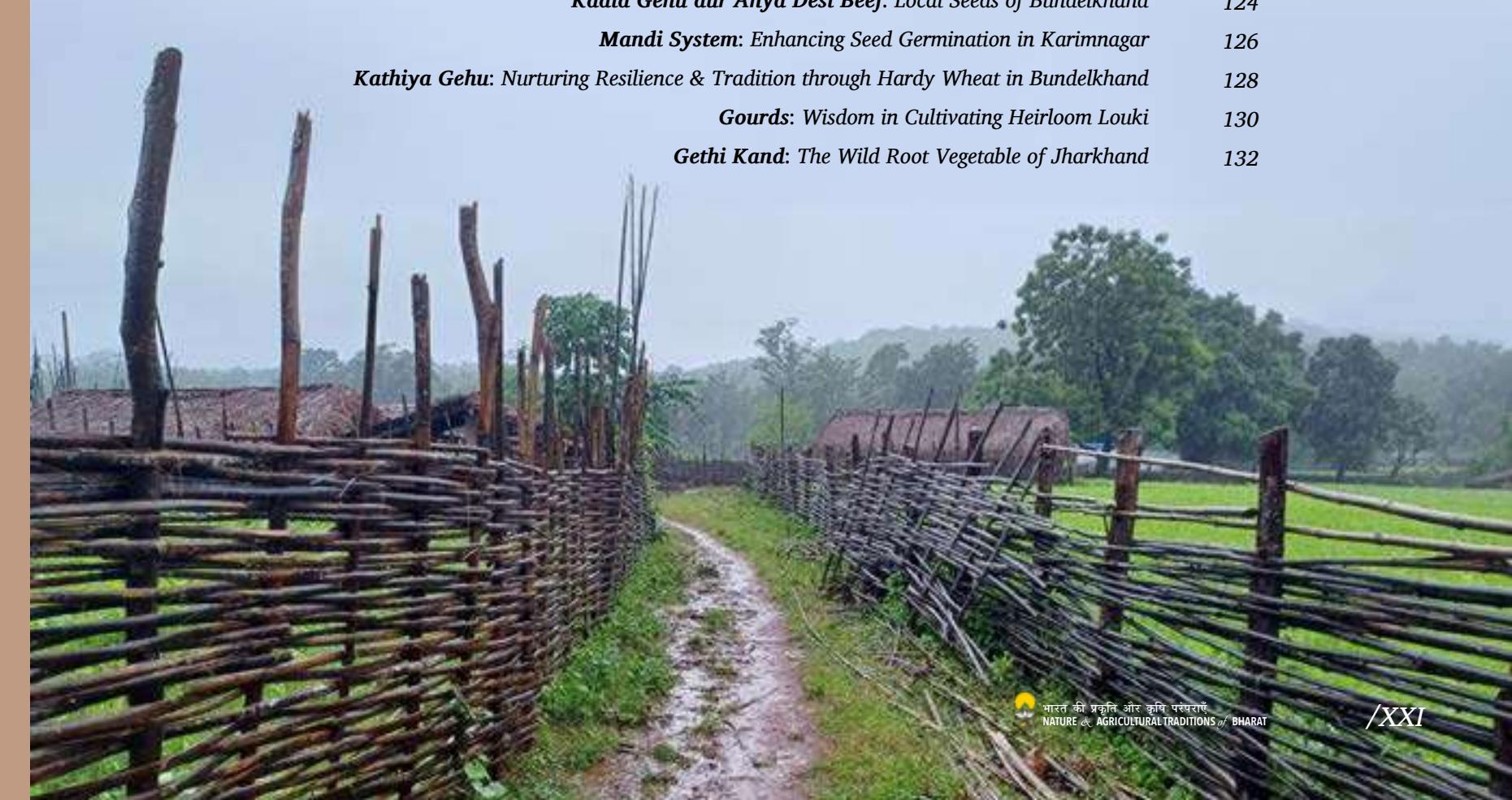
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SACRED NATURE

आञ्जनगन्धिं सुरभिं बंहुन्नामकृषीवलाम् ।

प्राहं मृगाणां मातरमरण्यानिमशंसिषम् ॥ (Rigved - क्रग्वेद - 10.146.6)

Aranyaani (अरण्याणी), the forests are adorned with trees bearing leaves and flowers that exude the fragrance. These forests are rich with various types of food grains sown by farmers and are home to diverse wild animals. Such an Aranyaani, abundant and flourishing, is truly praiseworthy.



भारत की प्रकृति और कृषि परंपराएँ

NATURE & AGRICULTURAL TRADITIONS *of* BHARAT

When the soil is fertile, green, and thriving, it creates a self-sustaining ecosystem, offering all the essential resources needed for life. Nature, as a provider and nurturer, goes beyond mere utility; it maintains a symbiotic relationship with humans, animals, and other organisms. This interconnectedness and mutual support are why we revere Nature as sacred, honoring its essential role in sustaining life.



Our reverence for Nature goes beyond rituals and prayers. Nature is not just a resource but an integral part of our existence. The analogy with cosmic dance of Nataraj (नटराज) is a unique entry point to understand this relationship. Nataraj's cosmic dance shows that the art and artist cannot be separated just as dancer cannot be separated from dance. There is a deeper and profound wisdom that the creator and the creation are inseparable hence divinity pervades every bit of creation whether in Nature or in art. Similarly, agriculture is not merely a livelihood; it is a connection that human beings experience with Nature.

माता भूमिः पुत्रो अहं पृथिव्याः ॥
पर्जन्यः पिता स उ नः पिपर्तु ॥ (Atharvaved - अथर्ववेद - 12.1.12)

'Bhudevi' (भूदेवी - earth) is our Mother, and we are all her children. 'Parjanya' (पर्जन्य - cloud) is our father. May they nurture us together.

By portraying the Bhudevi as mother, Parjanya as father, and human beings as their children, this verse illustrates the deep relationship between human beings and Nature. It underscores the dependence of humans on Nature, and that it nurtures them.

We perform pooja (पूजा) of the natural elements (Panchabhutas - पंचभूत) - Prithvi (पृथ्वी), Jal (जल), Agni (अग्नि), Vayu (वायु), and Akash (आकाश). Be it any part of Bharat (भारत), our culture reflects this philosophy of sacredness and dependency on Nature, whether through rituals like Bhoomi pooja (भूमि पूजा) by farmers before plowing the land, or performing Ganga pooja (गंगा पूजा) as the holy water provides fertility to the land wherever it flows, carrying various minerals.





Agni, the havyavahan (हव्यवाहन) known for its purity, plays a significant role in customs like yagya (यज्ञ), serving as a medium to convey our bhakti (भक्ति) and offerings to gods. We honor Vayu and Akash, who regulate the seasons. Similarly, we honor trees, mountains, animals, and other natural entities that form an integral part of Nature. Whether in the hills of Khasi and Jaintia in the East, or the widespread Banyan trees across the country, we have celebrated our connection with Nature for millennia. We are a part of it, and it is sacred to us.

SACRED IN AGRICULTURE

The Bharatiya Krishi Padhhati (भारतीय कृषि पद्धति) practiced across the country have consistently honored Nature. Whether in resource utilization, farm operations, or in the form of farming festivals, agricultural traditions have always been aligned with natural entities.

In Bharat, it is a common practice for farmers to perform poojas to Bhudevi before sowing seeds and plowing, a practice deeply embedded in our agricultural heritage. Festivals like Pongal (போங்கல்) in Tamil Nadu, which are celebrated to thank Surya Devata (सूर्य देवता), Indra Devata (इंद्र देवता), and farm animals for a bountiful harvest, are among many that honor Nature and express gratitude for its resources. Similarly, Baisakhi (ਬੈਸਾਖੀ) in the North, Bihu (ବିହୁ) in the East, and Gudi Padwa (ગુଡ଼ି ପାଡ଼ବା) in the West share this same essence.

The Bhil (भील) community of the Nandurbar district of Maharashtra follows a unique agricultural tradition which honors Prithvi Maa (पृथ्वी माँ). It is performed in three stages: before tilling, before sowing, and after harvesting. Before

tilling, they consecrate a stone with water, oil, haldi (हल्दी), and Mahua (महुआ) blossoms, invoking Prithvi Maa (पृथ्वी माँ). During sowing, they do poojas (पूजा) to various gods to protect the crops and for a good harvest. And before harvesting, they prepare and sanctify the threshing floor, calling Modi Maa (मोदी माँ) and Surya Devata (सूर्य देवता), and offer a portion of the crop in a ceremonial basket.

ANIMALS AND THEIR IMPORTANCE IN OUR KRISHI PARAMPARA

In Bharat (भारत), a diverse array of farm animals, including cows, buffaloes, goats, sheep, and poultry, play a crucial role in agriculture. Cows and buffaloes not only provide milk, essential for dairy products, but also serve as draft animals for plowing fields. Goats and sheep contribute significantly to milk and wool production, supporting the livelihoods of many rural families. Additionally, the manure produced by these animals and the nutrient-rich droppings from poultry are invaluable for enriching soil fertility. Therefore, it is vital that we treat these animals with the care and respect they deserve.

The importance of treating and caring for animals is highlighted in various shastras (शास्त्र). Maharshi Parashar (महर्षि पराशर) notes in his treatise Krishi Parashar (कृषि पराशर):

वाहपीडार्जितं शस्यं फलितं च चतुर्गुणम् ।

वाहानिः श्वासवातेन तद् द्वितं च विनश्यति ॥ (Krishi Parashar - कृषि पराशर - 24)

The above verse suggests that even a four-fold yield obtained at the cost of causing hardship to animals will eventually be lost, as evidenced by signs of their exhaustion. This is why our ancestors emphasized the importance of utilizing animal by-products instead of overburdening them. Bulls, in particular, are robust animals capable of carrying loads and plowing fields, which is why cows and bulls hold a sacred place in many of our traditions.

There are several festivals associated with honoring farm animals across the country. Pola (पोला) is one such festival celebrated in Maharashtra, Chhattisgarh & Telangana to



honor the role played by oxen and bulls in agriculture. Celebrated widely by the farmers in central and eastern states, it occurs on the Pithori Amavasya (पिठोरी अमावस्या), the new moon's night in the month of Sawan/Shrawana (सावन/श्रावण - which falls typically in August). On this day, farmers abstain from employing bulls for field work.



FOOD - THE THREAD OF UNITY

While the current cultivation practices worldwide usually follow principles of individual ownership, harvesting in Bharat still brings families and communities together to reap crops collectively. Villagers unite in the fields, their combined efforts turning harvesting into a celebration of solidarity and mutual support. This tradition goes beyond the simple act of gathering the crops; it embodies a profound expression of communal harmony, blurring the distinctions between individuals and community. The collective effort of harvesting unites people, nurturing a strong sense of belonging and shared purpose.

Consider Anna Daan (अन्न दान) and Bhandaras (भंडारा) near temples. The Bhandara is the practice of distributing specially cooked meals free-of-cost near or at places where poojas (पूजा) are performed right before the harvest to get a good crop yield. It is considered as a prasad (प्रसाद) or Bhog (भोग). It is a tradition grounded in faith and hope. Harvest, agriculture, nature are all bundled into one.

THE VIGYAN IN BHARATIYA KRISHI PARAMPARA

Our great Maharshis (महर्षि) comprehended the rhythms of Nature through rigorous Sadhanas (साधना) and Tapasyas (तपस्या). They explored and developed numerous agricultural practices that harmonize with natural processes. They aimed to share their knowledge with society, compiling their insights

into comprehensive treatises. Among these treatises, the Krishi Parashar (कृषि पाराशर) by Maharshi Parashar, written at least 2500 years BCE, focuses on Nakshatras (नक्षत्र) related to sowing and other operations (e.g., Uttarashadha - उत्तराषाढ़ा, Uttarabhadrapad - उत्तराभाद्रपद, Mul - मूल, Jyeshtha - ज्येष्ठ), the importance of the plow (Hal - हल), and animal husbandry. The Kashyapiya Krishi Sukt (काश्यपीय कृषि सूक्ति) by Maharshi Kashyap (महर्षि कश्यप), written in 800 CE, from the Krishna Godavari Region sheds light specifically on paddy cultivation. The Krishi Gita (कृषि गीता) by Parshuram (compiled in Malayalam in 15th Century) discusses crop production in Kerala, covering cultural practices, pest control, and crop varieties.

The Vrukshayurveda (वृक्षायुर्वेद) by Surapala, written in 1000 CE, describes various botanicals to be used for treatments in the ancient Tridosha (त्रिदोष) system (Vat - वट, Pitta - पित्त, and Kaph - कफ) - an innovative diagnostic system to identify plant diseases and manage plant health, linking to Panchabhutas (पञ्चभूत). The treatise details formulations like Kunapa jal (कुणप जल - a mix of excreta of animal, and plant remains) to boost soil fertility, Amritpani (अमृत पानी - a mixture of cow dung and jaggery), the use of Agnihotra bhasma (अग्निहोत्र भस्म) for soil fertility. These ancient formulations, which utilize cow dung as manure, form the basis for managing nutrient cycles and balancing Panchabhutas in the ecosystems. They reflect the reverence of ancient methods towards Nature and the respect for the cycle of life through these practices.

The Chamaka Prashna (चमक प्रश्न) of the Yajurved (यजुर्वेद) describes various types of grains like kuyavah (कूयवाः - small grains), annam (अन्नं - food), akshut (अस्तुत - freedom from hunger), vreehyah (व्रीहियः - any variety of rice), yavah (यवाः - barley), mashah (माषाः - beans either black gram or wild beans), tilah (तिलाः - sesame), mudgah (मुद्गाः - kidney beans or green gram), khalvah (खल्वाः - kind of grain or leguminous plant), godhumah (गोधूमाः - wheat), masurah (मसुराः - lentils), priyangavah (प्रियंगवः - little millets), anavah (अणवः - rice), shyamakah (श्यामाकाः - cultivated millets) and neevarah (नीवाराः - wild rice) for the survival.





The Kashyapa Krishi Sukti (कश्यप कृषि सूक्ति) enumerates a variety of grains, highlighting their distinct characteristics. These include Shwet Shali (श्वेत शाली) - the white rice, Rakt Shali (रक्त शाली) - red rice, Sthul Shali (स्थूल शाली) - thick rice, and Deergh Shali (दीर्घ शाली) - long-grain rice. It also mentions Shukla Vrihi (शुक्ल व्रीहि) and Sthoolakaya Vrihi (स्थूलकाया व्रीहि), both of which are broad varieties. Ghana Vrihi (घना व्रीहि) is noted for its heavy grains, while Samara Vrihi (समारा व्रीहि), available in both white and black, resembles barley and is known for its abundant yields. Kala Vrihi (काला व्रीहि) is recognized for its sweet and nourishing qualities, Sita Vrihi (सीता व्रीहि) represents standard white rice while Peetavarna Vrihi (पीतवर्ण व्रीहि) is a yellow rice beneficial for digestion.

Our shastras have extensively explored the subject of weather and rainfall. For instance, Maharshi Parashar, in Krishi Parashar (कृषि पाराशर), categorized clouds into four types: Aavart (आवर्त), Samvart (संवर्त), Pushkar (पुष्कर), and Dron (द्रोण), each associated with distinct rainfall patterns. Aavart refers to swirling clouds known for their circular motion, typically bringing rain to small, scattered areas. Samvart, or gathering clouds, are linked to heavy, widespread rain across entire regions. Pushkar, or nourishing clouds, bring gentle, life-giving rain in minimal amounts, while Dron, dense clouds, often carry excessive rainfall or storms.

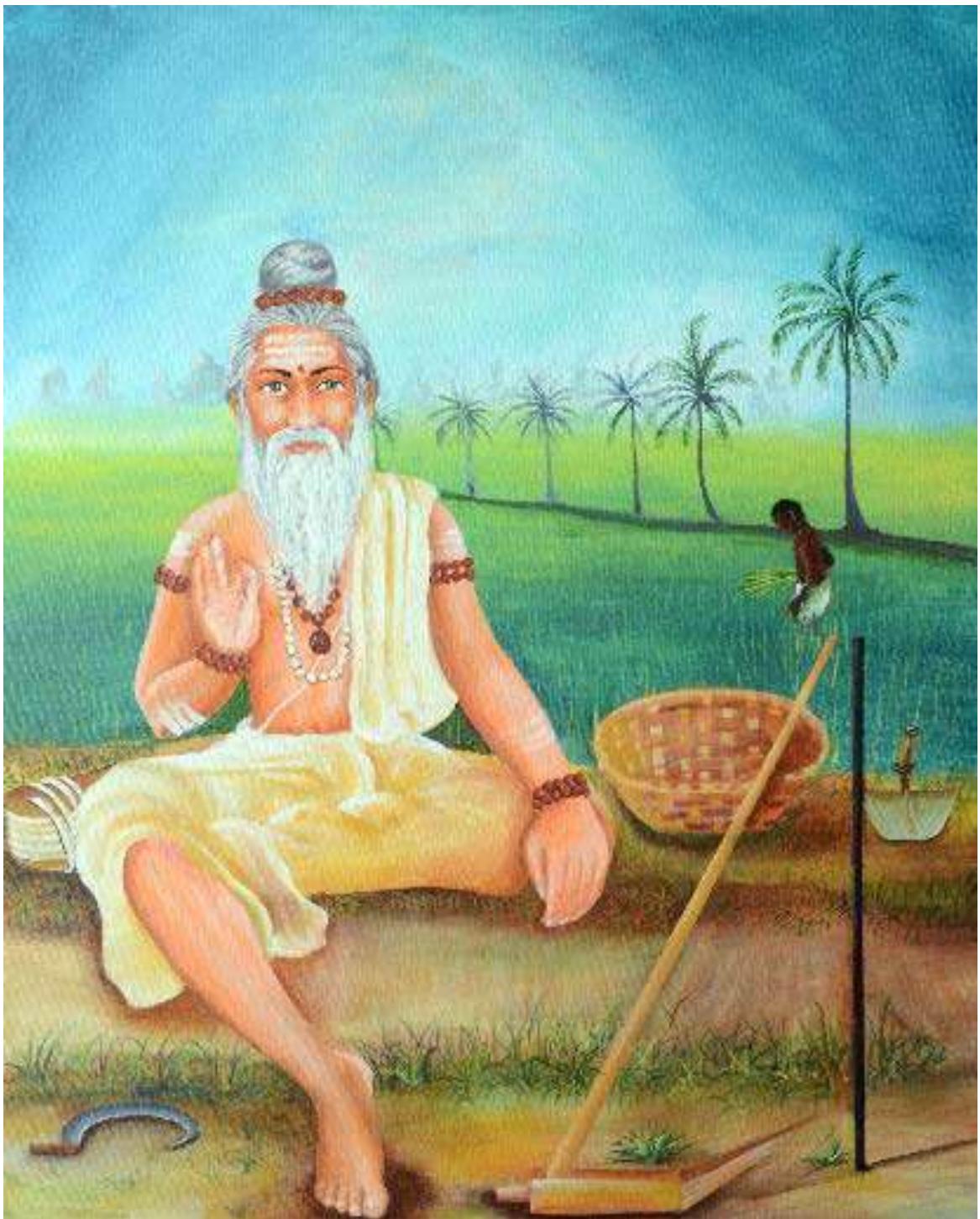
एकदेशेन चावार्तः संवर्तः सर्वतो जलाम् ।
पुष्करे दुष्करं वारि द्रोणे बहुजला महि ॥ (Krishi Parashar - कृषि पराशर - 24)

The verse from Krishi Parashar further explains these patterns, emphasizing how different clouds influence the distribution and intensity of rainfall. Additionally, Varahamihir in the Brihat Samhita (बृहत साहित्य) delves into the concept of 'Garbhottam'

(गर्भोत्तम), an ancient method for predicting monsoon conditions based on atmospheric observations made approximately 195 days before its onset. This period, viewed as the ‘Garbhottam’, meaning ‘the formation of the embryo’ of the monsoon, was critical in determining the upcoming rainfall, helping farmers plan their agricultural activities accordingly.

This extensive knowledge of agricultural traditions, food grains, animal care, weather and the utilization of leftovers and recycling, all while honoring nature, was meticulously studied by the Maharshis. They formalized and compiled this wisdom into texts. This profound connection to Nature is why our elders regard our Krishi Parampara (कृषि परम्परा) as sacred.

Apart from the above texts, there are various regional texts across Bharat (भारत) that provide valuable insights into ancient agricultural practices. Lokopakara (लोकोपकार) by Chavundaraya, written in 1025 CE, is an encyclopedic work that explores ancient Indian agriculture and demonstrates an understanding of plant mutagenesis. The Manasollasa (मनसोल्लासा) is a 12th-century Sanskrit text by Kalyani Chalukya King Someshvara III from Karnataka, covering topics including horticulture. Upavana Vinoda (उपवन विनोद), authored by Sarangadhara in the 13th century CE, focuses on horticultural practices in Bundelkhand. Vishwavallabha (विश्ववल्लभ), written by Chakrapani Mishra between 1540 and 1597 CE, provides extensive insights into plant science and agriculture from Mewar-Udaipur. These diverse texts collectively illuminate the rich and varied traditions of Krishi Vigyan (कृषि विज्ञान) in Bharat. They reveal a deep understanding of farming practices, horticulture, and plant science forming the scientific foundation of our Krishi Parampara.





POETS & AUTHORS ON OUR PHILOSOPHIES OF NATURE

From ancient times to the present day, the relationship between humans and Nature has been a central theme in Indian culture, evident in the works of poets, authors and travelers alike.

Kalidasa's *Meghadootam* (मेघदूतम्) tells the tale of an exiled yaksh (यक्ष), banished to a solitary mountain peak, yearning deeply to reunite with his beloved. He asks the clouds to carry his heartfelt message, viewing them as his brothers, and the mountains as loyal friends. As the cloud journeys from Ramagiri (Ramtek) to Alaka (the Himalayan foothills), it embraces each mountain it encounters. This story portrays that these natural entities are not just a part of the physical world around us, but are as lively and emotional as we are.

Another notable example is the renowned Telugu classic *Sri Suryanarayana Meluko* (श्री सूर्य नारायण मेलुको) which means 'Wake up, Surya Bhagwan!', a song that rouses the Sun as the world is dependent on Surya Bhagwan's (सूर्य भगवान्) cosmic rays. The song compares the different forms and colors of the Sun to various flower blossoms, like the Noon Sun to the brilliant hue of olive flowers and the morning Sun to the blush of onion blossoms. The song appreciates the beauty, energy, and richness of Surya Bhagwan. This says something about the culture indeed. Even in contemporary movies, the lyrics of Siri Vennela Sitaramasastry in Telugu songs like "*teli manchu karigindi talupu teeyana prabhu ila gontu palikindi taluputeeyana...*" beautifully depict the welcoming of the dawn.

Gurudev Rabindranath Tagore's song Akash Bhora (आकाश भोर) captures a profound sense of wonder and appreciation for Nature's divine rhythm. It reflects the deep connection between the individual and the natural world, revealing how even simple elements of Nature are imbued with infinite beauty.

Modern-day poets continue to draw inspiration from Nature to portray emotions, as seen in Mahadevi Verma's poem "कहाँ गया वह श्यामल बादल!" ("Where has that dark cloud gone?"). The poem reflects on the absence of a monsoon cloud that once brought joy and relief, symbolizing the fleeting happiness of the past.

The reverence for Nature and its personification has been a constant theme since ancient times. Whether in classical Sanskrit literature or contemporary Indian cinematography, there has always been a deep connection and joy associated with Nature.

CONCLUSION

From Shastras to Parampara, there is a consistent recognition that Prakriti (प्रकृति) is more than just a resource. The bond between us and Nature is sacred—we live within it, are a part of it, and it resides within us. This deep connection is celebrated, embraced, and woven into every aspect of our lives. This reverence for Prakriti shapes our rituals, traditions, and daily practices, reminding us of the harmony between all living beings and the Nature. It's a relationship that has been nurtured for generations, grounding us in the timeless wisdom honoring Nature.



PRAKRITI *ke* SAATH SAMBANDH

प्रकृति के साथ संबंध



SACRED GROVES *of* BHARAT

GUARDIANS *of* CULTURE & BIODIVERSITY

Bharat (भारत) is home to diverse sacred groves, as we have always revered Prakriti (प्रकृति) as sacred. Each region in Bharat upholds unique traditions and Devi-Devatas (देवी-देवता) linked to these groves, reflecting a profound bond between Nature and spirituality.

In Andhra Pradesh, sacred groves, known as Pavithravana (पवित्रवन) or Pavitra Kshetra (पवित्र क्षेत्र), are dedicated to gods like Shiv (शिव) and Hanuman (हनुमान). Arunachal Pradesh hosts Gompa (गोम्पा) Forest Areas, managed by Lamas (लामा) and the Mompa (मोम्पा) community, primarily near monasteries. Assam's sacred groves, called Than (थान) or Madaico (मैडाइको) are linked to local gods like Shankar Dev (शंकर देव) and Sibrai (सिबराई).

Bihar's sacred groves, or Sarnas (सरना), are clusters of trees worshiped by local communities. Chhattisgarh has Matagudi (मातागुडी) and Devgudi (देवगुडी) groves, closely tied to local rituals. In Goa, sacred groves, called Devrai (देवराय) or Devran (देवरन), are well-preserved by local communities.

Gujarat's groves, known as Oran Mata (ओरण माता) or Sadhay Pir (साधय पीर), are diverse and play a crucial role in conservation. Haryana lacks a

generic name for its sacred groves, but they are dedicated to gods like Shiv and Khetanath (खेतनाथ). Himachal Pradesh, often called the 'Land of Gods and Sacred Groves,' has Dev Van (देव वन) or Devata Ka Jungle (देवता का जंगल), which are strictly protected.

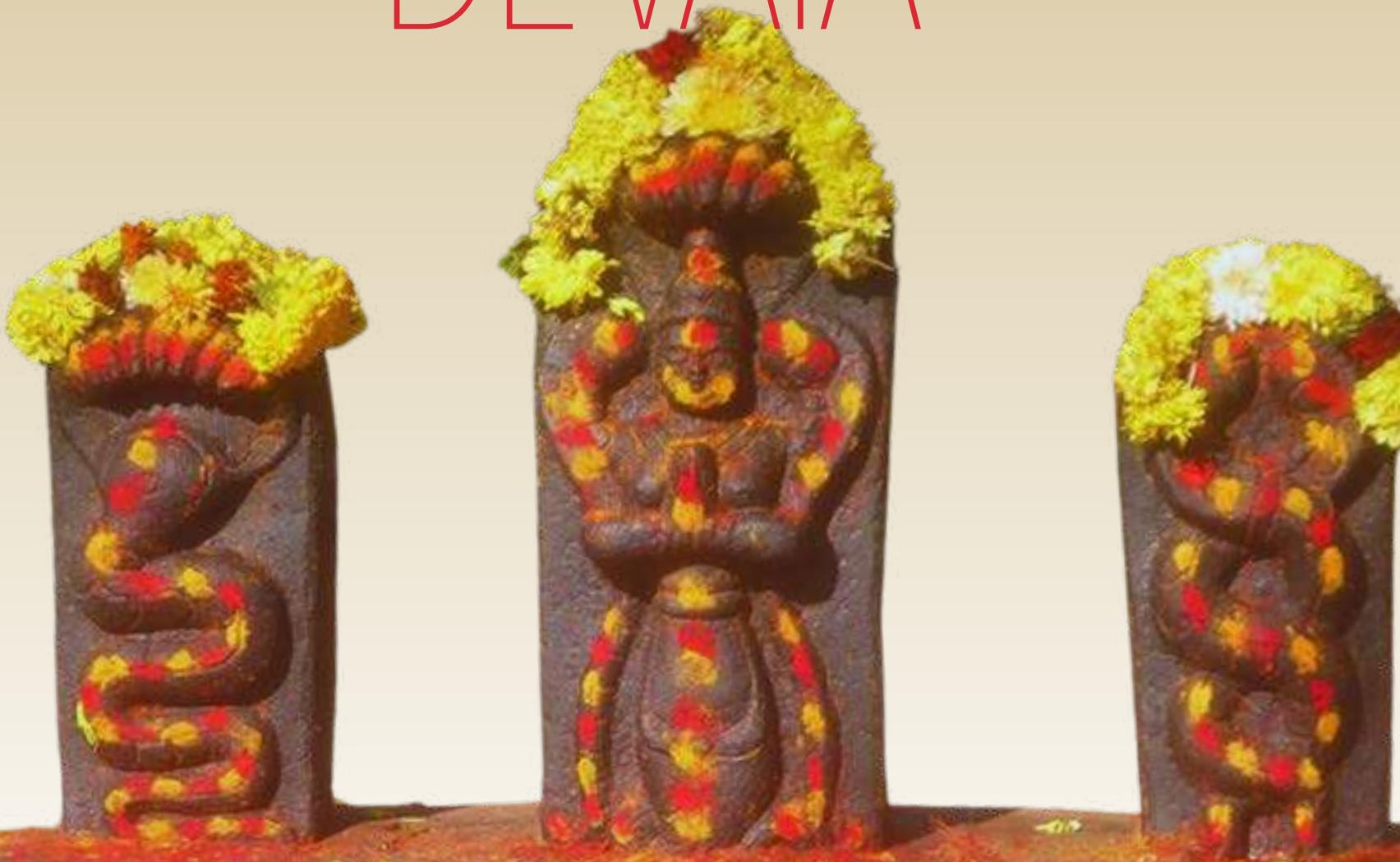
Jammu and Kashmir's sacred groves, known as Banis (बनी), are dedicated to gods like Mata Vaishno Devi (माता वैष्णो देवी). Jharkhand's Sarnas are revered by local communities and hold significant cultural importance. Karnataka's Kans (कांस) and Devarkadu (देवरकाडु) groves are rich in biodiversity, with unique traditions like offering terracotta icons.

Kerala's sacred groves, including Ayyappan Kavu (अय्यप्पन कावु) and Sastham Kavu (सस्थम कावु), are known for serpent worship and diverse flora.

These groves, across India, not only preserve ecological balance but also embody the cultural heritage and spiritual practices of their respective regions.

NAAG DEVATA

SNAKE GODS *of* KARNATAKA



Naag Devata Pooja (नाग देवता पूजा) is a common practice in many parts of India. Naags (नाग) are Snake Gods that are thought to be able to take human form. In Karnataka, the idea behind Naag Pooja is connected to how people perceive Nature. Through their traditions, they are aware that snakes are important for keeping the balance of the ecology intact. Snakes are also seen as symbols of punar janam (पुनर जन्म - re-birth or new life) because they shed their skin periodically.

The knowledge that the Naag Devata can protect local water resources and help bring on the rains has been passed down through generations. The pooja of snakes is also thought to help in difficult times as they remove the sarp-dosh (सर्प-

दोष) from the past lives. Snakes are said to have a connection with God, which makes it less likely for people to hurt them. This indirectly protects snakes and helps to increase the number of snakes in many regions.

In Indian villages, poojas of the Naag Devatas are thought to help cure diseases, especially skin problems. Stones representing snakes, called Naagkallu (नागकल्लू), are placed in homes and gardens, and used for poojas. The Naag Panchami (नाग पंचमी) is also a significant festival for offering poojas to the Snake Gods for protecting the people. Through these age-old traditions, communities are aware of the cultural relevance of Nature and their relationship with it, as Naags are deemed important in keeping the ecology intact.

The Panchavati (पंचवटी) comprises five trees that hold sacred significance in Indian cultures: the Pipal (पीपल - *Ficus religiosa*), Bilva (बिल्व - *Aegle marmelos*), Vat (वट - *Ficus benghalensis*), Amla (आंबला - *Phyllanthus emblica*), and Ashok (अशोक - *Saraca asoca*). These trees are revered for their religious importance, with their leaves, flowers, and fruits often used as offerings in worship.

The Pipal tree is closely associated with the Trimurti (त्रिमूर्ति)—Brahma (ब्रह्मा), Vishnu (विष्णु), and Shiv (शिव). Performing pooja (पूजा) of the Pipal is believed to be equivalent to worshiping the entire universe. Symbolizing the cycle of birth, death, and rebirth, the Pipal is also valued for its air-purifying and medicinal qualities. The Bilva tree, sacred to Shiv, has leaves that are significant in worship rituals, representing Shiv's three eyes and the fundamental aspects of creation, preservation, and destruction.

The Vat tree, also linked to Shiv, symbolizes immortality and longevity, embodying stability, wisdom, and the interconnectedness of life. The Amla tree, sacred to Vishnu (विष्णु), is celebrated for its health-promoting properties and its association with overall prosperity. The Ashok tree, revered by both Vishnu and Buddha, represents health, happiness, love, fertility, and protection from sorrow.

Panchavati trees are often established near ashrams (आश्रम) and sacred sites. The presence of these five trees forms a tradition that fosters adhyaatmik (आध्यात्मिक) growth and preserves the wisdom handed down through generations. At the same time, they serve a practical purpose, offering tangible benefits rooted in science. Together, these trees embody a balanced approach to life, nurturing both physical and spiritual well-being – a reflection of how we see and live life.



PANCHAVATI AARANYAS

PIPAL, BILVA, VAT, AMLA & ASHOK



TREES *of* PULIYARAI

TAMARIND & NEEM *of* TENKASI

In the Tenkasi district of Tamil Nadu, the village of Puliyarai is named after the Puliyarai Thekshnamoorthi Kovil, renowned for its unique worship practices centered around two sacred trees: the Tamarind and the Neem (नीम).

The Tamarind tree holds profound spiritual significance in Puliyarai. The murti (मूर्ति - idol) of Nataraj (नटराज) was discovered inside a marapondhu (मारापोंधु - hole) in a Tamarind tree, and it is believed that Shiv himself gave darshan (दर्शन) near this tree. In Tamil, Tamarind is known as "Puli" (पुळि), which inspired the village's name. This discovery has given the status of the Tamarind tree as a sacred symbol in the community.

The Neem tree in Puliyarai is associated with Devis (देवी) Mariyamman (मरियम्मन), Isakkiyamman (इसाक्कीअम्मन), and Kaliyamman (कलिअम्मन).

The Neem tree is also regarded as one of the manifestations of Devi Mariamman, the Goddess who wields a Neem leaf to strike down all diseases like smallpox and measles.

The worship of these natural elements expresses a deep gratitude to Bhoomi thai (भूमि थाई - Mother Earth), rain, trees and nature. The sacred trees in Puliyarai are a reminder of the villagers' close connection with Nature. Their traditions reflect a simple but powerful belief - that Nature cares for them, and in return, they honor and protect it.

NATURE & NEWBORN

PLANTING TREES for EVERY GIRL in PIPLANTRI

Piplantri, a village located in Rajsamand district in Rajasthan, holds the rare distinction of contributing to nature on the occasion of births in the village. The villagers celebrate by planting 111 trees on the birth of every girl child. This is in line with the philosophy of being a part of Nature by associating and expressing important events with Nature.

This tradition has not only enhanced the greenery in the area but also provided a message to the society that the birth of a girl child symbolizes prosperity around us. In this tradition, the mother of the new-born decorates a basket in which she carries her baby along with her during the planting of the trees. The community ensures that the trees are taken care of and nurtured just as the girl child is loved and taken care of.

Trees including neem (नीम), amla (आंवला), mango (आम), and sheesham (शीशम), are planted on all important occasions. The community ensures that the trees receive essential nutrients and protection from pests, for instance, they have planted aloe vera to prevent termites from infesting the area.

The relationship between man and Nature in Piplantri showcases both the cultural and economic reliance on natural resources. Moreover, it shows the promise of the community to uphold the symbol of nurturing both Nature and humans.

Cutting of trees is completely banned in this village. Such traditions indicate Nature as very sacred since it is the ultimate provider. It also signifies that we are a part of it and the basis of all our traditions lie in Nature.





SARHUL

POOJA *of the SAL TREE in JHARKHAND*

Sarhul (सरहुल), one of the most significant festivals of Jharkhand, is a vibrant celebration that reflects the deep connection of the local communities with Nature. Primarily observed by the Oraon (ओरांव), Munda (मुंडा), and Ho (हो) communities, Sarhul marks the advent of spring and the blossoming of the Sal tree. The festival spans three days, beginning on the third day of the Chaitra (चैत्र) month during Shukla Paksha (शुक्ल पक्ष) and continuing until Chaitra Purnima (चैत्र पूर्णिमा).

The word "Sarhul" is derived from two words, Sar (सर), meaning Sal, and Hul (हुल), meaning worship. The festival marks the marriage between Bhudevi (भूदेवी) and Surya Dev (सूर्य देव), which brings fertility and prosperity to the land. The Sal tree, whose flowers bloom during this time, is considered sacred and is central to the festivities. The blossoming of Sal flowers symbolizes the renewal of life, fertility, and the sustenance of the earth.

The Sarna Sthal (सरना स्थल, a Dharm aaranya - धर्म आरण्य) in the village, is the focal point of the celebrations. Here, the village pandit, known as the Pahan (पहान), performs rituals to honor the Sal tree and the Bhudevi. The Pahan offers the first Sal flowers to the Devi, followed by offerings of rice beer (हरिया - Hariya) and other traditional foods. These offerings are made to appease the gods and seek their blessings for a bountiful harvest.

Music, dance, and traditional songs form an integral part of Sarhul celebrations. The entire community participates in joyous dances, such as the Jhumar (झमर), to the rhythm of traditional instruments like the Mandar (मंदार) and Nagara (नगाड़ा).

Through Sarhul, the people of Jharkhand preserve their traditions and maintain a deep relationship with Nature. It's a reflection of how everything in life is connected and how we all depend on each other.



SARP KAAVU

The NAAG DEVATA TEMPLE of MANNARSALA

Sarp Kavu (सर्प कावु), meaning a traditional sacred grove located near ancestral homes in Kerala and the Tulu Nadu region of India. These sanctuaries, believed to be inhabited by snakes, often feature depictions of Naag Raja (नाग राजा - the King of Snakes) and other Naag Devatas (नाग देवता - snake gods).

One of the most famous Sarp Kavus is the Mannarasala Temple in Haripad, Kerala, dedicated to Naag Raja. Situated within a sacred grove, this temple holds immense cultural and historical significance in the region.

Special ceremonies such as the Sarp Pooja (सर्प पूजा) and Noorum Paalum (नूरूम पैलुम) are conducted to appease the serpent gods, seeking their blessings for fertility, prosperity, and protection from harm.

These groves are also ecologically significant. They are often rich in biodiversity, housing rare species of flora and fauna. The undisturbed Nature of Sarp Kavus contributes to the preservation of the local ecosystem, making them vital green pockets amidst Kerala's dense human settlements.

Culturally, Sarp Kavus are a symbol of the harmonious relationship between humans and nature. These are a unique blend of tradition, and environmental stewardship, reflecting Kerala's rich cultural heritage and its reverence for Nature.



MAHUA

The TREE of LIFE in JHARKHAND

The Mahua (महुआ) tree (*Madhuca longifolia*) is a remarkable species indigenous to India, Sri Lanka, Nepal and Myanmar. Renowned for its exceptional drought resistance and frost tolerance, the Mahua thrives in diverse conditions – from the deep, loamy soils of tropical forests to the rocky, calcareous terrains of semi-evergreen regions. Withstanding extreme temperatures, it is a vital part of the ecosystem in central India and other areas.

In local culture, the Mahua tree holds a revered status. The Gond (गोंड), Munda (मुँडा), and Santhal (संथाल) communities, among others, regard it as the Tree of Life, attributing adhyaatmik (आध्यात्मिक) qualities to it. According to tradition, Mahua Devi (महुआ देवी), residing within the tree, protects the forest and its inhabitants, fulfilling wishes and safeguarding against harm. Rituals and offerings to this God underscore the tree's sacredness, as communities believe it grants protection and blessings.

Mahua's culinary and cultural significance is profound. The fruit is used to prepare a variety of dishes and is integral to the diet of Western Odisha's people. The flowers are used to make

a variety of edible treats and beverages. Mahua flowers, when boiled, are often consumed directly or used to prepare sweets like laddoos (लड्डू). The flowers and fruits are processed into traditional foods and beverages, including Mond (मोंड), a local



beverage now available commercially.

The Mahua tree is a vital ecological and cultural treasure, celebrated for its resilience, spiritual significance, and diverse applications in local traditions and cuisine. Its enduring presence and historical importance highlight its integral role in sustaining the livelihoods of countless communities.



SIHARI PATTA

MANY USES *of* KANCHANAR *in* CHHATTISGARH

In the heart of Bharat's (भारत) dense forests, where modernity's reach is limited, the forest communities continue to live in harmony with Nature. The Sihari (सिहारी) leaf is more than just a resource – it is a symbol of the deep connection between the forest dwellers and their environment. These leaves, stretching up to 50-60 feet in length, are used as plates during meals, vessels for drinking water, and even for storing food (like rice), keeping it warm for hours.

The versatility of the Sihari leaf is celebrated during festivals and special occasions, where it adds a unique flavor and freshness to the food. Beyond its culinary uses, the leaves are plucked and preserved before the monsoons, ensuring a steady supply throughout the year. The vines of the Sihari plant are equally valuable, with their

bark used to make ropes that bind animals, create barriers in cots, and serve as essential tools for vegetable sellers in local markets. The pods of the Sihari, known as Bastaria Falli (बस्तरिया फली), are a delicacy, roasted and enjoyed like peanuts.

Also known as Kanchnar (कंचनर), it helps in treating various ailments like skin diseases, wounds, edema, dysentery, and ulcers. The anti-helminthic, astringent, anti-leprotic, and anti-microbial properties of Kanchnar make it an effective Ayurvedic medicine.

This symbiotic relationship between the forest communities and the forest echoes a broader understanding that binds Bharat together – a reverence for Nature. In honoring Nature, we honor ourselves, preserving the wisdom of our ancestors and the harmony of our land.



DONYI-POLO of ARUNACHAL

"WE are CHILDREN of the SUN & MOON"

The Ziro Valley in Arunachal Pradesh, home to the Apatani (अपातानी) community, is not only a region of breathtaking beauty but also a sanctuary of ancient traditions. The Apatani people practice Donyi-Polo (डोन्यी-पोलो), which reveres the sun and moon, central elements of their daily lives. Donyi-Polo, meaning "Sun-Moon" symbolizes the balance and harmony in the universe. The sun, Donyi (डोन्यी), represents the nurturing mother, while Polo (पोलो), the moon, embodies the protective father. Together, they manifest the principle, Sedi (सेडी), providing balance to nature and humanity.

This faith is deeply embedded in the lives of the Apatani, with flags fluttering atop homes

as a testament to their ongoing worship of these celestial bodies. Festivals revolve around this veneration of Nature, celebrating the rhythms of light and darkness, warmth and coolness, and unity and diversity. The Apatani call themselves "Donyi O, Polo Om" (डोन्यी ओ, पोलो ओम) meaning "children of the sun and moon," reflecting their deep connection to the cosmos.

India's tradition of worshiping Nature is a thread that unites the diverse cultures across the country. This reverence for the natural world, seen in the Apatani's Donyi-Polo, shows a shared belief that has been passed down through centuries. It is this deep respect for the earth and its natural cycles that defines these practices and the essence of Bharat (भारत).

A

raku Valley, also known as the Kashmir of Andhra, embodies the essence of nature itself. Even the farmers of Araku dedicate each activity to the Bhudevi (भूदेवी).

From sowing seeds to harvesting crops, every step is performed with reverence towards Prakriti (प्रकृति). The seeds are not merely planted but are offered to Bhudevi before sowing, and the harvest is celebrated with rituals that honor "Nela Talli" (नेला तळी). Agricultural tools and produce are also presented before her, acknowledging their sacred significance.

In local villages, a unique manifestation of Bhudevi is created through the formation of a stone structure that symbolizes the Gram Devi (ग्राम देवी). Villagers gather around Nela Talli (Nela-Bhu नेला-भू, Talli-Mata तळी-माता in Telugu) to perform rituals, seek blessings, and express gratitude. This sacred site becomes a focal point for community worship, where seeds, harvests, and farming tools are consecrated and revered.

In Araku Valley, the intertwining of daily life with Prakriti highlights a deep respect for Bhudevi. The community's farming practices are a heartfelt way of honoring the land and the divine presence they believe keeps it thriving.



PAAVAN BHUMI ARAKU

A LAND WHERE NATURE SPEAKS



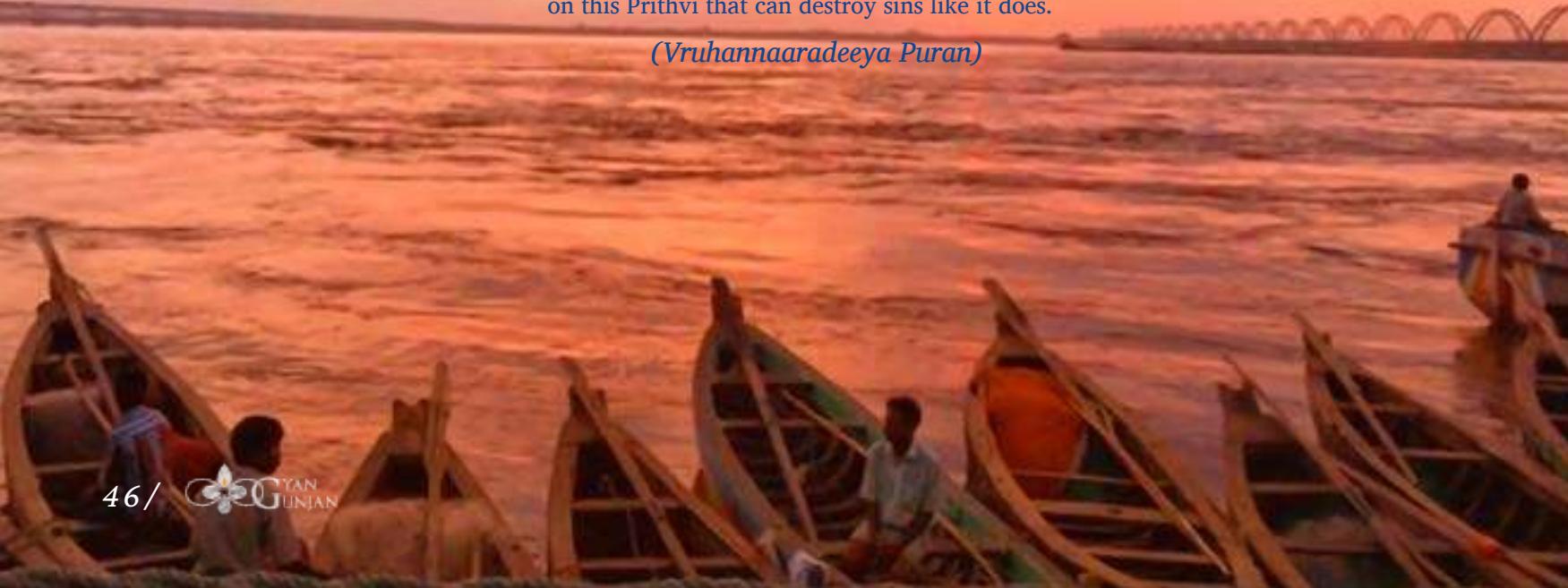
JAL JANANI BHARAT ki

EMBRACING GANGA MAIYYA *in PRAYAG*

सर्वषामपि तीर्थानां श्रेष्ठा गंगा धरातले ।
न तस्य सदृशं किञ्चित् विद्यते पाप नाशनम् ॥
(वृहन्नारादेय पुराण)

Among all the holy places on this Bhumandal,
Ganga is the most powerful: there is no other Teerth
on this Prithvi that can destroy sins like it does.

(Vruhannaaradeeya Puran)



Ganga Mayya (गंगा मैय्या), is not just a river to the people of Prayag, but a mother who nurtures, purifies, and sustains life. Flowing through the heart of India, she carries the essence of the land. Every festival and celebration, particularly those tied to agriculture, begins and ends with rituals dedicated to Ganga. She is worshiped during sowing and harvest seasons, Her blessings sought for prosperity and protection.

One of the most significant festivals is Ganga Dussehra (गंगा दशहरा) and celebrated on the Shukla Dashami (शुक्ल दशमी) in the month of Jyeshtha (ज्येष्ठ - May-June), Ganga Dussehra marks the descent of the Ganga to the earth by Raja Bhagirath. The festival sees thousands of people doing pooja (पूजा), and singing devotional songs.

Kajari Geet (कजरी गीत), a traditional folk song, also finds its roots in the reverence of Ganga. Sung during the monsoon season, these songs express the deep connection between the people, their land, and Ganga Mayya.

The Alopi (अलोपी) Mandir in Prayag is another sacred site, where Prakriti Devi's (प्रकृति देवी) presence is deeply felt. This temple, dedicated to Alopi Devi and considered a Shakti Peeth (शक्ति पीठ), is surrounded by trees like Pipal (पीपल), Bargad

(बरगद), and Neem (नीम), which are revered for their life-giving properties. The Mahua Maharani (महुआ महारानी), located near the Alopi Mandir, is an ancient stump of a Mahua (महुआ) tree worshiped by the locals. It possesses healing properties and has a great significance among the locals.

These trees, along with Ganga, form the moral foundation of the region. For the residents of Prayag, whose mother is Ganga, every aspect of life is intertwined with Nature. Ganga Mayya is their guide, protector, and sustainer, and her presence is a constant reminder of life and the interdependence of all living things.





In the coastal village of Chinnapalam in Tamil Nadu, the sea is much more than just a body of water. It has traditionally been considered sacred, with a vast, living temple of Mariyamman (मरियम्मन) and Murugan (मुरुगन). Every time the fishermen enter the sea, they invoke all these Devatas-Devis (देवता-देवी) in their poojas (पूजा). This ritual has been going on for generations because these poojas provide a sense of security, as well as hope for the fishermens' safe return.

The fishermen also consider the very act of taking a dip in the sea—integral to their daily lives—a blessing. Each cast of the net and every haul of the catch is filled with a sense of sacred duty and gratitude towards the Devatas-Devis residing in the temples on the coast.

In January, there is a vibrant celebration of Mariamman. The entire village comes alive, united in devotion. To them, Mariamman is a guardian of their heritage, a symbol of their collective identity. The sea's rhythm dictates the lives of the villagers, and in every wave, they see the hand of Ganga Devi (गंगा देवी). Each pooja, each utsav (उत्सव), and each mention of Mariamman is a reaffirmation of their deeply held belief that God is ever-present, guiding and protecting them.

In Kerala, the fishermen community traditionally address the sea as Kadalamma (കടലമ്മා), where Kadal (കടല) means the sea and amma (അമ්මා) means mother. By addressing the sea to their mother, the fishermen express their gratitude to the primary source of their livelihood.

The fishermen perform Samudra-pooja (समुद्र पूजा) to honor Kadalamma and thank her for protecting them from the perils of the sea, a practice that finds its origins in the Ramayan (रामायण). Shri Ram (श्री राम) prays to Varun (वरुण), the Sea God, and requests Him to give His blessings for the safe navigation and protection of his army to rescue Sita Maa (सीता माँ) from Lanka. Shri Ram also seeks His permission to build a Sethu (सेतु - bridge), across the ocean, to travel to Lanka. Today, the same Samudra-pooja is held at the start of the fishing season to pray for a bountiful catch, and to keep the fisher-folk safe from harm.

Another notable festival is Aatukaal Ponkala (आतुकाल पोंकाला), held in honor of Kadalamma, where the women present Ponkala (पोंकाला - rice pudding) to the sea. It is quite heartening to know how the locals put in so much effort to prepare a dish for the sea, symbolizing the sacred bond between humans and Nature that can only be witnessed in India.

BAIGA SAMUDAY aur PRAKRITI

TATTOOS SYMBOLIZE *the BOND with NATURE in MADHYA PRADESH*

Nestled in the Baiga-Chak belt in southern Madhya Pradesh, the Baiga (बैगा) community, for several centuries, has considered Nature as a mother figure responsible for their existence.

The Baiga community display their reverence to the earth and Nature through tattoos on their forehead, with Adha Bhenda (आधा भेंडा - slanting lines) symbolizing rivers, Khade Bhenda (खड़े भेंडा - straight lines) representing trees, and Tipkas (टिप्का) representing mountains. This unique tattoo tradition is called Gonda (गोंडा). On women, these tattoos mark different milestones related to puberty, marriage, and motherhood.

The tattoo artists, also known as Badnis (बदनि), know extensively about the plants and trees in the region. And so, they can use colors made of natural materials like leaves, flowers, and barks of specific trees. For instance, kuchi (कुची)—thin strips of bamboo covered in cotton—are used to carefully draw and apply complex designs on the body. In Madhya Pradesh, the oil derived from the seeds of the Ramteela (रामटीला) is used in the ink for such ritual tattoos.

In a more everyday sense, even the kajal (काजल) made and used by the locals is derived from the gum of the garlic tree or the dried skin of the Bija (बीजा) tree. Such natural ingredients are also proven to have medicinal properties. With their traditional knowledge, the locals are aware of

antiseptics like haldi (हल्दी) that can be applied on injuries as well tattooed areas to avoid infection and disease.

It is fascinating to see how such Jeevan Darshan (जीवन दर्शन) continues to guide the community to this day, and how humans trust Nature even in their artisanal pursuits. They depend on Nature to be their guide, and spend time understanding the natural world's inherent properties and forming a relationship with it that often surpasses material needs.

PRAKRITI ke MAHOTSAV

प्रकृति के महोत्सव



Maati Tihar (माटी तिहार), also known as Chaad (चाड) celebrated in the Bastar region during the month of Chaitra (चैत्र), is a deeply revered festival dedicated to soil. expressing gratitude for a bountiful harvest. This festival is celebrated across different villages on dates decided collectively by the village priest, known as the Gayata (गयाता), and the community.

On the day of Maati Tihar, no activities related to soil, such as digging or plowing, are performed, respecting Bhudevi (भूदेवी). The festival begins with villagers contributing offerings, which include rice, lentils, vegetables and fruits. These offerings are brought to the site of the Gram Devata (ग्राम देवता) Buda Dev (बुडा देव), is honored.

The rituals are accompanied by the rhythmic beats of traditional drums like the mohri (मोहरी), nagada (नगाड़ा), and turruburi (तुरुबुरी), which resonate through the village, exhorting everyone to the celebration. After the formal worship, where flowers, coconuts, and areca nuts are offered to the Soil God, villagers partake in a unique tradition of applying mud paste to each other, symbolizing their connection to Dharti Maa (धरती माँ) and Prakriti (प्रकृति).

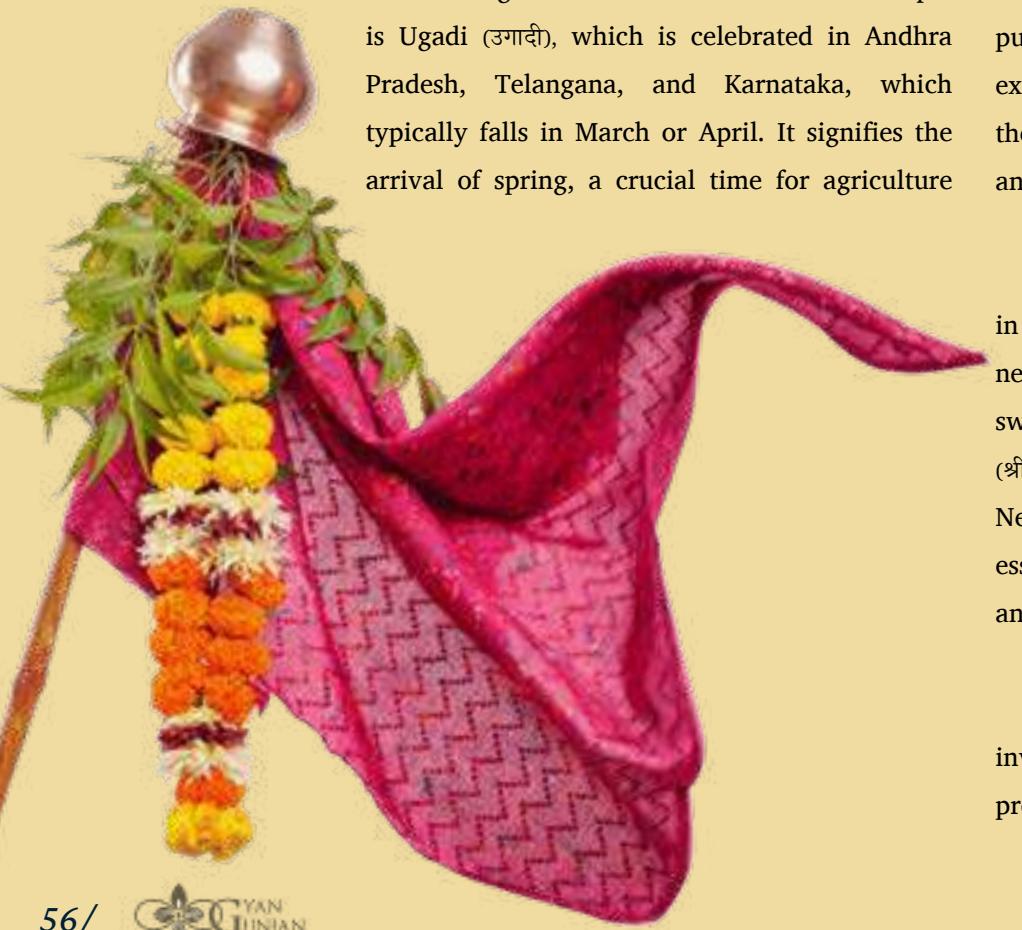
The festival is more than just a religious observance, it is a renewal of the community's bond with Nature. It marks the beginning of the agricultural season, and the generational learning ensures the tradition lives on. Maati Tihar sets the tone for the year's festivities, eventually leading to the grand celebrations of the mela (मेला) and madai (मडई). The festival reflects the deep respect the local communities hold for Nature, recognizing it as a source of life and sustenance.



CHAITRA MAAS

NAV VARSH ke TYOHAR

Chaitra Maas (चैत्र मास) marks the beginning of the new year in Bharat (भारत). In this month, Nav Varsh (नव वर्ष) is celebrated in different ways in different regions across Bharat. One such example is Ugadi (उगादी), which is celebrated in Andhra Pradesh, Telangana, and Karnataka, which typically falls in March or April. It signifies the arrival of spring, a crucial time for agriculture



as it heralds the start of the new sowing season. Farmers prepare their fields for the upcoming crops, praying for a bountiful harvest. The festival's centerpiece, Ugadi Pachadi (उगादि पचड़ी), with its six flavors- sweet, sour, bitter, salty, pungent, and astringent symbolizes life's diverse experiences and the balance of nature, reflecting the deep connection between agricultural cycles and cultural practices during this time of renewal.

Similarly, Gudi Padwa (गुडी पड़वा) celebrated in Maharashtra and Goa, signifies the start of a new harvest season. It involves preparing special sweets like puran poli (पूरन पोली) and shrikhand (श्रीखंड), and worshiping with family members. Neem (नीम) leaves, often eaten with jaggery, are an essential part of the celebration, believed to purify and strengthen the body for the season ahead.

Navreh (नव्रेह) which is celebrated in Kashmir involves viewing a ceremonial platter at dawn for prosperity. Chaitra Sukladi (चैत्र शुक्लादि) is celebrated



in Rajasthan, Himachal Pradesh, and Uttarakhand, welcoming the New Year with the joy of spring's arrival. These festivals, deeply connected to the seasonal cycles, reflect the rejuvenation of nature and the renewal of agricultural life. They embody the cultural reverence for Chaitra Maas, a month that signifies new beginnings with the changing seasons.

BAISAKHI

The SPRING FESTIVAL of PUNJAB



Baisakhi (ਬੈਸਾਖੀ), also known as Vaisakhi (ਵੈਸਾਖੀ), is a festival deeply embedded in Punjabi (ਪੰਜਾਬੀ) tradition, celebrated on the first day of the month of Vaisakh (ਵੈਸਾਖ). Falling on the 13-14th of April each year, it marks the Hindu solar new year and heralds the onset of the harvest season. For generations, this festival has been a time of joy and gratitude, as communities come together to honor the harvest and celebrate the start of a new agricultural cycle. Vaisakhi is also known as Mesh Sankranti (ਮੇ਷ ਸੰਕਾਂਤੀ), marking the day when the Sun enters the Mesh Rashi (ਮੇ਷ ਰਾਸ਼ਿ), the first zodiac sign in the Hindu calendar. This astrological event signifies the beginning of the solar calendar and is celebrated with processions and worship of temple gods like Durga (ਦੁਰਗਾ), Surya (ਸੂਰ੍ਯ), and Vishnu (ਵਿਸ਼ੁ), and the propitiation of Nature itself. In Punjab and Northern Bharat (ਭਾਰਤ), Vaisakhi is primarily recognized as a spring harvest festival. Homes are cleaned and adorned, traditional attire is worn, and people visit Gurdwaras in the morning to pray for a prosperous year ahead.

This festival is a vibrant celebration marked by traditional feasts prepared with fresh harvests. For many communities, this day is marked by ritualistic bathing in sacred rivers such as the Ganga, Jhelum, and Kaveri, visiting temples, performing charity, and participating in community fairs. The festival holds particular importance for the Sikh community, who visit local Gurudwaras, participate in langar (ਲੰਗਰ - community meals), and engage in the preparation and distribution of food. This act of service and sharing exhibits the communal bonds that Vaisakhi strengthens.

The essence of Vaisakhi reflects a reverence for Nature and the cyclical rhythms of the agricultural calendar. This practice of honoring the earth and its gifts is a defining feature of Bharatiya (ਭਾਰਤੀਯ) culture.

BOHAG BIHU

The SPRING FESTIVAL of ASSAM

Bohag Bihu (বোহাগ বিহু), also known as Rongali Bihu (রংগালী বিহু), is deeply rooted in the culture of Assam and is celebrated across the state with great enthusiasm. Marking the onset of the Assamese New Year in mid-April, the festival is named after the first month of the Assamese calendar, Bohag. The term Rongali (রংগালী) is derived from 'Rong' (রংগ), symbolizing happiness and festivity. Bohag Bihu embodies a sense of gratitude towards Nature, seeking blessings for a prosperous harvest in the coming season.

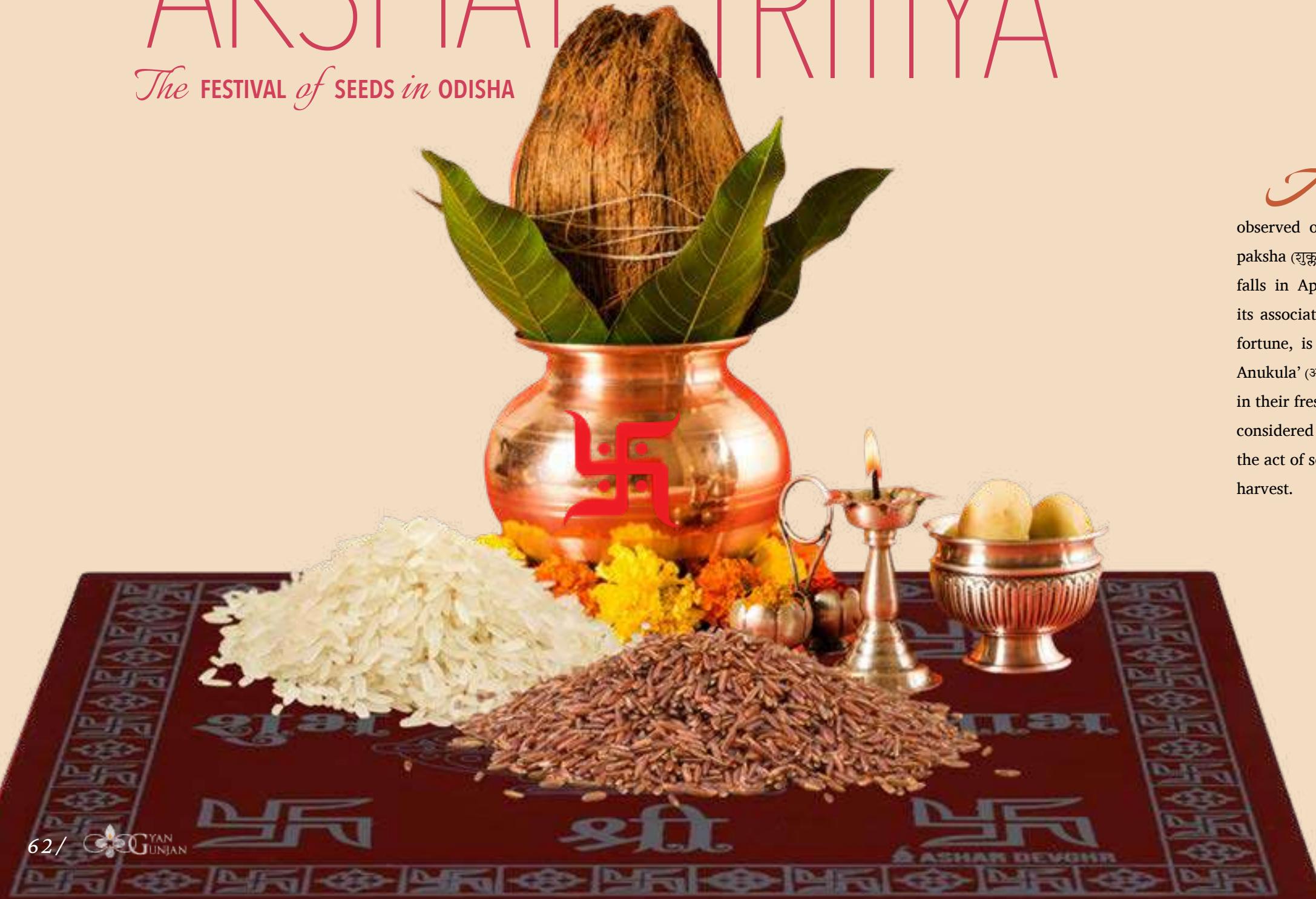
The festival begins with Goru Bihu (গোরু বিহু), a day dedicated to honoring cattle for their vital role in agrarian life. Cattle are bathed with turmeric, fed gourds and brinjals, and adorned with special ropes called Tara Pogha (তারা পোঘা), made from indigenous creepers. They are also decorated with flower garlands, and their hooves are painted in various colors.

The second day, Manuh Bihu (মনুহ বিহু), is a celebration for the people. Everyone dresses in new clothes, and traditional dishes like Chira (চিরা) and Pitha (পিঠা) are prepared in homes. Families visit relatives and friends, bringing food items and gifts to share. The third day, Gosain Bihu (গোসাই বিহু), is devoted to the worship of gods.

On all three days, troupes of musicians and dancers visit houses and perform the Bihu dance. Young children participate in egg fights (কোনী জুজ - Koni Juj) and sing songs of love and merriment. Young men and women perform dances and sing to the tune of drums and pepa (পেপা), a flute made from buffalo horns. Bohag Bihu holds profound cultural significance in Assam, as it brings communities together in a joyous celebration of life, nature, and the hope for a bountiful year ahead.

AKSHAY TRITIYA

The FESTIVAL of SEEDS in ODISHA



Akshay Tritiya (अक्षय तृतीया) is an auspicious festival celebrated in Odisha, observed on the third tithi (तिथी) of the Shukla paksha (शुक्ल पक्ष) of the Vaisakh (वैशाख) month which falls in April or May. This festival, revered for its association with wealth, prosperity, and good fortune, is marked by the ritual of 'Akhi Muthi Anukula' (अखि मुठी अनुकूला), where farmers sow seeds in their freshly plowed paddy fields. The seeds are considered offerings to Maa Lakshmi (माँ लक्ष्मी), and the act of sowing them is believed to ensure a rich harvest.

Farmers carry baskets of seeds, and perform this ritual as a way to invite prosperity and success into their agricultural endeavors. The festival is also observed as 'Siddhi and Suddhi Dibasa' (सिद्धि और शुद्धि दिवस), emphasizing its significance in ensuring a bountiful crop yield.

In addition to the agricultural rituals, Akshay Tritiya coincides with the commencement of chariot construction for the Puri Rath Yatra (रथ यात्रा), known as 'Gandhalepana Yatra' (गंधलेपन यात्रा) or Chandan Yatra (चंदन यात्रा).

While farmers plant seeds with the hope for a rich harvest, the beginning of the chariot construction for the Puri Rath Yatra adds to the celebration. It's a special occasion where everyone comes together, mirroring how their efforts and shared beliefs promise a prosperous future.

RAJA PARBA

TRIBUTE to the FERTILITY of BHUDEVI in ODISHA

Raja Parba (रज पर्ब) is an Eastern/Coastal Odisha festival observed by various communities. It is celebrated for three days in the month of Ashadha (आषाढ), during Mithuna Sankranti (मिथुन संक्रान्ति), marking the first day of the monsoon. This

festival honors the fertility of Bhudevi (भूदेवी) and the beginning of the monsoon season after the hot summer. The term 'raja' is derived from the Sanskrit word 'rajas' (रजस), and a menstruating woman is referred to as Rajasvala (रजस्वला).



The festival's first day is called Pahili Raja (पहिली रजा), the second day is Raja Sankranti (रज संक्रान्ति), and the third day is known as Basi Raja (बसी रजा) or Sesha Raja (शेष रजा). During these days, agricultural activities, especially tilling the soil or digging, are prohibited as it is believed that Bhudevi is resting. Women, considered incarnations of Bhudevi, are celebrated during this period. They take turmeric baths and wear new clothes, and enjoy sweets like 'poda pitha' (पोडा पिठा - rice cake). Women are also relieved from domestic chores and spend their time playing, dancing, and swinging on raja doli (रज डोली).

The fourth day, Basumati Snana (बसुमती स्नान), involves bathing Bhudevi after her three-day menstruation period. Prayers are offered to prepare for the arrival of the monsoon.

Raja Parba is significant in the agrarian communities of Odisha's coastal belt. The festival beautifully illustrates the connection between Bhudevi, representing Nature, and human life by symbolizing the menstrual cycle. Dharti Maa (धरती माँ) is given rest, and no agricultural activities are performed, mirroring the high respect and care shown to women in our culture during their menstruation.





TEEJ

SAWAN *ka* PAWAN TYOHAR



The term Teej (तीज), meaning the third day, encompasses three related festivals: Hariyali Teej (हरियाली तीज), Kajari Teej (कजरी तीज), and Hartalika Teej (हरतालिका तीज), each with distinct traditions but a common theme. Hariyali Shravan (हरियाली श्रावण), also known as Hariyali Teej, is celebrated on the third day of Shukla Paksha (शुक्ल पक्ष) in the month of Shravan (श्रावण), aligning with the monsoon season. It involves rituals such as worshiping trees like Banyan and Neem (नीम). Women enhance their celebrations by joining in Jhulan Mahotsav (झूलन महोत्सव), where they swing, dance, and sing, focusing on Shiv (शिव) and Parvati's (पार्वती) marriage. As the rains

turn the landscape lush, the festival symbolizes a deep reverence for nature's renewal. Following Hariyali Teej, Kajari Teej is observed 15 days later in honor of Maa Parvati (माँ पार्वती), emphasizing the link between agricultural cycles and seasonal changes. Another 15 days after, Hartalika Teej celebrates Parvati's union with Shiv. Women fast for the day, engaging in vibrant festivities to express their devotion and ensure their families' well-being. These festivals, spread across the monsoon season, highlight their cultural and agricultural significance.

BAEL POLA

PAYING GRATITUDE to BULLS in MAHARASHTRA

Bael Pola (बैल पोला) is a festival celebrated by farmers across Maharashtra to pay tribute to bulls and acknowledge their crucial role in farming activities. It falls on Pithori Amavasya (पिठोरी अमावस्या - the new moon day) in the month of Shravan (श्रावण), usually in August.

During Bael Pola, farmers refrain from working their bulls. They apply turmeric and oil all over the bulls' bodies and bathe them with hot water. The bulls are decorated with colorful paints like orange, yellow, and blue on their horns, and adorned with ornaments. A bright-colored decorative cloth is placed on their bodies, and ghunghroos (घुँघरू - tinkling anklets with bells) are tied to their feet and around their necks. Once dressed up, the bulls are taken onto the streets of

the village in a grand procession accompanied by the villagers playing dhol-tasha (ढोल-ताशा).

Farmers perform a pooja (पूजा) to express gratitude for the hard work of their bulls and to ensure their health and productivity, feeding them homemade poori (पूरी), puran poli (पूरन पोली), rice, and a sweet dish. Along with the bulls, the yoke (Joova - जुआ) used for plowing the fields is also placed on the floor and worshiped.

The entire day encompasses celebrations and rest for the bulls. Pola reflects the deep connection between farmers and their cattle, emphasizing respect and care for these animals. It serves as a reminder of the essential role that cattle play in agricultural life, fostering a sense of respect and gratitude for these indispensable animals.





VASU BARAS

CELEBRATION *for COWS* in MAHARASHTRA & GUJARAT

Vasu Baras (वसु बारस), is celebrated primarily in Maharashtra, Karnataka, and parts of Gujarat. The name Vasu Baras (वसु बारस) comes from Vasu (वसु) meaning cow, and Baras (बारस) referring to the 12th day, Dwadashi (द्वादशी) in the month of Ashwin (अश्विन). On this day, Gau Maata (गौ माता - mother cow), is worshiped as a symbol of motherhood and nourishment.

The festival is marked by the special ritual of honoring cows and other cattle, reflecting their significant role in agriculture and daily life. On

Vasu Baras, farmers and households clean and decorate their cattle with colorful flowers, and garlands. They also prepare special food offerings like jaggery and wheat flour to feed the animals, expressing gratitude for their contribution to farming and livelihood.

The significance of Vasu Baras lies in its celebration of the bond between humans and animals, emphasizing the cultural and spiritual reverence for cattle. Vasu Baras reinforces the connection between agricultural practices and the sacredness attributed to animals in our tradition.



NAAVA of RAJASTHAN

SEEKING BLESSINGS *from* SURYA BHAGWAN

Celebrated in Rajasthan to mark the end of the harvest season and the beginning of a new agricultural cycle, Naava (नावा) is a festival that symbolizes prosperity and abundance. Celebrated during the month of Kartik (कार्तिक), the celebrations begin with rituals and pooja (पूजा) offered to Surya Bhagwan (सूर्य भगवान्) seeking blessings for a bountiful harvest in the coming season. The tradition, which recognizes life as a gift of the sun, continues through generations.

A significant aspect of the Naava festival is the preparation of special traditional dishes made from the newly harvested crops. The dishes are prepared with great care and shared among family members and the community. The food is always shared in the community reinforcing the social bonds and fostering a sense of community. Naava also features various fairs and markets where people can buy and sell local handicrafts, textiles, and agricultural products.

Bathukamma (बतुकम्मा), the floral festival, is celebrated across various regions of Telangana and parts of Andhra Pradesh. It honors Devi Bathukamma (देवी बतुकम्मा, Bathuku signifies life and Amma denotes mother) acknowledging her as 'the giver of life' and blessings for the bountiful crop harvests. The festival lasts for nine days during Dussehra (दशहरा), falling in the month of Ashwin (अश्विन - September or October), coinciding with the beginning of the harvest for most Kharif (खरीफ) crops like paddy in these states.

Bathukamma begins on Mahalaya Amavasya (महालय अमावस्या - the new moon day) and concludes on Mahanavami (महानवमी), the eighth and ninth days of Navaratri (नवरात्रि) respectively. Family members collect seasonal flowers such as marigold (Banthi Poolu - बंथी पूलु), senna (Tangedu - तांगेदु), lotus (Tamara Puvvu - तामरा पुव्वु), celosia (Gunugu Poolu - गुनुगु पूलु), chrysanthemum (Chamanti - चामंती), and teak flowers (Teku Poolu - टेकु पूलु) to arrange in a stack on a thambulam (ताम्बूलम्) plate, resembling a gopuram (गोपुरम्). These flowers, in full bloom, are offered to Devi Bathukamma. In the evening, women from the village carry these thambulam plates to temples or house entrances, where they dance in circles, singing the famous folk songs like 'Bathukamma Uyyalo' (बतुकम्मा उय्यालो) dedicated to Devi, celebrating the bounty of nature.

BATHUKAMMA

The FLORAL FESTIVAL of TELANGANA & ANDHRA

Each day of the festival, women create different forms of Bathukammas in their homes, starting with mud mounds called Engili Pula (एळिली पूला) Bathukamma on the first day. Following this, they craft Bathukammas using flattened rice (अटुकुला बतुकम्मा - Atukula Bathukamma), lentils (मुद्दप्पु बतुकम्मा - Muddapappu Bathukamma), raw rice (नाना बिय्यम बतुकम्मा - Nana biyyam Bathukamma), and neem leaves (वेपकायला बतुकम्मा - Vepakayala Bathukamma), among others. On the final day, known as Saddula Bathukamma (सद्दुला बतुकम्मा), these floral stacks are joyously immersed in water bodies amidst jubilant celebrations. Flowers used in these floral stacks like Tangedu and Gunugu are believed to cleanse stagnant waters, highlighting the festival's ecological aspect.

Dating back to 1000 AD during the Chalukya dynasty's reign in the Vemulawada region of Telangana, the Bathukamma festival has been passed down through generations via legends and oral traditions. Over the years, the Bathukamma has become a symbolic festival of the state. It has also been recognized as an official state festival by the Telangana Government.



Vrushabhotsav (वृषभोत्सव), also known as Laguda Pratipada (लगुडा प्रतिपदा), is a festival dedicated to honoring the bull, a crucial companion in agriculture. According to the ancient text Krishi Parashar (कृषि पराशर), the festival's rituals highlight the deep respect and gratitude for the bull's contribution to agricultural work.

On Laguda Pratipad, farmers begin the celebrations by adorning the bull's horns with oil and turmeric powder. Shyamalatha (श्यामलता), a climbing creeper known for its sacredness, is tied to the bull's horns. This ritualistic adornment symbolizes protection and reverence. The following shlok (श्लोक) from Krishi Parashar describes the ritual:

गोपूजां कार्तिके कुर्याल्लगुडप्रतिपत्तिथौ ।
बद्धवा श्यामलतां शृंगे लिप्त्वा तैलहरिद्रया ॥

(Krishi Parashar - कृषि पराशर - 99)

The farmers, or Gopalak (गोपालक), anoint their bodies with saffron and sandal paste, ornaments, and carry sticks. They then proceed for the yatra (यात्रा) with the decorated bullock through the village. This procession, accompanied by songs and musical instruments, creates a festive atmosphere while seeking to ward off evil spirits.

कुङ्कूमैश्वन्दनैश्वापि कृत्वा चांगे विलेपनम् ।
उद्यम्य लगुडं हस्ते गोपालाः कृतभूषणाः॥

(Krishi Parashar - कृषि पराशर - 100)

ततो वायैश्व गीतैश्व मण्डयित्वाम्बरादिभिः।
भ्रामयेयुर्वृषं मुख्यं ग्रामे गोविघ्नशान्तये॥

(Krishi Parashar - कृषि पराशर - 101)

This celebration not only honors the bull's crucial role in agriculture but also reflects the profound connection between farmers and nature. Our scriptures like Krishi Parashar, mirrors this respect and understanding.



VRUSHABHOTSAV

A DAY DEDICATED to HONORING BULLS

GOVARDHAN POOJA

A TRIBUTE to GOVARDHAN PARVAT



Govardhan Pooja (गोवर्धन पूजा), also known as Annakoot (अन्नकूट), is celebrated on the first day, Pratipada (प्रतिपदा), of the Shukla Paksha (शुक्ल पक्ष) in the month of Kartik (कार्तिक). The festival is marked by a variety of rituals and traditions. Central to the celebration is the preparation of a mountain of food, called Annakoot, which symbolizes Govardhan Hill. This includes up to 56 or 108 different dishes, such as puri (पुरी), kadhi (कड़ी), rice, and sweets, offered to Krishna (कृष्ण) and Govardhan Ji before being distributed as Prasadam (प्रसाद).

The festival primarily honors Krishna's victory over Indra (इंद्र), the king of the heavens, and his act of lifting the Govardhan Hill to protect the villagers of Gokul from torrential rains.

Another key ritual is Govardhan Parikrama (गोवर्धन परिक्रमा), where devotees circumambulate a representation of Govardhan Hill, symbolizing their devotion. Additionally, artistic representations of the hill are crafted using eco-friendly materials like cow dung and clay, and adorned with flowers and grains. The worship during this festival honors Krishna as the lifter of Govardhan Hill and reveres the hill itself as his divine incarnation. The celebrations also include the worship of cows and bulls, highlighting their integral role in the festival. These practices reflect the deep reverence for Krishna's protection and the sanctity of Govardhan Hill.



KATI BIHU

WELCOMING LAKSHMI DEVI *in ASSAM*

Kati Bihu (কাটী বিহু), also known as Kati Gasa (কাটী গাসা), is an Assamese festival celebrated during Kartik Maas (কাৰ্তিক মাস). On this auspicious occasion, Lakshmi Devi (লক্ষ্মী দেবী) is welcomed home. Additionally, the Tulsi (তুলসী) plant is prayed to, to ensure the well-being of family members and pray for a good harvest.

Earthen diyas (সাকি - saki) are lit at the foot of the Tulsi plant, the granary, the garden (বারী - bari), and the paddy fields. In ancient times, diyas that functioned as a natural insecticide were lit around the paddy fields. Farmers whirl a piece of bamboo and chant rowa-khowa (রোবা-খোবা) prayers to ward off harmful elements from the maturing paddy crop.

The festival also has a strong spiritual element. People light a special lamp called Akash Batti (আকাশ বটী - sky candle) atop bamboo poles in their paddy fields. These lamps are part of the knowledge tradition that people say guides their ancestors to heaven. Deep within, the festival reflects a profound sense of gratitude to Nature and its gifts.



CHHATH POOJA

RITUALS for SURYA BHAGWAN & CHHATHI MAIYYA

Chhath Pooja (छठ पूजा) is one of the most revered and significant festivals, predominantly celebrated in the states of Bihar, Jharkhand, and Uttar Pradesh. It is the worship of Surya Bhagwan (सूर्य भगवान्) and his sister Chhathi Maiyya (छठी मैय्या) for the life of earth and the well-being of family and loved ones.

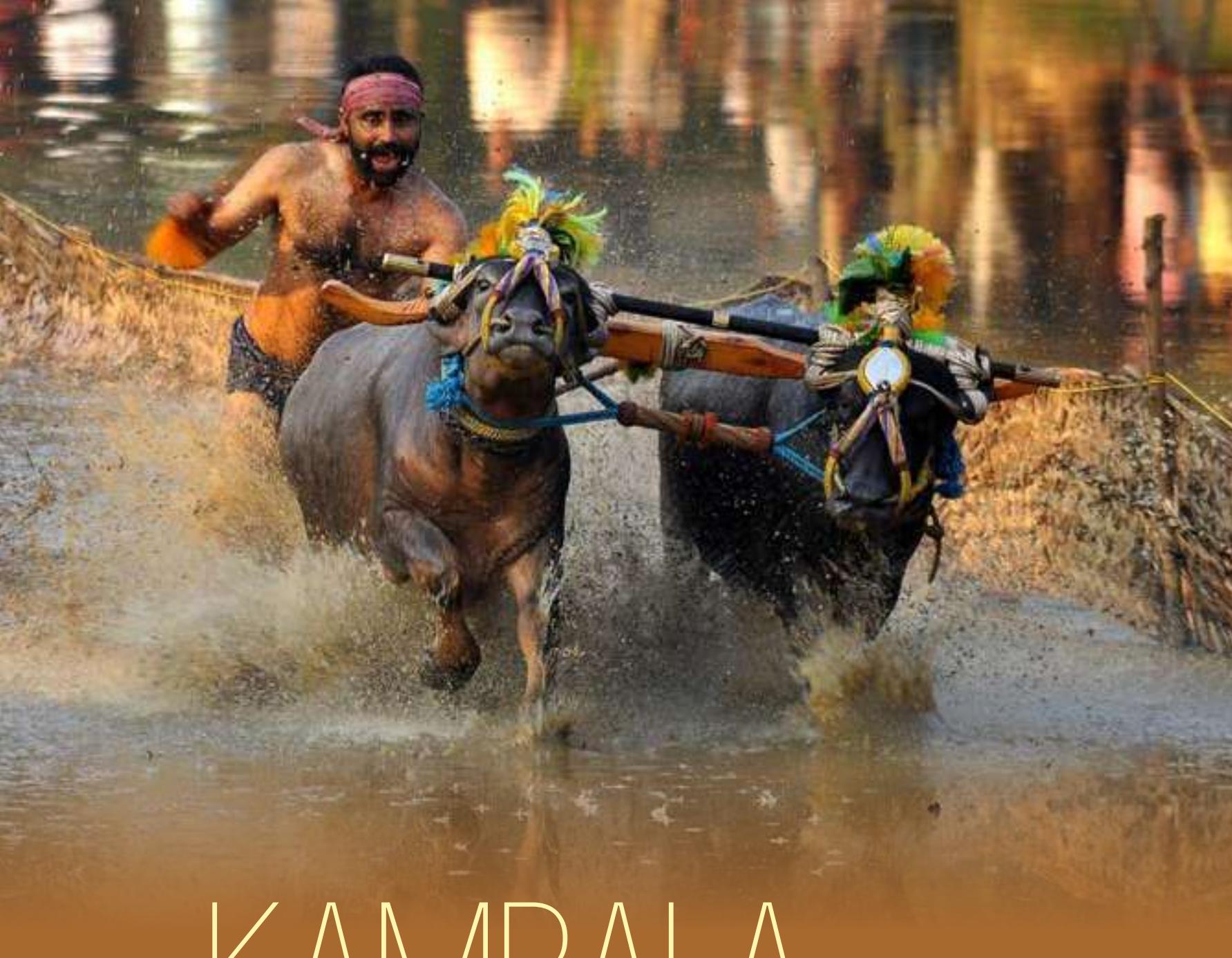
Chhath rituals have their origins in the Ramayan (रामायण). When Shri Ram (श्री राम) and Sita Maa (सीता माँ) returned to Ayodhya after vanvas (वनवास), they observed a fast in honor of Surya Bhagwan, and broke it only at sunset. This highly sacred and revered festival is spread over a period of four days - Nahay Khay (नहाय खाय), Kharna (खरना), Sandhya Arghya (संध्या अर्घ्य), Usha Arghya (उषा अर्घ्य).

As the sun sets on the third day of Chhath Pooja, devotees perform Sandhya Arghya while standing, half-submerged, in water bodies like rivers, lakes, or manmade pools to offer Arghya (अर्घ्य) to the setting sun. Performing rituals in the water body is considered to be purifying and sacred to the devotees and their families. Fruits, flowers, thekua (ठेकुआ), and prasad (प्रसाद) are arranged in the soup (सूप - woven bamboo tray) and taken to the riverbank or any other water body to present it to Surya Bhagwan. Offering Arghya to Surya

Bhagwan is a way to express gratitude for His light and energy. On Usha Arghya, the fourth and final day, the devotees and their family assemble at dawn to show their appreciation and thanks by offering heartfelt prayers to the rising Sun. This marks the culmination of their fast and the sunrise represents renewal and hope.

Children accompany their mothers and grandmothers, who continue the traditions over time which show how these traditions and practices have been passed down to generations. Over time, the Chhath rituals have evolved and now it reflects the time when human life was intricately synchronized with the natural cycles.





KAMBALA

The BUFFALO RACING FESTIVAL of KARNATAKA



Kambala (ಕಂಬಳ) is a traditional buffalo race celebrated in the coastal districts of Karnataka, particularly Dakshina Kannada and Udupi, during the winter months from November to February. This event highlights the region's rich agricultural heritage, featuring pairs of buffaloes yoked together racing through a water-filled, muddy track. Skilled handlers, known as Kambala runners, guide the buffaloes with enthusiasm, striving for the fastest time.

More than just a sport, Kambala is a cultural festival that underscores the deep bond between farmers and their buffaloes, which are crucial for agricultural work such as plowing. The race often coincides with local festivals, creating a

lively atmosphere filled with traditional music, dance, and communal feasting.

Preparation for Kambala includes meticulous care for the buffaloes, who are groomed and adorned with decorative bells and flowers. Kambala embodies the essence of community and tradition, showcasing the cultural richness of rural life.

As the buffaloes race through the muddy tracks, Kambala brings together people in a shared celebration of tradition, culture, and unity. With its vibrant atmosphere and deep cultural significance, the event not only honors the hardworking animals but also keeps alive the timeless customs that define the coastal districts of Karnataka.



Popularly known as the hundred-drums festival, Wangala (ওংগালা) is a harvest festival celebrated by the Garo (গারো) community of Meghalaya. It is the time when people come together to praise and offer prayers to Salijong (সালিজং - Sun God) who blesses the crops and ensures a good harvest.

To show their gratitude and appreciation for nature and agriculture, they offer fruits and grains and pray to their gods. They thank them for the bountiful harvest and ask for continued blessings for the land and people. It serves as a reminder to nurture and protect their surroundings and reaffirm their commitment towards it.

It is considered as one of the most colorful festivals of Meghalaya with people adorning vibrant colors and feathered headdresses. The beat of the drums fills the air adding to the festivities. These drums are made of tree trunks and the performance includes bamboo flutes and gongs as well. The dance moves are in sync with the rhythms of the music reflecting the cycles of nature.

Through their prayers, dances, and rituals, they celebrate the balance between taking from the earth and giving back, ensuring that their ideals remain strong for future generations.



HEMPURA

The HERAKA NEW YEAR

The Zeliangrong (ज़ेलियानग्रोंग) community of Northeast are followers of the Heraka (हेराका) faith, their life tied to the cycles of nature. Living at the tri-junction of Assam, Nagaland, and Manipur, they celebrate festivals almost every month that are guided by the lunar calendar which determines key stages of their agricultural operations. Each festival begins with prayers to Tingwang (टिंगवांग), their God, asking for good crops, good health, and prosperity for the villagers, as well as protection from evil.

Hempura (हेमपुरा), the Heraka New Year, is celebrated during the first crescent moon in January where the community comes together to pray for a fruitful year. It is a time when hope and harmony for the future are set in motion. March marks the three-day festival of Helei Ngi (हेलेई एन-गी), followed by Nchang Ngi (नचांग एन-गी) in

June. As the crops begin to ripen in September or October, the community celebrated Puakpat Ngi (पुआक-पाट एन-गी), the new crop harvesting festival, over three days. This festival is a time to offering gratitude to the earth for a rich harvest.

Hega Ngi (हेगा एन-गी) is the biggest and most important festival of the community that takes place before the full moon in either December or January. The community offers the harvested crops to Tingwang on the first day with the second and third days being called Ngi Di Mai (एन-गी डि माई) and Puapat Mai (पुआ-पाट माई), respectively. While Hega Ngi is rooted in sacred and ritualistic practices, it brings people together and is an elaborate celebration of their social and community life.



MAKAR SANKRANTI

The HARVEST FESTIVAL of BHARAT

Sankranti (संक्रान्ति), a major harvest festival in Bharat (भारत), is celebrated in Magh Maas (माघ मास) marking the entry of the Surya (सूर्य) into Makar Rashi (मकर राशि). This auspicious occasion symbolizes the end of Shishir Ritu (शिशिर ऋतु) and the onset of longer, warmer days. Across Bharat (भारत), this festival is celebrated under various names and with distinct regional traditions.

In Punjab, it is known as Lohri (लोहड़ी), celebrated with bonfires, singing, and dancing to mark the end of the sugarcane harvest. In West Bengal, the festival is called Tusu Parab (तुसु परब), observed with traditional songs, dances, and small bonfires honoring Devi Tusu (देवी तुसु). Assam celebrates it as Magh Bihu (माघ बिहू). In Gujarat, it is called Uttaryan (उत्तरायण), marked by vibrant kite-

flying. In Tamil Nadu, Sankranti, known as Pongal (पोंगल), spans four days: Bhogi (भोगी), Pongal, Mattu Pongal (मट्टु पोंगल), and Kaanum Pongal (कानुम पोंगल), each with unique customs like bonfires, cooking special dishes, and honoring cattle. In Karnataka, it is celebrated as Suggi Habba (सुग्गी हब्बा), while in Kerala, it is known as Makar Vilakku (मकर विलङ्कु). Andhra Pradesh also observes it as Pedda Panduga (पेड्डा पंडुगा), with Bhogi, Sankranti, Kanuma (कनुमा), and Mukkoti (मुक्कोटी) as key days.

Across Bharat, despite the diverse names and customs, Sankranti unites people in a shared celebration of the harvest, renewal, and gratitude for Nature.

JALLIKATTU

The BULL FESTIVAL of TAMIL NADU

Celebrated in the districts such as Trichy, Madurai, Sivaganga, and Pudukkottai in Tamil Nadu, Jallikattu (ஜல்லிகட்டு) is a traditional sport and festival celebrated as part of the harvest festival of Pongal (பாங்கல்), in the Tamil month of Thai (தாய்).

The festival gets its name from letting a bull out through a small gate called vaadivaasal (வாடிவாஸல்) into an open space. The men try to grab a bag, tied to the bull's horns, by hopping on to the charging bull's back hoping to get the bag without falling off. This is thought to create a stronger bond between the bull and its rider.

Maadu (மாடு - Tamil for cattle), also means wealth. It is delightful to see how much these traditional communities value bulls, and how they help shape their cultural identity. Traditional agriculturists by profession, the villagers ensure this practice remains alive as it acknowledges the crucial role played by the animals in their everyday lives.

Jallikattu also has a cultural significance for young men's matrimonial prospects, as they use their Jallikattu performances to impress young women through their bravery, to marry them. A poem in Kalithogai (கலிதோகை - a classical Tamil poetic work) depicts how a bull, as a woman's best friend, helps her pick a man of the right morals and character to marry.

The old rock paintings of Jallikattu at Karikkiyur in Tamil Nadu, the earliest dated between 2000 BC and 1500 BC, show a strong link between people and nature. These paintings, spanning several millennia, exhibit the tradition of people interacting with bulls, giving us the idea of living in tune with animals in their natural homes. Showcasing Jallikattu as a Veera Vilayattu (வீர விளயட்டு - a warrior's or hero's sport) also stresses how the local culture values Nature and other creatures.



LOCHMI XOBAAH

GRATITUDE TOWARDS BHUDEVI *in* TINSUKIA



Lochmi Xobaah (লোচমী জোবাহ) is a traditional harvest festival celebrated in Tinsukia, Assam. This festival reflects the gratitude towards Prakriti (প্ৰকৃতি) and Bhudevi (ভূদেৱী) for the bountiful harvests.

After the harvest, Devi Lakshmi (দেৱী লক্ষ্মী), the Goddess of wealth and prosperity, is worshiped during this festival. The ritual begins with a pooja (পূজা) performed in the naam ghars (নাম ঘৰ - prayer houses). These are not just places of worship but also serve as community centers where the Assamese people gather to express their collective gratitude. Following the pooja, the sacred blessings are taken to individual homes, symbolizing the transfer of divine grace from the community to the household.

Lochmi Xobaah reflects a common practice seen across Bharat (ভাৰত), where various regions celebrate harvests under different names but share the same essence of reverence for Nature. Such traditions converge on the shared understanding that the land, crops, and nature form the foundation of Bharat's philosophy.



BASANT PANCHAMI

CELEBRATING THE ARRIVAL *of* SPRING



Basant Panchami (बसंत पंचमी), also known as Vasant Panchami (वसंत पंचमी) or Saraswati Pooja (सरस्वती पूजा), is not just a festival marking the arrival of Vasant Ritu (वसंतऋतु) but a celebration deeply rooted in the reverence for nature and agricultural practices. Observed on the fifth day of the bright half of the month of Magh (माघ - late January or February), it heralds the transition from cold winters to the warm, vibrant blooms of spring.

The festival is intrinsically linked to the agricultural rhythms of the land. As mustard fields across the country burst into a sea of yellow, their golden hues mirror the spirit of the festival. This connection between the festival and the earth's bounty is beautifully symbolized in the customs and traditions of the day. People wear yellow attire, a color associated with the mustard blossoms and Saraswati Devi (सरस्वती देवी), who is worshiped on this day. Yellow rice, sweet dishes, and saffron-infused delicacies are shared among families, reinforcing the bond between humans and the earth.

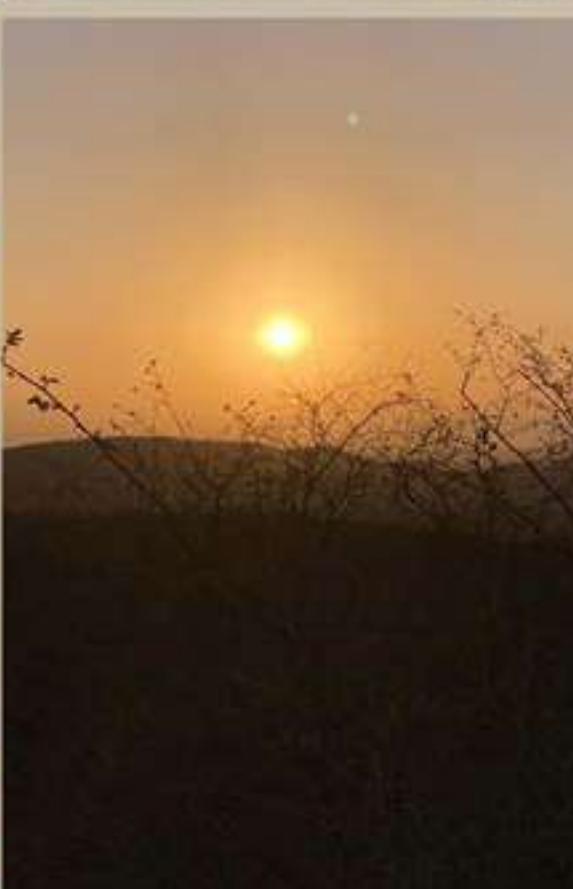
Different regions of Bharat celebrate Vasant Panchami in their unique ways, yet the underlying theme remains the same - honoring Nature and its cycles. In the states to the south, the day is called Sri Panchami (श्री पंचमी), while it is celebrated as Basanta Panchami (बसंता पंचमी) in Odisha. In Uttarakhand, the festival is not only dedicated to Saraswati Devi but also to Shiv (शिव) and Parvati (पार्वती), while in Rajasthan, people wear jasmine garlands, and in Maharashtra, newly married couples visit temples to offer prayers, wearing yellow garments as a symbol of prosperity and new beginnings. It is celebrated as a vibrant Festival of Kites in Punjab with people flying kites and wearing yellow turbans, symbolizing their connection to the mustard fields that dominate the landscape. It includes poojas for the agricultural fields, highlighting the interconnectedness of life, land, and godly forces.

This festival serves as a reminder of the people's connection with the earth, to celebrate its bounty, and to honor the age-old practices that have sustained us through time immemorial.



BHARATIYA KRISHI PADDHATI

भारतीय कृषि पद्धति



SHAD RITU

SEASONS & AGRICULTURAL CYCLES

According to Veds (वेद), the year was divided into six seasons of two months each, each with distinct characteristics. The arrival of each season was a source of enjoyment and celebration. The Samaved (सामवेद) poetically describes the seasons, stating that 'Vasanta (वसंत - Spring) is delightful and fit for joy after Varsha (वर्षा - Rainy season), Grishm (ग्रीष्म - Summer) is the abode, while Hemanta (हेमंत - Early Winter) and Shishir (शिशिर - Late Winter) are charming and provide intense pleasure.'

The Sukla Yajurved (शुक्ल यजुर्वेद) specifically names the months and categorizes them into six seasons, as follows: Madhu मधु (Chaitra चैत्र) and Madhav माधव (Vaishakh वैशाख) represent the Vasant (Spring वसंत) season, Shukra शुक्र (Jyeshth ज्येष्ठ) and Suci सुची (Ashadha आषाढ़) correspond to the Grishm (Summer ग्रीष्म) season, Nabha नभा (Shravan श्रावण) and Nabhasya नभस्य (Bhadrapad भाद्रपद) denote the Varsha (Rainy वर्षा) season, Isha ईशा (Ashvin अश्विन) and Urja ऊर्जा (Kartik कार्तिक) mark the Sharad (Autumn शरद) season, Saha साहा (Margashirsh मार्गशीर्ष) and Sahasya

सहस्य (Pausa पॉसा) indicate the Hemant (Early Winter हेमंत) season; and Tap तप (Magh माघ) and Tapasya (तपस्या) (Phalgun फाल्गुन) represent the Shishir season.

मधुश्व माधवश्व वासन्तिकावृतु, शुक्रश्व
शुचिस्व ग्रामावृतु, नभश्व नभस्यश्व एनानावृतु,
ईशश्व ऊर्जश्व शारदावृतु, सहश्व सहस्यश्व
ह्मन्तिकावृतु, तपश्व तपस्यश्व शशिरावृतु॥
(Shatapath-Brahman - शतपथ-ब्राह्मण - 8)

Each season offers unique experiences and insights, reflecting how harmoniously our lives align with the natural world. It serves as a timeless reminder of our relationship with Nature.

NAKSHATRAS

PREDICTING SEASONS & PLANNING AGRICULTURE

In traditional agriculture, the significance of nakshatras (नक्षत्र - lunar constellations) is highlighted in ancient texts for their influence on sowing and farming practices.

According to the Krishi Parashar (कृषि पराशर) Shlok (श्लोक) 170:

उत्तरात्रयमूलेन्द्रमैत्रपैत्रेन्दुधातृषु ।
हस्तायामथ रेवत्याम् बीजवपनमुत्तमम् ॥

The nakshatras deemed auspicious for sowing include Uttarashadha (उत्तराशाढ़ा), Uttarabhadrapad (उत्तरा भाद्रपदा), Uttaraphalguni (उत्तराफाल्गुनी), Mul (मूल), Jyeshtha (ज्येष्ठा), Anuradha (अनुराधा), Magh (माघ), Mruga (मृग), Rohini (रोहिणी), Hast (हस्त), and Revati (रेवती). These nakshatras are believed to enhance crop growth and yield when chosen for sowing activities. Complementing this, the Kashyapa Krishi

Sukthi (कश्यप कृषि सूक्ति) identifies additional favorable nakshatras, such as Uttara (उत्तरा), Rohini, Anuradha, Chitra (चित्रा), Mrigasira (मृगशिरा), Revati (रेवती), Mul, Vishakha (विशाखा), Tishya (तिष्या), Shravan (श्रावण), Aswini (अश्विनी), and Hasta.

Aligning agricultural practices with these specific nakshatras can optimize planting times and improve overall crop productivity, reflecting a deep connection between celestial events and agricultural success in ancient wisdom.



GHUR MANURE PITS *of* BUNDELKHAND GADDHA

Ghur Gaddha (घुर गड्हा) of the Bundelkhand region are pits dug near fields for collecting and decomposing animal dung, including that of cows, buffaloes, bulls, goats, and sheep. These pits are regularly filled with dung, and the decomposition process typically takes about 3 to 4 months. The older, well-decomposed dung is applied to the fields first. This traditional system of manure management was especially prevalent in Bundelkhand and still exists in some areas of the region.

During the British period until the 1960s, there was even a dedicated department called Ghur Vibhag (घुर विभाग), and the officers overseeing it were known as Ghur Saheb (घुर साहब). Their responsibility was to ensure that bullock carts were filled with well-decomposed manure and that it was evenly distributed across the fields.

Dung is a rich source of essential nutrients that are vital for plant growth. It releases nutrients slowly, ensuring a steady supply to plants. Decomposed dung enhances microbial activity in the soil, promoting nutrient cycling, which leads to healthier soil and plants. The practice of Ghur Gaddha highlights the extensive traditional agricultural knowledge in India, particularly the importance of dung in farming.



BHOO MI POOJA

REVERENCE *for* MOTHER EARTH

यस्यां समुद्र उत सिन्धुरापो यस्यामन्त्रं कृष्टयः संबभूवः।
यस्यामिदं जिन्वति प्राणदेजत्पा नो भूमिः पूर्वपेये दधातु॥

(Atharvaved - अथर्ववेद - 12.1.3)

Salutations to Mother Earth! Within her, the waters of oceans and rivers are intertwined: she holds within her the food that she brings forth when cultivated, and she is the source of all life. May she bless us with the gift of life.

In every corner of Bharat (भारत), it is a common practice among farmers to perform a ritual of Bhoomi Pooja (भूमि पूजा) before beginning any work in their fields, as a way to show gratitude to the land. Bhoomi Pooja, conducted before cultivating the land, embodies the profound respect that farming communities in Bharat hold for the earth. This ancient tradition, deeply rooted in Veds (वेद), venerates the land as a divine entity essential for sustaining life.

In the Atharvaved (अथर्ववेद), the Bhoomi-sukta (भूमि-सूक्त), a long hymn dedicated to the earth, encapsulates this reverence, referring to Bhoomi as the Mata (माता). The hymn emphasizes the earth's role in supporting bipeds, quadrupeds, and various life forms, all nourished by her bounty.

Through Bhoomi Pooja, farmers seek blessings for a bountiful harvest, expressing gratitude and respect for the earth's nurturing power. This age-old practice reinforces the symbiotic relationship between humans and nature, acknowledging the earth's central role in sustaining life.

AGRICULTURE in LAHAUL

GOD RESIDES WITHIN *the* FIELDS



In the remote village of Lahaul, agriculture has traditionally been a sacred practice. Traditional rituals and customs associated with farming are not only about practical activities but have profound religious and cultural significance. The villagers believe that God resides within the agricultural fields, encompassing water and all other natural elements.

At the end of the winter season, the community prepares for the important act of sowing. The guidance of Lama (लामा - Buddhist monks) is crucial for determining the auspicious dates for plowing, signaling a harmonious alignment of

human intention with the natural order. Two Lamas beat drums and chant sacred texts praying to the Field-God and blessing the seeds that will soon take root in the fertile earth. They also pray to Lha (ल्हा), guardian of watercourses, offering a respect for natural resources.



With the seeds sown, the community gathers in celebration, sharing a feast of sweet dishes, symbolizing unity and gratitude. As the crops flourish, rituals continue to affirm the interconnectedness between humans and their environment. Incense sticks are placed in the fields and poojas (पूजा) are done by family members for abundant growth. This act is believed to not only nourish the soil but also nurture a spiritual bond that transcends mere agricultural practice. Harvest time is celebrated by thanking God and organizing joyful horse races.

Until these traditional rituals are complete, villagers are not allowed to cut grass or any tree with iron sickles. This is done so to honor the Farm-God and maintain ecological balance, to show the village's commitment to respecting the natural world's sacred rhythms.



Each ritual, from plowing to harvest, signifies an understanding that the well-being of the community and the land are intricately linked. These rituals extend beyond mere sustenance, embodying a profound gratitude that man has towards nature.



CHASA *in* BALASORE

FARMLANDS *as* LAKSHMI DEVI

For the villagers of Balasore in Odisha, the relationship between Nature and humans is as deep and strong as their family bonds. Most villagers think of Chasa (चासा - farmlands) as Lakshmi Maa ka roop (लक्ष्मी माँ का रूप - a form of Lakshmi Devi), while some also treat her as a daughter who contributes to the welfare of the family.

Since Chasa, the farmland itself, is traditionally considered a mother or daughter, the villagers ask for Her forgiveness in advance for treading upon it. It may be deliberate to cross the Chasa or it may happen by mistake. In either case, the villagers fold their hands in namaskar (नमस्कार) and ask for the Chasa's forgiveness. They are also particular about using footwear while stepping on to the Chasa, and if they happen to be in shoes, they ritually ask for Her forgiveness again.

On auspicious days or on festivals like Akshay Tritya (अक्षय तृतीया), there is a special pooja (पूजा) for the Chasa. The villagers dig a pit in the Chasa using a phaavada (फावड़ा - spade), perform jalabhishek (जलाभिषेक - water offering), offer flowers, and apply a tilak (तिलक) of sandalwood on the soil in the pit. They make an offering of fruits, or sugar or any other sweet dishes if there are no fruits available, followed by a pooja (पूजा) with aarti accompanied with scented dhoop (धूप) and diyas (दिया). Once the pooja of the Chasa is complete, the villagers perform a pooja of the hal (हल - plow). And after all these traditional rituals are carried out, the entire Chasa is plowed, and cultivation commences with the sowing of the seeds.



The Dakargal (दकार्गल) system is an ancient Indian method for locating underground water sources, deeply rooted in traditional knowledge passed down through generations. The term Dakargal comes from two words, Udag (उदक), meaning water, and Argal (अर्गल), meaning pulse or veins. This system, meticulously detailed in Maharshi Varahamihira's Brihat Samhita (बृहत संहिता), showcases the sophisticated understanding of hydrology possessed by ancient Indian scholars.

The Dakargal system relies on observing specific natural indicators, particularly the roots and growth patterns of certain trees, to locate underground water. For example, the following shlok explains how trees can serve as indicators for detecting the presence of groundwater.

स्निग्धा: प्रलंबशाखा वामनविकटद्वमा: समीपजला:
सुषिरा जर्जरपत्रा: रुक्षाश्च जलेन सन्त्यक्ता:॥
(Brihat Samhita - बृहत संहिता - 54.49)

Trees that are short and wide, with long, hanging branches and glossy leaves, often signal nearby underground water. Conversely, hollow and dry trees with pale leaves suggest the absence of groundwater in the area.

There are many examples of such indicator plants mentioned in Brihat Samhita. For instance, trees like the Fig (*Ficus spp*) are known for their deep-root systems

that draw water from underground sources. As these roots grow, they create micro-paths or capillaries that facilitate the upward movement of water, making it accessible near the surface. This natural capillary action is a key aspect of the Dakargal method, helping to identify potential underground water reserves.

Varahamihira also identified other botanical indicators of groundwater. The Neem (नीम) tree (*Azadirachta indica*) with vascular knots in its lateral branches is a reliable sign of a water table at around 30 feet below the surface. Another significant indicator is the intergrowth of different tree species. For example, the intergrowth of a Banyan (*Ficus benghalensis*) and Neem tree or a Fig tree with a Palmyra palm (*Borassus flabellifer*) indicates the presence of underground water. Additionally, a Date Palm (*Phoenix dactylifera*) or Coconut tree (*Cocos nucifera*) with two crowns, or a Neem tree with a termite mound at its base, presence of anthill covered by Kush grass (कुश घास - *Desmostachya bipinnata*) are considered strong hydrological indicators.

In regions facing water scarcity and irregular rainfall, the Dakargal system provides a sustainable solution. By leveraging these natural indicators, this ancient method helps locate and utilize underground water, offering a vital resource for agriculture and daily life in drought-prone areas of India. This system underscores the enduring relevance of ancient Indian hydrological wisdom.



ANCIENT WATER MANAGEMENT

METHODS *of* WATER PRESERVATION *in* BHARAT

JIndia's diverse regions possess a rich heritage of traditional water management practices.

These systems, deeply attuned to nature, include the stepwells and tanks of the arid northwest, the bamboo drip irrigation of the northeast, the elaborate temple tanks in the south, and the intricate canal networks of the southwest. Designed with a profound understanding of local geography and climate, these ancient structures efficiently captured and stored water, ensuring its availability for agriculture and essential activities.

The scientific foundations of these traditional techniques reveal a deep understanding of natural principles like gravity flow and capillary action. Constructed using locally available materials, such as bamboo in the northeast or stone in the south, these systems placed minimal burden on the communities they served.





POORJAJURA

TRADITIONAL IRRIGATION SYSTEM *in*
BUNDELKHAND

Poorjaura (पूर्जौरा) is a traditional irrigation system prevalent in the Bundelkhand region that involves the use of a leather basket, known as Poorjaura, tied with thick ropes called rassa (रस्सा) to pull water from wells. Bulls are used to draw up the water by pulling the basket from the well. Once retrieved, the water is channeled through bamboo tubes that connect to the fields, ensuring efficient distribution for crop irrigation. Charsa (चरसा) a similar system to Poorjaura, is operated manually by men rather than bulls.

This ancient method showcases the ingenuity and resourcefulness of traditional farming communities in managing water resources.





BOMBAY DRUM

A tool for irrigation in EAST GODAVARI

The Bombai (बम्बई) drum is a traditional irrigation device used extensively in the East Godavari district of Andhra Pradesh, India. This innovative tool is essential for lifting water from lower levels to irrigate fields.

The Bombai drum consists of a large, cylindrical drum made of iron equipped with propellers and a handle attached to the propeller mechanism. The design is simple yet effective: when the handle is turned, the propellers rotate, creating a lifting motion that draws water from wells, rivers, or canals into the drum. As the water is lifted, it flows through an outlet pipe, directing it to the irrigation channels that distribute it across the fields.

This old system of irrigation is still used in parts of East Godavari, showing the strong hold it continues to have on agricultural communities.



DESI BEEJA of ARAKU

PRESERVING SEEDS & WISDOM *in ANDHRA*

Araku Valley, cradled within the Eastern Ghats of Andhra Pradesh, stands as a living embodiment of our relationship with Nature. This connection is most evident in the valley's rich tradition of preserving desi (देसी) seeds, each one representing the enduring bond between the farmers and the land. These seeds, nurtured over generations, are not just agricultural assets but sacred gifts from nature, embodying the collective wisdom of the community.

These seeds are both nutritious and well-adapted to the region's climatic conditions. These include numerous variants like:

Millets - Pedda Sama (पेद्दा सामा), Nalla Sama (नल्ला सामा), Pedda Korralu (पेद्दा कोर्रालु), Andu Korralu (अंदु कोर्रालु), Pedda Sajja (पेड्हा सज्जा), Chinna Sajja (चिन्ना सज्जा), Tella Jonna (टेला जोना), Bude Choudi Ragi (बूडे चौड़ी रागी), Chilli Choudi Ragi (चिल्ही चौड़ी रागी), Oodalu (ऊदालु), etc.

Beans and Pulses - Anumulu (अनुमुलु) and Bastarlu (बस्तरलु) (Beans), Koromonga (कोरोमोंगा - Beans), Bobbarlu (बोब्बरलु - Cow pea), Tella Rajma (तेला राजमा), Erra Rajma (एरा राजमा), Chinna Rajma (चिन्ना राजमा), Pedda Kandulu (पेद्दा कन्दुलु - Red Gram), Siri Kandulu (सिरी कंडुलु - Red Gram), etc.

Paddy Varieties - Iska Ravalu Rice (aromatic), Kalajeera (black husked variety of rice).

Maize-Rangulu Kanki (मक्का-रंगुलु कंकी) - Corn with multi colored kernels.

Oilseeds - Sankralu (संकरालु) is used for making laddoos (लड्हू).

The diverse varieties of desi seeds found here are a testament to the valley's ecological abundance, sustained through sustainable farming methods.



BEEJON ki SEEDS of ODISHA DHAROHAR



Odisha, with its diverse ecosystems, is the janma bhumi (जन्म भूमि - birth place) of thousands of varieties of desi seeds. The local regions, in particular, serve as hubs for an astonishing array of seeds, especially dhaan (धान - rice). Odisha is home to more than 1,000 varieties of rice, each with unique characteristics and uses, carefully preserved and passed down as traditions.

The rice varieties in Odisha can be classified according to their characteristics and uses. Traditionally, the kings and nobles favored thin and aromatic rice varieties, known as 'Khushbudaar Dhaan' (खुशबुदार धान) for their delicate flavor and fragrance. Varieties such as Ketaki Juna (केतकी जूना), Rakhi Chawal (राखी चावल), Sairam (साईराम), and Latani (लतानी) were highly prized for their softness, aroma, and fine texture. These varieties also include scented types like Kalamulamanji (कलमुलामंजी), Basmati (बासमती), Karpuravaas (कर्पुरावास) and Kumatiya (कुमतिया), cherished for their distinctive aromas.

On the other hand, the Kisan (किसान) consumed 'Mota Dhaan' (मोटा धान), a sturdier, more substantial rice that provided sustained energy for their intensive work in the fields. Varieties like Suna Chudi (सुना चूड़ी), Kalajeera (कालाजीरा - a black aromatic rice), and Kala Krishna (काल कृष्ण) were integral to their diet. Some of these varieties, like Sulia (सुलिया) and Kali Moonj (काली मूंज), are also valued for their medicinal properties, offering remedies for ailments such as stomach aches and joint pains. Kalavathi (कलावती),

rich in zinc, fiber, iron, and calcium, is another such variety.

Beyond these, Odisha is also home to brown rice varieties like Jhilli (झिली), Paogi (पाओगी), Sakara (सकारा) and Sakra (सकरा). There are also some Red Rice varieties like Raktasool (रक्तसूल). Sekta (सेक्टा) is a 60 day variety of rice. The Manjari Dhaan (मंजरी धान) variety of rice is a nature's wonder which produces two grains from a single seed (one bigger and another one being smaller).



These seeds are not just agricultural products: they are a nature's treasure, the rich heritage of farm culture, carefully preserved through generational transfer of knowledge.

The regional areas of the Bundelkhand region are a hub of unique indigenous seed varieties, each possessing properties well-suited for drought conditions.

a. Kardhana (करधना) Rice - This variety is characterized by its brownish color and short growing period of just 60 days. Kardhana rice requires minimal water, making it ideal for drought-prone areas. Its quick maturation and resilience make it a valuable crop for farmers facing water scarcity.



b. Kala Gehu (काला गेहूं) - Black Wheat - Known for its blackish hue due to the presence of anthocyanins, Kala Gehu is healthier than common wheat and has a lower glycemic index. This variety is nutritionally superior and offers health benefits, particularly for those managing blood sugar levels.



c. Desi Kodo (देसी कोदो) - Kodo millet is a hardy crop that thrives in poor soil conditions and requires very little water. It is rich in dietary fiber, protein, and essential minerals, making it an



KAALA GEHU aur ANYA DESI BEEJ

LOCAL SEEDS *of* BUNDELKHAND

important part of the local diet and a sustainable food source in arid regions.

d. Desi Sama (देसी समा - rice for fasting) - Sama also known as Vrat ke Chawal (व्रत के चावल - rice for fasting) is another drought-resistant millet variety. It grows quickly and is highly adaptable to different soil types. Little millet is rich in fiber, iron, and antioxidants, making it a nutritious addition to meals.

e. Desi Bajra (देसी बाजरा) - It is a staple in arid and semi-arid regions due to its high tolerance to drought and heat. It is a significant source of energy, protein, and essential nutrients like magnesium and iron, supporting both food security and nutrition.

f. Sugar-Free Gehu Paigambaree (गेहूं पैगम्बरी)

- This wheat variety is notable for its low sugar content, making it suitable for people with diabetes. It combines the resilience of traditional wheat with the added health benefit of being low in sugar.

g. Desi Jowar (देसी ज्वार - Sorghum) - Sorghum is a versatile and drought-resistant grain that can be used for food, fodder, and even biofuel. It is rich in carbohydrates, protein, and various vitamins and minerals, making it a vital crop in the region.

These traditional seeds have been cultivated for generations, offering resilience in challenging climates of local agriculture. Their unique properties not only support the livelihoods of farmers in Bundelkhand but also promote health and nutritional benefits for the wider community.

MANDI SYSTEM

ENHANCING SEED GERMINATION *in KARIMNAGAR*



In the heart of Kashimpeta Village, Karimnagar, Telangana, an age-old agricultural practice known as the Mandi (మండి) system is followed as a pre-sowing treatment for Rabi (రబీ) Paddy seeds which enhances the germination percentage of the seeds. The Mandi system involves storing water-soaked paddy seeds in a basket-like structure woven from paddy straw and the leaves of the Moduga (మోదుగా) tree (*Butea monosperma*). This simple yet ingenious method provides the seeds with the necessary warmth and moisture, creating an ideal microclimate that ensures almost 100% germination. The structure, crafted with care and skill, safeguards the seeds from both biotic and abiotic stresses, such as insect pests and temperature fluctuations, ensuring that the seeds sprout evenly and healthily.

To create a Mandi, farmers first moisten paddy straw and twist it into ropes, which are then looped to form a circular basin. The floor of the basin is layered with gunny bags and leaves of the Moduga tree, providing a warm, moist environment for the seeds. The soaked seeds are spread evenly inside the structure, which is then covered with paddy straw and moistened again. Within a day, the seeds sprout and become ready for planting. This traditional system is not only effective but also eco-friendly and cost-efficient, making it accessible to farmers.

The Mandi system, like many other traditional practices, preserves the agricultural heritage of Bharat and ensures that the knowledge and techniques of the past continue to benefit future generations.



KATHIYA GEHU

NURTURING RESILIENCE & TRADITION through
HARDY WHEAT in BUNDELKHAND



Kathiya Gehu (कथिया गेहुं), scientifically known as *Triticum durum*, is a traditional variety of wheat mainly cultivated in the Bundelkhand region. It is a distinguished variety known for its exceptional hardness and resilience. Often referred to as Durum wheat, Dalia (दलिया), or pasta wheat, this variety represents only 5-8% of total wheat production but holds substantial cultural and nutritional importance. Its robustness allows it to flourish in challenging environments like the one in Bundelkhand, where water scarcity and harsh weather conditions prevail. Kathiya Gehu's ability to endure these conditions and resist common wheat diseases makes it a sustainable choice for farmers, promoting reliable harvests even in difficult circumstances.

Nutritionally, Kathiya Gehu excels with its rich content of essential vitamins (A, B, and E), beta-carotene, and vital minerals such as iron, calcium, phosphorus, zinc, and copper. Its high fiber content supports digestive health, aids in cholesterol management, and assists with weight control, providing a range of health benefits.

In culinary applications, Kathiya Gehu proves versatile, commonly used to make Kathiya Daliya and Kathiya Daliya Khichdi (खिचड़ी). The Baatis (बाटी) made from the flour of Kathiya Gehu are very famous in Bundelkhand and Malwa regions.



GOURLDS

WISDOM *in* CULTIVATING HEIRLOOM LOUKI



Bharat (भारत) is a hub of traditional seed varieties, including a notable group of gourds. The snake gourd, recognized for its distinctive shape and health benefits, has seeds that have been preserved through generations, ensuring its unique traits are maintained. Celebrated for its rich nutritional profile, it provides essential vitamins and minerals for a balanced diet.

Similarly, the bottle gourd is a cornerstone of this agricultural heritage. Its low-calorie, high-fiber content makes it valuable for digestive health and a staple in traditional dishes. Hollowed and dried bottle gourds are also used to store seeds.

Cucumber cultivators also follow this tradition, with seeds handed down through local farming families. These cucumbers, known for their superior taste and nutritional benefits, are often used in pickles.

The continuity of these traditional seed varieties reflects the lifelong interaction between the people and their land. Farmers uphold a tradition that respects nature's gifts and ensures the availability of nutritionally rich produce.



GETHI KAND

The WILD ROOT VEGETABLE of JHARKHAND

Gethi Kand (गेठी कन्द) is a wild root vegetable found particularly in Odisha and Jharkhand. This hardy tuber thrives in the region's soil and climate, contributing significantly to local diets. Gethi Kand is valued for its nutritional benefits, providing a rich source of carbohydrates, dietary fiber, and essential minerals such as potassium and magnesium. Its taste is mildly sweet and earthy, making it a versatile ingredient in various culinary preparations.

In traditional cuisine, Gethi Kand is often used in curries, stews, and as a side dish. It is commonly prepared by boiling or roasting, and can be spiced and seasoned to enhance its natural flavors. The vegetable's resilience and ability to grow in diverse conditions make it a staple in rural farming communities.





BHUT JOLOKIA

The FIERY TREASURE of the NORTH EAST

Bhut Jolokia (भूत जोलोकिया), also known as Ghost Pepper or Bhutanese pepper or bih zolokia (बिह जोलोकिया) is a chili variety native to the northeastern regions of India, particularly Assam, Nagaland, and Manipur. This chili has earned global recognition for its extreme heat, with a Scoville rating (a measurement of pungency - spiciness or “heat” - of chili peppers and other substances) that can exceed one million units, making it one of the hottest peppers in the world.

The chili is not only valued for its heat but also for its versatility in local cuisine and traditional medicine. Bhut Jolokia is used in a variety of dishes, adding a potent kick to curries, pickles, and sauces. It contains a compound called Rutin which has medicinal properties and is used as a remedy for various ailments like pain relief.

The cultivation of Bhut Jolokia is rooted in the traditions of the indigenous communities of Northeast India. Farmers have preserved and passed down the tradition to ensure this unique chili cultivation has survived through generations.

PAHADI GREENS

From HILLSIDE HERBS to SKYWARD CANOPIES in UTTARAKHAND



The lush green landscapes of Uttarakhand nurture a rich diversity of herbs, spices, fruits, and vegetables. From the wild Bichhu Ghass (बिच्छु घास), a medicinal herb used to make flavorful chutney (चटनी), to the woody Tejpatta (तेजपत्ता) trees, which hold a GI tag and add depth to local dishes, the region's vegetation is as varied as it is abundant.

One such variety of plant, the Wild Tree Tomato, locally called tamatar (टमाटर), grows in the Himalayan foothills, offering a more sour flavor than normal tomatoes. The Charkakra pumpkin (चरकाकड़ा कद्दू), famous in Jadi village of the Jaunsar-Bawar region, with its distinct shape and taste, and the massive Pahadi Kheera (पहाड़ी खीरा) which is found almost in every kitchen garden on the hills also thrive in the region. Meetha Karela (मीठा करेला), a unique meethi (मीठी - sweet) variety of bitter gourd, is loved for its distinct sweet taste and can be eaten raw. The Pahadi Mooli (पहाड़ी मूली), a spicy pinkish colored radish, adds a unique flavor to local cuisine, while Malta (माल्टा), a tangy orange, provides a refreshing vitamin C boost.

Uttarakhand also boasts Ramdana (रामदाना), also known as God's grain, which has also received the GI tag. It is highly nutritious, gluten-free grain rich in protein, fiber, and essential amino acids. Used in laddoos (लड्डू), chikkis (चिक्की), and kheer (खीर), it provides energy, iron, calcium, and antioxidants.

In addition to its edible treasures, the state is also known for its medicinal plants. Gandrain (गंद्रैण), a medicinal herb used to treat diarrhoea, cough and wounds is a native plant to himalayas, which is also endangered. Buransh, the rhododendron flower, is used to make juice, beverages and tonics. It is famous for its medicinal properties and used to heal inflammation, bronchitis and liver ailments.

It is the Paavan Prakriti (पावन प्रकृति) of the Devbhoomi (देवभूमि) which nurtures such diverse forms of plants with unique qualities. These plants highlight the state's rich biodiversity and its agricultural and medicinal heritage.



XAAK

LEAFY VEGETABLES *of* ASSAM

India is home to a rich variety of unique leafy vegetables, with the Northeast region standing out as a hub for these nutritious and flavorful greens. Among them is Dhekia Xaak (ঢেকিয়া জাক), a type of wild fern native to the Himalayan foothills. These ferns grow abundantly in the wild and are also commercially harvested in Northeast India like Assam. Belonging to the *Matteuccia* genus, fiddleheads are a cherished leafy vegetable in traditional diets, known for the distinctive tang they bring to various dishes. Whether added to curries, stir-fries, or simply sautéed, Dhekia Xaak is versatile and delicious in any preparation. It also holds significant medicinal value. It is traditionally used to help with colds, fevers, and flu, boosting resistance to seasonal illnesses. Additionally, it is known for its digestive benefits, aiding in cleansing the digestive tract. Beyond internal health, it can also be ground into a paste and applied topically to treat various skin conditions. This versatile fern is a valuable component of traditional remedies, contributing to both culinary and medicinal practices.

Another notable leafy vegetable is Manimuni (মণিমুনি), known scientifically as *Centella asiatica*. This herb is not only a culinary ingredient but also a revered medicinal plant. It is traditionally used to treat stomach ulcers and urinary tract infections, offering relief from these conditions. It also helps in curing coughs and respiratory disorders, making it a valuable remedy for respiratory health. Additionally, Manimuni is believed to boost memory, enhancing cognitive function. When applied topically, it aids in healing cuts and wounds. This versatile herb plays a significant role in both traditional medicine and overall well-being.

Leafy vegetables are integral to the culinary and medicinal heritage of Bharat (भारत) where these greens are celebrated for their unique flavors and health benefits. These plants show us how traditional wisdom and modern health practices come together, proving that age-old remedies still have the power to nourish and heal us today.



KRISHNA VRIGHI

The BLACK RICE of BHARAT

कृष्णाव्रीहिशालामुखेत्यादिना व्रीहीन विभज्य सुश्रुते ।
तद्गुणा उक्ता यथा कृष्णाव्रीहिर्वरस्तेषां कषाया नुरसो लघुः ॥

(Susrutha Samhitha - सुश्रुत संहिता - Ch. 46)

According to the Sushrut Samhita (सुश्रुत संहिता), black rice or the Krishna Vrihi (कृष्ण व्रीहि) is revered for its sweet and astringent taste and its ability to aid digestion. It increases enzymatic activities and helps in curing constipation. Similar in quality to Shashtikas (षष्ठिका), black rice is considered the best among all rice varieties.

Black rice, with its deep purple to black hue, due to the presence of a pigment called Anthocyanins, is a nutritional powerhouse cherished in Bharat (भारत) for centuries. Krishna Vrihi or black rice is also considered a super food as it contains minerals and nutrients like Iron, Calcium, Zinc, Manganese, Proteins, Fibre, etc. more than the white rice.

Various regions across India cultivate their unique varieties of black rice, each with distinct characteristics and local names. In Manipur, Chak Hao (चक हाओ), a GI-tagged fragrant variety of black

rice with a slightly sticky texture, is often used in desserts and special dishes. In Assam, it is called Kumol Saul (कुमोल साउल), a semi-glutinous black rice traditionally eaten after soaking in water, making it ideal for the hot and humid climate. Odisha's Kalabati (कलाबती) or Kalavathi (कलावती) is another prominent variety, prized for its rich aroma and high nutritional content. In Chhattisgarh, Kariajhini (करियाझिनी) and Kala namak (काला नमक) varieties of black rice are found which are rich in antioxidants.

Farmers understand the significance of these precious seeds, not only for their nutritional benefits but also for their role in maintaining soil health and enhancing crop resilience against pests and diseases.



GHODA CHAWAL

The MEDICINAL RICE of BASTAR

Ghoda Chawal (घोडा चावल), a unique variety of rice cultivated in Bastar, stands as a testament to the traditional wisdom of local farmers. Maturing in just 60 days, this rice requires minimal water and is known for its medicinal properties, particularly in treating stomach ailments. Its stem and roots are particularly used in various Ayurvedic treatments. It has 4 variants—white, black, red, and brown—which have been preserved by the farmers through generations, each variety offering specific

benefits. Notably, the panicles remain closed, allowing the grains to develop fully intact within, which prevents shattering and minimizes harvest loss. Beyond its agricultural value, Ghoda Chawal plays a significant role in the region's cultural practices, being used to prepare traditional dishes like kheer and rice beer or Hariya (हरिया), offered to Devi-Devatas (देवी-देवता) during festivals. The rice is naturally pest-resistant. The crop produces up to 2 quintals.



NIRVARA *the* RUDRAM

The RED RICE

Nirvara (निर्वारा) rice, also known as Navara (नवारा), is a remarkable variety with deep roots in ancient Indian traditions. Referenced in the Yajurved (यजुर्वेद) as the Rudram (रुद्रम्), this red rice variety is celebrated for its unique properties and health benefits. When soaked in water for two days, Nirvara rice, devoid of husk, begins to sprout, revealing its vitality and enhancing its nutritional value.

The medicinal properties of Nirvara rice are well-documented in ancient texts like Ayurved and Charak Samhita (चरक संहिता). Nirvara is rich

in antioxidants, essential minerals, and dietary fiber. It is known to aid in digestion, boost heart health, and support overall wellness. Its natural composition helps in managing blood sugar levels and reducing inflammation.

Nirvara rice continues to be cultivated for its medicinal properties and as a cherished symbol of the farmers' preservation of this invaluable tradition.



RAJMAS of UTTARAKHAND

A BLEND *of* FLAVOUR & TRADITION

The Devbhoomi (देवभूमि) Uttarakhand boasts over 400 varieties of rajma (राजमा) beans of different colors and shapes with distinct flavors. These beans not only taste great but also provide essential proteins and boost immunity as they contain different types of vitamins and minerals like thiamine, magnesium and a significant amount of fiber which help in regulating the blood sugar levels and blood pressure.

From the crimson red to snowy white there are numerous types of rajmas found in Uttarakhand. The Chitra (चित्र) rajma is known for being richly embedded with proteins, fibers and minerals as well.

The famous Chakrata (चक्राता) red rajma of Jaunsar-Bawar region that is known to contain the highest level of protein as well as fiber content and cooks in no time which is appropriate for the health-aware. The Munsiyari (मुनस्यारी) white rajma which has been given the GI Tag because of its unique color and richness of minerals that makes it an asset to every kitchen. There are many more varieties like cream colored Harshil (हर्षिल) rajma, yellow Koshir (कोशिर) rajma that grow in the lush green landscapes of the hills.

Every rajma variety from Uttarakhand resonates with the agricultural potential and diversity of the Himalayas, thereby maintaining a continuity of taste, nutrition and pride in the culture.

PUTTU

MUSHROOMS *of* BASTAR

Mushrooms are nutrient-dense, offering a rich source of proteins, B vitamins, vitamin D, and essential minerals like selenium and potassium. They also provide dietary fiber and bioactive compounds that enhance immunity and promote overall health. In Bastar, these mushrooms, locally known as Puttu (पुट्टू), Putkook (पुट्कुक), or Muriya/Mariya (मुरिया/मारिया), are a vital part of the region's traditional diet. Cultivated traditionally by the farmers, these mushrooms are a vital part of the region's culinary

and cultural practices. During the Shravan (श्रावण) month, which aligns with the rainy season, these mushrooms flourish naturally for about 1-2 months. The farming communities, following their age-old parampara (परम्परा) harvest these mushrooms.

After harvesting, the mushrooms are dried and ground into a fine powder, which serves as a flavorful garnish on food items used throughout the year. It shows how farmers make the most of their produce while being connected to nature: it reflects the ingenuity in preserving seasonal crops.





ARATI

BANANAS *of* GODAVARI

150/ GIGANTAN

The Godavari region of Andhra Pradesh, is home to several traditional banana varieties, each with unique features and a long history of cultivation. These varieties are often found near houses and in fields.

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a. Bontham (बोन्थम) - Bontham bananas are known for their robust growth and resilience. These bananas are typically medium-sized. They are commonly used in local cuisine and are favored for their ability to withstand varying climatic conditions. Bontham bananas are often cultivated in home gardens and small farms, making them a staple in the region.

b. Bukkis (बुक्किस) - Bukkis bananas are smaller in size but pack a rich, sweet taste. They are distinguished by their thick peel and firm flesh, making them ideal for both raw consumption and cooking.

c. Amritpani (अमृतपानी) - Amritpani bananas are known for their sweetness and aromatic flavor. These bananas have a smooth texture, making them highly sought after for desserts and fruit salads.

d. Chekkarkeli (चेक्कर्केली) - Chekkarkeli bananas are known for their unique combination of sweetness and slight tartness. They are medium to large in size and have a bright yellow skin when ripe.

e. Karpooravalli (कर्पूरावल्ली) - Karpooravalli bananas, known for their sweet aroma and creamy texture, are rich in fiber and essential nutrients. Its high fiber content aids digestion, while the natural sweetness and soft consistency make it a favorite for both raw consumption and culinary use.

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DESI HAL

EMBLEM *of the* BHARATIYA KRISHI

The Desi Hal (देसी हल), an Indian plow, epitomises the deep-rooted Krishi Parampara (कृषि परम्परा) in Bharat (भारत). In the Krishi Parashar (कृषि पराशर) by Maharshi Parashar (महर्षि पराशर), various parts of the plow are detailed in the following verse:

ईषायुगहलस्थाणुर्निर्योलस्तस्य पाशिकाः ।
अङ्गुच्छलश्च शौलश्च पच्चनी च हलाष्टकम् ॥
(Krishi Parashar - कृषी पराशार - 112)

The verse enumerates the components related to the plow: Esha (ईशा - the beam of the plow, which is connected to the yoke), yug (युग - yoke to which bulls are tied), Halasthanu (हलस्थानु - wooden support of the plough share), Niryoila (निरयोला - steering rod joined to the beam), Pashika (पाशिका - handle), Addachala (अड्डाचला - wooden pegs fitted through holes on the yoke), Shaula (शौला - plow

share made up of iron which is used to break the soil) and Panchanika (पंचनिका - stick used to drive the bulls).

Balram (बलराम), the God of agriculture and also known as Haldhar (हलधर), is frequently depicted with the Hal, underscoring its importance.

This tool, passed down through generations, embodies the essence of Bharatiya Krishi (भारतीय कृषि). It holds such cultural importance that there are numerous poojas (पूजा) dedicated to the Hal, whether in farming or non-farming activities like bhumi (भूमि) pooja and Hal pooja during marriages in northern India, reflecting its sacred connection to all the Bharatiyas.

SINGAR

The SEED SOWING INSTRUMENT



he Singar (सिंगार) is a traditional seed-sowing tool, typically crafted from Mahua (महुआ), Sheesham (शीशम) and Sagaun (सागौन).

Its design features a wooden cup-like structure connected to three hollow, pointed beams. Seeds are placed in the wooden cup, and as the farmer moves through the field, the pointed beams penetrate the soil, creating small holes or furrows. The seeds then drop through the hollow beams into the prepared holes. This precise method of sowing minimizes seed wastage and ensures that seeds are planted at the optimal depth for germination, promoting healthy crop growth.

Singar's design reflects a deep understanding of the natural environment. Its precise sowing method supports soil health and crop productivity while preserving ecological balance. This traditional tool embodies a respect for nature and showcases age-old agricultural practices.



KRISHI UPAKARAN

TRADITIONAL AGRICULTURAL TOOLS

Traditional agricultural tools are still widely used by many farmers in India. These tools are simply made of wood and iron by local blacksmiths. Wood from trees like Mahua (महुआ), Sheesham (शीशम), Mango, and Bamboo are often used to make these tools.

The following are some common tools used in farming practices:

a. Pawda (पावडा) - The pawda is a sharp-edged shovel used for digging, removing, and lifting soil. It is a crucial tool for various farming tasks.

b. Kulhadi (कुल्हाड़ी) - It is used for cutting wood, pruning trees, and performing other heavy tasks on the farm.

c. Farshi (फर्शी) - The farshi is used for digging and breaking up soil. It is strong and sharp, helping to break up hard soil, without disturbing the main crop. It is specially used in potato fields, where regular soil tilling is required, without disturbing the main crops.

d. Kudal (कुदाल) - The kudal is used to cut soil, making it easier to manage and prepare for planting.

e. Basa (बासा) - The basa is a traditional plow used for tilling the land, often drawn by oxen. It is also useful for sowing seeds and is known in its modern form as a seed drill.

f. Khurpi (खुरपी) - The khurpi is a small hand-held tool used for weeding, digging, and loosening soil. It is an essential tool for various farming tasks.

g. Pharuhi (फरूही) - The pharuhi is used for cleaning dung from the floor, ensuring cleanliness in farming areas.

h. The Hasiya (हाँसिया) - It is a traditional sickle used primarily in rural India for harvesting crops and cutting grass. Its curved blade, typically made of iron, allows for slicing through stalks with a swift, pulling motion. Chara (चारा) for animal are often harvested using hasiya.

The practical advantages of these tools remain significant even today. Farmers across the country continue to rely on them because they address their needs and challenges, thereby showing how modern practices coexist with traditional equipment.





BAKKHAR

The HARROWING TOOL

The traditional Bakkhar (बक्खर) is typically made from a combination of wood and iron.

The frame and main structure of the Bakkhar are usually crafted from wood, such as teak or neem (नीम). The blades attached to the underside of the Bakkhar, responsible for tilling and leveling the soil, are often made from iron. This combination of materials ensures that the Bakkhar is both durable and effective in breaking up clods of soil, leveling the ground, and preparing it for planting.

The design reflects a deep understanding of agricultural needs by our ancestors who designed this tool. This harmonious blend of iron and wood makes the Bakkhar a versatile and reliable tool for preparing soil, demonstrating how traditional craftsmanship aligns with practical agricultural requirements. The use of these materials ensures that the Bakkhar remains an indispensable tool in farming, promoting effective soil management and supporting sustainable agricultural practices.

TRIDOSH SYSTEM

ANCIENT METHOD *for* PLANT
DISEASE DIAGNOSIS

According to Vrukshayurved (वृक्षायुर्वेद) by Surapala, plant diseases are categorized into two types: internal and external. Internal diseases arise from the imbalance of the three doshas (दोष)—Vat-Vayu and Akash (वट-वायु और आकाश), Pitta - Agni and Jal (पित्त - अग्नि और जल), and Kaph-Prithvi and Jal (कफ-पृथ्वी और जल). External diseases are caused by factors like insects and environmental conditions. Vat-related issues occur when land becomes arid, leading to hard, less juicy fruits, knotty trunks and leaves, and premature loss of foliage. Kaph-related diseases are common at the end of summer when trees are overwatered with sweet or oily substances, causing delayed fruiting, paleness, and dwarfing. Pitta-related diseases arise when plants are watered with bitter or sour substances, leading to yellowing leaves, fruit drop, and decay.

To treat these imbalances, Vat can be addressed with treatments like Kunap Jal (कुणप जल - a mixture of excreta, marrow of bones, flesh, blood, and plant debris stored underground), while Kaph can be managed with treating the plants with

a mixture of Panchamool (पंचमूल) roots (Roots of five plants-sriphal (श्रीफल), sarvatobhadra (सर्वतोभद्र), patal (पाताल), ganikarika (गणिकारिका) and synoka (स्यनोका)) and a paste of white mustard on roots. Pitta imbalances can be corrected by watering trees with sesame and ashes. For external threats like insects and worms, Kunap Jal can be used, or trees can be smoked with a mixture of white mustard (सफेद सरसों), Vidang (विदंग) - Embelia ribes, Usana (Piper nigrum), and other ingredients. Treatments such as Neem (नीम) for controlling diseases, pulse flours for plant strengthening, Kimsuk (किंशुक) and Bael (बेल) for flower pigmentation, and Licorice (मुलेची) for addressing seedlessness are examples of how Vrukshayurved provides effective plant protection methods.





After burning cow dung cakes or kandi (कंडी), the leftover ash is often used by farmers as an insecticide. This ash is effective against various insects. When adult insects move through the ash, it grazes their bodies, particularly the chitin layer on their abdomens, leading to the clogging of their spiracles and trachea. Chitin is a tough layer of the insect body that forms part of the exoskeleton in insects, providing structural support and protection. Spiracles are small openings on the surface of an insect's body that lead to the respiratory system. These openings allow air to enter and exit the trachea, which are a network of fine tubes that transport oxygen directly to the insect's tissues and cells.

When ash fills the spiracles, it blocks the airways and disrupts the insect's ability to breathe. The blockage of these respiratory passages causes the insects to suffocate, resulting in their death.

Our traditional agricultural knowledge is remarkably scientific, understanding that insects do not breathe through a single nose like humans but through multiple holes called spiracles. This tradition is shared over centuries, even millenia, and farmers have used dung ash to target harmful insects effectively and protect the crops.





To kill mosquitoes and flies, farmers often used to burn neem (*नीम*) leaves (*Azadirachta indica*) inside a 'mitti ki gursi' (मिट्ठी की गुरसी) or earthen pot near and in front of homes. This traditional practice involved giving these pots to the children of the house, allowing them to roam all over the home with the smoking pot. Neem leaves contain a pungent compound called Azadirachtin, which is highly effective in repelling insect pests. When neem leaves are burned, the smoke releases Azadirachtin, which acts as a natural insect repellent.

The practice of burning neem leaves in mitti ki gursi is rooted in the extensive traditional knowledge of natural pest control methods.

Neem, known for its medicinal and insecticidal properties, has been used in various forms for centuries in India. The smoke from burning neem leaves not only helps in repelling mosquitoes and flies but also purifies the air by eliminating harmful bacteria and pathogens.



This method was particularly useful during the monsoon season when mosquito populations tend to rise. The mitti ki gursi, made of natural clay, is an excellent medium for burning neem leaves, as it retains heat well and allows for slow, consistent burning.

BUTTALU

A STRUCTURE to STORE GRAINS in ANDHRA

In the local forest areas of the Srikakulam District, Andhra Pradesh, bamboo-woven baskets, locally known as buttalu (బుట్లు), capable of storing up to 12 quintals of grains or seeds are used. These baskets are crafted from bamboo, which helps in maintaining the quality of the stored grains.

To protect the grains from pests, the baskets are lined with neem (నీమ) leaves, a natural repellent known for its insecticidal properties. The bottom of the basket is sealed with a mixture of cow dung and chaff. This sealing process not only adds an extra layer of protection against pests but also ensures that moisture does not penetrate the basket, which could lead to spoilage of the grains.

After the grains are filled, the upper portion of the basket is also sealed with cow dung and chaff, creating a secure, airtight environment that helps preserve the grains for extended periods. This method allows the grains to remain fresh and free from infestations. When needed, the seal is carefully broken, and the required amount of grain is taken from the buttalu, after which the basket is resealed to continue protecting the remaining contents.

The timelessness of these practices reflect the ancient practices and the scientific utility is indicative of the practicality embedded within the practice.





KOTHI

TRADITIONAL STRUCTURE *to* STORE GRAINS

Kothi (कोठी) are traditional containers commonly used in rural areas for storing food grains. These storage units are crafted from locally available materials such as mud, dung, bamboo, grass, or other suitable resources.

The use of mud and dung in Kothi construction not only utilizes abundant local materials but also enhances the container's insulating properties, helping to preserve the grains by maintaining a

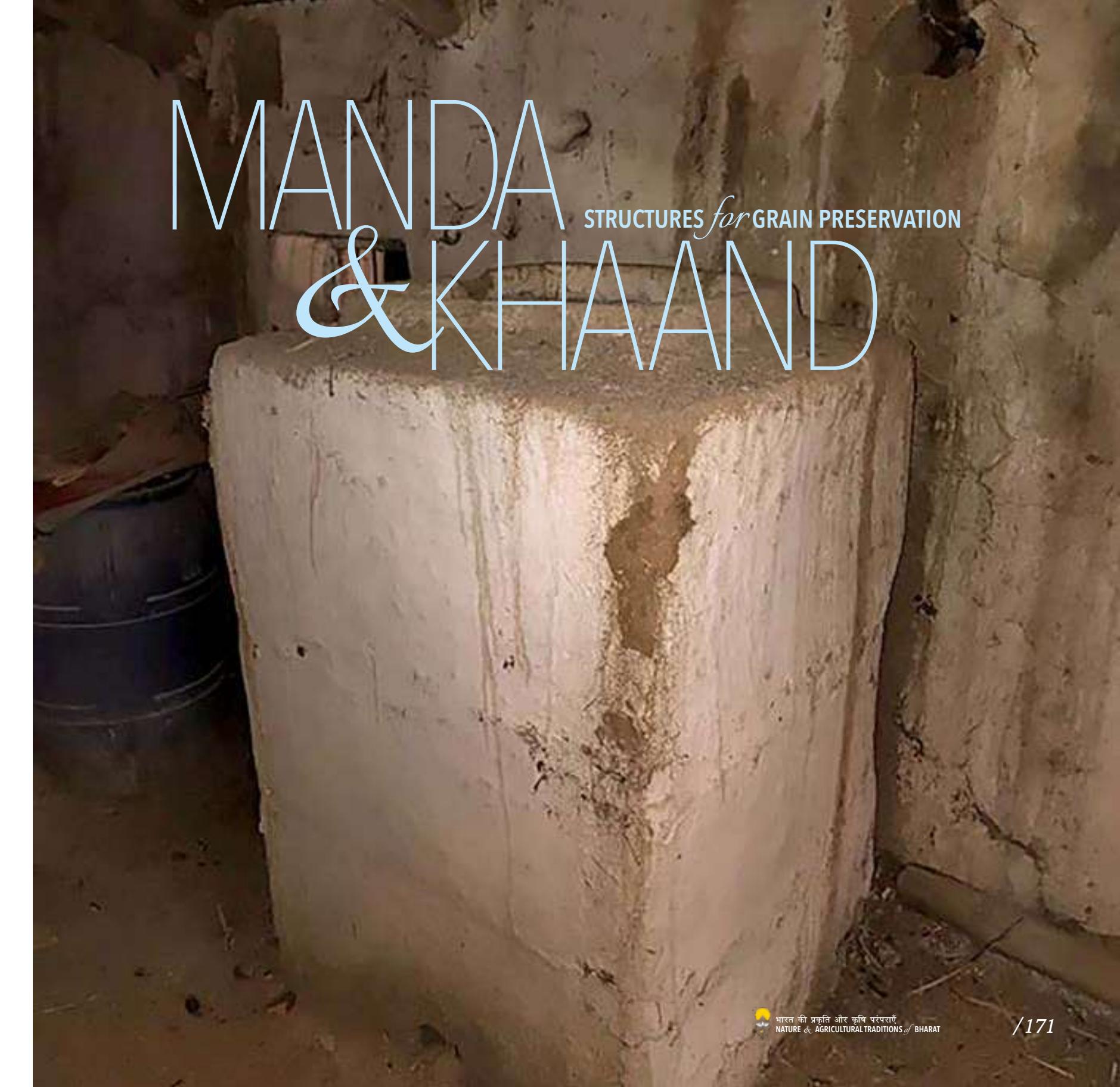
stable internal temperature and humidity. Bamboo and grass, both renewable and biodegradable, add structural integrity and ventilation, ensuring that the grains remain dry and protected from pests.

This traditional approach to storage exemplifies sustainable practices by employing materials that are locally sourced and naturally degradable. Such structures like Kothis contribute to a circular economy, where resources are reused and waste is minimized.

Farmers have traditionally stored seeds for both grains and future sowing in various structures, some of which are still in use in parts of Uttar Pradesh. The Manda (मंडा) is an open earthen pot, where seeds are stored and covered with husk and neem (नीम) leaves to avoid insect pests. The Dahari (दहारी) is a smaller version of the Manda, essentially earthen pots used for storing seeds.



The Khaand (खांड) is an underground seed storage structure system, also known as Sataayi (सतायी), where a wooden frame is created and plastered with clay and mud. This structure is kept underground and seeds are taken out whenever required.



MANDA & KHAAND

STRUCTURES for GRAIN PRESERVATION

SEED STORAGE

PRESERVING SEEDS *with* GOURDS & CLAY POTS



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In many areas of the country, the seeds are often stored in natural materials like hollow dried gourds and clay pots. These storage practices are not only sustainable but also highly effective in preserving seeds for future planting seasons. Hollow gourds, such as dried bottle gourds with their naturally hard outer shell, serve as containers that protect seeds from moisture and pests. Clay pots, known for their porous nature, allow for air circulation while keeping the seeds dry and safe.



To further enhance the preservation process, farmers often mix the seeds with ash powder and neem leaves before storing them. The ash powder acts as a desiccant, absorbing any excess moisture that could lead to seed spoilage. Neem (नीम) leaves, known for their insecticidal properties, are a natural deterrent against pests.

It takes a highly meaningful life philosophy to develop such natural methods to respond to local challenges, and Bharat (भारत) carries these efforts abundantly.



COCONUT

The TREE of LIFE

In the lush coconut orchards of Amalapuram, nearly every local farmer is engaged in coconut cultivation, with each household boasting its own coconut grove. Farmers utilize specialized tools such as the Gudhariga (गुदारिगा), which is used for mixing and applying manure near the roots of coconut trees. Another essential instrument is the Gunapam (गुनापम), designed to efficiently remove the outer coir from coconuts, preparing them for further processing into ropes, stuffing materials for sofas and mattresses, and scrubs.

A distinctive feature of the local homes is the Attak (अटक), a drying space built under the roof where coconuts are dried to create kuridi kaya (कुरीडी काया) or dry coconuts: it is a crucial method for preserving coconuts, allowing them to be stored and used throughout the year. The Attak not only serves the functional purpose but also reflects how the design of their homes integrates with their farmers traditions.

In Kerala, coconut palms are known as Kalpavriksham (कल्पवृक्षम्), the trees of heaven. Indeed, the name of the land, Kerala, is derived from the Malayalam word Keralam, where 'alam' (आळम्) means the land of and 'kera' (केरा) means coconut.

The three dots on the coconut represent the three eyes of Shiv (शिव). The kernel (white flesh) represents Parvati (पार्वती), the water signifies Ganga, and the brown shell represents Kartikeya (कार्तिकेय). Devotees perform elaborate poojas (पूजा) of the gods by treating the coconut as an object of devotion. And so, it is also known as shripal (श्रीफल), and derives its association with prosperity from the fact that the coconut tree, unlike other trees, produces coconuts throughout the year.

It is placed on the Kalash (कलश) during poojas and the Archana Thaal (अर्चना थाल), a platter containing various offerings, is incomplete without a coconut. The coconut is said to bring peace, prosperity, and good fortune, making it a significant part of life events such as weddings, child births, and housewarmings.

Children learn about the centrality of coconut in their lives as they grow up, and so do their children when they grow up. They learn that the coconut shell represents ego, and the soft inner flesh symbolizes the human heart. The breaking of the coconut represents the breaking of ego, known as 'Aham Bodham' (अहम् बोधम्).

ARECANUT

MAKING MUTTAALE & GORABU *in KARNATAKA*



Arecanut, often referred to as betel nut, holds a significant place in the agricultural landscape of India's Coastal and Malenadu regions. The arecanut palm, known for its tall and slender trunk, produces nuts that are used in various rituals, traditional medicine, and as a masticatory. Beyond its economic value, the arecanut palm contributes to the daily lives of agricultural workers in unique ways.

In these regions, the leaves of the arecanut palm are woven into a traditional headgear called the Muttaale (मुत्ताळे) cap. This cap, crafted with skill and care, is a staple for field workers, providing protection from the sun. Additionally, during the monsoon season, agricultural workers use a Gorabu (गोरबु) hood made from Katthaale (कथ्थाळे) reeds. This hood covers the head, neck, and back, shielding them from heavy rain. The Gorabu and Muttaale are excellent examples of how local resources are utilized for practical, sustainable solutions in farming communities.





KARPASA

The STORY of COTTON in BHARAT

Cotton cultivation in India has a rich history. References to cotton, known as karpasa (कार्पास), are found in Rigved (ऋग्वेद), highlighting its long-standing significance in the country. Bharat (भारत) is unique in growing all four major species of cotton: *Gossypium hirsutum*, *G. barbadense*, *G. arboreum*, and *G. herbaceum*. These varieties, particularly the desi cottons, like *G. arboreum*, have been cultivated for centuries and are well-adapted to Indian agro-climatic conditions.

Desi cotton is resilient, drought-tolerant, and requires fewer inputs compared to hybrid varieties. It is predominantly grown in rainfed areas, with Maharashtra, Gujarat, and Madhya Pradesh being

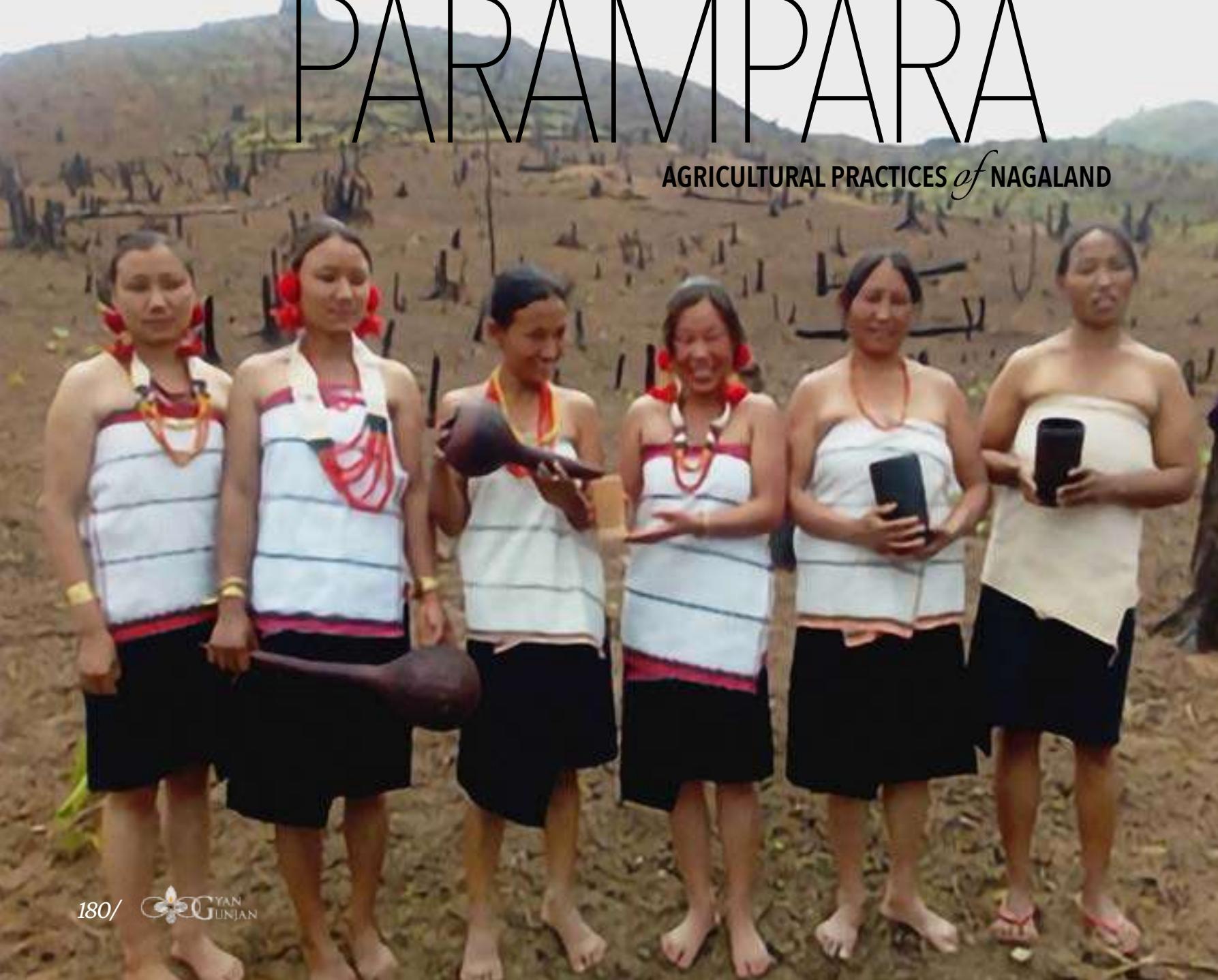
major producers. The black cotton soil, particularly in the Deccan plateau, is ideal for its cultivation.

In Bharat, cotton has a rich tradition of use, from creating intricate textiles like sarees and dhotis to crafting traditional garments for festivals and ceremonies. It is integral in the production of cotton rugs and bedspreads, valued for their comfort and durability.

Bharat's cotton cultivation continues to play a vital role in its economy, with both traditional and modern practices co-existing, contributing to the country's rich agricultural heritage.

NAGAKRISHI PARAMPARA

AGRICULTURAL PRACTICES *of* NAGALAND



In the agriculture of Nagaland, the roles of men and women are uniquely intertwined, reflecting a deep connection with Nature. Agriculture is not just a means of sustenance but a way of life that embodies their Jeevan Darshan (जीवन दर्शन)—and is firmly rooted in their parampara (परम्परा), which draws its essence from prakriti (प्रकृति).

The process begins with both men and women working side by side to clear the fields. Women form groups called chehutme (चेहुतमे) where they sing as they dig a small layer of soil, preparing it for planting. The seeds are carefully buried under the soil, ensuring a proper start for the crops. Elderly women follow behind the chehutme collecting and placing weeds in a designated area known as tesai khoibo (टेसाई खोइबो), maintaining the field's orderliness.

During harvest, women skillfully cut the paddy with sickles while men gather and arrange it in a specific manner, forming a torus-like shape with the rice grains protected at the center. The grains are separated from the hay using a bamboo frame called saibuak (साईबूक), showcasing the community's ingenuity and harmony with Nature.

When it's time to bring the grains home, the women carry them in traditional baskets called keluang (केलुआंग) while the men use sack bags. This meticulous process, from clearing the fields to carrying the grains home, exemplifies the profound connection between Nature and agriculture.





BARAHNAJA

A TRADITIONAL SYSTEM of FARMING in UTTARAKHAND

The Barahnaja (बारहनाजा) System is an ancient mixed-crop mode of cultivation followed by the farmers in the hilly tracts of Uttarakhand. The word Barahnaja in Garhwali means twelve grains, referring to the group of crops grown together in one field, including millets, pulses, legumes, and cereals. Such crops that are commonly grown in this system include Mandua (मंडुआ - finger millet), Ramdana (रामदाना - amaranth), Rajma (राजमा - kidney bean), Kuttu (कुट्टू - buckwheat), Urad (उरद - black gram), Moong (मूँग - green gram), Gahat (गहत - horse gram), Bhat (भट्ट - soybean), Lobiya (लोबिया - cowpea), Kheera (खीरा - cucumber), Bhangjeera (भंजीरा - hemp), and Jakhiya (जखिया - wild mustard/cleome).

This diverse cropping system brings several benefits. It enhances the diet diversity of farming communities as various food sources are acquired in one crop cycle, and it promotes local ecology

by naturally enhancing the fertility of the soil, reducing infestation of pests, checking soil erosion, and building ecosystem resilience. The cultivation of nitrogen-fixing legumes like rajma, lobiya, bhatt, etc. along with millets and cereals naturally enriches the soil without having to depend on external fertilizers, and hence sustains the productivity of that land.

This would further complement food security, but the Barahnaja System also assists in preserving biodiversity in this region and the agricultural heritage by adopting a holistic approach to farming, which again remains in consonance with the traditional ecological wisdom of Uttarakhand.

MISHRIT FASAL

MIXED CROPPING SYSTEM *in BUNDELKHAND*

Mixed cropping and intercropping have long been integral to traditional agricultural systems, leveraging the science of symbiotic relationships between plants and soil. In Bundelkhand, the Tiphra (तिफ्रा) cropping system is a prime example of this approach. During the Rabi (रबी) season, three crops—wheat, barley, and chana (चना - chickpeas)—are interplanted. These crops mature and are harvested simultaneously, ensuring efficient use of land and resources. A special type of flour made from this mixture of wheat, barley, and chana is used to cook rotis (रोटी), providing a balanced diet. Another common combination is birra (बिर्रा), which includes chana dal (चना दाल) and either wheat or barley.

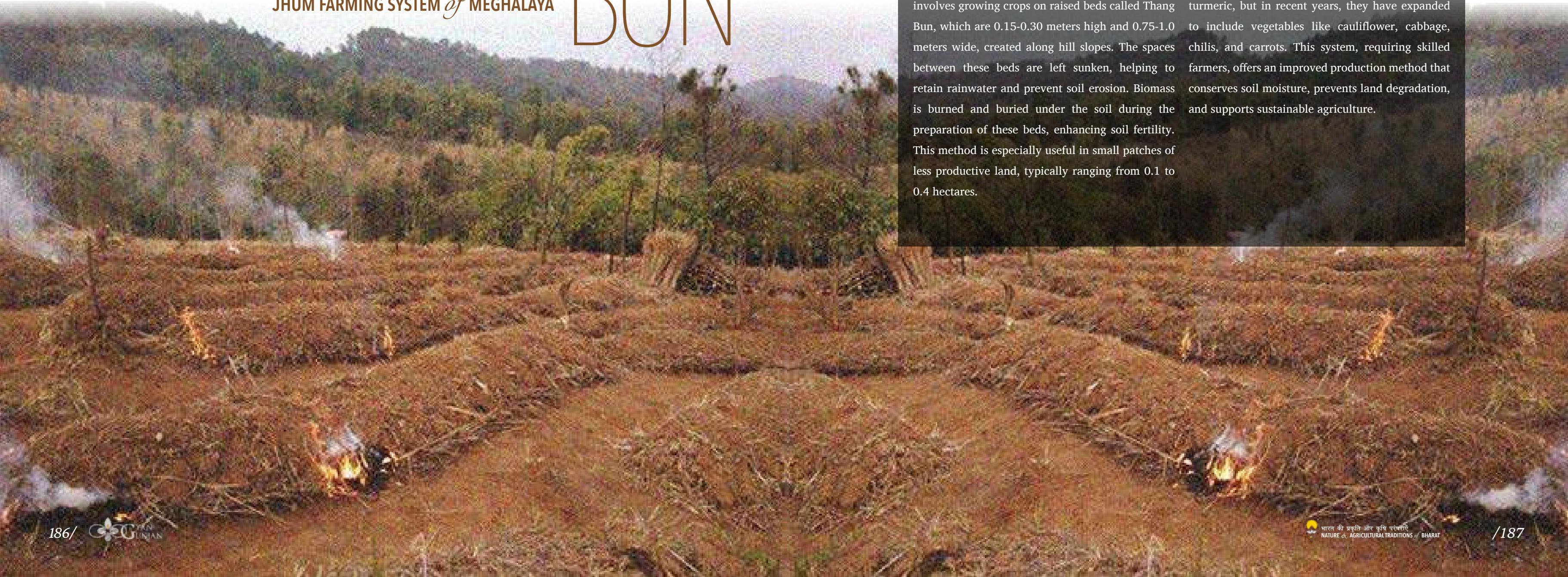
This strategic combination of crops offers multiple benefits. Legume crops like chana play a crucial role in nitrogen fixation, enriching the soil and benefiting the cereal crops planted alongside

them. This scientific approach not only enhances soil fertility but also ensures that the rotis made from this flour mixture provide all essential amino acids, combining the nutritional benefits of both pulses and cereals. Nutritionally, pulses and cereals complement each other. Pulses are rich in lysine but lack methionine and cysteine, which are abundant in cereals. Conversely, cereals are rich in methionine and cysteine but lack lysine, an essential amino acid found in legumes. This complementary relationship ensures that combining pulses and cereals provides a complete set of essential amino acids, crucial for human nutrition.

These traditional methods reflect a deep understanding of agricultural science and nutritional needs, showcasing the ingenuity of traditional farming practices in maintaining soil health and providing a nutritious diet.

THANG BUN

JHUM FARMING SYSTEM *of* MEGHALAYA



The Thang Bun Jhum (थांग बुन झूम) farming system is a traditional agricultural method practiced by ethnic communities in Meghalaya. This technique involves growing crops on raised beds called Thang Bun, which are 0.15-0.30 meters high and 0.75-1.0 meters wide, created along hill slopes. The spaces between these beds are left sunken, helping to retain rainwater and prevent soil erosion. Biomass is burned and buried under the soil during the preparation of these beds, enhancing soil fertility. This method is especially useful in small patches of less productive land, typically ranging from 0.1 to 0.4 hectares.

The Thang Bun method is widely adopted in areas with short jhum cycles (5-6 years) to maintain soil fertility and optimize crop yield. Initially, farmers used this technique to cultivate ginger and turmeric, but in recent years, they have expanded to include vegetables like cauliflower, cabbage, chilis, and carrots. This system, requiring skilled farmers, offers an improved production method that conserves soil moisture, prevents land degradation, and supports sustainable agriculture.



JHUM

ALDER-BASED FARMING *of* NAGALAND

The Alder-Based Jhum farming system is a traditional agricultural practice in Nagaland's Kohima and Phek districts, aimed at reducing soil erosion on the region's steep slopes. Farmers use the *Alnus nepalensis* in this system, which is known for its rapid growth and soil-enriching properties. Seedlings are planted on sloped land, and after 6-10 years, the trees are pollarded—leaves and twigs are burned, and the ash is mixed with the soil to prepare it for crops. This pollarding is repeated every 4-6 years, while the land undergoes a fallow period of 2-4 years.

The alder tree's roots, which develop nitrogen-fixing nodules through a symbiotic relationship with the *Actinomycete frankia*, help improve soil fertility and prevent erosion. The larger branches are

used for firewood, and the tree's litter contributes organic carbon, nitrogen, and other nutrients to the soil. The system is highly effective, with nitrogen fixation rates ranging from 48.3 to 184.8 kg per hectare, depending on the number of trees.

Recognized by the farmers of Angami (अंगामी), Chakhesang (चाखेसांग), Chang (चांग), Yimchunger (यिमचुंगर), and Konyak (कोन्याक) communities for over 200 years, this agroforestry system enhances soil fertility, making it a valuable and sustainable farming practice in Nagaland.

SHASYASANGRAHKALA

The HARVEST SEASONS of BHARAT



Shasyasangrahkala (शास्यसङ्ग्रहकालः) refers to the time dedicated to gathering harvests. In Bharat (भारत), agriculture encompasses three distinct harvest seasons, each reflecting the country's diverse climatic conditions. The Zaid (ज्ञायद) harvest, between March and June, is a short growing season for crops like cucumbers and melons, which complete their life cycle in about 60 days, bridging the gap between the Rabi (रबी) and Kharif (खरीफ) seasons. The Kharif harvest, aligned with the monsoon from June to October, includes crops like rice and cotton, sown with the arrival of rains and harvested in autumn. The third harvest, from January to March, includes cover crops like sesame, black gram, or green gram. Additionally, the Rabi harvest, from November to April, includes crops such as wheat and mustard, sown in winter and harvested before summer. These harvests not only reflect seasonal rhythms but also highlight the adaptability of Indian agriculture to varying climatic conditions, ensuring a continuous and diverse food supply throughout the year.



HONORING the HARVEST

The SACRED HASIYAS of PUROLA

In the Puolla village of Uttarkashi District, Uttarakhand, the Gram Devi (ग्राम देवी), stands as a powerful guardian of agriculture and prosperity. The Devi is surrounded by hasiyas (हसिया), or sickles, each symbolizing the farmers' gratitude and hopes for a bountiful harvest. These sickles, essential tools for harvesting, embody both the hard work of the community and the abundance provided by Bhudevi (भूदेवी). After every harvest, farmers place their hasiyas in front of the Gram Devi, a ritual that has been passed down through generations.

This tradition reflects the farmers' deep connection to their land. By offering hasiyas to the Devi, they express reverence for her blessings on their crops, ensuring that each season brings prosperity and sustenance to their families. The sight of the temple surrounded by sickles is a powerful testament to the agricultural roots of Puolla, where farming is not only a livelihood but a sacred tradition. This practice unites the community in a shared act of gratitude and respect, reinforcing their spiritual bond with nature and the divine forces believed to protect and nurture their lands.

SRI ANNAPOORNESHWARI

The DEVI of ABUNDANCE & NOURISHMENT in the WESTERN GHATS



Located amidst the picturesque landscapes of the Western Ghats lies the temple of Sri Annapoorneshwari (श्री अन्नपूर्णेश्वरी) in Sri Kshetra Horanadu. This temple, dedicated to the Devi Annapoorneshwari (देवी अन्नपूर्णेश्वरी), is nestled on the banks of the river Bhadra (भद्रा) and surrounded by the enchanting Malanadu region.

Sri Annapoorneshwari is an incarnation of Parvati Devi (पार्वती देवी), revered as the Goddess of food. The name Annapoorna (अन्नपूर्णा) is derived from Anna (अन्न), meaning food or rice grains, and Poorna (पूर्णा), meaning complete or perfect. Thus, Annapoorna signifies the divine

promise of fulfilling the needs of supplicants. The pratishthapana (प्रतिष्ठापना) of the god was performed by the revered Maharshi Agasthya (महर्षि अगस्त्य) many centuries ago. Devotees take the akshat (अक्षत - rice grains) from the temple and place it in their homes to avoid food scarcity. They also place it in the farms so Sri Annapoorneshwari will bless them with a good harvest and bring good fortune.





UPDAAV

STORAGE for DUNG CAKES in UTTAR PRADESH

In many rural parts of India, dung cakes, known as kandi (कंडी) in Hindi, are an essential source of fuel for cooking and heating. These cakes are stored in a special structure called an updaav (उपडाव), mostly found in Northern states like Uttar Pradesh, Bihar, Madhya Pradesh, Haryana etc. where we experience extreme Winters.

These are typically a hut-like or dome-shaped construction made from locally available materials such as mud, thatch made of dried paddy or wheat straw, and bamboo.

The walls of the updaav are often made from a mixture of mud and clay, providing insulation and maintaining a stable internal temperature. The roof is commonly thatched with dried straws supported by a bamboo framework, which helps prevent water seepage during the monsoon season.

Cow dung cakes, or kandi, are highly absorbent and can disintegrate if exposed to rain. The updaav's design provides a dry environment, protecting them from direct rainfall. While initial drying of cow dung cakes may occur in the sun, prolonged exposure can cause them to become too dry and brittle, making them prone to breakage. Storing them in the shadow helps maintain their integrity and ensures they burn evenly when used as fuel.



The enclosed structure also protects the dung cakes from pests and animals, such as rodents and insects, which might otherwise damage or consume them. The updaav is usually located close to the household or kitchen area, making it convenient for daily use. Its design allows for easy access and organization of the fuel.

Storing cow dung cakes in an updaav is not just a practical solution but also has cultural significance. In many rural communities, the process of making and storing kandi is a communal activity, often involving women who prepare the cakes together.

The updaav stands as a symbol of self-sufficiency, traditional knowledge, and sustainable living practices. Its design says a lot about the local climate and resources utilized by our forefathers.



PASHU GRAH

TRADITIONAL HOUSING SYSTEMS for FARM ANIMALS

In Bharat (भारत), the housing systems for farm animals are designed with a deep understanding of the local environment and resources, showcasing sustainable practices that utilize natural materials. Separate sheds are constructed for different animals such as cattle, goats, buffaloes, hens, ducks, and pigs, each tailored to meet the specific needs of the animals while harmonizing with the surroundings.

The sheds are built using locally sourced materials like bamboo leaves, palm leaves, and bamboo fencing, which are abundant and sustainable. The roofs are carefully thatched with bamboo and palm leaves, providing effective insulation from both heat and rain, ensuring the comfort and well-being of the animals. This natural roofing also allowed for

proper ventilation, as all sides of the sheds are kept open, facilitating free air circulation and reducing the risk of respiratory diseases among the animals.

The flooring of these sheds is often layered with bamboo and dry grass providing a sturdy and hygienic surface that was easy to clean and maintain. Such types of beds also absorb the urine and dung of the animals, which can later be used as compost for the soil. The bamboo fencing not only offered protection but also allowed sunlight to filter through, creating a healthy environment for the animals.

The traditional housing systems ensured that the animals are not only protected but also thrived in an environment that mirrored their natural habitats.

CHARA

FEED for FARM ANIMALS



गुणकैर्यवसैर्धूमैस्तथान्यैरपि पोषणैः।
वाहा: क्वचिन्न सीदन्ति सायं प्रातश्च चारणात् ॥
(Krishi Parashara - कृषी पराशर - 8)

The shlok (श्लोक) from Krishi Parashara (कृषि पराशर) highlights the importance of proper feed for farm animals. It instructs that animals should be given jaggery, fodder (like barley), and other nutritious substances and should be allowed to graze in the morning and evening. This guidance reflects the deep respect our ancestors had for animals, seeing them not merely as work tools but as integral members of the family.

Farmers traditionally provide a variety of feeds to cattle, including bhusa (भूसा), chari ghas (चारी घास), and mixtures of bhusa with chari ghas, as well as straw. They also allow cattle to graze on fresh grass, which not only nourishes the animals but also enriches the land with nutrient-rich manure. The varied grazing grasses also contribute to the nutritional value and medicinal properties of the milk produced.

This care and respect that we give are reciprocated by the animals. It is believed that when a person is ill, cows seek out medicinal grasses to produce healing milk. The bandhan (बंधन - relationship) between gau mata (गौ माता) and humans reflects the deep-rooted reverence for Prakriti (प्रकृति).

Additionally, farmers provide various treatments to maintain the health of their animals, such as administering ajwain (अज्वाइन) and mustard seed mixtures (राइ) for colds, kala namak (काला नमक) for digestive issues, and massages with oil during fevers.

This holistic approach to animal care underscores the traditional wisdom and respect embedded in our Krishi Parampara (कृषि परम्परा).

GAU VANSH

PILLARS of BHARATIYA
KRISHI PARAMPARA

यूयं गावो मेद्यथ कृशं चिदश्रीरं चित्कणुथा सुप्रतीकम् ।
भद्रं गृहं कृणुथ भद्रवाचो बृहद्वो वय उच्यते सभासु ॥

(Rigved - क्रग्वेद - 6.28.6)

O cows, grant us nourishment: strengthen even the weak and frail, making them strong and graceful. With your auspicious presence, bless our home with prosperity, for in sacred assemblies, your praises are celebrated and resound far and wide.

Cows and bulls are not only vital for their practical uses but also hold a cherished place in Bharatiya Krishi Parampara (भारतीय कृषि परम्परा). In India, there are many indigenous breeds of cows found such as Gir (गिर), Sahiwal (सहिवाल), Ongole

(ओंगोल), Sindhi (सिंधी), etc. well-suited to various climates. In ancient texts like the Rigved (ऋग्वेद), cows are celebrated, highlighting their central role in society.

Cow dung, as well as beneficial microbes, is highly valued as a natural fertilizer, enriching soil and supporting sustainable farming practices. Cow urine, rich in nitrogen, urea, and other nutrients, further aids in soil health. The traditional practice of using Panchagavya (पंचगव्य)—a mixture of cow milk, curd, ghee, urine, and dung—enhances plant growth. In addition to their agricultural benefits, cows play a significant role in cultural practices. Festivals like Gopashtami (गोपाष्टमी) honor their contributions.

According to the Mriga Pakshi Shastra (मृग पक्षी शास्त्र), cows are held in high reverence and come in a range of colors, including pure red, white, jet black, blue, and various mixed hues. They are divided into two main groups. The Gau (गौ) are uniform in color with stout horns, beautiful eyes, and long tails. These cows are moderate in size, have a smooth, shiny body, and are known for their gentle and slow-moving nature, thriving on a minimal diet. Another group is the Dhenu (धेनु), distinguished by spots of white, red, or black. These cows are taller with long horns. They possess smooth bodies, are free of diseases, and are valued for their faithful and gentle nature.

Bulls are crucial for plowing fields and performing draught work due to their strength and endurance. The Mriga Pakshi Shastra describes several distinct varieties of bulls, each with unique attributes. The Uksha (उक्षा) bulls are known for their pure white color, stout horns, and strength. They are patient and efficient, ideal for heavy work, and have a dignified stride. Balivard (बलिवर्द) are tall, powerful, and either pure white or red. They have curved horns and long tails, are swift, and are known for their pleasant nature and strength. Rishabh (ऋषभ) bulls are black, moderate in size, and possess large humps. They are temperamental but reliable in completing tasks. The Vrish (वृष) bulls come in pure red, white, or black, are eager workers, and have good stamina despite their shorter stature. Anadwan (अनाद्वान) bulls, with varied colors and powerful builds, are passionate and faithful, though they can be difficult if angered. Mahoksh (महोक्ष) bulls are tall, uniform in color, and highly patient, excelling in various agricultural tasks. Saurabheya (सौरभेय) bulls are tall, with a shiny coat and strong muscles, making them highly trainable and suitable for demanding work.

As integral pillars of Krishi Parampara, cows and bulls are celebrated and relied upon for their essential role in sustaining and enhancing our livelihoods. They are not just farm animals but cherished members of our family.



INDIAN BREEDS *of* BUFFALOES

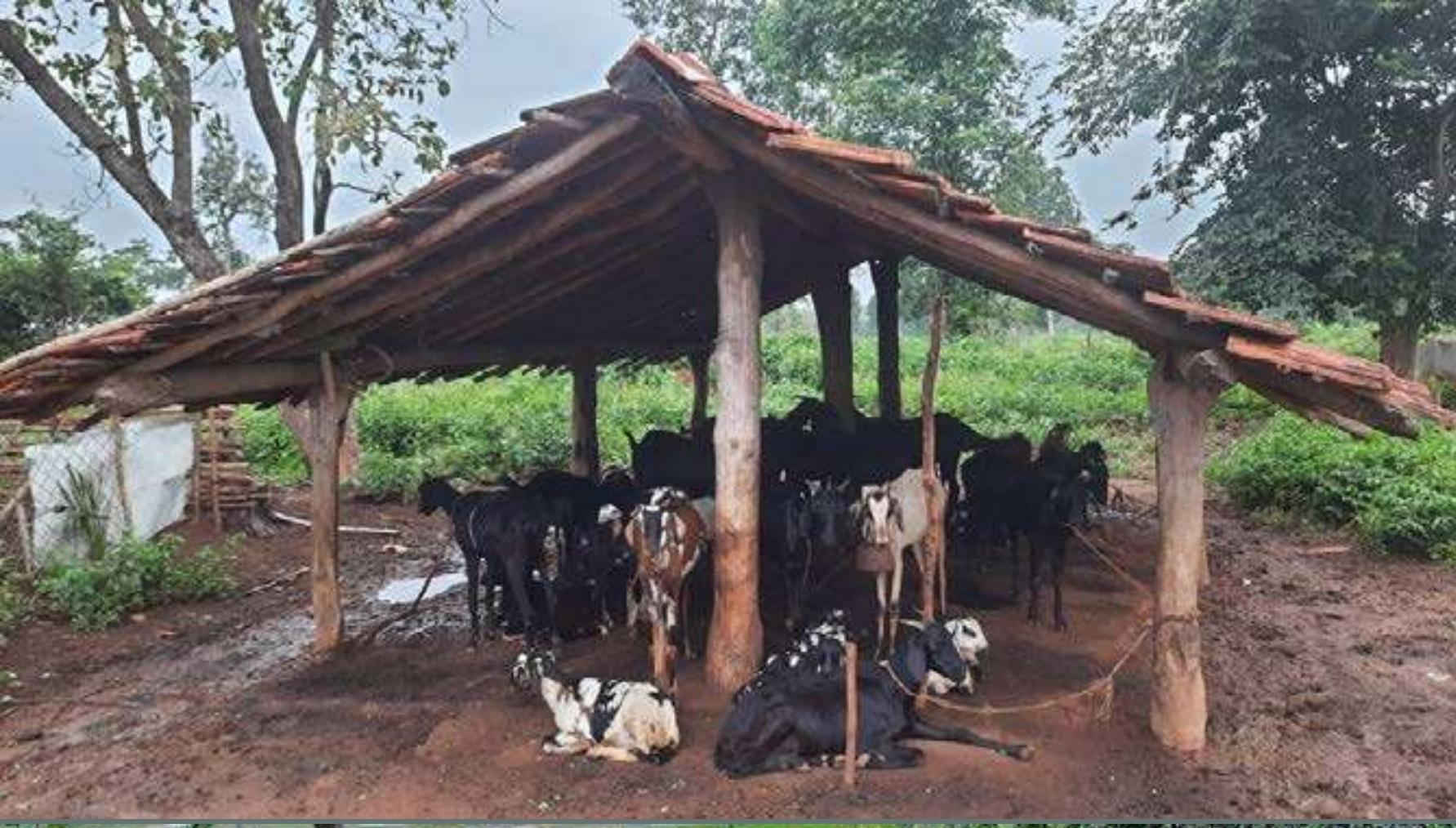
MAHISHA LULAYA & MANY MORE...

Buffaloes play a vital role in the agricultural practices, owing to their strength and resilience. They are primarily used for plowing fields, transporting heavy loads, and providing milk, which is rich in fat content. Buffalo milk is preferred for making dairy products like butter, ghee (घी), and cheese. Indian breeds of buffaloes are well adapted to the local climate. Some notable breeds include the Murrah (मुर्रा), found mainly in Punjab known for its high milk yield. The Jaffarabadi (जाफराबादी), found mainly in Gir forests prized for its large size and strength, the Surti (सुरती), found mainly in Gujarat and recognized for its dairy qualities, and the Bhadawari (भदावरी), found mainly in Uttar Pradesh and Madhya Pradesh known for the high butterfat content in its milk. The Toda (टोडा) breed is found in the Nilgiris which are ash-gray in color which thrive well in humid conditions.

Each type of buffalo has its unique place in the cultural and agricultural landscape. According to Mriga Pakshi Shastra (मृग पक्षी शास्त्र), buffaloes are primarily classified into five types, each with

unique characteristics. For instance, Mahisha (महिषा) buffaloes are jet black, stout, and quick when aroused, while Lulaya (लुलाया) buffaloes are tall with long horns, partly blue in color, and known for their gluttony. Vahadwit (वाहद्वित) buffaloes, on the other hand, are tall, swift, and black, with a strong passion for cohabitation, making them challenging to control when angry. Kasara (कसारा) buffaloes are blackish-red with white horns and a loud cry, enjoying rolling in mud and rain. Lastly, Sairibha (सायरिभा) buffaloes, which dwell in forests, are strong but irritable and difficult to control.

Each breed brings its own distinctive touch to farming practices, making buffaloes hardworking partners as well as a cornerstone of the country's agricultural heritage.



AJA & AVI

SHEEP & GOATS of BHARAT

Sheep and goats play vital roles in agriculture, with references as Aja (अजा) and Avi (अवि) in the Rigved.

These animals are prized for their milk, meat, wool, and manure. Goat milk is highly nutritious, while their dung serves as an excellent organic manure, enriching soil fertility. Sheep provide wool, essential for clothing, and their manure also acts as a natural fertilizer. Both animals are resilient, thriving in diverse climates and terrains, making them ideal for sustainable farming practices.

Bharat (भारत) is home to several indigenous breeds of sheep and goats. Among goats, the Jamunapari (जमुनापारी) and Betel (बीटल) breeds are well-known for their high milk yield. The Barbari (बारबरी) goat is another popular breed, known for its adaptability and prolific breeding.

In sheep, the Deccani (देक्कनी) breed is famous for its coarse wool and adaptability to semi-arid

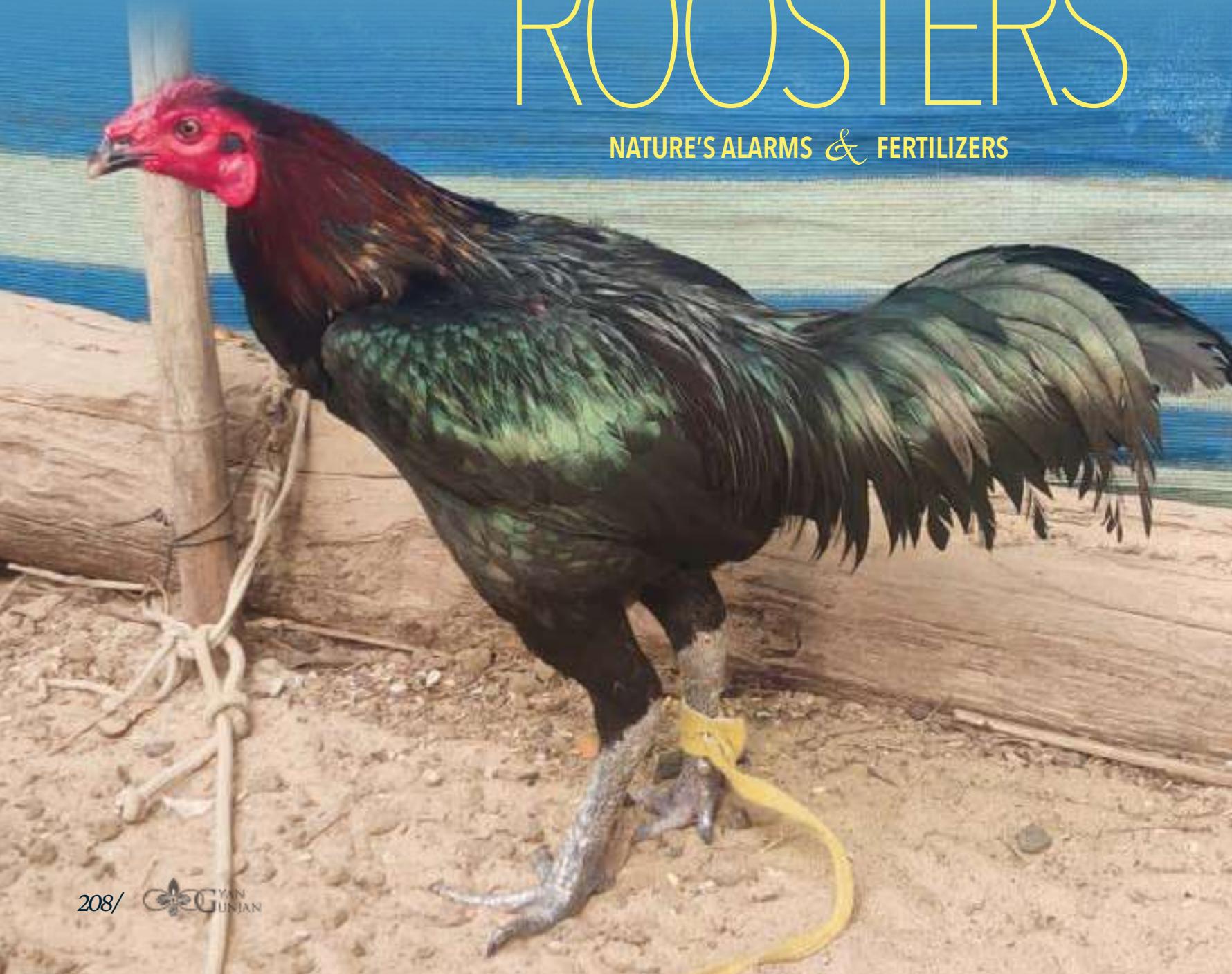
regions. The Gaddi (गद्दी) sheep, from the Himalayan region, are valued for their fine wool.

According to Mriga Pakshi Shastra (मृग पक्षी शास्त्र) there are five main varieties of goats, each with distinct characteristics. For instance, Aja goats are generally white, slightly taller, and known for their voracious appetite and swiftness. Ochaga (ओचागा) goats are red with smooth bodies, peaceful nature, and a fondness for shade. Mesh (मेष) goats are black, slower, and more prone to anger, yet beautiful and resilient. Vrishni (वृष्णि) goats are brown with long hair, while Braka (ब्रका) goats display a mix of colors and are tall with long legs, capable of jumping from heights and withstanding fatigue.

The ability of these animals to thrive in varied environments and their crucial assistance in the agricultural landscape make them an integral part not only of Bharatiya (भारतीय) farming but also everyday life.

HENS & ROOSTERS

NATURE'S ALARMS & FERTILIZERS



Hens and roosters hold a significant place in Indian agriculture, blending cultural reverence with practical utility. Our ancient scriptures like Mriga Pakshi Shastra (मृग पक्षी शास्त्र) describe different types of cocks: Krakavaku (क्राकावाकु), with multi-colored feathers and a long cry, known for their timidity and quarrelsome nature; Tamrachuda (ताम्रचूडा), with red bodies and white wings; Kokkuta (कोक्कुटा), brown and slow, with an unpleasant smell and a tendency for quarrelling; Charauyudh (चरायुध), uniform in color, stout-bodied, and calm, with pleasing cries. Each type had unique traits influencing their roles in ancient times. A hen with straight talons, a leech-colored neck, fat flanks, reddish nails and beak, and a deep voice is considered auspicious in farming families. Hens with bat-like colors, white heron shades, red or gray hues are particularly valued for their favorable symbolism. Roosters, known for their reliable crowing, act as natural alarms, marking the start of the day and alerting the community to the presence of snakes or unfamiliar visitors. In older times, families would often designate a special space or home for these birds, recognizing their importance within the household.

Beyond their cultural significance, roosters and hens are integral to agricultural practices. Their droppings are rich in nutrients, serving as

an excellent natural fertilizer that enhances soil fertility and promotes healthy crop growth. Roosters are natural foragers, consuming insects and weeds, which helps control pests.

From marking the start of the day to enriching soil with their droppings, these birds have an essential role in maintaining the balance and productivity of rural ecosystems.





KALAHANS

IMPORTANCE *of* DUCKS *in the* ECOSYSTEM

Ducks, or Kalahans (कलहांस), are known to have been an integral part of Indian agriculture for centuries, contributing to both cultural traditions and sustainable farming practices. Their role in agriculture is multifaceted, offering benefits ranging from soil fertilization to pest control, and they have been particularly vital in paddy fields where they help maintain the health and productivity of the land. This practice is more evident in many regions of Northeast India.

One of the most significant contributions of ducks to agriculture is soil fertilization. Duck droppings are rich in nutrients, serving as an excellent natural fertilizer that enhances soil fertility and promotes healthy crop growth. Unlike chemical fertilizers, duck manure is organic and sustainable, enriching the soil with essential nutrients like nitrogen, phosphorus, and potassium, which are vital for plant development.

In addition to fertilizing the soil, ducks play a crucial role in pest control. In paddy fields, ducks are natural predators of insects, snails, and other pests that can damage crops. This practice, known as duck-rice farming, is a traditional method where ducks are allowed to roam freely in the fields. They consume pests and weeds. This not only protects the crops but also balances the ecosystem.

Ducks also contribute to algae control in water bodies. By feeding on algae, they help prevent algae blooms, which can be detrimental to aquatic life. This natural method of algae control is crucial for maintaining the health of ponds, lakes, and other water bodies used in agriculture.

Moreover, ducks are excellent seed dispersers. As they move from one location to another, they carry seeds in their feathers and digestive tracts, aiding in the regeneration of vegetation and promoting plant diversity. This natural seed dispersal contributes to the resilience and biodiversity of agricultural ecosystems.

Ducks also play a vital role in wetland conservation. They help maintain the health of wetlands by regulating aquatic vegetation and contributing to the overall biodiversity of these ecosystems. Wetlands, which are crucial for water purification and flood control, benefit greatly from the presence of ducks.

In addition, ducks have a key role in sustainable agriculture. Duck farming continues to support the health and productivity of the land.

FISH

SUSTAINING AGRICULTURE & TRADITION



चूर्णकं सिच्छ (कथ) कैर्युकं जलमध्ये च लोडयेत् ।

तिलानां पललैः कण्वै रोदनेन विमिश्रितैः ॥ २ ॥

बद्रीमात्रकन् गोलॉन् चरयेद्रोहितादिकान् ।

भृष्टकौसुभेचूर्णेन भक्तकैः सह सक्तभिः ॥ ३ ॥

(Manasollasa Chapter - मनसोल्लासा अध्याय - 14)

(The fish should be fed with sesame, boiled rice, and berries etc. in the form of balls for their better growth.)

to nutrient cycling, as fish waste enriches water, which in turn fertilizes crops and promotes healthier, more productive fields.

Fish farming has been a cornerstone of agricultural practices in Northeast India for centuries, reflecting a deep integration of aquaculture with crop cultivation. The practice of paddy-cum-fish culture, where fish are raised in flooded paddy fields, is a prime example of this integration. This method not only controls pests but also generates additional income for farmers. Ancient texts, such as those in the Manasollasa (मानसोल्लास), recommend feeding fish with nutrient-rich foods like sesame and boiled rice to enhance their growth, demonstrating an early understanding of aquaculture nutrition.

Depending on the region's diverse aquatic species, including carp, catfish, and local varieties like Channa (snakehead) and Anabas (climbing perch), are selectively bred for their adaptability and productivity. Fish farming contributes significantly

Ancient Indian texts, such as the Arthashastra (अर्थशास्त्र), highlight the importance of maintaining water bodies for sustainable agriculture. Farmers developed sophisticated water management systems, including tanks and canals, to ensure a steady supply of water for both fish and crops. These systems not only support fish farming but also enhance irrigation practices.

Culturally, fish symbolize prosperity and abundance in ancient rituals and festivals, especially in Eastern parts of India reflecting their importance beyond mere economic value. Fish is also used as a symbol of fortune; in many Madhubani (मधुबनी) paintings, we find several figures of fish are also drawn. The integration of fish farming with agriculture exemplifies sustainable farming practices by maximizing resource use, minimizing waste, and improving overall farm productivity.

KARKA

The ROLE of CRABS in the MANGROVE ECOSYSTEM

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In Indian culture, crabs, known as Kark (कर्क), hold a revered place due to their symbolic representation of resilience and adaptability. These crustaceans are also celebrated for their ecological roles. Mangrove crabs are vital to maintaining ecological balance. They are crucial processors of mangrove leaf organic matter. By shredding and burying fallen leaves into their burrows, they prevent the loss of leaf litter due to tidal export and help retain nutrients within the habitat. The retained leaf litter is processed into fine particles, which enhances mineralization and is utilized by microbes, ultimately improving food availability for various organisms. Thus, mangrove crabs play a significant role in maintaining the health of mangrove ecosystems.

In addition to their ecological functions, crabs support nutrient cycling and soil aeration. Their burrowing activities aerate the soil, which promotes healthier root growth and improves soil structure. This natural soil aeration is essential for robust plant development and ensures that crops receive adequate nutrients and water. This process is particularly beneficial in mangrove ecosystems, where the rich soil supports diverse plant life and sustains agricultural productivity.

Crabs are unsung heroes in natural pest control. By feeding on insects and tiny critters, they help keep pest populations in check naturally. Culturally, they are more than just ecological assets; they play a vital role in sustainable farming, demonstrating how nature's little helpers contribute to healthier crops and more balanced ecosystems.



MANDUKAS

MESSENGERS *of* RAIN

संवत्सरं र्याना ब्राह्मणा व्रतचाररणि: ।
वाचं पजशन्यतजन्मतां प्र मण्डु का अवातर्दिः ॥
(Rigved - रिंग्वेद - 7.103.1)

in miniature traditional wedding attire with the entire village often taking part.

The Rigved (ऋग्वेद) highlights the significance of frogs, or Manduka (मंडूक), describing them as Brahmins who chant praises to Parjanya (पर्जन्य). Frogs thrive in various environments, symbolizing prosperity and fertility, with their croaking marking the onset of the monsoon season.

The Manduk Parinaya (मंडूक परिणय), or frog marriage, is a ritual practiced in several regions of Bharat, including Assam (Bhekuli Biya - भेकुली बिया), Uttar Pradesh, Karnataka, and Tripura (Bangar Biye - बांगर बिये). As prescribed in the Rigved, frogs can invoke Parjanya to bring rain, particularly during dry spells or delayed monsoons. The ceremony involves the symbolic marriage of two frogs, dressed

Another notable example of the frog's revered status is the Frog Temple in Oel, Uttar Pradesh (120 km from Lucknow). This 200-year-old temple, dedicated to Bhagwan Shiv (भगवान शिव), prominently features a large frog at its base. According to local legend, a Rajput noble named Bakhat Singh was blessed by a frog, which brought prosperity to him and his descendants.

Frogs are not only messengers of Varsha (वर्षा) but also safeguard our farms by controlling pests, contributing to ecological balance. Their vital roles highlight the deep cultural reverence for them in our Sampradaay (संप्रदाय).



INDIAN RED SAND BOA

FARM FRIENDLY SNAKES

In Bharat (भारत), snakes or sarpas (सर्प) are revered as sacred beings, embodying powerful symbolism and cultural significance. They are often associated with fertility, protection, and prosperity, playing prominent roles in various rituals, and folklore. Among the diverse snake species in Bharat, the Red Sand Boa is particularly notable. This non-venomous snake plays a crucial role in maintaining ecological balance, especially in agricultural settings. By regulating prey populations such as rodents, lizards, and other small animals on farms, the Red Sand Boa naturally protects stored grains and crops from pests.

The snake's burrowing behavior further enhances its ecological importance. As it tunnels through the earth, it aerates the soil, allowing air and water to penetrate deeper, which promotes

healthier root systems for crops. This burrowing also aids in nutrient cycling, breaking down organic matter and enriching the soil with essential nutrients, thus enhancing soil fertility.

The Red Sand Boa is considered a symbol of prosperity in many Indian communities. It is a critical component of the ecosystem, contributing significantly to agricultural sustainability while also embodying the deep symbolic connections that sarpas hold in Bharatiya Parampara (भारतीय परम्परा).



BEEs

PILLARS *of* AGRICULTURE

Bees are revered as divine assistants, embodying symbols of life, rebirth, and the cyclical nature of existence. Krishna, often called Madhav (माधव), meaning “the nectar-born one,” is associated with the bee as his symbol. Bhramari Devi (भ्रामरी देवी) is the Goddess of bees, who symbolizes strength, resilience, and the power of nature.

Honey bees play a crucial role in agriculture, not only as honey producers but also as vital pollinators. Their pollination activities are essential for the reproduction of many flowering plants, including those critical for human consumption. By pollinating a wide variety of plants, honey bees help sustain the health and diversity of ecosystems, which, in turn, support numerous animal species. The effective pollination provided by honey bees enhances both the yield and quality of crops, contributing to about one-third of the food we consume.

Honey, produced by bees, is one of the panchamritas (पञ्चमृत). In Ayurved (आयुर्वेद), honey is used to treat a variety of ailments, including digestive issues, respiratory problems, and wounds, due to its antimicrobial and healing properties.

Bees are the pillars of Krishi (कृषि), playing a vital role in agriculture by facilitating the pollination of crops, which is essential for the production of fruits, vegetables, and grains. Their diligent work ensures the health and diversity of plant species, directly impacting crop yield and quality, and supporting the entire ecosystem that relies on these plants for sustenance.

ARUDRA PURUGU

The BEAUTIFUL INSECTS of AASHADA

The Arudra Purugu (आरुद्र पुरुगु - *Trombidium grandissimum*) or red velvet mite, is a rare and striking insect celebrated for its vibrant red, velvet-like body. Known as Arudra Purugulu, these mites appear around the auspicious day of Arudra Karthe (आरुद्र कार्ते) in Aashadh Maas (आषाढ़ मास) of the Telugu calendar, which follows the first rains. Their emergence signifies the start of a new ecological phase.

The vivid red coloration of the Arudra Purugu serves both as a visual spectacle and as a warning to predators, indicating that the mites are unpalatable. Ecologically, these mites play a vital role in maintaining soil health and pest control. They help aerate the soil and contribute to decomposition,

enriching it with essential nutrients. Additionally, as predators of small insects and their eggs, they help manage pest populations, thereby supporting ecological balance.

Despite their striking appearance, red velvet mites are harmless to humans. They symbolize the crucial yet often overlooked roles that small creatures play in sustaining the environment, highlighting their importance in the broader ecological system.



ACKNOWLEDGEMENTS

We pay tribute to our great ancestors who, over thousands of years, conceived and preserved our rich Gyan Parampara (ज्ञान परम्परा), passing it down through generations. Koti Koti Vandana (कोटि-कोटि वंदना) to their profound wisdom! Our heartfelt gratitude extends to all the dedicated farmers across our nation who uphold the ancient Krishi Parampara (कृषि परम्परा), safeguarding this timeless knowledge.

We express our heartfelt gratitude to all the Bharatiyas (भारतीय) whose collective efforts in preserving and enriching our rich Parampara has allowed our culture to flourish and enlighten us.

Through Gyan Gunjan (ज्ञान गुंजन), we celebrate this heritage, ensuring that Bharat's (भारत) cultural legacy remains vibrant and enduring for future generations.

Gyan Gunjan is a tribute to Ek Bharat Shreshtha Bharat (एक भारत श्रेष्ठ भारत), honoring the harmonious blend of our nation's rich diversity and unity, which highlights the unique heritage, culture, customs, and traditions of each state, helping people appreciate India's vast diversity while fostering a shared sense of identity.

We extend our deepest gratitude to the Ministry of Education, Government of India, for its pivotal role in supporting this project.

Jai Hind (जय हिंद)!



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Anushka Mehta
Anusuh Rajendran
Arpit Sharma
Arushi Mittal
Asawari Bhagwat
Ashish Reddy
Ashna Mangaram
Ashok Kumar Mandal
Ashok Pandey
Ashok Pradhan
Ashwini Karthik
Ashwini Kumar Dixit
Avani Sabade
Ayush Saraf
Badrilal Sharma
Balaram Sahu
Barun Kumar Thakur
Besarbai
Bhagirath Tadwal
Bhagwatil Rajpurohit
Bhanvarlal Patel
Bharat
Bharat Chauhan
Bharath
Bhoomika C Aithala
Bhoomika C Aithala
Chaitanya Ravi
Chandabai Muvel
Chandar Das
Chandarsinh Patel
Chandra Kishore Mishra
Chandrashekhar
Charu Agarwal
Chetram Chhipa
Chhagansinh Tadwal
Chithramalyai Vijayanagaram
Chitra Dadheech
Daleepsinh Nayak
Dansinh Rajpoot
Dariyav Puri Goswami
Darshini Manjunath
Daulatsinh Nayak
Dayaram Dadaniya
Deep Narayan
Dharani Sarma
Dharmesh Vora
Dheeraj
Dheerendra
Dhiraj Kumar
Dhundhabai Muvel
Dikshita Kahtiwoda
Dinamani Bhagawati
Dipankar Bhattacharya
Drivu Lalu
Dulari Baai Sharma
Durga Prasad Mohapatra Das
Emelya
Esha Patel
Gajrajsinh Sisodiya
Gajsinh Mandloji
Ganeshi Baai Chhipa
Gautam Dhanjal
Gayathri Swaminathan
Gayatri Kovvuri
Girinayudu
Gopal Bhai Ji
Gopal Tiwari
Gurudayal
Gurushanth
Chandra Kishore Mishra
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Dharmesh Vora
Jahan Gangwani
Jamsinh Patel
Jannat Bhatia
Jatin Sardesai
Jenish Mutta
Jharana Rani Dhangadamajhi
Jitu Goswami
Jitu Goswami
Juhi Sidharth
Kailash Mahukur
Kalia Krishna Bagh
Kallu Nayak
Kamal
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Khilansinh Rajpoot
Khiume Kianglu
Khushbu Patel
Khushbu Sharma
Gyaneshwar Panda
Hagru Ram
Haldhar Nag
Hallu Ahirvar
Hardik Negandhi
Hardik Sheth
Hari Krishna Pandya
Krishna Prasad S
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Michelle Clement
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Muskan Nigam
N Vijaya Raghavi
Nalinikant Sharma
Namrata Karani
Khushi Arutla
Khushi G
Khushi Vora
Kinjalkini Gautam
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Krishnakant Mehta
Kshitij Sharma
Kuber Kanta Panda
Kuljot Kaur Dua
Kynsai Manik Syiem
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Ranya Maingi
Vidhi Maheshwari
Vidya Kumari Shimlakha
Vijay
Vijay Jardhari
Vijay Kumar
Vikash Kumar
Vinay
Vineet Tolia
Srinivas
Sruti Samhita Malladi
Subrata Samantara
Sai
Subu Choku
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Vijay Jardhari
Vijay Kumar
Vikash Kumar
Vinay
Vineet Tolia
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ABOUT

INDIAN KNOWLEDGE SYSTEMS DIVISION

Ministry of Education



Indian Knowledge Systems Division (IKS Division)
भारतीय ज्ञान परम्परा विभाग
(Bhāratiya Jñāna Paramparā Vibhāga)
भद्रायां सुमतो यतेम | क्रग्वेद (६१९१०)
[Let us strive for the wisdom that leads to the welfare of all]

The Indian Knowledge System comprises of Gyan (ज्ञान), Vigyan (विज्ञान), and Jeevan Darshan (जीवन दर्शन) of the people of Bharat continuously arising out of deep experience, observation, experimentation and rigorous analysis, with a tradition of validating and putting into practice in several areas including education, arts, administration, law, justice, health, manufacturing, and commerce, documented in classical and other languages of Bharat, and transmitted through textual, oral and artistic traditions.

The IKS Division of the Ministry of Education was established with a vision to promote interdisciplinary and transdisciplinary research on all aspects of IKS and preserve and disseminate IKS knowledge for further research, and societal applications. IKS Division's mission, vision and objectives are focused on the Panch Pran (पंच प्राण) in totality. Three of the five pledges (Panch Pran) are focused on removing any trace of the colonial mindset and taking pride in our legacy while strengthening

our unity. IKS Division's mission is completely focused on these three pledges while enhancing a sense of duty among the citizens for the goal of developed a Bharat.

The primary goal of the IKS division is to bridge the gap between the traditional Indian knowledge systems and contemporary knowledge systems. The objective, the vision of the IKS division is to rejuvenate and mainstream Indian knowledge systems for the contemporary world.



The vision of the IKS Division is to completely decolonize the Indian mind by generating interest and healthy critical reverence for the unbroken knowledge traditions of Bharat, for the welfare of the world. The objective of the IKS division is to rejuvenate and mainstream Indian knowledge systems for the contemporary world.

The IKS division focuses on three fundamental principles when undertaking any activity:

Parampara (परम्परा) - Embracing the rich heritage and lineage of Indian Knowledge Systems, the IKS division aims to uphold and carry forward the wisdom that has been passed down through generations. The goal is to highlight and nurture the continuous unbroken knowledge traditions of Bharat since time immemorial.

Drishti (दृष्टि) - The unique perspectives provided make this knowledge system 'Indian' and valuable to the world. Indian Knowledge Systems offer a unique perspective that holds immense value in addressing contemporary and emerging challenges. By combining traditional wisdom with modern knowledge, we can find holistic solutions that transcend the limitations of either approach.

Prayojan (प्रयोजन) - The practical utility of the Indian Knowledge System to solve current and emerging problems of Indian and the world. To ensure the practicality and impact of IKS projects, emphasis is placed on developing knowledge systems that are relevant to the present. By focusing on areas of societal importance, such as health, technology, and social well-being, IKS projects strive to make a tangible difference.

The IKS Division supports and funds the establishment of IKS centres, and interdisciplinary and transdisciplinary research in IKS. The IKS Division specially conducts internship programs for undergraduate students in addition to conducting Faculty-Development Programs, Workshops, Text Mining and Documentation Projects, and many outreach activities in partnership with other institutions.

ABOUT

CENTRE FOR KNOWLEDGE ALTERNATIVES



The Centre for Knowledge Alternatives at FLAME University in Pune aims to develop relevant research products, that lie at the intersection of public policy and culture. As its flagship project, we are documenting district-level cultures and statistics of Bharat (भारत). The idea is to produce local, decentralized accounts of cultural attributes as well as developmental challenges and opportunities of Bharat, in a website, open freely for all, which continues to enrich over time, through collective wisdom of the people about their own lands. This is then, an effort to build a working encyclopedia of districts of Bharat.

One part of the project helps curate local cultures. We do this through the eyes of the local communities, and their experiences. Not theory. As Werner Heisenberg (noted theoretical physicist) would say, we only see that part of reality which is exposed to our questions. We go to search for cultures without any question in mind.

Indeed, few societies in the world have inspired the sheer volume of nonfiction dedicated to understanding themselves as Bharat has. Yet, what makes it all so interesting is that these ‘enigmatic’ visions of Bharat stand in stark contrast with the effortlessness of everyday experience of Bharatiyas who can get by in their daily lives so easily.

The Centre for Knowledge Alternatives is a fresh attempt in understanding Bharat. It aims to understand the country through its experiences rather than theories. In fact, we even shed the assumption that there is a theory somewhere, waiting to be found. Our logo, signifying the story of blind men and elephant is a floating signifier of this concept.

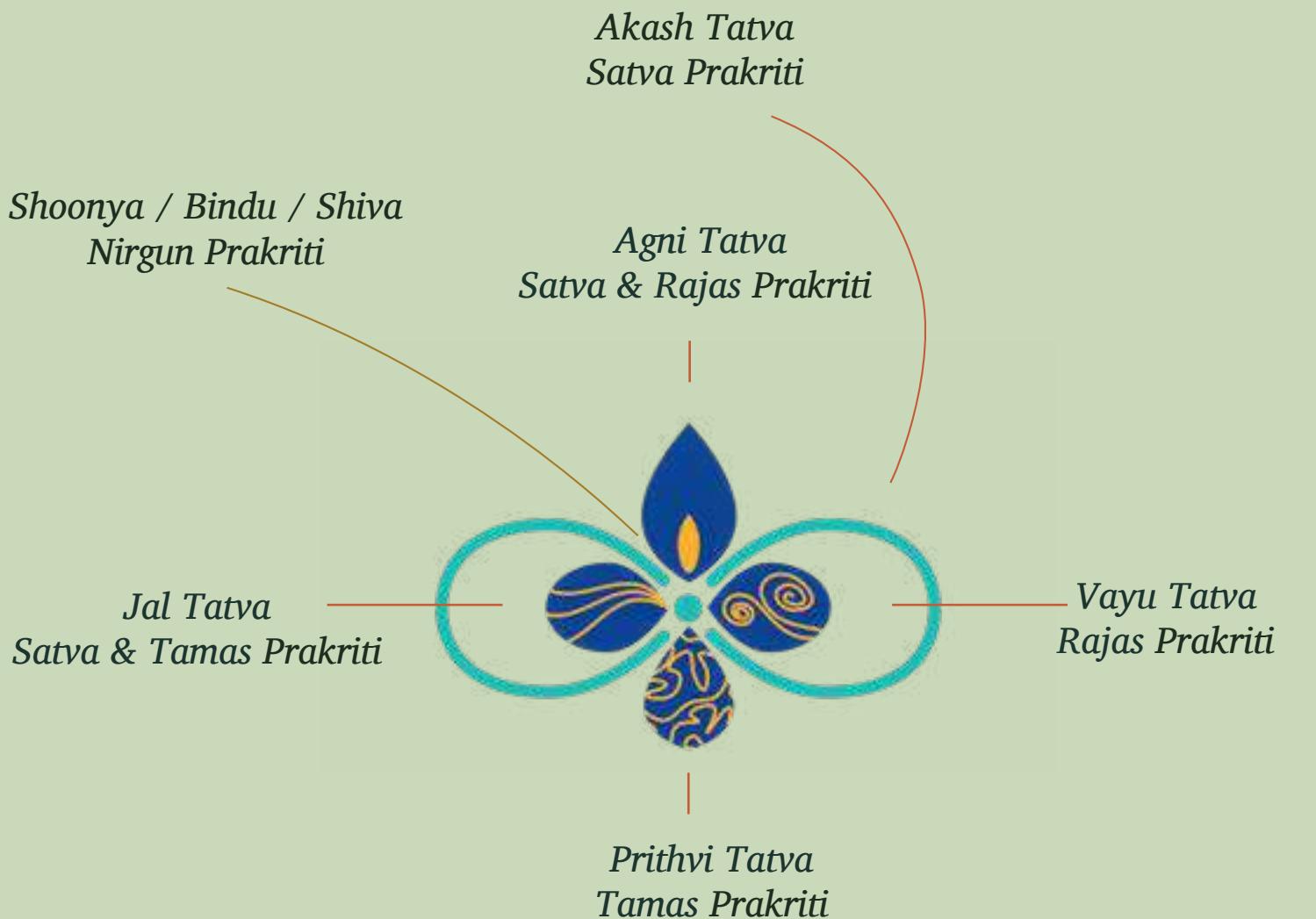


LOGO DESIGN CONCEPT



तस्माद्वा एतस्मात् आत्मनः आकाशः सम्भूतः । आकाशाद्वायुः । वायोरग्निः । अग्नेरापः ।
अद्व्यः पृथिवी । पृथिव्या ओषधयः । ओषधीभ्योऽन्नम् । अन्नात् पुरुषः ॥

- तैत्तिरीयोपनिषत् २-१-२



It all begins from nothingness, Bindu (बिन्दु). From Bindu comes vibration, Pranav (प्रणव - pure sound). From that Pranav comes Akash (आकाश - sky; hearing): from Akash comes Vayu (वायु - air; hearing & touch): from Vayu comes Agni (अग्नि - fire; hearing, touch & visual): from Agni comes Jal (जल - water; hearing, touch, visual, taste & smell): from Jal comes Prithvi (पृथ्वी - earth; hearing, touch, visual, taste & smell): from Prithvi comes Oshadhibhyo annam (ओषधिभ्यो अन्नम्), vegetation: from Oshadhibhyo annam comes Annat purush (अन्नात्-पुरुष), the insects, animals & humans.

- **Pushpa** (पुष्पा - Flower) - Blossoming of energy to inspire responsibility of beauty and one of the many manifestations of Nature, the one source.
- **Chatur Disha** (चतुर दिशा) – Uttar (उत्तर), Dakshin (दक्षिण), Poorva (पूर्व), Pashchim (पश्चिम) inspiring holistic awareness of the world.
- **Shoonya** (शून्य - nothingness) and Anant (अनंत - infinite) being the same - Source of creation is depicted by the two brackets that cross behind the flower form (invisible infinity).
- **Panch Tatva** (पंच तत्व) – the foundation of the whole creation – Akash (the Infinite), Vayu (the Perpetual Force), Agni (the Creative Transforming Energy), Jal (the State of Matter in Constant Flow), and Prithvi (the Matter).
- **Trigun** – Satva (सत्त्व), Rajas (रजस) and Tamas (तमस), the dynamic nature of the whole creation.





Nirakaar
Formless



Akaar
Form



Sakaar
Transformed



GYAN
GUNJAN



GYAN
GUNJAN



GYAN
GUNJAN



GYAN GUNJAN FIVE PHILOSOPHIES



भारत की प्रकृति और कृषि परंपराएँ

TIES *to the* EARTH:
NATURE & AGRICULTURAL TRADITIONS *of* BHARAT



परिवार, समुदाय और सामाजिक व्यवस्था

ROOTS *of* CULTURE:
FAMILIES, COMMUNITIES & SOCIAL STRUCTURE



ज्ञान और शिक्षा

KNOWLEDGE & LEARNING:
PRESERVING BHARATIYA SHIKSHA ACROSS GENERATIONS



कला धरोहर एवं सांस्कृतिक वैभव

EXPRESSIONS & CRAFTS *of* BHARAT:
ART HERITAGE & CULTURAL RICHNESS



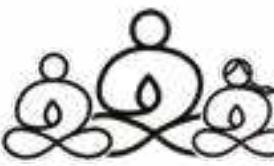
ग्राम व्यवस्था

VILLAGE GOVERNANCE:
ECONOMY, SOCIETY & LOCAL ADMINISTRATION



All the philosophy logos are picking up the flame element from the Gyan Gunjan.

This logo has 3 Tulsi (तुलसी) leaves. Tulsi is highly auspicious in Bharat (भारत) and is known to have very potent qualities for good health. 3 leaves depicts various trinities of Bharatiya (भारतीय) culture: Brahma Vishnu Mahesh (ब्रह्मा विष्णु महेश), Bhut Vartamaan Bhavishya (भूत वर्तमान भविष्य), Vat Pitta Kaph (वात पित्त कफ), Satva Rajas Tamas (सत्त्व रजस तमस), Niraakaar Aakaar Saakaar (निराकार आकार साकार) and so on. Leaves sprouting from a seed that is connected through the soil with the whole. The yellow circle depicts Surya (सूर्य), the potent energy for life. Soil is the connection of life with the rest of the universe.



This logo has 3 figures sitting in Dhyan Mudra (ध्यान मुद्रा). Central larger figure depicts the Guru (गुरु) while the 2 smaller, one female and one male figures depict the shishyas (शिष्य). They all have the flame element depicting the ultimate knowledge but the process of finding happens with guru imparting the knowledge to the shishyas. Bharatiya (भारतीय) way of teaching and learning creates possibilities for shishyas to be Guru and Guru to be shishya very spontaneously.



This logo has the same flame with the Shakti Tilak (शक्ति तिळक) within. Here the 3 elements inside the flame symbol depict the creative energy rising from the bottom to the top. The lowest dot is the source, muladhar (मूलाधार), the semi-circle is the transition of the energy and the larger yellow dot depicts the realised energy, the creation. The color black denotes the color of infinite space, kaali (काली), adishakti (आदिशक्ति), the dark matter in the universe, aakaash tatva (आकाश तत्त्व) being the carrier of ultimate information. Devi tatva (देवी तत्त्व), the feminine is known to be the source of all creativity.



The flame in this logo depicts the childlike innocence being carried and nurtured by many unknown hands. This village, jaati (जाति), kul (कुल), samudaay (समुदाय) are all extensions of garbh (गर्भ), the womb. They provide care, nurture, protection, comfort, attention, challenges: the much needed elements for a wholesome growth of all beings that are connected with it. It is said that it takes a whole village to bring up a child.

