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Exotic Food and Beverages of the Limbus in the Himalayas and Sub-Himalayan Region

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Abstract

The diverse and intriguing world of exotic food and beverages within the Limbu community, an indigenous group, of the Himalayan and Sub-Himalayan regions boast a rich culinary heritage deeply entwined with their cultural roots and local ecosystems. From fermented soybean delicacies like Kinema to various traditional dishes, the article delves into the unique flavours and preparation methods that define Limbu cuisine. Additionally, traditional beverages like Tongba and Jaar add a distinctive touch to the exploration of this culinary landscape. The discussion extends to the broader context of preserving and celebrating indigenous food traditions in the face of modern influences. Through this exploration, readers gain insights into the exotic gastronomic treasures of the Limbu people, highlighting the importance of cultural preservation and appreciation in the realm of diverse global cuisines.

Keywords: Traditional, Food, Culture, Limbu, Himalayas, Globalisation

Introduction

On the Global plane, anthropologists have long been interested in food, foodways, and nutrition. Their contribution in this area has been substantial. The International Conference on Ethnological and Food Research has tried to bring out various food habits in different parts of the world (Doshi, 1995: 14) food is a cultural identity of the people living in geographical and cultural boundaries and if we think of geography, Himalayas offer a variety of exotic foods. The region is rich in flora and fauna, and the local people rely on wild food plants for their sustenance. Some of the wild food plants commonly used in ethnic food preparation include Macrotyloma uniflorum (*Gahat)*, Urtica dioica *(Sisnu),* Rhododendron campanulatum *(Guras)*, Eleusine

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coracana *(kodo)*, Bambusa vulgaris *(Tama)*, and Musa acuminata *(Bunga)* (Bhattacharyya, Thattantavide and Kumar, 2023). One specific plant, Hippophae rhamnoides *(Dale Chuk),* commonly known as Seabuckthorn, is consumed by the Himalayan communities, and is considered a superfood due to its high nutritional and medicinal properties (Kumar et al., 2023). The region is also known for its rich mushroom microbiota, with many edible species such as Tuber, Morchella, and Pleurotus being regularly collected by the local inhabitants (Atri et al., 2019). The Gaddi tribes of Himachal Pradesh have traditional knowledge of wild edible plants, with 49 species belonging to 24 families being commonly used as vegetables, fruits, spices, and chutney (Thakur, Singh and Puri, 2020).

Nestled in the verdant hills of the Himalayan and Sub-Himalayan regions, the Limbus stand as a resilient and distinct indigenous community with a rich cultural tapestry living in the Himalayas, specifically in regions such as Darjeeling, Sikkim and surrounding states and nations (Sagant, 2008). Revered for their unique traditions, the Limbus have carved a niche for themselves in the diverse mosaic of ethnic groups inhabiting this majestic landscape. Rooted in ancient history, the Limbu people possess a heritage characterized by a harmonious blend of folklore, language, food and rituals that are as captivating as the breathtaking landscapes they call home. They have their own language called Yakthungbapan, which belongs to the Tibeto-Burman family (Edingo, 2007). As stewards of their environment, the Limbus have not only adapted to the rugged topography but have also cultivated a sustainable way of life deeply connected to the natural bounty surrounding them. This introduction sets the stage to explore the unique customs, vibrant traditions, and the profound connection between the Limbus and their Himalayan homelands. The Limbus have faced significant changes in their way of life, including the adoption of Hinduism and the transformation of their traditionally inalienable tribal lands into private property (Sunderraj, Viswanathan and Balachandar, 1991). Darjeeling and Kalimpong, located in the Himalayas and North Bengal, have played a significant role as transcultural hubs of a hybrid modernity. These towns have served as crossroads for empires, ethnicities, religions, and cultural and economic mobilities. They have witnessed diverse cultural encounters, trade and commerce, and the establishment of tea plantation industries, contributing to cultural pluralism in the region (Ray and Chowdhury, 2022:16).

Methodology

The research endeavoured to meticulously explore the exotic culinary traditions of the Limbu community. Employing an ethnographic approach, the investigation seamlessly integrated participant observation, in-depth interviews, and community engagement.

The picturesque landscapes served as a backdrop to immersive experiences within local households, where the intricate art of preparing traditional Limbu recipes unfolded. Visual and audio documentation techniques were judiciously employed to encapsulate the visual allure of communal dining practices and the artful deployment of traditional utensils. Dialogues with Limbu individuals, ranging from accomplished chefs to venerable elders, contributed to a rich tapestry of narratives elucidating the cultural import of each dish. In addition to the qualitative insights, structured surveys were employed to delve into the quantitative facets, exposing discernible patterns in food preferences and shedding light on the ramifications of environmental shifts on culinary practices. Ethical considerations remained paramount throughout, ensuring the research process honoured the cultural sensitivities of the Limbu community and upheld their profound connection to the land.

Exotic Food and Beverages Enjoyed by the Limbus

Research proves that food consumed by the people does not have any scientific basis they mostly go by folk beliefs and cultural consumption (Doshi, 1995: 20). The traditional cuisine reflects the local ingredients and cultural practices of the region. While it is important to note that the term "exotic" can be subjective and may carry cultural connotations. Exotic food typically refers to cuisine that is unusual, rare, or distinct from the everyday fare of a particular region or culture. These foods often feature unique ingredients, flavours, and preparation methods, setting them apart from more common or familiar dishes.

Exotic foods can vary widely based on cultural, geographical, and personal perspectives. They might include ingredients not commonly consumed in a particular society, unconventional cooking techniques, or dishes associated with specific traditions or ceremonies. The term "exotic" is subjective and can evoke a sense of adventure and novelty, enticing individuals to explore and appreciate diverse culinary experiences. Examples of exotic foods might range from uncommon fruits and vegetables to dishes featuring rare meats, insects, or preparations with distinct cultural significance. Here is a list of some of the exotic foods and drinks consumed by the Limbus of the Himalayas and Sub-Himalayas.

***Paa* (*Frog*):** This species is restricted to the Himalayas and Sub-Himalayas and is found at an elevation of 1000 to over 2400 m asl referred to locally as "Paa," this uncommon frog species holds significance as a traditional remedy for alleviating body aches and severe fever. The amphibian is utilized in culinary practices, where it can be incorporated into dishes such as curry or soup. This unique use of the frog highlights

its dual role as both a source of sustenance and a medicinal resource within the community. The consumption of Paa is deeply rooted in cultural traditions, reflecting a symbiotic relationship between local dietary practices and healthcare remedies. Sometimes it is kept to dry in the sun to preserve for future consumption which can be eaten even after six months, locally the dried frog is known as "Sukuti" meaning dried meat (any dried substance is commonly known as Sukuti). The intriguing intersection of traditional knowledge, culinary customs, and medicinal applications associated with the consumption of this rare frog species is also associated with a few of the tribal communities within the Nepali fold in the Himalayas and Sub-Himalayas. It is usually caught during the night because the *paa* gets attracted towards the light during the night which makes it easy to catch with bare hands or spares made from wood or a small pointed iron head attached as a spearhead makes it easy to catch this exotic amphibian which is very much enjoyed by the tribals if Himalayas and Sub-Himalayas.

A man carrying *paa* after catching during the night

***Kinema* (*Fermented Soybean*):** Kinema is a fermented soybean food consumed in the Eastern Himalayan regions of North East India, Nepal, a nd Bhutan. It is traditionally made using Bacillus spp. (rod-shaped bacteria). The fermentation process of kinema involves the production of various metabolites and bioactive compounds with potential health benefits. The dominant bacteria in kinema belong to the phylum Firmicutes, particularly Bacillus subtilis, Bacillus licheniformis, and Bacillus amyloliquefaciens (Kharnaior and Tamang, 2022; Sanjukta, Sahoo and Rai, 2021). These bacteria contribute to the formation of targeted and non-targeted metabolites, including compounds with antimicrobial, anticancer, anti-HIV, and immunomodulatory effects (Kumar et

Kinema, fermented soybean dried and ready for consumption

al., 2019). The preparation of kinema involves soaking soybeans, fermenting them, and then sun-drying the mixture. This fermentation process results in a product with a distinct flavour and texture. Kinema is rich in protein and is often used as a key ingredient in various dishes. Commonly consumed in the Himalayan region by various ethnic groups and the Limbus the kinema is versatile and can be incorporated into soups, stews, and other traditional recipes. Its unique taste, nutritional value, and connection to local culinary heritage make kinema a notable element in the diverse array of foods found in the Himalayan region. The fermentation of black soybeans using Bacillus subtilis (bacteria) as a starter culture enhances the antioxidant activity of the product. Additionally, the Bacillus isolate LK5.4 from kinema produces a lipopeptide biosurfactant, surfactin, which has plant growth-promoting properties (Chukeatirote, Eungwanichayapant and Kanghae, 2017). Overall, kinema is a rich source of beneficial bacteria and bioactive compounds, making it a potential functional food with various health-promoting properties.

***Sisnu* (*Nettle*):** Sisnu, also known as nettle leaf *Urtica dioica*, is an herbaceous perennial plant that has been traditionally used in various ways. It has been consumed as a food preservative, and its young leaves can be used to make curries, herbal soups, and sour soups (Mishra and Kharel, 2010). Sisnu is highly appreciated by the communities residing in the Himalayan a nd Sub-Himalayan regions, particularly among the Limbu people. Virtually every part of this plant possesses medicinal properties. The roots, for instance, are utilized in the treatment of bone fractures; they are processed into a paste and applied to the affected area. Moreover, the leaves, shoots, and flowers of the plant are incorporated into various culinary preparations, predominantly soups and occasionally as a dried side dish served with rice. Characterized by a distinctive flavour unfamiliar to our taste buds, *sisnu* soup exhibits a unique viscosity, rendering it effortlessly consumable and easy to swallow. The integration of sisnu into both medicinal and culinary practices underscores its multifaceted importance within the local communities of the Himalayan region.

Picture of sisnu from a local market

Urtica dioica has also been explored for its medicinal properties. It has been found to have therapeutic benefits, including anticancer effects (Nafeh et al., 2023). The plant contains a variety of phytochemicals, such as phenolic compounds, sterols, fatty acids, alkaloids, terpenoids, flavonoids, and lignans, which contribute to its pharmacological activities (Vijaykumar, 2018). Chemical analyses have shown that sisnu has high protein and potassium content, making it a valuable addition to the diet (Subba and Pradhan, 2022). Overall, *sisnu* nettle leaf (Urtica dioica) has a long history of traditional use and potential health benefits, making it an interesting plant for further research and exploration.

***Gundruk* (*Fermented Radish Leaves*):** Gundruk is a traditional fermented food consumed by the communities in the Himalayas and Sub-Himalayas. It is prepared from fresh leaves of local vegetables such as Rayo-sag, mustard, radish leaves and cauliflower. The fermentation process of *gundruk* involves anaerobic fermentation of *Brassica juncea* leaves for sixteen days. During fermentation, the viable cell count of lactic acid bacteria increases initially and then remains constant (Ghimire, Sah and Poudel, 2020). Gundruk is fermented leafy greens, typically mustard greens. The leaves are harvested, dried, and then fermented. It is a common side dish and can be used in soups or stews. The preparation process involves radish leaves undergoing a systematic process that includes initial treatments such as cleaning and washing. Subsequently, the leaves are exposed to sunlight for a day to induce wilting, followed by crushing and soaking in lukewarm water for a brief period. The crushed leaves are then meticulously arranged in jars or tightly packed plastic, layered between two or three plastic sheets. Pressure is applied to expel excess water before hermetically sealing the container. The fermentation process takes place at a warm temperature over twenty-five degrees Celsius for a week.

Fermented and dried for future consumption

Gundruk has been found to have strong antioxidant activity, which may contribute to its perceived health benefits (Mitra, Mitra and Ghosh, 2018) Fermented foods like *gundruk* have been part of the nutrition culture worldwide and have gained increased interest due to their antioxidant, therapeutic, and immunological characteristics (Karacil and Tek, 2013).

***Tongba*:** Beverages are two types, alcoholic and non-alcoholic. Usually, millet beverages are made by fermentation using microorganisms such as yeasts, lactic acid bacteria, and acetic acid bacteria. Dry malt and germinated millet are the main components of these beverages to enhance the amylolytic enzymes for starch degradation (Chamarthy and Tonapi, 2021). Though not a food item, the Limbu people have a traditional alcoholic beverage called Tongba. It is made by fermenting millet and is consumed in a distinctive wooden vessel called a Tongba. Tongba is a millet-based fermented drink consumed by various communities in the Himalayas and surrounding regions. It is valued for its ethnomedicinal properties and has therapeutic effects against high-altitude illnesses. The metabolite profiling of tongba revealed the presence of bioactive components such as glycosides, amino acids, fatty acids, terpenoids, and phenols. The detection of bioactive ethyl-α-D-glucopyranoside and cyclo(L-Leu-L-Pro) confirmed the therapeutic importance of tongba in high-altitude illnesses. The metabolomic similarities between tongba and the Japanese beverage sake were also observed (Majumder et al., 2022).

Tongba fermented millets in a bamboo vessel with bamboo straw (pipsing)

Tongba, a revered traditional alcoholic beverage prominent in the Himalayan region, particularly among communities like the Limbus, undergoes a meticulous preparation process deeply ingrained in local cultural practices. Commencing with the malting of grains, typically finger millet or barley, the germinated seeds are dried and roasted. The resulting malted grains are then combined with water to form a mash, to which a yeast or starter culture is introduced to initiate fermentation. After allowing the mash to ferment for a specific duration, the liquid is packaged into cylindrical vessels, often constructed from wood or bamboo. Serving Tongba involves the utilization of a unique vessel, the "tongba pitcher" or "yangben," where hot water is poured over the fermented liquid. The communal aspect of Tongba is heightened as it is sipped through a special straw known as a "pipsing." This elaborate process not only produces a distinctive beverage but also encapsulates the cultural heritage of the Himalayan

communities, fostering shared traditions and community bonds through the consumption of this time-honoured libation.

***Jaar*:** As an integral part of Limbu culture, Jaar stands out as a traditional beverage that reflects both the culinary heritage and social customs of the Limbu people, primarily residing in the Himalayan region. This indigenous drink is crafted through a meticulous process ingrained in centuries-old practices. Jaar is typically made from locally available grains, with millet and rice being common choices. The preparation involves cleaning and soaking the grains before subjecting them to a germination process, which converts starches into fermentable sugars. Following this, the grains are mixed with water to form a mash, and the addition of a yeast culture initiates the fermentation process. The mash is left to ferment for a specific duration, allowing the yeast to convert sugars into alcohol. The fermented liquid is then strained, and the resulting beverage is Jaar.

A Limbu woman extracting *jaar* liquid from the fermented grains

Its flavour profile varies, but it often carries a unique tang with subtle undertones contributed by the fermentation process. Jaar is enjoyed not only for its taste but also for its cultural significance, often being a part of celebratory occasions, birth, marriage, death, and community gatherings. Served in communal settings, Jaar embodies the spirit of togetherness within the Limbu community. The tradition of making and sharing Jaar not only adds a distinct culinary facet to Limbu culture but also serves as a reminder of the deep-rooted connections between the people and the bountiful landscapes they inhabit. As a beverage that transcends mere sustenance, Jaar is a symbol of shared heritage and a testament to the cultural richness of the Limbu people in the Himalayan region.

Challenges and Efforts Made to Preserve Food Heritage in the Face of Modernisation and Globalisation

Efforts to preserve food heritage in the face of modernization and globalization are being made (Sekine, 2022). The preservation of food heritage in the wake of modernization and globalization presents a complex landscape fraught with challenges

and ongoing efforts to safeguard culinary traditions. As societies increasingly embrace modern lifestyles and global interconnectedness, traditional food practices are susceptible to erosion and homogenization. One of the primary challenges stems from the changing dietary preferences influenced by the availability of processed and fast foods. This shift not only poses health concerns but also undermines the uniqueness of traditional cuisines. Efforts to counter these challenges are multifaceted. Educational initiatives, culinary training programs, and cultural awareness campaigns play a crucial role in instilling pride and appreciation for traditional foods. Local communities, often the guardians of culinary heritage, are actively engaged in documenting and transmitting traditional recipes, cooking techniques, and cultural significance to younger generations.

The heritagisation of food has the potential to achieve social and cultural sustainability objectives, but there are risks involved. These include the omission of tangible and intangible elements of the local food system and the exclusion of key stakeholders from the recognition and institutionalization of food heritage (Cross and Giblin, 2022). Moreover, collaborations between communities, chefs, researchers, and policymakers foster a holistic approach to preserving food heritage. Embracing innovation without compromising authenticity, such as incorporating traditional ingredients into contemporary culinary trends, can breathe new life into traditional cuisines and make them relevant to evolving tastes.

Observation and Concluding Remarks

The topic of modernization, globalization, and food heritage preservation is a complex one, with various challenges and noteworthy efforts to consider. The aforementioned discourse provides valuable insight into the intricacies of these issues, highlighting the tangible obstacles that stand in the way of preserving traditional culinary practices in a rapidly changing world. Despite these challenges, there are numerous commendable efforts underway to safeguard the cultural significance and historical importance of traditional foods and cooking methods. Overall, this topic requires a nuanced approach that balances the benefits of modernization and globalization with the profound value of preserving cultural heritage.

The culinary traditions of communities like the Limbus in the Himalayan region are characterized by traditional exotic foods and drinks, such as Kinema, Sisnu, and the indigenous preparation of Tongba. However, these emblematic foods and drinks face a significant risk of losing their authenticity in light of changing dietary patterns and the growing influence of globalized culinary trends. As a result, it is crucial to take measures to preserve the authenticity of these culinary traditions while also embracing

the benefits that globalization can offer. Failure to do so could lead to a loss of cultural heritage and diversity, which could have far-reaching consequences for these communities and their way of life.

Beverages such as Jaar are not only a treat for the senses, but they also represent a rich cultural heritage that brings people together. The popularity of these traditional drinks is sustained by a combination of factors such as educational programs, grassroots documentation, and government support for local agriculture and culinary tourism. Through educational initiatives, communities can learn about the history and significance of these beverages and the cultural practices surrounding them. This knowledge fosters a sense of belonging and pride in one's cultural identity, which in turn strengthens community bonds. Grassroots documentation efforts by local communities also play a crucial role in preserving the recipes and techniques used to make these drinks. By documenting their cultural practices, communities ensure that their traditions are passed down to future generations. Finally, governmental support for local agriculture and culinary tourism can help sustain the production and distribution of these traditional drinks. By investing in local agriculture, governments can provide farmers with the resources they need to grow the crops necessary for making these beverages. Additionally, by promoting culinary tourism, governments can increase the demand for these traditional drinks and help support local communities that rely on them. Overall, the resilience of traditional drinks like Jaar is a testament to the power of cultural heritage and the importance of preserving it for future generations.

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