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Cultural Significance And Preparation Of Black Rice Beer (Poka Opo) Among The Galo Tribe Of Nari, Lower Siang District, Arunachal Pradesh

Bhaskar Das*

Department of Anthropology, DHSK College (Autonomous), Dibrugarh, Assam

*Corresponding Address: 2drdas@gmail.com

Abstract

The Galo tribe of Arunachal Pradesh, inhabiting West Siang, East Siang, and Lower Siang districts, sustains a rich tradition of rice beer (Opo) brewing that is integral to their social and ritual life. This study documents the indigenous methods of preparing black rice beer (Poka Opo) in Nari village and explores its cultural significance through a qualitative ethnographic approach, with data collected via interviews and analyzed thematically. The Galos prepare two forms of Opo—black (Poka) and white (Nyogin)—with Poka Opo, prepared exclusively by women, holding sacred prestige within the Donyi-Polo society as a symbol of unity, ritual continuity, and hospitality, while Nyogin Opo is consumed individually with limited ceremonial value. The fermentation starter (Opop), derived from medicinal plants such as *Clerodendrum colebrookianum* and *Scoparia dulcis*, highlights the community's ecological knowledge. Beyond its role as a beverage, Poka Opo embodies the intricate relationship between culture, ecology, and indigenous knowledge systems, functioning as a ritual medium and repository of ethnobotanical wisdom, while its persistence underscores the resilience of traditional practices and their enduring relevance in safeguarding cultural identity.

Keywords: *Arunachal Pradesh, Black rice beer (Poka Opo), Galo tribe, Nari village, Traditional fermentation*

Introduction

Indigenous communities across the world rely on traditional fermented beverages which form an important component of the cultural identity, ritual life and subsistence economy. Fermentation is one of the oldest biotechnological practices developed by human societies, enabling the preservation of food resources while also enhancing their nutritional and sensory qualities [I]. Fermented beverages prepared from cereals play an important role in social exchange, ritual activities and community bonding particularly among the tribal communities in Asia [II]. Similarly, in Northeast India also, the preparation and consumption of traditional rice beer is found to be common among the ethnic communities and it constitute an integral part of the socio-cultural and ritual framework [III, IV]. For them, rice beer is often linked with hospitality, kinship relations, life cycle ceremonies, religious practices and agricultural rituals and festivals [II] and serve as a symbol of cultural identity and continuity among indigenous populations [V, VI].

Similarly, among the indigenous communities of Arunachal Pradesh like the Adi, Galo, Nyshi, Apatani, Nocte, Monpa etc, rice beer holds significant ceremonial value [VII]. The Galos are a prominent tribe of Arunachal Pradesh and they, besides the Adi, Nyishi, Apatani, Tagin and the Mising, belong to the Abo-Tani group of Tibeto-Burman speaking populations. Traditionally the Galo inhabit several districts of Arunachal Pradesh including West Siang, East Siang and Lower Siang. They are strong believers of the indigenous Donyi-Polo faith which worships the Sun and the Moon as divine entities [VIII]. Among them, traditional rice beer (Opo) plays a vital role in rituals, festivals, community gatherings, and ceremonial feasts. Despite its cultural significance, detailed ethnographic documentation of the preparation techniques and socio-cultural roles of traditional rice beer among the Galo community is found to be limited [VII, IX]. In one study, Dabi & John (2017) explored the cultural and symbolic importance of traditional rice beer (Opo) of the Galo tribe of the East Siang District, Arunachal Pradesh.

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Documenting indigenous knowledge related to fermentation practices is important not only for understanding traditional food systems but also for preserving cultural heritage that may gradually decline under the influence of modernization. The present study thereby aims to document the traditional methods involved in the preparation of black rice beer (Poka Opo) among the Galo people of Nari village in the Lower Siang district of Arunachal Pradesh. In addition, the study seeks to examine the continuing cultural significance of this traditional beverage within the social and ritual life of the Galo community of Nari village which is adjacent to villages of other communities in Assam.

Materials and Methods

Study Area

The present study was conducted in Nari village located in the Lower Siang district of Arunachal Pradesh. The village is approximately 100 km from Dibrugarh city and predominantly inhabited by the Galo tribe, one of the major indigenous communities of the region. The area largely experiences a subtropical climate with abundant rainfall, fertile soil and extensive paddy cultivation, which forms the staple food and primary agricultural activity of the local population. Besides, they also carry out jhum cultivation on the hills. The socio-cultural life of the Galo community is closely associated with agricultural practices and traditional religious beliefs under the Donyi-Polo faith.

Research Design

The study adopted a qualitative ethnographic research design in order to document indigenous knowledge related to the preparation and cultural use of traditional rice beer, locally called Opo.

Data Collection

Primary data were collected through fieldwork using a combination of ethnographic techniques including case studies, semi-structured interviews and informal discussions with community members.

Ethical Considerations

Prior informed consent was obtained from all participants before conducting interviews. The purpose of the study was clearly explained to the participants and their participation was voluntary. Local cultural norms and community sensitivities were respected throughout the research work.

Data Analysis

The collected data were analyzed qualitatively using descriptive and thematic approaches.

Results

The Galos of Nari village prepares two varieties of rice beer (Opo) namely, black (Poka) and white (Nyogin) Opo, each serving distinct purposes. Poka Opo, popularly known as Kala Apong is considered sacred and prestigious and it plays a crucial role in every social and religious occasion such as festivals, marriages, community gatherings and other celebrations within the Donyi-Polo society. It symbolizes hospitality and unity, and no event is believed to be complete without its presence. During clan conferences of the Galo community, they often brew large quantities of Poka Opo, sometimes exceeding 20 quintals, reflecting its cultural importance. In contrast, Nyogin Opo is consumed casually as an individual drink and holds little ceremonial value.

According to the Galo, people who are followers of the Donyi-polo faith in every nook and corner of Arunachal Pradesh use and consider black rice beer as very sacred, although the local term used for the same among the communities may be different. For instance, the Galo refer to it as Poka Opo. They believe that Abo Tani was their forefather and had six sons namely Galo, Adi, Tagin, Nishi, Apatani, and the Mising.

Among the Galo, Opo is strictly prepared by the womenfolk only. For preparation of Poka Opo, they carry out dehusking of the paddy followed by boiling of rice. The cooked rice is spread on an open plate made of packing leaves (*Phrynium pubinerve*), locally known as Ekkam, and allowed to cool. The paddy husk (Ampe) is burned until it becomes black in colour. The black Ampe is then mixed with the boiled rice as per requirement. Both the Ampe and boiled rice are mixed vigorously and then kept on Ekkam for cooling.

After that they mix starter cake (Opop) with the rice and husk mixture. The Opop is essential for fermentation and it is made from local medicinal plants namely east Indian glory bower (*Clerodendrum colebrookianum*), locally called as Oyin and sweet broom weed (*Scoparia dulcis*). Both the plants are dried and finely grinded before it is mixed with rice flour. The Opop is mixed with the rice and husk mixture properly. They keep the mixture in a bucket or plastic bags in an airtight manner. However, in present times, the Galo purchase Opop from local markets as it is easily available and sold by people from other communities. For fermentation, the mixture is kept for 1-3 months depending on desired concentration of the Poka Opo. After fermentation, filtering is carried out using a large bamboo cone (Borju) with packing leaves (*Phrynium pubinerve*) placed around the Borju. Large quantity of fermented mixture is put on the Borju and fully boiled water is poured over it. The tasty Poka Opo then filters out through the Borju.

The Galo people prepare another traditional rice beer which is called Nyogin Opo but this is consumed casually as an individual drink only and holds little ceremonial value in their Donyi-polo society. Nyogin Opo is prepared from rice only as paddy husk (Ampe) is not required for the preparation of this drink. Rest of the procedure is same as that of Poka Opo. However, the fermentation time required for Nyogin Opo is less as they keep the mixture for a minimum of 15 days.

The Galos consider Poka Opo very sacred and prestigious as it plays a very important role in their lives. For any activity related to the customs and traditions of the Galo people, Poka Opo is very significant. Before any important occasion like marriage, birth and death anniversary, or any community festival, be it small or big, it is mandatory for them to decide how much quantity of Poka Opo needs to be prepared. During festivals, and other special occasions they welcome guest with Poka Opo. They even believe that if the colour or taste of Poka Opo changes, it is a sign of bad omen for their family or community. Although modern beverages like beer and whisky are increasingly used today, traditional Poka Opo remains central during major festivals such as Mopin, where the use of commercial liquors is discouraged.

Discussion

Among the Galo community of Lower Siang district of Arunachal Pradesh, the preparation and consumption of Poka Opo reflects a complex interplay of ecology, culture and indigenous knowledge systems. Several studies have reported that fermented beverages across Northeast India are not merely dietary components but constitute important cultural artefacts embedded within ritual, social organization, and identity [X, IX, II]. This holds true for the Galo community also, among whom, Poka Opo represents a biocultural tradition where fermentation practices are shaped by both environmental resources and socio-religious values. The distinction between Poka Opo and Nyogin Opo demonstrates a functional duality within Galo society—one sacred and ceremonial, the other quotidian. Similar dual classifications have been reported among other indigenous communities of Northeast India, where certain fermented beverages are reserved exclusively for ritual purposes [VI]. The ritual centrality of Poka Opo, particularly during festivals such as Mopin, aligns with anthropological theories that emphasize the role of food and drink in reinforcing collective identity, social cohesion, and symbolic communication.

The fermentation process in the preparation of Opo demonstrates a degree of indigenous technological sophistication. For instance, the use of burnt rice husk (Ampe) in Poka Opo preparation not only contributes to its characteristic color and flavor but may also influence microbial activity during fermentation. Studies on traditional fermentation in Northeast India indicate that such practices promote the growth of beneficial microorganisms, enhancing both preservation and nutritional value [II]. The prolonged fermentation period (1–3 months) further differentiates Poka from Nyogin, suggesting a controlled process aimed at achieving specific organoleptic and functional properties.

A notable aspect of Galo brewing is the incorporation of ethnomedicinal plants such as *Clerodendrum colebrookianum* and *Scoparia dulcis* in the starter culture. *Scoparia dulcis* is also reported to be used by other indigenous populations namely the Bodo, Mising, Deori, Rabha, Ahom and Tiwa of Assam [XII, IX, XIII, XIV], Tangsa and Singhpo populations of Arunachal Pradesh [VI]. Similarly, *Clerodendrum colebrookianum* is extensively used by several indigenous populations of Arunachal Pradesh besides Assam, Nagaland, Mizoram, Meghalaya and Manipur [XV]. Ethnobotanical researches from Arunachal Pradesh and Assam have

documented the medicinal properties of these plants, including anti-hypertensive, anti-diabetic, antioxidant, anti-microbial, and anti-inflammatory effects [XV, XVI]. Their inclusion in fermentation reflects an indigenous understanding of the therapeutic potential of plant resources, where food preparation intersects with health maintenance. This aligns with broader findings that traditional fermented foods often possess functional properties due to bioactive compounds and probiotic microorganisms [XVII].

The use of traditional filtration device such as the cone-shaped bamboo apparatus (Borju), lined with packing leaves (*Phrynium pubinerve*), further emphasizes the ecological adaptation and material culture of the Galo people. Such practices emphasize sustainable utilization of locally available resources and demonstrate a low-impact, eco-friendly technology that has been transmitted across generations.

From an anthropological perspective, Poka Opo serves as a marker of hospitality, reciprocity, and social bonding. The offering of rice beer to guests is a widespread cultural norm across tribal societies of Northeast India and is often associated with notions of respect and kinship [VII, IX]. Additionally, beliefs related to divination where changes in taste or color of Poka are interpreted as omens, illustrate the integration of material culture with spiritual and cosmological frameworks.

Despite increasing exposure to modernization and commercial alcoholic beverages, the continued preference for Poka Opo in ritual contexts suggests cultural resilience. This persistence supports the argument that traditional food practices endure not merely due to habit but because of their embedded symbolic meanings and social functions [XI]. The Galo community's reluctance to replace Poka Opo with commercial liquor during festivals like Mopin reflects a conscious effort to preserve cultural authenticity and identity.

Conclusion

Among the Galo tribe of Lower Siang district of Arunachal Pradesh, Poka Opo exemplifies the intricate relationship between culture, ecology and indigenous knowledge systems. Beyond its role as a beverage, Poka Opo functions as a ritual medium, a symbol of social unity and a repository of ethnobotanical and technological knowledge. Its preparation process characterized by the use of burnt husk (Ampe), medicinal plants, and traditional fermentation techniques demonstrates a sophisticated understanding of natural resources and microbial processes.

The persistence of Poka Opo in contemporary Galo society highlights the resilience of indigenous traditions in the face of modernization. While market-based alternatives are increasingly accessible, the ritual and symbolic significance of Poka ensures its continued relevance, particularly in ceremonial contexts. This emphasizes the importance of traditional food systems as carriers of cultural identity and intangible heritage. Documenting and preserving such practices is crucial not only for anthropological scholarship but also for promoting cultural sustainability and biocultural diversity. Future research integrating microbiological, nutritional, and ethnographic approaches could further illuminate the scientific basis and health implications of such traditional fermentation practices.

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Conflict of Interest

The author declares that there is no conflict of interest.

AI Tool Use Declaration

Certain paragraphs in this manuscript were paraphrased using the QuillBot AI tool. The author remains responsible for the intellectual content and final manuscript.

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