



APONG, AN ALCOHOLIC BEVERAGE OF CULTURAL SIGNIFICANCE OF THE MISING COMMUNITY OF NORTHEAST INDIA

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Abstract

Traditional knowledge of production of *Apong* (rice beer) and its uses and cultural values among the Mising people of North East India is discussed. Participatory approach method was adopted that included informal and group discussions, semi-structured interviews of key informants and personal observations. Two forms of *Apong* are produced for consumption and cultural use by fermenting rice with *E'pob* (starter cakes). *Nogin Apong* is produced by fermenting rice, while *Po:ro Apong* (*saimod*) is produced by fermenting mixture of rice (usually glutinous varieties) and ash of paddy husk and straw. *Po:ro Apong* is usually produced during festivals and rituals. Both *Nogin Apong* and *Po:ro Apong* are indispensable during festivals and rituals and in social life. The entire process of preparation of *E'pob* and production of *Apong* is the exclusive domain of women. Further studies on value addition such as nutritional values, toxicity and preservation can contribute towards development of this unique alcoholic beverage.

Key words: Mising tribe, *E'pob*, *Nogin* and *Po:ro Apong*, culture.

1. Introduction

The Mising people, referred as Miri in Indian constitution, are one of the indigenous communities inhabiting the Northeastern region of India. They represent an Indo-Mongolian and East Asian group and belong to greater Tani people which comprises many tribes like Adi, Apatani, Nyishi or Nyshing, Padam and Minyong of Arunachal Pradesh, India. All Tani tribes share linguistic, cultural and religious similarities. Mising people are said to have inhabited the Eastern Himalayan region in Tibet in the hoary past and migrated from the Siang region of present Arunachal Pradesh to the present Assam state. Mising follow patrilineal system of family and marriage is strictly clan exogamous, which means marriage is solemnized between a boy and girl belonging to different clans. They practice traditional religion which is considered as a form of Hinduism; idol worship is common. Like other *Tani* tribes, the Mising people believe *Donyi-Po:lo* as their ancestral god which symbolize the Sun (*Donyi*) as their mother and, the Moon (*Po:lo*) as their father (Sarma 2004; Borang 2007). Recently, this belief has been popularized as *Donyi-Po:lo Yelam* which literally means *Donyi-Po:lo* religion. Agriculture is the main occupation; crafts, weaving and hunting are other occupations. Rice is the staple food supported by wild vegetables. Alcoholic beverage referred as *Apong*, fermented from rice, is their common drink.

Apong is more than a drink; this product has been integral part of the social, cultural and religious life of the Mising people (Sarma 2004; Borang 2007; Sharma and Pegu 2011). It is produced by fermenting cooked rice with locally prepared starter cakes called *E'pob*, which in turn is prepared from mixture of rice flour and plant ingredients. This unique product is consumed in social and day to day life, the most preferred occasion being after a hard day's work. Besides, *Apong* is used in all cultural and religious occasions like *Midang* (traditional marriage), *Ui* (rituals), *Tani siko* (death ceremony), and festivals (*Po:rag*, *Ali a:ye li'gang*, *Dobur*, etc). *Apong* is considered as symbol of honor and receiving guest with a glass of *Apong* is a matter of pride for the host family. Oral history of the origin of *Apong* touches upon their origin, religion and habitat and therefore, the Mising people consider this product as their cultural heritage. In the light of this, we investigated the cultural history of *Apong*, preparation of *E'pob* (starter cakes) and local technology of extraction of *Apong* and cultural values of *Apong* among the *Mising* community. We also discussed the role of women in the production of *Apong* and scope for development of this local product. The present paper fills the deficiencies in earlier reports.

All cultures around the world knew the use of alcohol as well as its abstention. In many societies, drinking behavior is considered for the whole social order and so drinking is defined and limited in accordance with fundamental motifs of the culture (Mandelbaum 1965). The act of drinking is part of larger cultural configuration. Alcohol is a cultural artifact; the form and meanings of drinking alcoholic beverages are culturally defined, as are the uses of any other major artifacts (Mandelbaum 1965). There are great variations of the meanings and functions of alcohol. The holy Bible carry many information of ancient myths, local oral history and archaeological findings that supplements alcohol consumption has been part of culture, rituals, traditions and customs since time immemorial. The World Health Organization (WHO) estimates that around 2 billion people around the world consume alcohol (WHO 2004) but there is no single reason why they do or why different people drink to different extents. Alcohol is a special form of embodied material culture and the most widely used psychoactive agent in the world. Probably alcohol existed as early as 10,000 BC substantiated with the discovery of late Stone Age beer jugs (Dietler 2006). Use of psychoactive substances including alcohol has been in existence in human societies since ancient time. An estimated 4,000 plants yield psychoactive substances, and about 60 of these drugs have been in constant use, somewhere in the world, throughout history with cannabis, opium, coca, tea, coffee, tobacco, and alcohol predominating (Malcom 1972). The Hindu Ayurvedic texts have mentions of alcohol

beverages describing both its beneficial effects and the consequences of intoxication and alcoholic diseases. Much information on alcohol use comes from anthropological works and described drinking in most societies is not only a highly patterned, socially and culturally integrated activity but is usually also either a profane or a sacred act (Mandelbaum 1965; Douglas 1987a). For some religion alcohol however, is a taboo. Some experts are of opinion that psychoactive drugs are responsible for unique features of some cultures. Marlene Dobkin de Rios believes psychoactive substances were major influences on Mayan religion and art (Dobkin de Rios 1974).

The use of alcoholic beverages, fermented from rice and other substrates using locally produced starter cakes, is prevalent among many cultures in Northeastern region of India. Rice is the common substrate for fermentation though other cereals like millets, Job's tears, maize and sometimes fruits are also used. Substrates are fermented with starter cakes, which is locally prepared with rice and plant ingredients. Alcoholic beverage is consumed in day to day life as refreshing drink and in social occasions and during rituals as part of religious and cultural practices in this part of India (Teron 2006; Deori, Begum and Mao 2007; Chakrabarty et al 2009; Gogoi et al 2010; Buragohain 2011; Kardong et al 2012; Das, Deka and Miyaji 2012). In the present paper we presented the legend of *Apong* (rice beer), preparation of *E'pob* (starter cakes) and local technology of extraction of *Apong* and traditional uses and cultural values of *Apong* among the *Mising* community.

2. Materials and Methods

Study on local knowledge relating to production of the alcoholic beverage *Apong* and its cultural values was undertaken during the year 2010 and 2012 among the *Mising* community of Dhemaji district and Majuli Island in Assam state and *Mising* (Miris) of Pasighat and Oyan under East Siang district in Arunachal Pradesh. We adopted participatory approach for the present study. The method included informal and group discussions, semi-structured interviews of key informants and personal observations. Persons of different age groups and priests and women were selected for interview and group discussions. Informants were first apprised of the objectives of the research and then requested to participate in the study. Traditional knowledge of preparation of *E'pob* (starter cakes), plants used, fermentation of *Apong* (alcoholic beverage) from rice and other substrates, extraction of *Apong*, and traditional uses and cultural values of *Apong* in *Mising* society were recorded. We also attended rituals and festivals of the *Mising* people for personal observations and interacted with priests on various aspects of *Apong* including the cultural history of the origin and use of *Apong* among the *Mising* community. Women were interviewed to document their role in preparation of *E'pob* and production of *Apong*. Plants used in preparation of *E'pob* were recorded with local names in *Mising* dialect. The plants were collected with the help of local guides, identified to its botanical names (Kanjilal and Bor 1934-40) and then processed into voucher specimens following standard methods of Jain and Rao (1977).

3. Result and Discussion

Apong is not only an alcoholic refreshing drink but an integral part of the social, cultural and religious life of the *Mising* community of North East India. Folk legend of *Apong* touches upon their origin, migration, religion and habitat and therefore, the *Mising* people regard *Apong* as their cultural heritage. *Apong* is produced by fermenting cooked rice or other substrates with *E'pob* or starter cakes, which in turn is prepared from a mixture of rice flour and many plant ingredients. Preparation of starter cakes and extraction of *Apong* (alcoholic beverage) is exclusively the domain of women. *Apong* is indispensable in the social and religious life of the *Mising* people. Further studies on value addition such as nutritional values, toxicity and preservation can contribute towards development of this unique alcoholic beverage.

3.1 Cultural history of *Apong*

The myth of the origin of the *Adi* and *Mising* people is closely associated with the origin of starter cakes (*E'pob* in *Mising* and *Siiyey* in *Adi* dialects) and its use for producing alcoholic beverage referred as *Apong*. *A:bang* is the oral history of the *Mising* people which forms the basis of their worldviews and folklores. *A:bang* narrates the legend of a beautiful fairy called *Miti Omum*, daughter of *Pedong Na:ne* (mother of millions) in *Mitimijo* (the land of fragrance). One day her (*Miti Omum*) breast milk spilled all over the land and several plants sprouted and grew abundantly wherever the milk spilled. The spilled breast milk of *Miti Omum* was also collected by *Engo Takar Karmu Mudeng*, wife of *Abo Tani*; the latter is considered as the ancestor or forefather of *Tani* group of people. *Engo Takar* stored the breast milk in a container but the milk remained unchanged for many days. Eager to see what happens to the breast milk, *Engo Takar* collected some plants like *Rukji* (*Cyclosorus extensa* Bl. Ching), *Bungkiripuk* (*Paederia foelida* Roxb.), *Rikom* (*Zanthoxylum nitidum* (Roxb.) DC) and *Taje-jetui* and *Taje-jepo*. The last two categories of includes plants with pleasant aroma and sweet taste like *Muduri* (*Psidium guajava* L.), *Tabad* (*Saccharum officinarum* L.), *Belang* (*Artocarpus heterophyllus* Lam.) and *Keteki* (*Ananas comosus* (L.) Merr.). The plants were pounded into a powder mass and with addition of water made into cakes and named it as *E'pop*. After drying, the cakes were grinded to fine powder and then mixed with the breast milk of *Miti Omum*. On the third day, the breast milk-*E'pob* mixture started producing sweet fragrance. When the fragrance spread into the surrounding environment, all creatures, spirits (good and evils) and people from the region came to see the fragrant product of fermentation of the breast milk. This alcoholic product has been named *Apong*; when tested it was found to be sweet and pleasant. Since then, the *Adi* and *Mising* people knew that *E'pob* brings about fermentation of cooked rice to produce *Apong* hence, consider *E'pob* indispensable for production of *Apong*.

Karpung and *Karduk* are brother and sister respectively and grand children of *Li'tung ba:bu* and *Li'mang Na:ne* of *Tani* group residing in the land of *Engo Takar*. They developed illegal relationship and *Karduk* delivered a death baby which they threw in a river. The river spirit contacted an unknown disease after drinking water from the river. On inquiry the spirit discovered the illegal baby of *Karpung* and *Karduk* the cause of the illness. In order to punish the duo brother-sister, the spirits of the land entered their *Ukum* (house built on a raised platform) but were said to be excited by the

sweet aroma of *Apong* emanating from the house. On searching, the spirits found *Apong* dripping from a basket, tasted a few drops and found it very pleasant. The spirits were humbled with the taste and aroma of *Apong* and said to beg for more beer from *Karpung* and *Karduk*. The spirits pardoned the brother and sister of their guilt but instructed them to offer *Apong* in any ritual as it will appease the spirits and gods.

3.2 Traditional knowledge of *E'pob* (starter cakes)

E'pob or starter cakes serve as microbial culture for fermentation of substrate to produce alcoholic beverage or *Apong*. Preparation of *E'pob* is a tedious and exclusive job of women folk. Rice grain is the major component of *E'pob* along with leaves of many plant species. Preparation of *E'pob* involves multiple steps and requires many days for completion. In the past more than 50 plants are said to have been used but today *E'pob* is prepared from about 26 plants in addition to rice grains, suggestive of loss of plant knowledge. It is noteworthy to mention that each plant used in *E'pob* is said to provide specific property to the final product.

The plants are collected from forest and other habitats; the leaves are properly cleaned and dried in the sun or on *Pe'rap* or *Rabbong* (a bamboo platform constructed over the fire place). Depending on weather condition, the leaves take about 10-15 days for proper drying. The dried leaves are pounded into fine powder in *Ki:per* (wooden mortar) with *E'gi* (wooden pestle). Rice grains are soaked in water and then mixed with the crude leaf powder and the mixture is again pounded in *Ki:per* with *E'gi* (with addition of water in between) till a sticky paste is obtained. Then some quantity of good quality old *E'pob* is added to the mixture as source of microbial spawn. Initially a pair of large round cakes is made, one symbolizing a male (father) and the other female (mother); other cakes are of smaller size but may be different shapes - round ball or egg-like or flat cakes, of about 6 cm x 3 cm in size (Figure 1). The cakes are placed on a bed of paddy straw and *Rukji* leaves (*Cyclosorus extensa* Bl. Ching) and dried in the sun or on *Pe'rap*; another layer of paddy straw and *Rukji* is placed above freshly prepared starter cakes. Depending on the prevailing ambient temperature it takes 3-5 days for proper drying. Finally the cakes are stored in containers, preferable earthen pot, and after covering the mouth with *Rukji* leaves kept near a fire place for future use. The quality of the starter cakes is examined by striking with finger- the best ones produce 'dhop dhop' like sound. The use of *Rukji* (*C. extensa*) has specific function; the plant is locally used as insecticide and its use in *E'pob* and storage is said to prevent microbial contamination.



Figure 1. A Mising woman (Mrs Usharani Pegu) prepares *E'pob* or starter cakes from rice flour and plant ingredients.

3.3 Production of *Apong*

Apong, an alcoholic beverage of cultural significance of the Mising community, is produced by fermenting cooked rice with herbal-based starter cakes called *E'pob*. Two forms of *Apong* are produced by the Mising people. The *Apong* which is produced by fermentation of cooked rice with locally prepared *E'pob* is called *Nogin Apong*. This is a common beverage which is produced in day-to-day life mainly for consumption. *Po:ro Apong* is produced by fermenting mixture of cooked rice, ash of partially burned paddy husk and straw with locally prepared *E'pob*. For the use of ash, *Po:ro Apong* is also locally referred as *Saimod* (*sai:ash; mod:liquor*). Preparation of *Po:ro Apong* is tedious and time consuming for which this beverage is usually prepared during festivals and rituals. There is however, no bar in production of *Po:ro Apong* during normal times. *Po:ro Apong* is usually produced from glutinous or sticky rice varieties, and also use the best quality *E'pob* for fermentation. During preparation of *E'pob* and *Apong*, *Citrus* fruits are kept away from the vicinity because it is said to make *Apong* acidic or sour.

3.4 Fermentation and extraction of *Po:ro Apong*

At first paddy husk and dried paddy straw is partially burned and the ash is collected in a container. Cooked rice is spread on *Kopak Anne* (banana leaf) and after cooling mixed with the ash of paddy husk and straw to produce a mixture of black mass (Figure 2). *E'pob* (starter cakes) are pounded into fine powder and added to the rice-ash mixture. Generally one *E'pob* is added to 1kg of rice grains. The *E'pob*-rice mixture is now put in a *Kili'ng* (earthen pot). The earthen pot used for fermenting rice is first fumigated by placing on a *Pe'rap* until the pot turns blackish. The mouth of *kili'ng* is closed with dried straw and leaves of *Rukji* (*C. extensa*). In warm weather it takes 6-8 days but during cold weather 12-15 days is required for proper fermentation.



Figure 2. A Mising woman is seen mixing *E'pob* or starter cakes, cooked rice and ash for production of *Apong*.

Po:ro Apong is traditionally extracted in a cone-shaped bamboo basket called *Ta:suk*. The latter is hung from a post and its wall is covered with banana leaves; a pack of *Amrong* (paddy straw) is placed at the base of the *Ta:suk* which serves as a sieve or filter. Now *Po:ro Arug* (fermented rice) is taken out from the *kili'ng* (earthen pot) and put inside the *Ta:suk*, and water is poured from above. Water passes through the fermented rice grains and extracts the soluble components including alcohol. The pack of straw at the base of the *Ta:suk* allows passage of liquid only while retaining the fermented rice grains in the basket. The filtrate, now called *Apong*, is collected in a container (Figure 3). Water is added 3-4 times for proper extraction of *Apong*, further addition of water is not encouraged as it is said to decrease the strength (i.e., intoxicating effect) and sweetness of the beverage. The remaining substrate after extraction is called *Po:ro tonrug* which is manually removed from the *Ta:suk* and used as pig feed or as fish bait. Again it is pertinent to mention that the whole process of extraction is exclusive job of women. Ready to consume *Po:ro Apong* is generally straw colored; sometimes it may be reddish-black depending upon the skill of the woman concerned. Mising folk believe that having two or three glasses (about 500ml) of *Po:ro Apong* a day can prevent formation of stone in kidney but needs further investigation to substantiate this local claim.



Figure 3. Extraction of *Apong* (rice beer). The fermented rice is placed in a conical bamboo basket (*Ta:suk*); water is poured from above and the filtrate called *Apong* is collected below in a container.

3.5 Fermentation and Extraction of *Nogin Apong*

Rice grains are cleaned, cooked and then transferred to a bamboo mat or banana leaves; it is worked to fine grains and allowed to cool. Then adequate quantity of powdered *E'pob* is added to the rice grains, properly mixed and transferred to an earthen pot and after closing the mouth with paddy straw and *Rukji* leaves kept for a few days. In warm weather it takes 5-6 days but in cold weather it takes 8-10 days for complete fermentation.

Extraction of *Nogin Apong* is comparatively easier than *Po:ro Apong*. Some quantity of *Nogin Arug* (fermented rice) is taken out from the *kili'ng* (earthen pot) in a container and adequate amount of water is added and then stirred. On stirring the content becomes milky which is then transferred to *Korai* (sieve, weaved from split bamboo) and shaken gently. While the rice grains are retained in the sieve, the filtrate, which forms the ready to consume *Nogin Apong*, is collected in a container. The left over substrate called *Nogin tonrug* is used as pig feed and fish bait or given to cow.

3.6 Uses and cultural implications of *Apong*

Apong has great implication on the social, religious and cultural life of the Mising people. *Apong* touches upon their origin, religion and habitat and therefore, indispensable for continuity of their culture. All events in life, from birth to funeral, sowing to harvesting crops, friendship to revenge, argument to settlement, abduction and murder and from happiness to sorrow *Apong* is indispensable. In social life, this alcoholic beverage is consumed as refreshing drink by

both men and women. The most befitting occasion for *Apong* consumption however, is after a hard day's work. Guests are welcomed by honoring with this locally brewed alcoholic beverage by the host before initiation of discussion.

Customary use of *Apong* can be observed during marriage, birth and death events, rituals, festivals and on occasion of assembly of village chiefs. But there is specific pattern of use of the two types of *Apong* (*Po:ro* and *Nogin*). During traditional marriage called *Midang*, the boy's (would be groom) family offers *Nogin Apong* to the girl's (would be bride) father to initiate discussion on marriage proposal. The *Apong* will be served only if the girl's father and her family agree to the proposal. No ritual is considered complete without offering *Apong* to the concerned deity. The ritual use of *Apong* has its origin with the legend of the origin of *E'pob* (starter cakes) discussed earlier. *Nogin Apong* find use in traditional rituals like *Tale'ng ui*, *Kumsung ui*, *Rokpung ui*, *No-Bhat*, etc. *Po:ro Apong* is indispensable during traditional harvesting festivals *Ali-a:ye Li'gang* and *Po:rag* and in funeral ceremonies and also in *Urom apin*, *Dodgang* and *Dobur ui* rituals. Both *Nogin* and *Po:ro Apong* are used during *Tani siko* (ritual for deceased persons). During *Dobur ui* ritual Mising people sacrifice cock, hen and pig to traditional deities. The *Po:ro Arug* (fermented rice of *Po:ro Apong*) along with ginger and rice grains are placed on leaves of either *tali'ng* (*Alpina malacensis* Rosc.) (Figure 4) or *kamro* (*Phrynium pubenerve* Blume) as offering to the deities. Further, *Po:ro Arug* is rubbed on the body of animals before sacrifice. *Yalo bami'd* or *Yalo rogum* ritual is observed when a family member is said to be possessed by spirit; on the occasion the priest rub the cock with *Po:ro Arug* before offering to the deity.



Figure 4. A Mising priest prepares for *Dobur ui* ritual. *Po:ro Arug* (fermented rice of *Po:ro Apong*) mixed with ginger and rice grains is placed on leaves of *tali'ng* (*Alpina malacensis* Rosc.) in honor of local deity .

Mibu is a diviner who can converse with deities and believed to be capable of inviting deities during some rituals. Mising folk compare *Mibu* with god bestowed with immense divinity to predict the future of a family or people by performing a sacred divination ritual called *Mibu daknam* (also called *Mibu summam*). On the occasion he uses *Yoksa* (actually a sword) as a medium to make contact with deities. First, he rubs the *Yoksa* with a mixture of *Po:ro Arug*, ginger and rice grains and then utter sacred verses to establish contact with the deities; the *Mibu* is now said to be divine. By virtue of divinity he predicts the cause of diseases or any grievances and provides remedies for the problems to the aggrieved members. On completion of divination (i.e., *Mibu daknam*), the *Mibu* ask the deities to leave his body. For this he call the name of the deity one by one and offer *Po:ro Apong* drop by drop with his *Yoksa* to appease the deities. The *Mibu* now returns to natural state of mind but without the divine power. In the present time the practice of *Mibu daknam* has become very rare among the Mising community due to dearth of *Mibu*.

3.7 Gender aspects of *E'pob* and *Apong*

In tribal Mising society, men and women share equal responsibility of the family and their children. But at times their responsibility becomes gender specific at both the family and societal level and the role of women is more demanding on some occasions. The entire process of production of *Apong* is the exclusive domain of women and hence, their role is indispensable for conservation and transmission of the associated traditional knowledge and culture. Women take active role in gathering plants for preparing *E'pob* (starter cakes) and this makes women as the medium of transmission of plant knowledge. Missing women consider production of *Apong* sacred and the society confer them special recognition on occasions like rituals, festivals, marriages and social gatherings. They consider it as a cultural duty and have remained faithful of their responsibility to this day. Further, being sacred women offer a few drops of *Apong* in the corner of the *Me'ram* (fireplace, a clay oven) in honor of their forefathers and seek their blessings before serving *Apong* to guests. But during the ritual *Dobur puja*, *Apong* is extracted by men because participation of women is a social taboo. The social pattern associated with *Apong* speaks of division of labor and respect to women and recognition of their contribution and status.

4. Conclusion

Apong (*Nogin* and *Po:ro Apong*) is integral component of the social life of the Mising people and also used in marriage, rituals and festivals. *E'pob* and *Apong* are indispensable and uphold cultural identity of the Mising community. The use of *Apong* is highly patterned that also reflect division of labor and women empowerment in the Mising society. This local drink is accepted well by all cultures in the Northeastern region of India. *Nogin Apong* is locally claimed as nutritious and energy drink while *Po:ro Apong* is a recognized local drink of great cultural significance. But there has been loss of knowledge of plants used in preparation of *E'pob*, from 50 to 26 plants in the present time. Effort to

document ethnobotanical knowledge of the remaining 24 plant species will help restore the traditional knowledge system of the Mising people. Above all women folk deserve special appreciation for their zeal and understanding the values of cultural knowledge which they demonstrated by preserving traditional art and techniques of making *E'pob* and production of *Apong* and transmission of the associated cultural knowledge. With value addition *Apong* has potential for development into precious product; scientific evaluation of the raw materials, microbes and finished products is in infant stage. Preliminary study on the nutritional and biochemical properties of *Po:ro Apong* reported positive (Kardong et al 2012) but further evaluation on other aspects- local technology of preparation of *E'pob* and *Apong*, microbial flora of *E'pob* and dynamic of microbial population during different stages of fermentation, secondary metabolites, nutritive and non-nutritive components, minerals, toxicity and preservation- will be necessary to meet scientific scrutiny. Biotechnological interventions can improve microbial strains and selective enrichment of bioactive compounds and improve the quality of final products.

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