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# Ethnic food habits of the Angami Nagas of Nagaland state, India

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#### **Abstract**

There is amazing diversity of culinary knowledge among the Angami Nagas but consumption of fried foods is very rare. The present study aims to document ethnic food habits of the Angami Nagas of Kohima district, Nagaland state. Group discussion, personal interview (semi-structured) and personal observation were included in the study design. Most plants are eaten boiled and a few species are taken raw. Galho, Galkemeluo, Ghabe, Modi and Tathu are the important traditional dishes. These are prepared from wild edibles except Modi. Ignorance of wild foods by the Angami Nagas of younger generation can lead to gradual decline of traditional knowledge of wild foods in the society. There is sincere need for the documentation of the traditional knowledge of food system of the Angami Nagas.

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#### Introduction

Food has been an inseparable part of human culture. There is diverse food habits among different communities in different parts of the globe. Traditional food systems of indigenous tribes contain treasures of knowledge that have evolved over generations through continuous interaction of their cultures with local ecosystems (Kuhnlein, 2009). Every community has its own unique food system and culinary knowledge that have been inherited from one generation to another. Traditional foods are the products of a particular culture which is made by blending unique local resources and culturally accepted in the community (Kuhnlein and Receveur, 1996). Traditional foods reflect the cultural identity, sensitivity and health perception of a community. Food habits of human continuously change with the change in their life styles. The study of food systems of indigenous communities has been an area of recent interest among researchers (Singh and Jain, 1995; Kuhnlein and Receveur, 1996; Pieroni, 2001; Kuhnlein et al., 2009; Sivakumar et al., 2014; Meithuanlungpou and Singh, 2015). There are distinct food practices among different ethnic groups in Nagaland (Mao and Odyuo, 2007; Singh et al., 2007) but very little study on food systems of different Naga tribes have been undertaken. One report described the traditional food recipes made from tuber crops and their role in food and nutritional security among the Konyak tribes of Mon district of Nagaland (Sivakumar et al., 2014). There is one report on gender perspective of food in traditional Angami Naga society (Yano, 2015).

A review of various reports revealed scant information on food habits of the Angami Nagas of Kohima district, Nagaland. But there have been significant changes in the food patterns of the Angamis due to the influence of modern foods which have developed a trend of ignorance towards traditional foods and the associated traditional knowledge and beliefs. The aim of the present study is to document their traditional food systems and the diverse culinary knowledge.

## **Materials and Method**

*The study area and the people* 

The Kohima district (25°11'N - 26°N latitude and 93°20'E - 94°55'E longitude) of Nagaland state, with a geographical area of 4041 sq km and located 1450 m above mean sea level, is considered as the homeland of the Angamis, one of the 16 Naga tribes of the state (Deorani and Sharma, 2007). Kohima is the district headquarter and also the capital of Nagaland state. There are more than 60 Angami villages in Kohima, and each village consists of 60-900 houses (Khonyo, 2010). Traditional religion of the Angami Naga is animistic in nature which includes belief on multiple deities. Under the influence of missionary, majority of the Angamis have embraced Christianity; today their animistic religion remains confined to only a few Angami groups. Agriculture is the main occupation and rice is the staple food. The Angamis



Figure 1. Map of Kohima district, Nagaland showing places (encircled) visited for field study (Map source: Nagaland GIS and Remote Sensing Centre Planning and Co-ordination Department, Government of Nagaland)

practice terrace cultivation on the hilly terrains where they produce rice and other minor crops. Jhum or slash and burn agriculture though common in the past is rare today (Hutton, 2003).

### Collection of ethnobotanical data

Permission for field study and interview was obtained from village Heads. Extensive field study was conducted from March, 2014 to March, 2015 covering different villages of Angami regions, namely Kigwema, Phesama, Lerei colony, Jotsoma and Kohima. Figure 1 is the map of Kohima district of Nagaland showing places visited for field study. For data collection group discussions with elderly knowledgeable persons on types of traditional dishes, methods of food preparation, ingredients added and their perceptions, personal interview (semi-structured) of elderly women and participant observations on the recent trend in the food patterns and ecological aspects of the ethnic foods were included in the study design. Photographs of food plants and different food items were taken.

### **Results and Discussion**

Diversity of wild foods of the Angami Nagas

The present study documented use of 29 wild edible plants belonging to 26 genera under 21 families by the Angami Nagas in their traditional dishes. Table 1 shows inventory of plants used in important traditional dishes of the Angami Nagas. Two species of fern namely *Diplazium esculentum* and *Pronephrium* sp. were included in the report. Seven species are used in 2 traditional dishes while other species are used in only 1 traditional dish. Most widely utilized plants belong to Apiaceae (3 species) which is followed by Polygonaceae, Cucurbitaceae, Rutaceae, Malvaceae, Urticaceae and Amaranthaceae (2 species each), Saururaceae, Verbenaceae,

Thelypteridaceae, Plantaginaceae, Piperaceae, Passifloraceae, Leguminosae, Asteraceae, Moraceae, Lamiaceae, Athyriaceae, Brassicaceae, Araceae (1 species each) and one arborescent species of Bamboo.

Food system and culinary knowledge

Almost all parts of plants are consumed such as leaves, stems, tubers, young shoots, roots, rhizomes, inflorescences, flowers, fruits and seeds. There is amazing diversity of culinary knowledge among the Angami Nagas but consumption of fried foods is very rare. Most plants are eaten boiled and a few species are taken raw. Other methods of food preparation include roasting, baking and frying. Fermented foods are common, the most popular being dacie/ dzacie/axoni/axone, which is a fermented product of soyabean. Method for making axoni is slightly different from other Naga tribes. To prepare axoni seeds of soyabean are boiled and allowed to cool and then wrapped with banana leaves and smashed. After that it is kept hanging above the furnace for few days. It was reported that number of days required for the smashed seeds of soyabean to develop axoni depended upon seasons and individual perception. Fermentation period during winter is longer than that of summer. The Angami Nagas usually prefer to take axoni with strong smell. Meat is revered delicacy. Big pieces of meats are usually hung above furnace to make them dry for future use. Meat is cooked with axoni or with plants like Amaranthus sp., Bamboo shoot, Brassaiopsis sp., Chenopodium album, Colocasia esculenta, Curcuma angustifolia, Fagopyrum esculentum, Hibiscus sabdariffa, *Oenanthe* stolonifera, Persicaria chinensis, Polygonum molle, Zanthoxylum armatum and Zanthoxylum rhetsa.

The Angami Nagas do not have specific names for many of their traditional dishes. Important dishes of the Angami Naga tribes are briefly enumerated below:

Galho

It is of two types. One is rice cooked with several wild leaves. It is prepared by simply boiling. Salt, garlic, potatoes, tomatoes, dry fish and fermented soyabean are also added to increase delicacy. Seeds of *Perilla frustescens* are also added sometimes to give flavour to the dish. Different plants can be used in *Galho*. Plants and other ingredients to be used for preparing *Galho* depend upon the individual perception. So there is great diversity in *Galho* preparation among the Angami Nagas. The other one is rice cooked with only meat (mainly beef). To increase delicacy salt and garlic are added. Figure 2

Table 1. Inventory of plants used in important traditional dishes of the Angami Nagas

Scientific names of plants [Family]	Angami names	Parts used	Habitat	Food product	Distributio n
Amaranthus sp. [Amaranthaceae]	Liza	Leaves and inflores-	Shady places	Galkem- eluo	Frequent
Alternanthera philoxeroides (Martius) Grisebach [Amaranthaceae]	Dzübou	cences Leaves and shoots	Moist places	Ghabe	Frequent
Brassica sp. [Brassicaceae]	Saprega	Leaves and stems	Moist and shady places	Galho	Rare
<i>Bambusa</i> sp. [Poaceae]	Kesi, Khoprei	Young shoots	Wet hilly places	Tathu	Frequent
<i>Centella asiatica</i> (Linnaeus) I. Urban [Apiaceae]	Gara, Gharie	Whole plants	Moist and shady places	Galho	Frequent
Colocasia esculanta (Linnaeus) Schott	Dzübou- n	Leaves	Moist places	Tathu	Frequent
[Araceae] Cucurbita maxima Duchesne [Cucurbitaceae]	Rümo, Rümon- ü	Fruits, green leaves	Moist and shady	Ghabe	Frequent
Diplazium esculentum (Retzius) Swartz	Gachül- ü	and shoots Leaves	places Wet and shady places	Galho	Frequent
[Athyriaceae] Elatostema lineolatum Wight	Gazo	Leaves	Wet and shady	Galho	Frequent
[Urticaceae] <i>Elatostema</i> sp. [Urticaceae]	Gadzo, Gazo	Leaves	places Wet and shady	Galho	Frequent
Elsholtzia blanda (Bentham) Bentham [Lamiaceae]	Neihü, Neipfü, Rünou	Young shoots, leaves and inflores- cences	places Moist places	Tathu	Frequent
Eryngium foetidum Linnaeus [Apiaceae]	Dunia	Shoots	Moist and shady places	Tathu	Frequent
Fagopyrum esculentum Moench [Polygonaceae]	Garei	Young shoots and	Moist and shady	Galho, Galkem- eluo	Frequent
Ficus auriculata Loureiro [Moraceae]	Khrabvü , Chiede, Habanü	leaves Leaves	places Cold regions	Galho	Frequent
Gynura nepalensis de Candolle [Asteraceae]	Lezino, Lizienuo	Leaves and stems	Moist and cold places	Galho, Galkem- eluo	Frequent
Hibiscus cannabinus Linnaeus [Malvaceae]	Gakhro	Leaves	Boiled, cooked with rice to make Galho, cooked with meat.	Galho	Frequent
Hibiscus sabdariffa Linnaeus [Malvaceae]	Gakhro, Gakhruo	Leaves and inflores- cences	Cold places	Galho, Ghabe	Frequent
Houttuynia cordata C. P. Thunberg [Saururaceae]	Gathaü, Gatha	Whole plants	Moist places	Tathu	Frequent
Oenanthe javanica (Blume) de Candolle [Apiaceae]	Gakra	Leaves	Moist and shady places	Galho, Ghabe	Frequent
Parkia timoriana (de Candolle) Merrill [Leguminosae]	Miakrü- rucü, Kuinyü- mero	Pods and seeds	Low hilly regions	Tathu	Intermedia- te
Passiflora e dulis John Sims [Passifloraceae]	Beal, Bel	Leaves, young shoots	Cold regions	Ghabe	Frequent
Piper sp. [Piperaceae] Plantago asiatica	Kusada Gapa	Leaves	Cold region Moist	Galho Gapa	Frequent Frequent
subsp. erosa (Wall) Z. Pronephrium sp. [Thelypteridiaceae]	Sucheik omo,Th evüdoko	and Leaves	places Wet and shady forests	Galho, Galho	Frequent
Rumex nepalensis Sprengel	nyü Merhüg- akre	Leaves	Wet and shady	Ghabe	Frequent
[Polygonaceae] Sechium edule (Jacquin) Swartz [Cucurbitaceae]	Bisüku	Tender shoot and fruits	places Moist places	Ghabe	Frequent
Stachytarpheta jamaicensis (Linnaeus) Vahl [Verbenaceae]		fruits Leaves and young shoots	Boiled with rice to prepare Galho, plane	Galho and Ghabe	Intermedia- te
Zanthoxylum armatum de Candolle [Rutaceae] Zanthoxylum rhetsa	Ganya Ganya	Leaves and fruits Leaves	boiled. Cold region Cold	Galke- meluo, Tathu Galke-	Frequent Rare
(Roxburgh) de Candolle [Rutaceae]	9-		region	meluo, Tathu	



Figure 2. Galho



Figure 3. Ghabe



Figure 4. Galkemeluo

shows Galho.

#### Modi

It is highly revered dish of the Angamis; usually prepared during special occasions. For preparing *Modi* big pieces of meat of Mithun, beef or pork are cooked in very large pan under huge fire and stirred continuously. Meat of Mithun is preferred the most. To this ginger, garlic, onion, chilli, and salts are added to increase flavour and delicacy. Blood of Mithun is also added and stirred continuously until the meat is cooked.

#### Ghabe

It is prepared by boiling only green leaves. No garlic, chilli, fermented soyabean or dry fish are added. Figure 3 shows Ghabe.

#### Galkemeluo

It is prepared by boiling wild leaves with bamboo shoot, garlic, tomato, potato, dry or smoked meat, dry fish, fermented soyabean, *Zanthoxylum rhetsa* and *Zanthoxylum armatum*. Tomato is specially added to give slight sour taste. *Galkemeluo* of snail and fishes (especially *Clarias*) are also prepared. For preparing *Galkemeluo* of *Clarias*, banana flowers are separately boiled and cooked with flesh of *Clarias*, leaves of *Zanthoxylum armatum* or *Zanthoxylum rhetsa* and chillis. Figure 4 shows *Galkemeluo*.

#### *Tathu*

This is a hot preparation or chutney. It is usually prepared by making paste of chillis and leaves or dry meat or fermented fish. Leaves of *Colocasia esculenta* are boiled and then smashed and dried for preparing chutney.

## Changes in food patterns of the Angamis Nagas

There have been significant changes in their food patterns among new generation Angami Nagas. They prefer the western food culture. Many new food plants from other places are introduced in their food habits. Following are the important factors that lead to the changes in food pattern of the Angami Nagas:

#### Modernization

The new generation Angamis have effected significant changes in their life styles because of financial improvements and conversion to Christianity. Opening of several restaurants, fast foods, and modernized hotels have introduced western food culture in their traditional food habits. Today many young people prefer to take such western foods rather than their traditional boiled dishes. It leads to ignorance of wild edible plants among the younger generations.

Interactions and relationships with other communities

Inter community marriage makes relationships between the Angami Nagas and other communities. The Angamis have friend circles from different communities. Such relationships provide great opportunities for exchange of their traditional knowledge of food habits. Consequently many new food plants which were not known before are introduced among the Angamis and incorporated into their food system. For example, Parkia timoriana, Psophocarpus tetragonolobus, Vicia faba etc which were not familiar as food plant before are now becoming very popular among the Angamis. There are also many plants brought from others places to the Angami regions. Gradually these plants are becoming part of food habits of the Angamis. For example, Murraya koenigii was reported to have been brought from Dimapur district, Gnetum gnemon from Wokha and Dimapur districts, and Lasia spinosa from Zhaluki and Mokokchung districts.

## Gender perspective of foods

Women are placed in high esteem in Angami Naga society. In Angami Naga society, it is custom and ritual for women to initiate agriculture and the beginning of harvest was started by a woman known as Liedepfü or the first reaper. The preparation of

rice beer is usually done by women (Yano, 2015). Women are responsible for all onerous household activities like cooking, farm works, agriculture, collection of food plants and many more. Women are the main collectors of wild edible plants. However, men hardly engage in cooking except during the period of absence of female members, community feasts, marriage ceremony and other grand occasions. So women are quite familiar with food plants and expected to have better culinary knowledge than men. But hunting, cutting of trees, collection of plants from deep forests and other activities which involve hard physical works are mainly done by men. So men are also expected to have good knowledge about the distribution of plants, seasons of availability and methods of collection

Cultural transmission of traditional knowledge of food habits

Culinary knowledge and other traditional knowledge of wild edible plants are transferred from elders to younger generations orally. Mothers generally transfer their culinary knowledge to their daughters or by cooking together with them. Today younger generations ignore wild foods because of modernization and improvement of financial conditions. Therefore there is serious impairment in the transfer of traditional knowledge of wild edible plants and food preparation among the younger generations.

### Conclusion

The Angami Nagas possess unique knowledge of food preparation which is difficult for other communities to emulate. Individual perceptions for the addition of ingredients to different curries vary from one person to another. This increases the diversity of culinary knowledge among the Angami Nagas. The Angami Nagas of younger generations have shown changes in their food patterns because of changes in their lifestyles which can be attributed mainly to financial improvement and the conversion into Christianity as well as their interactions and relationships with other communities. Ignorance of wild foods by the young Angamis can lead to gradual decline of traditional knowledge of wild foods in the society. However, many Angamis are still preserving tradition food practices. The present documentation of Angami foods can help in the preservation of their traditional knowledge of food habits and transmission of the associated heritage.

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