

# The dynamics of food and the Kalingas: an account of a people in the north Luzon highlands, Philippines

by Robert Lawless

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## A B S T R A C T

Describing the production, preparation, consumption, availability, preferences, rites, taboos, and diseases of food among the Kalingas in northern Luzon, this article covers most of the traditional beliefs and behaviors associated with subsistence.

## A R T I C L E I N F O

### *How to refer to this article*

Lawless R., The dynamics of food and the Kalingas: an account of a people in the north Luzon highlands, Philippines, 2008, Omertaa, Journal for Applied Anthropology, <http://www.omertaa.org/archive/omertaa036.pdf>

### **Introduction**

*“When most animals feed, they repeatedly consume those foods necessary for their well-being, and they do so in a similar manner at each feeding. Humans, however, do not feed. They eat” (Kittler and Sucher 2004:1-2).*

Food may be defined as “any substance that can be metabolized by an organism to give energy and build tissue. Foods are made up of a combination of calories, proteins, fats, minerals, and carbohydrates” (Fernandes 2006:978). The internal processing of food begins when enzymes in the mouth break down sugars as food is prepared for digestion. “Upon entering the stomach, the acids therein separate the nutrients and useable compounds in the food in the processes of digestion. These are then absorbed into the body to become the energy source for functioning at the cellular level” (Fernandes 2006:978).

The obvious importance of studying food dynamics is stated by Sidney Mintz and Christine Du Bois: "Next to breathing, eating is perhaps the most essential of all human activities, and one with which much of social life is entwined" (2002:102). In her classic study, which is, indeed, a model for all subsequent ethnographic studies of food, Audrey Richards investigated food in terms of its production, preparation, exchange, preferences, symbolism, consumption, and nutrition (1939).

Understanding how food is selected is also important, and an effective model should show how availability and preferences influence food selection. The first step in constructing such a model would be to group foods according to the frequency of their consumption. Core foods are those that are consumed daily and usually include complex carbohydrates, such as cassava, maize, plantains, rice, tubers, or wheat. Secondary foods, such as fruits, meats, legumes, and vegetables, may be eaten as infrequently as every ten days, or they may be used in small amounts with the core foods, usually improving palatability or nutrition. For example, "in cultures where grain is a core food, sources of vitamins A and C are needed to approach sufficiency. Rice, breads and pastas, and corn are frequently prepared with leafy green vegetables, abundant herbs, or tomatoes, which are high in the needed nutrients" (Kittler and Sucher 2004:7-8). Peripheral foods are consumed only sporadically and reflect the peculiar preferences of individuals or families. Food selection is powerfully influenced by food aroma, color, taste, and texture, properties that are themselves influenced, primarily, by cultural expectations, and, secondarily, by individual preferences.

My account of the dynamics of food and the Kalingas will incorporate modifications of the models of Richards and the food preferences model with the understanding that "any definition of a group's food habits implies homogeneity in the described group. In daily life, however, each member of a group has a distinctive diet, combining traditional practices with new influences" (Kittler and Sucher 2004:viii). In addition, I will not discuss food exchange among the Kalingas, which is well covered by Michiko Takaki (1977), or symbolism and nutrition, about which I have inadequate data. Also, the standard preparation techniques, which are understood in most perspectives to include chopping, hulling, leaching, marinating, peeling, pounding, soaking, squeezing, and washing, are not particularly applicable to the Kalinga situation. The same caveat applies to the standard cooking techniques of baking, boiling, frying, grilling, roasting, steaming, stewing, and toasting; and to the

standard preserving techniques of canning, curing, drying, fermenting, freezing, and pickling. I will, however, discuss hunting and gathering, famines, feasts, crop and human diseases, and rituals and taboos.

### ***Ethnographic Background***

Celebrated in the popular literature largely for their invidious headhunting, the Kalingas live in the North Luzon Highlands (sometimes called the Cordillera Central). A rugged and sharply dissected block of mountains averaging about 65 kilometers wide between 120 degrees and 122 degrees longitude and stretching north from approximately 16 degrees north latitude for about 320 kilometers, this massive mountainous area, the largest in the Philippine archipelago, boasts several peaks over 2740 meters in its southern range. Located in the north-central section of these highlands, Kalinga territory (or Kalingaland) extends perhaps 70 kilometers northwest-southeast and 60 kilometers northeast-southwest around the 17 degrees north latitude mark, where the peaks reach about 2470 meters.

With a population of approximately 72,500 the Kalingas are surrounded by other peoples who are equally famous for their headhunting, including the Apayaos to the north, the Bontocs to the southwest, and the Ifugaos to the southeast. Dean Worcester, the first American administrator in the North Luzon Highlands, described the Kalingas as "a fine lot of headhunting savages, physically magnificently developed, mentally acute, but naturally very wild" (1914:579; for more information on the Kalingas, see Cole 1922; Barton 1949; Billiet and Lambrecht 1970; Lawless 1977; and Takaki 1977).

Amid the scenic beauty of majestic peaks, plunging waterfalls, and awesomely terraced mountainsides the villages come to life. The ears of the awakening villager open to the laughter of the children blended with the squealing of pigs, the savage growling and barking of semi-domesticated dogs, the roaring of a nearby mountain river, and the morning thump-thump-thumping of pestle and mortar as the women pound the daily supply of rice. The nose of the villager is met by the ever-present pig manure, the blood from frequent animal slaughterings, the wood burning in the hearth, and the always welcomed mountain coffee.

Most of the villages contain these sounds and smells, a crowded cluster of huts, occasionally one unused chapel from the days of missionaries, and, of course, the Kalingas who live and die there. Often located on fairly inaccessible lower ridges

for defense and usually marked by groves of coconut trees, the villages typically contain a plaza in their center where the rituals of the births and the deaths and other events in the lives of these mountaineers are publicly celebrated.

All houses in the villages are raised above the ground on posts with steps or a ladder leading up to a single entrance. Most of the houses are square, single-room dwellings with walls commonly made of split and plaited bamboo and pitched roofs made of strong reeds and thatched with thick grass. Floors consist of split bamboo mats resting on a grating of small beams. Each dwelling has a hearth, a square box about a meter wide and a couple of hands high, filled with sand and accumulated ash and located toward the back of the room. Above it is a rack for drying food, wood, and wearing apparel. All the activities of the household, including the cooking of the daily meals, revolve around this hearth.

In their marriages the Kalingas practice matrilocality. They also observe regional endogamy, thereby produce a deme. Within these demes marriage between relatives closer than fourth cousins is forbidden. The size of these demes ranges from 60 to 1000 households, and perhaps 70 to 80 of these demes make up the whole of Kalingaland. Polygyny is allowed but practiced by only a few of the wealthier Kalingas.

Within a bilateral descent system Kalinga kinship terms feature merging of collateral with lineal kin, use of reciprocal terms, primary importance of the generation principle, and rarity of sex differentiation in terms of reference. Kinship terms generally fit the Eskimo type but emphasize the kindred rather than the nuclear family.

Except for carabaos used for trampling the soil in the terraced rice fields and except for dogs used in tracking wild animals all of the work of the Kalingas is done through human muscle power. Heavy labor, however, such as the clearing of land and the felling of trees, requires large numbers of people working together. Work requiring precise timing, such as the harvesting of rice, also requires large numbers of people working together. A highly important part of the Kalinga social structure is, therefore, the reciprocal work group, in which one household works with another knowing that later it can depend on that other household to work with it.

The Kalingas accomplish all this necessary work with a fairly simple tool kit consisting only of a few types of axes, fishing rods, and spears, for headhunting, fishing, and game hunting. A chisel, hammer, shovel, dibble stick, grubbing hoe, and machete for agriculture and terrace building round out the tool kit. Household items include clay pots, iron vats,

and coconut shells for cups and ladles. Some richer households have imported modern items such as aluminum pots and pans, glasses, and plates, but these are rare.

The larger units through which Kalingas express their social structure include the village and the deme. The smaller units through which they express their social structure include the household and the *ili* (or neighborhood). They are born and die in households, and they have a saying, "Nothing happens that does not start from the hearth." In other words, the household is the center and the focal point of their world. The household "is the only corporate group within the region to which membership is indispensable for the survival of every person" (Takaki 1977:57). The importance of the neighborhood comes in the many activities of everyday life when neighbors interact and act together economically and politically but most importantly socially.

Kalingas, and most other indigenous peoples in mountainous Southeast Asia, do not have strong leadership or territorial organizations. And even though demes are politically and socially sovereign entities and can make treaties governing trade, conflicts, and territorial boundaries, the household and, indeed, the individual Kalingas are largely autonomous. Nobody in a Kalinga village can order others around. Whatever needs to be decided on a village or regional basis is done through discussion and consensus.

Within this individualistic sociopolitical framework Kalingas live in a well-ordered world in which all things, inanimate and animate, must be given due respect and all things must be honored on their own terms. Kalingas are not only individuals both giving honor and respect and due honor and respect but are also representatives of their families and demes. Kalingas therefore receive honor and respect and deserve hospitality only when they give these qualities with proper honesty and sincerity, and although they may express their individuality to its fullest extent, they must pull themselves up short when their activities would bring any sort of dishonor or disrespect upon their family or upon their region (cf. Magannon 1972 and 1973).

At the time of my fieldwork in the mid-1970s Kalingas were still largely uncontaminated by outside influences. A few years before my fieldwork Christoph von Fürer-Haimendorf visited the more acculturated Kalinga areas, and was deeply impressed with the widespread and strongly held traditional beliefs and behaviors of Kalingas (1970:193-194). This work, then, will focus on the tradition food-related enterprise of the Kalingas, which has remained relatively unchanged up to the present day.

## Production

I am subdividing this section into ten categories beginning with the staple and continuing through the categories largely as given their importance by the Kalingas, i.e., rice, meat, vegetables, tubers, fish, fruits, beverages, snack foods, seasoning, hunting and gathering. I am giving the scientific name and Kalinga word for various crops and activities only when it is not easily available in other publications. For example, scientific names of most of the crops and plants in Kalingaland are given in Morice Vanoverbergh's publication on a neighboring peoples (1941:374-376) and most of the Kalinga terms are found in the work of Takaki (1977) or in my work (1977). I begin with a bit of history on food and crops in Kalingaland.

According to my reconstruction from information given to me by several elderly informants recalling what their grandparents had told them, in the 1860s most swiddens in Southern Kalingaland were planted almost entirely in maize and camote. Small patches of rice were also planted but apparently the yield was meager. Meat, however, was abundant; deer and wild pigs were plentiful and were bagged by traps and pits. The meat was usually eaten with maize and camotes. In 1882 a German traveler recorded the presence of rice terraces in the Pasil River drainage area of Southern Kalingaland (Meyer 1975b:90).

Specifically Ko-om, one of my key informants, related that when he was small, his grandfather (FaFa) told him that as a small boy he primarily ate bananas, camote, maize, mungo beans, rice, taro, and wild pigeon peas. There were no rice paddies at that time when he lived in the Kalinga village of Pugong in the 1870s. According to Ko-om, his great-grandfather (FaFaWiFa) first saw terraced rice paddies in the 1860s to the south in Butbut, in the current municipality of Tinglayan, and tried to make one in Pugong, but he gave it up as too much work. A traveler in Western Kalingaland in the 1880s mentions bananas, maize, rice, vegetables, sugarcane, sweet potatoes, and tobacco (Reyes 1887:39).

My oldest informant, Ad-damay, who was born probably around 1890, said that in her father's time they lived mainly on camote, taro, and one-celled plants that grew on rotten wood. Wildlife, such as pigs, deer, mitit (a squirrel-like animal), and snakes were plentiful. No domesticated fruits were eaten, but wild fruits were gathered, especially rattan fruit and oranges. Meat was frequently available and eaten with rice and vegetables. An account from a passage through Kalingaland in 1900 reports, "For some days we have been eating neither meat nor salt, though we have never been in want of rice, which exists here [Lubuagan Poblacion] in abundance" (Villa 1902:8).

An 1820 account of a trip through Western Kalingaland in the 1820s contains no mention of carabaos, currently the major source of meat in Kalingaland, though the traveler does mention meeting an "Igorot" (probably Bontoc) riding a carabao (La Gironière 1854:83). An 1882 account mentions, "There is not a single example of the carabaos, cows and horses" in Southern Kalingaland (Meyer 1975b:90), though some of the villages had pigs (Meyer 1975b:92). The origin myths of the Mountaineers include, first, humans; second, taro; next, rice, and then of pigs, roosters, cats, and dogs but not carabaos (see, e.g., Wilson 1965:271). By 1907-1908 when Fay-Cooper Cole was there the Western Kalingas were using carabaos to pull plows (1922:390), and they were slaughtering them only rarely (Cole 1909:346). On a trip in 1902 an America official wrote, "I found very few caribou east of the mountains [i.e., in Upstream Kalinga-Apayao]" (Bowen 1902:9).

Among the first uses of carabaos was to trample the rice paddies, and they were probably introduced along with the spread of terraces. Trampling rice paddies was probably widespread throughout the lowland Philippines before the use of the plow. It is still occasionally used in the Bicol region of southern Luzon where animals are plentiful and plows scarce. Fay-Cooper Cole wrote, "Carabao are kept and used as food but [in the folklore] no mention is made of using them as work animals" (Cole 1915:9). Indeed, mention of carabaos in the Kalinga folk epics is always in terms of wealth, not as plow animals (Billiet and Lambrecht 1970:196-197).

Kalingas recall two locust swarms. One in 1914 and one in 1916, and they have specific stories about where the hoards swarmed: Both came up from the lowlands to the east of Kalingaland and the 1914 swarm went through Balenciagao to Balbalasang, and the 1916 hoard came through Dalupa and over Pugong. They didn't destroy any terraced rice paddies but the 1916 swarm went into some swiddens near Pugong in an area named Sadel and destroyed about one third of the rice. They say the people lit fires at night to attract the locusts and ate them. The hoards lasted only three days.

Ko-om saw the first use of maize when he was a small boy in the 1910s and 1920s. The kernels were cut off, then pounded in a mortar. And, then, the poundings were put under a large stone that was rolled back and forth until the kernels became the size of pounded rice, and this was cooked and eaten like rice. The prepared maize could also be made into cakes, like rice cakes. There are no more of these stone maize mills extant in Kalingaland, but there is a picture of one in Mabel Cook Cole's book (1929:14).

### **Rice**

I have elsewhere written extensively about rice production in Kalingaland (see Lawless 1977:35-47), and this section is mostly a summary of information from my monograph on Kalinga agriculture. Rice can be grown in terraced and irrigated paddies and in rain-fed swiddens, but the overwhelmingly greater amount of rice comes from the paddies. Traditional Kalinga rice varieties are tall with droopy leaves and weak stems and are susceptible to lodging, a dysfunction in the stem that causes the plant to bend over when it reaches a certain height. They exhibit perennial growth habits and are highly resistant to local diseases and insects.

The first crop, planted in January-February and harvested in June, traditionally has only one variety. The second crop, planted in July-August and harvested in November-December, has six traditional varieties. The most common non-Kalinga variety planted in Southern Kalingaland is a traditional variety used by the neighboring lowland Ilokans, which is, however, harder to hand-pound and more susceptible to viruses than traditional Kalinga varieties. It is, therefore, usually planted only by wealthier households that use it for festivities.

In the Pasil River drainage area the largest paddy is about one hectare and the smallest contains twelve hills of palay. All the paddies are usually continuously wet year-round. The ideal Kalinga paddy would be clean, close to the household, highly productive, and have no leeches.

The paddy cycle covers preparation, planting, cleaning, harvesting, including the repair and maintenance of terrace walls and irrigation ditches, the selection and care of seeds, the use of carabaos and tools, and the formation of reciprocal work groups. Preparation involves driving several carabaos around the paddy to trample the soil, which mixes the vegetation, mostly rice straw left over from the previous harvest, with the mud. In preparing and growing rice Kalingas do not use fertilizers, insecticides, herbicides, fungicides, or pesticides.

The first-crop wet nursery is located in the center of the paddy; and the second-crop dry nursery in an upland area. Kalingas do not supply any reasons for the differential use of wet and dry nurseries (but for a scientific explanation, see Lawless 1977:39-40). Transplanting is generally accomplished by a reciprocal work group. Through years or maybe generations of experience Kalingas know exactly how many seedlings will fill up their paddies. The seedlings are transplanted seemingly haphazardly, not in rows as is common in the lowlands.

Harvesting is generally accomplished by reciprocal work groups who must complete work on the second crop within five days because of the possibility of rain. Harvesting can be more leisurely with the first crop due to the infrequency of rain. After the harvest is dried, it is piled under the granary for a few days then stored inside as stalk palay, i.e., with the stalk attached.

### **Meat**

Although wildlife is hunted in some parts of Kalingaland, most of the meat comes from domesticated livestock with the primary source being carabaos, pigs, and chickens. None of these is indigenous to the Philippines and probably all three came from Southeast Asia through Indonesia. Carabaos were the last of the domesticated livestock to be brought into the North Luzon Highlands. Carabaos, then, were introduced to the Southern Kalingas fairly late, probably from the Ilocos Coast through Abra Province and the Western Kalingas. The Northern Kalingas may have been the last of the Mountaineers to get carabaos, though there are certain areas of the North Luzon Highlands that are too rugged to support the animals at all, especially in Ifugao Province (Lambrech 1939:502)

Carabaos were initially used as animals to butcher for various ceremonies, not as work animals. In fact, they were introduced before rice paddies were extensively used. Even after rice terraces became widespread, the soil was often prepared by people trampling the relatively small fields with their feet rather than using carabaos.

Carabaos may be obtained through borrowing, buying, husbandry, inheriting, renting, and stealing. A carabao may be borrowed as a requirement for ceremonial butchering, and is paid back with an equivalent item, often a rice field. In a loose form of husbandry a fertile female carabao may be borrowed (a practice known as tarkon for carabaos and cattle, and pakan for pigs, dogs, and chickens). Beyond the occasional payment of a stud fee to allow a male carabao in the same pasture with a female one, little husbandry is practiced in Southern Kalingaland. Traditionally Kalingas purchased carabaos through a complex arbitrage scheme, but nowadays most carabaos are purchased on the market in the lowland part of Kalinga Province at Tabuk. Carabaos may be rented for soil trampling. Traditionally the eldest child in the household gets most of the carabaos.

Kalingas have stolen carabaos ever since the animals were first introduced into Kalingaland. Lt. Gov. Hale's diary contained much about carabao stealing and advice from

Hale to the Kalingas to brand the animals and to have documents when buying and selling carabaos (Wilson 1956). Kalingas have yet to follow this 1909 advice.

All black with absolutely no color, the indigenous pigs sport a long snout, approaching the wild pigs in appearance. Highly adapted to the local environment, very resistant to pests and diseases, they will eat almost anything, and require little care. They are, indeed, effective scavengers of human feces. Little husbandry of any sort is practiced, except that male pigs are butchered before females, and, indeed, a common sight in the village is of a small boar trying to mount a large sow that it can hardly reach.

Cattle have never been plentiful in Southern Kalingaland, and there were no cattle in the Pasil River drainage area until around the beginning of the 20th century. Carabaos were preferred because they could be used both for ceremonies and trampling. Cattle are not effective for trampling because they lack the enormous feet of the carabaos. Also, cattle require more expensive food than carabaos and are more susceptible to disease.

Although ducks are seen in some villages in Southern Kalingaland, notably Balatok, the most common fowl is the chicken; however, they are relatively rare and an egg is a rare treat indeed. I was not able to identify what the Kalingas call pannak or “chicken pest,” which sometimes kills 90 percent of the chickens in the villages.

Dogs are fairly rare in Southern Kalingaland, and slaughtering and roasting of dogs is a social event for men only and is often done with some amount of secrecy in the nearby forest or distant fields. After several months in my Kalinga home village, I had the honor of being invited to one of these events. Between bites of dog meat and sweetbreads I asked them what they called this event. They replied that it had no name. Then they asked me what it was called in my culture when a group of guys grabbed a dog and went off to roast and eat it. Thinking fast, I replied that we called it a “picnik” (using the English word).

A few months later I was in another village quite a distance from the aforementioned one when after several weeks a group of young guys that I had been establishing rapport with came to me and whispered in my ear (in Kalinga), “Would you like to come with us on a piknik,” using a word that clearly sounded like the English work picnic. I responded (in Kalinga), “Sure, but what’s a piknik?” They said, “You know, that’s where we grab a dog, take it out in the woods,

roast it, and eat it.” “Where did you get the word ‘piknik?’” “Oh, that’s an old Kalinga word for this event.” “But have you always used that word.” “I guess so.” “Did you know that word last season?” “Oh, no, just a few weeks ago, some guy from the village over the mountain came here, we took him out for a dog feast, and he told us that ‘piknik’ was the ancient Kalinga word for what we were doing.”

### ***Vegetables and tubers***

I have elsewhere written extensively about swiddening in Kalingaland (see Lawless 1977:48-57), and this section is mostly a summary of information from my monograph on Kalinga agriculture. In addition to a small amount of rice and maize all crops in the Kalinga swiddens come under the general classification of vegetables and can be subdivided into crucifers, cucurbits, legumes, bulb crops, tubers, and solanaceous and malvaceous plants. Besides camotes and taro, including the lesser known taro-like lidoy and the cassava-like lubog, all of which are tuberous, and eggplants, which are solanaceous, the most common crops in the swiddens are leguminous, for example, peas, climbing peas, bountiful beans, mung beans, winged beans, black or bush beans, vine beans, and rice beans.

Malvaceous crops are usually limited to okra, and the few bulb crops are usually only onions and occasionally garlic. Also the most common crucifers include various varieties of cabbage, the cucurbits include squash, bitter melon, bottle gourd, and luffa. The tops of camotes and squash are also referred to as vegetables by the Kalingas. Corchorus, which is common on the Ilocos Coast, is becoming increasingly common in Kalingaland. An excellent source of iron, calcium, and phosphorous, it can be grown in clearings, in rice paddy banks, and in open, low, usually wet places near settlements. The tops and leaves are used as vegetables—either cooked with bamboo shoots and fish, meat, or with other vegetables. Tea can be made from the dried leaves for curing dysentery and as a tonic for children with coughs. Beans are generally harvested by individual households. Still in their pods, the beans in their pods are gathered into bags that are beaten with a stick cracking the beans from their shells. The shells and beans are then separated by winnowing.

Tubers were more important in the diet of peoples in the North Luzon Highlands in the distant past but have been largely replaced by rice. And camote is now more popular than the traditional taro because it is less susceptible to disease, has a higher yield, is faster maturing, and is easier for both humans and pigs to eat.

The leaves and vines are usually fed to pigs. Camotes can be harvested every three months for up to about three years. Taro is harvested for only one year every three months. Generally both are eaten nowadays only for snack, though during food scarcities camote may be consumed in lieu of rice.

### **Fish**

I have elsewhere written extensively on the fishing techniques of the Kalingas (1984), and this section will be largely a summary of that article. Little fishing occurs on the Pasil River since it is polluted from the upstream mines, but in the villages along the major rivers and streams of the Chico, the Saltan, and Mabaca, and Tanudan Rivers almost every male Kalinga fishes as a food supplement to the household's rice fields and other food sources.

Although Kalingas do not plant fish in the paddies, a very small fish called palispis inhabits the older fields. The fish are harvested with a bamboo trap called a kobkob-ong. Such fish are admittedly a small item in the Kalinga diet, but with a growing population and also an increasing terraced rice system, these fish are becoming more important in the diet. Fishing techniques in the rivers and streams of Kalingaland include primarily bag-net fishing; bait fishing with pole, line, and hook; falling-net fishing; fishing traps; grappling; lifting-net fishing; line fishing; stunning; and wounding.

The beginning of the dry season, April and May, mark the beginning of the fishing season. Trapping and line fishing techniques are popular during these months. Nets are usually used from August through November when the rivers are often swollen. Grappling and wounding are used whenever the water is clear but most often in July and August. The falling-net technique is also used in July and August when the rivers are not swollen and the water is clear. Bait fishing, stunning, and wounding, may be used anytime.

By their Kalinga names the fish most often caught are dalit, eel; ikan, a squat fish of 30 to 40 cm. length; kollidaw, probably the largest fish at somewhat shorter than a meter in length; parilong, a sucker fish about 15 cm. long; lagdaw, small shrimp; kipkip, a term for any small fish; tilapia, a flat, black fish 15 or so cm. long apparently the same as the well-known tilapia; balanba, a fish about 10 cm. long with a long snout; and the small mochi fish.

### **Fruits**

The primary fruits in Kalingaland are avocado, mango, papaya, oranges, guavas, santol, gayuvana, star apple, sugarcane, coconuts, pineapple, jackfruit, and karvasa, a

fruit that grows on a vine along fences or on frames. Fruits are usually considered food for children though adults may eat such fruits as oranges, sugarcane, and coconuts. Kalingas have told me that parents feel they sacrifice eating fruit for the sake of the children, and often the money obtained from selling extra fruit is used to buy things for children. Adults will also say that they like fruits but don't eat them because the children like them better. Others say that adults will eat fruits only when they are picked before they ripen and prepared as vegetables.

### **Beverages**

The Americans introduced coffee throughout Southern Kalingaland though there was a Kalinga variety growing there already. The biographer of the first American lieutenant governor of Kalinga Subprovince wrote that this lieutenant governor "caused at least 60,000 trees to be planted, mostly coffee" (Wilson 1956:35). The indigenous coffee trees were not harvested, however, and my informants speculated that they were imported from Abra Province in the 19th century but that before the Americans came in the early 20th century the people didn't know what use the bean had. According to the Kalingas, the indigenous coffee tastes better, but the newer coffee produces more, and therefore the indigenous trees are rarely harvested.

Kalingas often uproot the saplings that have grown voluntarily from dropped beans for planting new trees; these saplings are not considered the property of those owning the trees from which they dropped. The difficulty comes in finding land to grow them on; the land must be owned, shaded, and fertile, and ideally it should be near transportation. When uprooted the saplings are about one meter tall and are usually transplanted during the rainy season after the undergrowth is cleared. If properly maintained, they bear fruit in about four or five years and are harvested annually thereafter from December through February.

A favorite drink of the Kalingas is basi, which is fermented sugarcane juice. I will spend some time describing the Kalinga production of basi since there is very little information on it in the literature and since basi is extremely important in ceremonies and social gatherings. Several case histories that I gathered demonstrate that the authority of various Kalinga elite was undermined by their inability to supply enough basi at various ceremonies.

In the early 1900s basi was manufactured for export (cf. Barton 1949:9) and was, along with coffee, the chief source of cash in the Pasil River drainage area. In those times fresh

swiddens were cleared for sugarcane, but since World War II nobody clears only for sugarcane. Now sugarcane is usually planted in March in a swidden where tobacco has been harvested and where there is no need for further clearing.

While harvesting the previous crop the ends of the stalk (ngawow), which must be in a pre-flower stage, are gathered and tied into bundles of about 100 each. Then the bundles are stood in a watery area while the stems grow, a process termed sanong. When the stems have grown to about 30 cm., the plant is ready to be transplanted. Three or four of the stalks are planted in an area with a diameter is about 30 cm. with each circle of plants about one meter apart. The stalks are put into a hole 10 to 20 cm. deep and a little dirt is piled around it.

The sugarcane is harvested just before the flowers bud and is done by anyone who wants to be assured of getting basi to drink as an informal payment. The branches, leaves, and flowers of the sugarcane are not discarded.

After harvesting the stalks are cut into one-meter lengths (tugma). If there is no access to a commercial mill to squeeze out the juice but only to an indigenous wooden mill, the stalks must be peeled (saknit). The cut and peeled stalks are called sinaknit.

When the sinaknit is ready it is brought to the area (astan) where the cane is milled. The wooden squeezer is called a kalopassi. The sinaknit are put in between the wooden rollers three or four at a time and put through three times, twisted the last time. The wooden wheels are turned by three or four persons pushing a long pole round and round. The juice is caught on bamboo sheets and runs off into a clay container. Usually the wooden mill is owned by the people who plant the sugarcane. My informants say that these wooden mills are copied after the commercially manufactured ones. Before these mills the sinaknit was pressed between two wooden planks operated by one man with his foot and others on the end of a pole. The cane was twisted and turned over to squeeze out the juice.

The juice is poured into a large iron vat that is above a dug out place for the firewood. Gathering the firewood is one of the most expensive and time-consuming processes of making basi; therefore the astan is usually located in the forest and barrios far from the forests do not have a chance to make basi anymore. The juice is boiled overnight and flavored with berries called gamu and with leaves called sagud, which are put in while the juice boils. My informants said that the basi would be too sweet without these ad-

ditives. Also the berries and leaves prevent small flies from getting into the juice after it's cooked. Most vats hold about five kerosene cans and yield about three after cooking.

The day after it is boiled in the vat it is put into jars and brought down to the villages and temporarily covered. In three to five days it bubbles for five to ten days and is then permanently covered with two to five thicknesses of banana leaves and tied with a vine and stored under the houses. It is aged generally about five months. There are two kinds: binagang, which is kept in jars (gusi) for three to seven months, and chacha-an, which is aged one year. As a byproduct of basi, sugar is made on a very small scale.

Payment whereby the owner of the mill is given one out of every five cooked cans is termed lawos. Also, the owner of the vat gets lawos. One basi producing family in my Kalinga hometown averages produces an average of 40 cans a year. The Pasil River drainage area have eight commercially manufactured mills and maybe two dozen indigenous wooden ones.

### ***Snack foods***

In addition to taros and camotes, the major snack food for Kalingas is maize, which was once a major crop in at least the northern sectors of the North Luzon Highlands but has given way under pressure for land and labor to the paddy system. Maize was also very common in the Pasil River drainage area into the 1920s and was often eaten in preference to rice. The Kalingas plant maize on a small scale during the start of rainy season in a few swiddens in May or early June. A favorite of wild pigs and rats, maize is eaten by Kalingas only as a snack, boiled or roasted. The raw stalks of sugarcane may also be chewed as a snack.

### ***Seasoning***

The only flavoring in traditional Kalinga cooking, outside of the occasional and rare salt, is sili, a hot, small green and red pepper that grows plentifully along the river banks. Introduced by the Spaniards from Mexico, probably along with maize, the peppers are gathered and dried and sometimes mashed. There must have been no flavoring during the pre-Spanish times. Kalingas are increasingly using bagoong, a salty fish or shrimp delicacy from the Ilokanos, as flavoring.

In the past the Kalingas in the Pasil River drainage area traded various items for salt that was controlled by people in the village of Balatok in the upstream area of the Pasil River. Currently commercial salt is obtained primarily

from Lubuagan in the downstream area. In fact, the Balatok salt trade ceased in the 1910s, though it revived during World War II. The indigenous production of salt was also quite laborious. The Balatok salt producers had access to some salt springs, and they cooked the stuff in a tenkerosene (or sometimes four-kerosene) can tub until only the salt was left. This operation required a tremendous amount of firewood that had to be carried and shipped by river. The cooking process took five days and produced a relatively small amount of salt.

### ***Hunting and gathering***

I have elsewhere written extensively on the hunting techniques of the Kalingas (1973), and this section will be largely a summary of that article. Among the major mountain peoples of Northern Luzon, only two, the Kalingas and the Apayaos, maintain hunting and fishing as an appreciable supplement to their regular food gathering and growing activities. Kalingas usually hunt with dogs, and a good hunting dog is highly valued. Often hunters go out in groups of ten or so and then break up into groups of two or three, each with several dogs. The dogs generally chase down the game and surround it. The most common game are deer, the squirrel-like mitit, and wild pigs. Deer usually head for water and are trapped in the middle of a stream; wild pigs are usually cornered against boulders. Dogs may chase the squirrel-like mitit up a tree, and then the hunters knock it out.

The weapons traditionally used include the common spear (tubay), which is about two meters long and steel tipped with one wing or backup hook on each side; some may have two on each side. Also, spear tips can be made from the tough bamboo. Machetes may be made from any iron and are often fashioned from automobile leaf springs.

The four main types of traps used include a pit for trapping wild pigs and sometimes deer (beto); a falling log trap usually placed at the edge of a swidden (korbit); a string-triggered spear trap for deer and pigs (balais); a spring-loop trap for birds, mitit, and wild chickens (lasag). Lesser used traps include a small version of the lasag (called an apad) for trapping lizards. A trap consisting of several long leaves with sharp, curved thorns tied on long poles for bagging bats. Also, at night the hunters may place a kerosene light on an elevated rock and cover it with a screen. Birds will fly into it knocking themselves out, and the hunters simply pick them up. A trap termed a pangati is used for catching wild chickens by using a domestic chicken as bait. Although hunting may be done year-round, dry seasons from February through April is the primary hunting sea-

son; rainy season brings out the much disliked small, black leeches. Also, in the dry season the hunters are usually free from their primary work in the paddies and swiddens--nobody in Southern Kalinga hunts full-time because everyone has at least one field to attend and planting in the swidden and harvesting in the paddy does not begin until June.

Many of the vegetables that are cultivated also grow wild. Pakpako, a fern-like plant, is popular with both Kalingas and Ilokanos. Many of these vegetables grow wild and are simply gathered, such as the leaves of the sili. Saksakrong is a water lily that grows in the rice paddies. Chayote (sayote in Kalinga) is another popular vegetable that grows wild primarily in cooler places. These vegetables are all boiled and used mostly to flavor the rice, though since the introduction of canned sardines, bagoong (salted and fermented shrimp), and salted fish for flavoring, some vegetables are not as common now, at least on the plates of the wealthier households.

### ***Preparation***

About the only outside influence on food preparation has been that from the Ilokanos, the dominant lowland group who trade with the Kalingas. Contemporary Kalinga cooking has been extensively influenced by the Ilokanos, and now households that can afford it commonly use garlic, soy sauce, and pimenta that can be purchased from traveling vendors. Kalingas refer to this as "half and half" cooking. Particularly prevalent in Kalingaland, especially in the households of those who can afford foreign ingredients, is an Iloko dish called dinuguan.

A few Christian missionaries, both Protestants and Roman Catholics, have occasionally been in Kalingaland, but neither group introduced any new foods (Lawless 1985:15). Dinuguan, which may be translated into English as blood sausage or pork blood stew. Made using pig intestines and sometimes ears, usually with a vinegar base, garlic, and green chili peppers.

Rice. After the stalk palay is retrieved from the granary, the stalks are first removed, then hand-pounded with pestle and mortar removes the rice from the husk. A second pounding removes some of the germ and bran layers, though complete removal requires power machinery. In Southern Kalingaland only women pound rice, though in Western Kalingaland men will sometimes help. Although the results vary from variety to variety and from worker to worker, an experienced worker can hand-pound for about 30 chupas of and have it ready for cooking in about one hour. A chupa is a pan-Philippine volume measurement and is a 14-ounce condensed milk can with a volume of 174.1 cubic cm.

As a very general rule of thumb, one chupa cooked is good for one person one meal. In the Pasil River drainage area rice is pounded every third day for three days' supply. Hand-pounded rice will store for only two to three months, while stalk palay will store for at least five years and very possibly ten years.

Kalingas generally do not rinse the rice before cooking, a practice that arose from the necessity to remove the talc that is associated with machine milling and has been linked to health problems. Traditionally rice is cooked in boiling water in a clay pot, a process called absorption cooking. After the rice has absorbed the water and become soft the steam trapped in the pot completes the cooking. When they are cooked, first-crop rices are somewhat stickier than the second-crop rice.

Meat from domesticated animals can be eaten only on special occasions, which include ceremonies for childhood lifecycle markers (kontad) and for visitors (palanos), interdeme treaty celebrations (budong), curing ceremonies (posipos), and funerals (bagong). The meat from the kill of wildlife is divided immediately and evenly among whomever is around, whether or not they participated in the hunt. The hunters by custom save back for themselves the head, neck, and thorax. Usually the intestines and sweetbreads are cooked and divided and eaten on the spot of the kill (or nearby), while the meat shares are taken home uncooked. The lungs and bones are given to the dogs.

According to my informants, wildlife cannot be used as ceremonial animals because wild animals are the domestic animals of the spirits. Sacrificing domesticated animals in curing ceremonies is based on the principle of giving the spirit the life of the animals so that it won't take the life of the person (cf. Tima 1968:93).

The special occasions when meat from domesticated animals may be eaten include childhood and visiting ceremonies, treaty celebrations, curing ceremonies, and funerals. The peculiar distribution of these meats has been of special anthropological interest, beginning with the 1949 book by the amateur ethnographer Roy Franklin Barton (1949:73-77). Chickens and occasionally pigs are commonly butchered at childhood and visiting ceremonies; pigs, at curing ceremonies; pigs and carabaos at treaty celebrations; and carabaos, at funerals.

Since meat distribution in childhood ceremonies is confined to the household and immediate relatives and since treaty celebrations became relatively rare after World War II, visiting ceremonies, curing ceremonies and funerals account for most of the meat distributed to the public.

For both of these ceremonies the public is invited, which includes everyone in the home deme and everyone in the demes that are part of the interdeme treaty system. The ceremonies may last several days and may include such festivities as dancing, skits, and speeches.

The feeding of visitors by the slaughtering of a pig or chickens is widely observed in Kalingaland. The first thing asked of traveling Kalingas by their household after they return to their home is "What were you fed? Did they slaughter for you?"

In the curing ceremony the tongue of the pigs goes to the sick person and the immediate family gets the livers and most of the meat. Everyone else is fed the entrails with rice, which is eaten in the open plaza. If the household is rich enough, a carabao may be slaughtered. The blood of the animals is smeared on the painful parts of the patient while the village shaman recites various religious incantations.

Only carabaos are slaughtered at funerals, and since the carabao is a large animal, a relatively large amount of meat will be distributed. Funerals, therefore, are widely attended by the meat-hungry Kalingas. A share of meat given in a distribution ceremony is called an ilang. The animal is usually brought out in front of the crowd, its feet tied, then it is tripped to the ground, its throat cut and the gushing blood gathered in bamboo containers to be mixed immediately with basi and distributed among the crowd as a refreshing drink. Some of the blood is kept aside to be mixed later with the entrails. The animal eventually dies from loss of blood, and the butchering begins. Because of its size the slaughtering of a carabao requires some skill and strength. In an average Southern Kalinga barrio of 300 to 400 persons about five will know how to slaughter a carabao. As their payment, the butchers set apart some of the meat for their own use; usually two or three work on one carabao.

The meaty pieces of the animal are cut into relatively small parts, and each ilang is attached to a rattan strip called a tarok. The hard tip of the tarok is used to push through the meat and the other end is looped. When the ilang is distributed, usually by teenage boys and girls at the direction of the village elders, the recipients break off the hard tip and hangs up the ilang on a pot or nearby wall and then carries it with them when they leave to go home. The details differ from barrio to barrio, but the interesting thing about the custom in the Pasil River Valley is the difference in the size of the ilang according to the person's socioeconomic standing.

In the Pasil River drainage area there are three or four gradations of size in the *ilang*, and the disparity between the large and small is great, maybe three kilos, depending on the number of people and *carabaos*. The livers go to prestigious visitors, the large shares go to the village elite, the middle shares go to the municipal and barrio officials present along with the elders, the many small *ilang* go to everyone else.

The kindred of the deceased, at least through the second degree, do not normally eat the meat of the butchered *carabaos*. The number of *carabaos* butchered and the length of the funeral depends on the deceased's socioeconomic status. For example, the funeral in Naneng, Tabuk, in 1967 of Congressman Duyan, an elite Kalinga historical status, lasted six days and saw the butchering of 52 *carabaos*. This was the last traditional funeral in Kalingaland of such grand proportions. (For some information on the changing patterns of meat distribution, see Lawless 1977:85-86.) All the meat is eaten within a matter of a few days; Kalingas do not use any meat preservation techniques. At home or in the plaza, the Kalingas use only two methods for cooking meat, either boiling it or roasting it.

An archaeologist working in Kalingaland supplies a good description of the preparation of a chicken: "According to Kalinga practice, he proceeded to slit the chicken's throat and collected the blood in a dish as the bird fought desperately... Big feathers were simply plucked; smaller ones were removed by singeing the carcass in the fire... my host then opened the chicken, removed the internal organs, and added them to the blood in the dish...my hosts diced the chicken from beak to claw and dumped it in boiling water. Twenty minutes later they served it with the broth" (Skibo 1999:89-90).

Vegetables and tubers. Very little is done to prepare vegetables for consumption beyond casually shaking the dirt from them and perhaps washing them if they are quite dirty. They are eaten raw or boiled. Some legumes, such as common peas or black peas (*kordis*) may be shelled and stored for dry season consumption, when vegetable are scarce, and eaten along with bamboo and rattan shoots. Tubers are peeled but rarely washed.

Beverages. Coffee beans for home consumption are stored, then pounded with palay peelings, dried, cleaned by winnowing, then pounded again to remove the skins. Then they are dried, roasted, and pounded into powder.

## **Consumption**

A typical Kalinga meal consists of rice and boiled bean soup probably without salt, which was a very rare commodity in early times. The core ingredient is, of course, rice. A variation would be a meal with rice and a secondary ingredient, probably one kind of vegetable or a legume. An even more infrequently consumed secondary ingredient would be meat. More than one informant has suggested that the importance attached to meat might be that it serves as a much desired relief from this consistently boring diet. Peripheral foods would include canned items such as sardines that would probably be purchased from traveling vendors. These and related items are very exotic foods for the Kalingas, and such items are often stored and offered to special guests. In my travels through Kalingaland I was often offered canned sardines as a special treat.

Meals are usually eaten three times a day with snacks for those working in the fields. Typically "the paddy owner provides the food for the planters and generally feeds them in the field at 10:00 a.m. and 3:00 p.m. Sometimes a rice cake is also served as a snack, but rice cakes are not as common in Southern Kalingaland as before since less glutinous rice is grown" (Lawless 1977:40). Hunters and gatherers usually take a load of cooked rice with them and hope to catch some meat or tasty wild ferns on the way.

Meat is typically not chewed but simply swallowed. The only problem I had adapting to the Kalinga eating habits was in swallowing pieces of *carabao* meat that still had the hide and bits of hair attached. An archaeologist recently wrote an amusingly ethnocentric account of trying to adjust to Kalinga food habits, complaining, "I knew that the Kalinga were a people with few food taboos and anticipated I would be exposed to many exotic dishes. . . . But I was surprised to find that I even had trouble eating chicken, duck, and pork. Not only was I captive of my food taboos, but I also came face-to-face with strong, culturally held rules governing food preparation and what parts of an animal are edible" (Skibo 1999:89).

The coarser vegetables and certainly the tubers are chewed, but often Kalingas eat the slimy vegetables by simply tipping back their heads and letting the stuff slide down their throats. Some of my informant, especially those who had been exposed to exotic peripheral foods, complained about the blandness of the traditional Kalinga diet.

Coffee is widely used drink throughout Kalingaland at all times of the day having replaced *camote* soup as an all-purpose drink.

## ***Availability and Preference***

Kalingas have no nutritional information about the vitamin and mineral content of food, no food guide pyramids, no calorie counters, and no dietitians. They also have no food disorders. Kalinga view food as fuel. This does not mean, however, that they do not have food preferences. The selection of food is powerfully influenced by food aroma, color, taste, and texture, properties that are themselves influenced, primarily, by cultural expectations, and, secondarily, by individual preferences. Since the Kalinga diet offers little variation in taste and since much of the food is swallowed without chewing and without regard to texture, selection is determined primarily by smell and color. Dull and subdued colors are preferred to bright ones, though my informants say that children often prefer food with bright colors, such as certain fruits. Kalingas tend to smell all foods before eating them, and anything with a rancid or rotting smell is discarded.

Meat of any kind clearly ranks as the preferred food, and almost all Kalingas claim that they never, ever get enough meat to eat. An article from the 1880s mentions “the high value that meat has” (Meyer 1975a:116). The ideal meal, which Kalingas claim everyone had in the “good ole days” consisted of several huge chunks of meat accompanied by a small handful of rice and a few vegetables. The common meal today consists of a relatively large pile of rice and a big handful of vegetables and occasionally a small chunk of meat.

## ***Human and Crop Diseases***

As I have written elsewhere, “Western medical practitioners are rare, and the people rely mostly on traditional cures. The most common diseases are measles, bronchio-pneumonia, tuberculosis, goiter, and disorders of the skin, eyes, and intestines, especially diarrhea. Endemic goiter is related to iodine deficient soils, which are common in mountainous areas. Cholera and malaria are now rare” (1993:123). Beyond this brief overview not much is known about health among the Kalingas. Much more is known about the health of crops.

The most common ill health of the rice crop throughout lowland Philippines is lodging. Traditional varieties will lodge more when fertilizer is used simply because they will grow taller, which is certainly the greatest cause of reduction in crop yields. Kalingas do not use fertilizer and so lodging is not a terribly significant problem.

Most rice virus diseases are transmitted by leafhoppers and planthoppers. Most virus-transmitting insects prefer directly sown fields to the transplanted ones that Kalingas

use and fields with nitrogenous fertilizers to non-fertilized fields. Traditional Kalinga rice practices, therefore, tend to reduce the population of virus carrying insects. The most common virus disease in Kalingaland is tungro (vukaw), which strikes soon after transplanting and is recognized by the discoloring of the leaves of the plant. The virus destroys about one half of the crop every three or four years in the Pasil River drainage area. As I have written elsewhere, “Rice blast disease, the most destructive and ubiquitous of all rice diseases, seems to be rare in Southern Kalingaland. Non-flooded conditions favor the occurrence of the deadly rice blast, but I could not find instances of it in Kalinga swiddens. The other common diseases of rice, bacterial blight, bacterial leaf streak, and grassy stunt, are not very common in Southern Kalingaland” (1975:97).

“The most common rats in Kalingaland are called ing-gi. They are small with stretchable skin, and some Kalingas claim that they can fly. They will eat rice plants at any stage” (Lawless 1975:97). Rat destruction is more common in the swiddens than in the year-round submerged terraced fields. Rats increase with a decrease in forest cover, the habitat for larger predators, mainly hawks and owls, that feed on rats. Also, rat damage is less common in the older fields in the center of rice areas, which generally belong to the richer households, since rats hide in the grasses and forest beyond the rice fields.

In general, crop losses in Kalingaland to pests and diseases follow the increase in human populations, ranging from about 20 percent in sparsely populated areas to 60 percent in heavily populated areas. Storms and earthquakes also can cause crop damage. (For more information on the health of the rice crop in Kalingaland, see Lawless 1975:94-99).

“The very best soils for rice production are those with high clay content, a 1:1 type clay mineral, a medium organic content with a high degree of humification and good but not excessive drainage. Sandy, shallow, highly weathered, depleted soils and soils from which the water cannot be drained periodically produce low yields” (Lawless 1975:99). Soil types in southern Kalingaland are Annam Clay loam and Alimodian Clay loam, which are soils that are quite appropriate for rice production.

“A peculiar type of soil in Southern Kalingaland is found in fields that are left dry and have worms. These fields are called korang and give off a peculiarly identifiable odor (mambangtit) and are considered quite fertile, though they are, as are all dry fields, difficult to prepare for planting” (Lawless 1975:99).

Not much information exists on diseases of vegetables in the Philippines, but since corchorus and mung beans are common in the lowlands, as well as in Kalingaland, there is some information on pests and diseases for these plants. “The jute semilooper, hairy caterpillar, and jute mite attack corchorus, and stem rot is the most common plant disease. There are at least three diseases of the mung bean in Kalingaland, powdery mildew, carcospora leaf spot, and mungo mosaic virus. Powdery mildew, which is a leaf disease caused by a fungus, is highly visible with white, powder-like spots covering the leaves. . . . This disease causes about a ten percent loss of mung bean plants in Southern Kalingaland. Carcospora leaf spot, which shows up in large rust-colored spots, also kills the plants, and losses from this are also estimated at ten percent. Mungo mosaic virus, whose symptoms include deformed leaves and stunting, can cripple an entire field” (Lawless 1975:124)), but I found little evidence of it in Kalingaland.

As I have written elsewhere, “Seemingly the only disease of maize in Southern Kalingaland is downy mildew. I saw no stalk rot diseases, leaf rust, leaf spot, ear or kernel rot. Downy mildew takes an estimated five percent of the maize crop in the Pasil River drainage area” (1975:124). I did not notice any of the insects harmful to maize, such as the corn weevil, corn borer, corn earworm, or corn silk beetle.

### ***Feasts and Famines***

Kalingas have had experiences with famines and have learned to cope with food shortages. According to Elizabeth Colson, “Various themes [appear] among those who have gone through famine: the shift to foods normally ignored, the breakup into small family groups which comb the region, the refusal to share food with others, and finally, the determination to hand on to their children the hard-won knowledge that allowed them to survive the experience” (1979:20).

In the last quarter of the 1800s, when Southern Kalingas depended heavily on tubers, a relative drought, ruined the December camote crop. Stories of this dimly remembered famine focus on the fact that many households from the Pasil River area temporarily migrated to rice-growing areas, such as Bontoc, Tinglayan, and Abra Province. While there they were impressed by the sight of rice in terraced paddies, and brought the knowledge and techniques back with them. Although terraces did not immediately become widespread, rice undoubtedly gained considerable prestige and was probably grown exclusively in swiddens starting then and at least for a decade thereafter.

Takaki mentions that in her area of Southern Kalingaland, south of the Pasil River drainage area, “The worst famine in the memory of the people occurred in 1923 . . . and apparently took many lives” (1977:186). She also observed a food shortage in 1965 as I did in 1973-1974. These shortages resulting in changed food habits. Formerly eels and dogs were taboo, but apparently the taboo against eels and dogs went out with the 1927-1929 food shortage in the Pasil River drainage area. Given the Kalinga emphasis on hospitality, it is difficult to imagine a refusal to share food except under the most difficult circumstance.

In 2007 a rumor circulated that Kalinga Province, which includes the non-Kalingas in the lowlands as well as the Kalingas in the mountains, was suffering from a rice shortage. The Kalingas usually refer to this as a “rice gap,” meaning the time between the last grain of rice eaten and the upcoming harvest. The rumors were apparently a hoax since Agriculture Secretary Arthur Yap quickly reported that “Kalinga’s rice production is one of the highest in the country in terms of yield per hectare, making the province the Cordillera’s rice granary” (Cariño 2008).

Another change in eating habits that came about in the 1970s is the use of the inner trunk of the banana tree as a vegetable, especially during the summer months. Normally this is fed to pigs though it is regarded by lowlanders as a delicacy. The food has a woody taste, and Kalingas say that they generally did not eat anything with a woody taste before the 1970s. Also, before World War II pigs that died from “rinderpest” were not eaten but now they are. In fact, if it’s noticed that a pig doesn’t eat for two days and is sick, it is slaughtered. Also, the feet of slaughtered animals used to be thrown away but are now eaten.

### ***Rituals and taboos***

Food rituals play an important part in the interactions among often feuding demes; visitors are initially offered a drink and if one refuses to drink or eat, that act may be interpreted that the person is an enemy. According to the first lieutenant governor of Kalinga Subprovince, “It was a custom among the tribe to offer visitors salt if they have it, bananas if salt is lacking, and water in the event that neither salt nor bananas is available. If the visitors wish to accept the friendship thus offered, they promptly eat or drink, as the case may be; otherwise it is an understood fact that they come as enemies and a fight is started immediately” (Kane 1933:265). This custom still prevailed during my fieldwork when I was offered water by the household of the treaty holder as I first entered a new deme.

The most common ritual in hunting in Southern Kalinga comes from the interpretation of the behavior of the idaw, a variety of myna. An important hunting and traveling omen throughout the North Luzon Highlands (and probably throughout mountainous Southeast Asia), the idaw carries messages from the spirit world and foretells the future. Beliefs vary from region to region, but in general hunters must receive a favorable sign from the idaw before beginning the hunt and must also receive favorable signs along the way of the hunt. An unfavorable sign from the idaw results in an aborted hunt. It is difficult to quantify the signs but there are usually more opportunities for unfavorable than favorable signs, though in times and areas of food scarcity some of the unfavorable signs are "missed" (for details see Lawless 1973:87-89).

The general Kalinga term covering prohibitions and omens in agriculture is paniyaw. Rituals associated with the wet rice nursery include a taboo on visiting those who have just planted the wet nursery and also a taboo on eating dogs and eels for the household involved in the wet nursery. A knotted strip (purdos), which is a rattan stalk about one meter tall, knotted and looped on the end, is knotted rattan strip is placed at the door of the household to remind people that visitors are not allowed. Also, a knotted rattan strip is placed on any corner of the paddy so that the dead will not disturb the field, according to folk explanations. Shouting and fires are also prohibited during transplanting.

A knotted strip is also placed on any corner of the paddy after transplanting. The knotted strip is, in fact, common throughout the North Luzon Highlands (and elsewhere in Southeast Asia) as a symbol of ownership and a sign prohibiting trespassing.

Prohibitions during harvesting include a taboo on stepping over harvested panicles after they are placed on the dike (banong), sneezing and whistling are prohibited, and there is a taboo on using bamboo as fuel. When the bundles (bobod) are hung to dry, there will be some fallen grains, and these may be picked up and used only by women.

In Southern Kalingaland usually old men harvest the first four bundles of rice, while in Western Kalingaland old women do this (inapowan). Also, where customs are more closely observed, old men plant first in Southern Kalingaland; and old women, in Western Kalingaland.

Getting palay from the granary is prohibited until after the third day in the belief that the rice will last longer if it is allowed to settle into its new home.

Most of the traditional Kalinga rice beliefs have been published (see Sugguiyao and Sugguiyao 1964:196-197). Examples of rituals for agriculture, hunting, illness, transactions, home industries, falls, death, construction, and weather may also be found in published works (e.g., Magannon 1972:69-79).

My informants claimed that only rats and snakes are currently taboo, though some in the Pasil River drainage area will kill and eat large snakes called boklat and tab-bad if they come across them.

## Conclusions

This article has been primarily descriptive with the purpose of providing data for future comparisons and for gathering in one accessible location information on a topic discussed only fragmentarily in the literature. The dynamics of food among the Kalingas sheds light on the indigenous food systems of pre-colonial Southeast Asia and also on the impact of population growth and the accompanying recession of the forest. It is obvious, for example, that the indigenous plants are adapted to the environment and any proposed change should carefully consider the dynamics of ecosystemic adaptation.

A necessary model that might be used in further examining and comparing these dynamics would integrate the economic, political, religious, and social components of Kalinga culture in delineating the consequences of these food systems. "These consequences, however, may not necessarily be the same as the conscious intention of the people. In fact, the long-term effect of the practice of many cultural beliefs and behaviors may be unintended and non-articulated as far as the day-to-day life of the people is concerned. These hidden consequences are known as latent functions" (Lawless 2006:1605).

The most immediately noticeable latent function from the description that we already have of the Kalinga food system is the role of religious beliefs and behaviors in the conservation of food sources. Hunts are often aborted because of unfavorable idaw signs, spirits often refuse permission to cut down trees, and the prohibitions surrounding the planting and harvesting of rice insures against loss of grain due to vandalism and carelessness.

The use of analytic models and the search for latent functions should stimulate our thinking and assist us in developing a degree of detachment in confronting the issues of food production, preparation, and consumption.

In studying a variety of cultures we should further understand the flexibility of human society's beliefs and standards.

### **Notes**

\* The data for this article were gathered under a fellowship from the Foreign Area Program of the Social Science Research Council, New York City; however, the conclusions, opinions, and other statements in this article are the author's and are not necessarily those of the Foreign Area Program or of the Social Science Research Council.

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