

CASSAVA PROCESSING AND MARKETING BY RURAL WOMEN IN THE CENTRAL REGION OF CAMEROON

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ABSTRACT This study examines the development of rural women's commercial activities in Central Cameroon, particularly the Department of Lekié, which is adjacent to Yaoundé, the capital of Cameroon. I focused on cassava processing technologies and the sale of cassava-based processed foods undertaken by women in a suburban farming village. Cassava is one of the main staple foods in central Cameroon, including in urban areas. One of its characteristics is that it keeps for a long period in the ground but deteriorates rapidly after being dug from the ground. For that reason, cassava is mostly processed and sold, especially to urban food distributors. Cassava processing is based on local women's labor, and their domestic technologies are difficult to practice in a city. In the study area, cassava-based food processing is used to prepare products for sale in the village. In recent years, with urbanization and changes in traffic conditions, it has also been commercialized in urban areas, and this change has resulted in the reevaluation of local processing technologies. Food processing using domestic technology ensures marketability in cities. Urban demand for processed foods produced in villages has increased the range of options for village women who sell such products.

Key Words; Cassava; Local processing technology; African rural women; Eton; Cameroon.

INTRODUCTION

The urban population of sub-Saharan Africa is rapidly increasing. Yaoundé, the capital of the Republic of Cameroon (hereinafter, Cameroon) and this paper's area of study, is one of Africa's rapidly expanding cities. Having exceeded two million people (Institut National de la Statistique, 2010), Yaoundé's population continues to grow each year.

In African cities that experience continual population increases, food supply to city residents is increasingly important, yet it is far from clear how food is supplied to growing urban populations. One reason for this lack of clarity is that the supply of food for city markets and its distribution chains are fluidly driven by extremely small-scale actors, such as smallholders, petty merchants, and the transportation industry (Guyer, 1987a; 1987b; Takeuchi, 1993a; 1993b; 1996; 1998).

This paper focused on cassava processing technologies and the sale of cassava-based processed foods undertaken by women in a suburban farming village, an area that supplies food for the city market.

First, I describe the swidden work and cassava use in the study village. Women are the main laborers in agricultural production in this area. Second, I show that the local processing technologies for cassava and the sale of cassava-based processed foods by women are carried out continuously in the village. Cassava is the main staple in the village of research area and is also one of the main staple

crops in Cameroon. It can be preserved for an extended period in the ground, but it deteriorates rapidly once it is dug up. Therefore, it is difficult to transport products over long distances, and processing is required, particularly for distribution to the city. Consequently, local processing technologies provide village women with opportunities for commercial activity not only in the village but also in the urban area. Finally, I examine factors affecting the commercialization of cassava relative to local processing technologies.

The demand for food in cities is continually rising. Meanwhile, the development of cash economies in farming villages is making it all the more necessary to have a cash income. Rural women are responsible for agricultural production, and the most accessible way to acquire cash is through selling crops and foods made from crops.

In Sugiyama's study of the agricultural community of Bemba in Zambia, she pointed out that the production of finger millet beer is the principal means by which village women acquire cash. Moreover, it facilitates the circulation of cash within the village. Sugiyama reported that millet beer has been instrumental in generating a cash return to the village. Men who consume millet beer are engaged in a large number of activities to get cash. The cash that they acquire from outside the village comes into the hands of the women (the producers) through the selling of millet beer. Millet beer production has also become a means by which female householders can hire male labor. Sugiyama noted an essential point, namely that the women's commercial activities (that is, the sale of processed food) equalized the availability of cash in the village (Sugiyama, 1995).

In the area studied in this paper, cassava-based processed foods have been sold daily in village shops and in periodic markets since about the time of independence, the 1960s, and they have constituted the main source of cash income for village women⁽¹⁾. The sale of processed foods by women within the village, a relatively new phenomenon that emerged after colonization, has facilitated the accumulation of commercial experience, provided financial resources for women to take part in economic mutual associations, and provided village women with a financial foundation when they went to the city (Shioya, 2005).

The sale of cassava-based processed foods has been carried out on a daily basis within the village. In recent years, however, it has expanded to the city. This paper focused on the cultural aspect of the contribution of rural women to urban food distribution and examined the factors involved in the expansion of commercial activities associated with cassava-based processed foods beyond the village to encompass the city.

RESEARCH AREA AND METHODOLOGY

The research area is the Department of Lekié, which is adjacent to Cameroon's capital, Yaoundé. Lekié is located in the Central Region, one of 10 regions of Cameroon. Following Yaoundé, Lekié is the second most densely populated area in the Central Region, and it is known for its large Eton⁽²⁾ population, a people

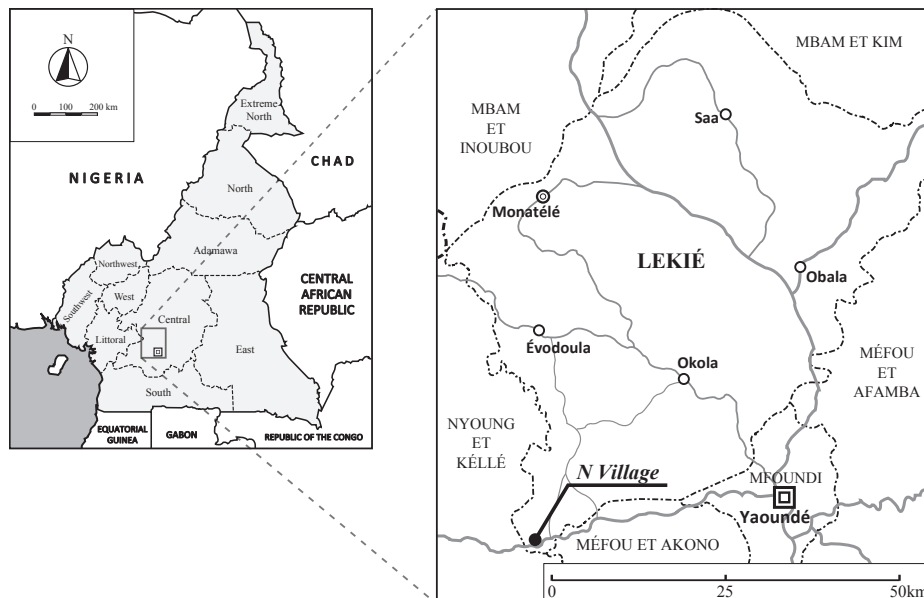


Fig. 1. Map of research area

who practice swidden agriculture.

The research area of N Village is located in the Commune of Okola, which is in the Department of Lekie in the Central Region (Fig. 1). There are about 400 inhabitants, mainly Eton people. It lies around 40 km west of the capital Yaoundé, along an old road that leads to Douala, Cameroon's foremost commercial city. The mode of transport to the capital Yaoundé is the bush taxi, an omnibus service that uses small passenger cars. A one-way fare to Yaoundé is 1,000 FCFA⁽⁵⁾.

N Village is the westernmost village in Lekie. Around 2 km to the west of N Village is a Bassa community, and 2 km to the east is a community of the Ewondo, who also practice swidden agriculture. The three ethnic groups of the Central Region (Eton, Bassa, and Ewondo) have lived adjacent to one another in this area, since precolonial times. Therefore, the area that includes N Village can be said to be a microcosm of the Central Region.

Participatory village studies were conducted from September 1998 to April 1999 and in January and December 2011. The following methods were employed. 1) Description of local farming practices and observation of women's involvement in farming activities. 2) Observation of crop processing, particularly cassava. 3) Observation of selling process of crops. 4) Survey of seven household budgets and dietary survey over a two-week period.

RESULTS AND DISCUSSION

I. Swidden Farming

As this area is located in the tropical rain forest, the principal occupation of the Eton is subsistence swidden farming, and the primary cultivated crops are cassava, plantain, macabo (*Xanthosoma sagittifolium*), and groundnuts. Hunting and fishing are subsidiary occupations. Cacao is cultivated as a cash crop; once the cacao trees are planted, the men are responsible for their care and maintenance. The farmland that is used for swidden cultivation is notionally divided into “men’s fields” prepared by men and “women’s fields” prepared by women. After the preparation of both types of fields, the main farming labor is provided by women, but the harvest from “men’s fields” is owned by men. Women can use these harvests for daily meals but they cannot sell the produce without permission from the men. In contrast, harvests from “women’s fields” are owned by women.

Land preparation starts with the cleaning of *lepene* (old or interior woodlands in the Eton language) by men in areas that have been left intact for more than 20 years. The fields that men clear for cultivation are called *essep*, which literally means “dry season” in Eton, because the reclamation takes place from December to January in the dry season. Tuber crops such as cassava, macabo, and plantain are grown in *essep* for about two years, and after the harvest, the land is left fallow for a period of more than five years. After the fallow period ends, women clear the land to create *apoup owono* (groundnuts fields).

The following is a detailed description of the Eton community’s cropping cycle. At the beginning of the dry season (from December to January), the men begin cutting down trees in the *lepene*. The task of felling all of the trees that enshroud the area requires physical exertion similar to that needed in battle. Before the dry season ends, the trees are felled and desiccated, and the field is then burned (from January to February). The felled trees are used for fuel. During this period, many people are seen selling firewood in the street.

The Eton do not begin tilling the soil until the rainy season starts in late February. Once the rainy season starts, men and women plant macabo, yam, cassava, and plantain. Because the roots of the trees remain deep in the earth, shallow-rooted crops are not planted in the *essep*. For instance, because the roots of groundnuts do not extend far below the soil surface, they are not suited to the hard soil of the *essep*. According to the Eton, the tubers that are planted in the *essep* become deeply rooted, and harvesting these tubers effectively tills the field. The acreage of the *essep* is two to three times larger than that of the fields used by women (*apoup owono/bina*).

After harvest, to restore the soil’s productivity,⁽⁴⁾ the *essep* is left in fallow for at least five years. The tree roots remain in the soil, and eventually bushes develop. This fallow field is called *ekorgui*. The women then prepare fields on the fallow *ekorgui* (which was once the *essep*). There are no large trees on *ekorgui* because the soil has already been tilled at least once, so it is much easier to till the *ekor-*

gui compared with the *essep*. This is why it is primarily women who prepare the land for cultivation. The initial farming field that is created after the *ekorgui* is the *apoup owono*. In this field, women mainly practice mixed cropping of groundnuts, cassava, and maize, and they also grow plantain, melon, okra, and leaf vegetables for a year and a half to two years.

Cropping of the *apoup owono* is carried out twice a year. During the first cropping period, the field is cleared for cultivation during the dry season, from December to January, and then harvested from June to July. During the second cropping period, the field is cleared for cultivation from June to July and then harvested toward December. Clearing and burning of the field take place during the dry season, and ploughing and seeding commence at the start of the rainy season. The groundnuts are harvested when the soil is still soft at the end of the rainy season.

Groundnuts occupy such an essential part of the Eton diet that the people say, "a meal without groundnuts is unthinkable." The fact that women's fields are called "groundnuts fields (*apoup owono*)" despite the mix of other crops is a testament to the importance placed on growing groundnuts. The groundnuts harvest period in December overlaps with the cacao harvest, and the men organize labor exchanges to harvest the cacao. The women, on the other hand, organize labor exchanges to harvest the groundnuts. For this reason, groundnuts are called "women's cacao" as opposed to "men's cacao." The groundnuts and cacao harvests both occur in December, making this the busiest season for farmers throughout the village.

After the groundnuts are harvested, the *apoup owono* is renamed the *bina*. Crops such as maize and cassava remain in the *bina*, and women provide daily meals made from the *bina*'s yield. The *bina*'s harvest, which is also sold as raw crops or processed food products, is described later. Once the harvest is over, the *bina* is once again left fallow for at least five years, thus becoming an *ekorgui*.

Aside from the *apoup owono (bina)*, one more field is used by women, the *lessan*, which is cultivated along the river or on the waterside and is used during the dry season. The crops that are planted here are tropical leaf vegetables such as *zom*, *folon*, *kelenkelen*, okra, and crops such as maize. The *lessan* is a vegetable field used to supplement food materials that are in short supply during the dry season. Because vegetables are scarce during the dry season, the *lessan*'s yield fetches a high price when it is put on the market in Yaoundé. However, the *lessan* was originally cultivated for subsistence farming and not to produce products for sale in the market; therefore, it is rare to find village women selling *lessan* produce.

As has been shown so far, apart from the initial work by men clearing the woodland, the Eton community's swidden farming is largely reliant on the efforts of women. Swidden farming, in which women play key roles, is subsistence farming that provides food for household consumption. When they are not engaged in farm work, women sell their crops and foods made from their crops. Therefore, the activities that women perform to obtain a cash income are determined by seasonal variation in farm work.

II. How Cassava Is Used

Because women are primarily involved in subsistence farming in the research area, production and consumption activities are directly linked through meal preparation. Meal preparation is considered women's work. In short, the productive activities and food culture in which women participate are closely related.

Food in N Village consists of "staple foods" and "supplementary foods." Staple foods are primarily made from cassava and other tubers and plantain, whereas supplementary food are sauce-type foods made from tropical leaf vegetables, meat, and fish seasoned with seeds, tomato, and chili. Groundnuts are mostly used in sauce-type foods. This combination of starchy staple foods and sauce-type supplementary foods is commonly observed in the food cultures shared among the agricultural communities in central Africa (Ankei, 1981: 122; Komatsu, 1996: 63).

When I investigated⁽⁵⁾ into diets in N Village, I found that cassava is the main staple food and that it is cooked in a number of ways. Aside from boiling, steaming, and pounding cassava into gruel (*couscous*), cassava flour is also produced and used to make fried dough. Cassava was used in more than half (58%) of all meals (Table 1). Considering that cassava leaves are also often used for supplementary food, the food culture of N Village depends to a very large extent upon cassava.

Table 1. Variation of staple food and frequency of use (Research carried out in October, 1998)

Staple Food	Formula	Way to Acquisition	Frequency of Use
Cassava	Boil	Home Grown	48
	Steam (<i>eboboro</i>)	Home Grown/ Purchase	14
	<i>couscous</i>	Home Grown	3
Macabo	Boil	Home Grown	16
Plantain	Boil	Home Grown	14
	Fry	Home Grown	1
Rice	Steam	Purchase(300 cfa/Kg)	15
Without Staple Food			1

Note: Including the case of plural use

In addition to cassava, other crops that are used as staple foods are macabo, plantain, and rice. Excluding rice, all of these crops are produced in the village. The fact that more than 85% of all of the food products used as staple foods were produced in N Village confirms that the swidden farming undertaken in N Village is indeed subsistence farming.

Seasonal variation in diets, a result of schedule of harvest periods for the village's crops, is apparent. Cassava, however, is available almost any time throughout the year. Cassava rapidly deteriorates after harvest, but while it is in the ground, it can be unearthed and used at any time. In this sense, the field in which cassava is planted functions as live storage. Therefore, unlike the other tubers, which have a fixed harvest period, cassava can be used as a staple or supplementary food any day of the year.



Fig. 2. *ebobolo* (*bâton de manioc*)

Cassava is cooked in many different ways, whereas the other tubers are only eaten boiled. Cassava is not only boiled, but it is also cooked or processed in elaborate ways. One of the cassava-based processed foods I observed in N Village was *ebobolo* (Fig. 2), which is a steamed, long, thin stick of gelatinous cassava wrapped in a leaf. The *ebobolo* is called *bâton de manioc* (a baton made from cassava in French) in Yaoundé. I also observed fried dough made from cassava flour.

Other processed foods that I observed in N Village included plantain-based processed foods, palm wine, smoked seafood, and smoked bush meat, which are used as supplementary foods. Among these processed food products, the cassava-based *ebobolo* is N Village's main processed food for marketing.

III. The Sale of Cassava-based Processed Foods: Sale in Periodic Markets

According to Fodouop, who studied a wide range of permanent and periodic markets across southern Cameroon, including the Central Region where N Village is located, the first markets in Yaoundé and in the rest of southern Cameroon were established after colonization. The reasons offered by Fodouop to explain why markets were never developed in this area until Germany began colonizing it in the 1880s included the sparseness of the population, the underdevelopment of agricultural technology, the underdevelopment of transportation methods, and the lack of safety when traveling (Fodouop, 1986, 1987, 1989).

The first markets were set up between 1884 and 1916 in Yaoundé and other administrative areas, as well as in some chiefdoms, army garrisons, and railroad construction sites. When Cameroon achieved independence in 1960, the number of markets in southern Cameroon stood at 75 (five times the number during German rule). After independence, the markets began to thrive. Although a number of these markets was established by the government, most started spontaneously.

According to Fodouop's study, in 1985, markets were not only held in the regional cities, which had permanent markets, but there was at least one periodic market in 91% of all villages and cantons across the whole of southern Camer-

oon. In the Department of Lekié, there was a periodic market approximately every 8.5 km. There were 2 or more markets in the 19 principal towns, and in 1986, 296 permanent and periodic markets were identified across the whole of southern Cameroon (Fodouop, 1986: 129).

The periodic market in N Village began during colonial rule. The land on which the periodic market is held was provided at the time by a Catholic mission society. The sale of processed foods by women can be considered one of the new economic activities that emerged under colonial rule.

The periodic market in N Village has a seven-day cycle; it is held every Sunday in a public square outside a church in the center of the village. At half past six in the morning, people with goods to sell flock to the market and exhibit their various wares. Sellers are not only from N Village but also from neighboring villages. There are no roofs or sales stands prepared as sales areas, and no officials collect sales tax, as in the permanent markets of Yaoundé, which are overseen and operated by government authorities. The people of N Village and those from neighboring villages participate freely in the market.

Table 2 lists the ethnicity and gender of the sellers who participated in N Village's periodic market. Women accounted for most of the sellers in the periodic market. There were 48 women, around 82% of all sellers. In addition, around 70% of the sellers were Eton, the main ethnic group in the village. The other sellers were predominantly from ethnic groups that populate neighboring villages. In short, the periodic market in N Village is a place where women sellers play a central role, and it is a place of local trade that is organized by the people of neighboring communities, particularly N Village. At the time of this study, both the sellers and buyers were very familiar with one another's names and places of residence, and while the market was a very multi-ethnic affair, trading activities were conducted as part of daily social interactions in which people knew one another's backgrounds.

Table 3 lists the products that were sold in the periodic market in N Village. The number of farm products exhibited was plentiful, but there were also many processed foods. In many cases, small volumes of crops were sold alongside processed foods, and 36 of the 58 vendors at the market were selling processed foods. In N Village's periodic market, the sale of surplus crops was overshadowed by the sale of processed foods.

It is worth mentioning that no one in N Village sold raw cassava. On the other hand, cassava-based processed foods accounted for around 30% of all of the processed foods exhibited (12 of the 36 products). The main items sold in N Village's periodic market were not surplus crops but rather processed foods made from crops that were cooked at home. These processed foods could be consumed immediately on the premises.

Table 2. Number of traders in a periodic market (N Village)

(Research carried out on September 21, 1998)

Ethnic Group	Male	Female	Total
Eton	7	33	40
Bassa	2	9	11
Ewondo	1	5	6
Bule	0	1	1
Total	10	48	58

Table 3. List of products in the periodic market (N Village) (Research carried out on September 21, 1998)

	Products	Number of Stall	
Crops	Yam	6	
	Capsicum	4	
	Oil Palm	4	
	Tomato	4	
	Herbs	4	
	Plantain	3	
	Sugarcane	3	
	Taro	2	
	Macabo	2	
	Fruits	8	
	the others	7	
	Subtotal	47	
Processed Foods	Cassava	Fried Dough	7
	Cassava	<i>ebobolo</i>	4
	Cassava	<i>mitumba</i>	1
	Maize	Liquor	4
	Maize	Fried Dough	2
	Wheat Fleur	Fried Dough	4
	Fish	Smoked Fish	8
	Shellfish	Smoked	3
		Shellfish	
	Oil Palm	Palm Oil	2
Oil Palm	Liquor	1	
	Subtotal	36	
Industrial Products	(Soap, Hardware, Plastic Bag, Used clothing, etc.)	13	
Others	(Leaf for <i>ebobolo</i> , Fresh Fish, Basket)	4	
	Total	100	

Note1: Total number of stalls is 58.

Note 2: *mitumba* is a kind of processed food based on cassava like *ebobolo* but it is originated from Bassa people.

Because cassava is the backbone of the food culture in N Village, there is a high probability that both the seller and buyer produced cassava, which would render it not very marketable. Thus, the addition of processing technologies makes cassava a commodity that can be marketed without the need to choose buyers. It is only through the addition of processing techniques that the crop's sale value is generated. Put another way, the domestic technology of processing is commercialized in the village.

IV. Everyday Sales: Village Shops/Vendors

Aside from the periodic village market, village women also sold processed foods on a daily basis through shops in the village. In such cases, food products that were processed at home were sold through three village shops. Most of the processed foods that the women handled consisted of foods based on cassava and plantain. The foods that were processed from cassava were either fried dough made from cassava flour or *ebobolo*. The food that was processed from plantain was a fried product that used matured plantain. Other products sold included palm oil, palm wine, banana, and pineapple.

Table 4 shows the weekly income and expenditures of a single household in N Village. The household received income almost every day during the week, primarily from the sale of processed foods. The products were sold on an extremely small scale because any individual household could produce only a limited volume of processed food at a time. In the case of *ebobolo*, no more than 100 *ebobolo* were produced at a time, and between 40 and 60 *ebobolo* were sold. The results obtained from other households were comparable.

The process of cooking *ebobolo*, which is discussed later, requires extensive time and labor. The quantities that are made at one time at home are therefore limited. Thus, the *ebobolo* that is available for sale is mainly sold in the village according to demand.

V. Transport of Farm Produce to Yaoundé

The distance from N Village to Yaoundé by bush taxi is around 50 km using a new paved road, and around 40 km on an old rough road. In both cases, the journey takes around one and a half hours. However, during the rainy season, when road conditions deteriorate, it is not at all uncommon for the journey to take as much as twice that long. There are sections of the paved road where the asphalt is missing and large potholes and ruts appear. To avoid these hazards, drivers have to reduce their speed. To make matters worse, these rough roads become muddy during the rainy season, and this presents a danger of sliding. Therefore, drivers have to maintain a lower speed. This transportation situation, which is easily affected by the season, is one of the key factors determining the product distribution structure around the villages in the Lekié Department and Yaoundé.

Table 4. Weekly income and expenditure (Household A) (Research carried out in March, 1999)

Day	Goods	Income	Expenses	Unit Price(FCFA)
Mon.	Fried Doudh of Cassava	450		5
	<i>Soap</i>		-500	500
Tue.	Banana	300		20
	<i>Petroleum</i>		-600	200/L
Wed.	Fried Doudh of Cassava	1100		5
	<i>Tomato</i>		-100	25
	<i>Envelope</i>		-25	25
	<i>Medicine</i>		-100	100
Fri.	Egg	60		10
	Fried Plantain	600		10
	<i>Rice</i>		-600	600/kg
Sat.	Fried Plantain	650		10
	<i>Fried Doudh of Cassava</i>		-25	25/3-4doudhs
	<i>Wing of Chicken</i>		-1000	500/kg
Sun.	Fried Doudh of Cassava	800		5
	Groundnuts	100		?
	<i>Palm Oil</i>		-400	400/L
	<i>Onion</i>		-100	100/3-4onions
		5060	-3850	

Note: Normal characters of goods show income and italic character show expenses.

This situation is not exclusive to N Village but applies across the whole Department of Lekié. Many of the roads that link villages are rough and are only wide enough to allow one car to pass. The Department of Lekié is a producing area that supplies 30% of the food destined for Yaoundé. The transportation of crops from Lekié to Yaoundé is mainly carried out by bush taxi (as of 2011).

According to a study conducted in 1999, taxi services were irregular, and even on days when taxi services were available, there were only one or two services a day. A 2011 study reported that a number of daily taxi services had become available. For example, a study in Okola, a small town at the entrance to the region when coming from Yaoundé, reported that there were more than 10 bush taxies per hour. This suggests that a thriving transportation industry now exists between Yaoundé and the villages. Bush taxi drivers are men who have developed into a new economic sector.

The bush taxi transports passengers and, as much as possible, commodities between Yaoundé and the region (Fig. 3). The bush taxi has the advantage of going around the villages and it functions as a means of transport for urban food supply activities. Thus, the traffic conditions control the urban food supply in Africa, as previous reports indicated (Takeuchi, 1998). The traffic conditions in the study region have been disadvantageous for the development of wholesale traders, but the increase in the number of bush taxis provides opportunities for women in villages to go to the permanent market in Yaoundé to sell their



Fig.3. Bush-taxi

products. Women in the village say that they go to Yaoundé at most once per week or at least once or twice per month.

Additionally, mobile phones are now widespread not only in the city but also in the village. The spread of mobile phones in the village enables rural women to know the demand for and price of food in Yaoundé and to compare the price of raw cassava with that of cassava-based products (*ebobolo*) to determine which products are most likely to reap optimal benefits.

VI. Demand in the City: “Village Bâton”

The cassava-based product that is most commonly consumed in Yaoundé is *bâton de manioc*, which, as was previously mentioned, is a long, thin stick of steamed gelatinous cassava wrapped in a leaf (Fig. 2) (*bâton de manioc* will be referred to as “bâton,” which is its common name in Yaoundé).

Bâton is eaten in all areas of Cameroon, and it is known by different colloquial names in each area. For example, in the Eton language, it is called *ebobolo*; in the Bassa language, it is called *bobla*; and in the language of Douala, whose home area is the port city of Douala, it is called *miondo*. The shape and preparation method also varies (Grimaldi & Bikia, 1985).

Ebobolo, the cassava-based processed food that Eton women produce, is a long, thin stick of cassava wrapped in a leaf that grows on the riverside; it is known as a specialty of the suburban farmlands near Yaoundé. When someone mentions “bâton” in Yaoundé, they are referring in most cases to *ebobolo*. The bâton produced by women in the suburban farms around Yaoundé is therefore called “village bâton,” and it is much loved by the residents of Yaoundé, despite its selling for half again the price of the bâton produced in Yaoundé (Table 5-1; 5-2).

The reason for the popularity of village bâton in Yaoundé is the “traditional” village preparation methods that are manifested in the taste and texture of the food.

The distinctive traditional preparation method is divided into two stages: processing and cooking.

First, during the processing stage, peeled cassava is soaked in water for three to four days and left near glowing embers so that it ferments naturally (Fig. 4).

Tables 5-1. Way of acquisition of materials for *Bâton de Manioc* (N Village and Yaoundé)

Materials	Bâton of N Village	Bâton of Yaoundé (Reference Price: FCFA)
Cassava	Harvested in own field	2500 ~ 3000 (10 ~ 12Kg)
Leaf	Collected	200/50 leafs
Yeast	×	100/pack
Cord	Banana fiber collected	Plastic bag 200/bag
Firewood	Collected	500/lot, or Gaz cylinder 6000/30L
Payment for mash	×	50 ~ 100/time

Note 1: Each of Bâton needs 4 leafs. Note 2: Plastic bag is broken to make the cord.

Tables 5-2. Price of *Bâton de Manioc* in Yaoundé

	Bâton of N Village	Bâton of Yaoundé
Wholesale Price	50 FCFA a each	100 FCFA/3 peaces
Selling Price	75 FCFA	50 FCFA

**Fig. 4.** Processing process

The cyanogenetic glycosides contained in cassava are detoxified via hydrolysis using the fermenting action of microorganisms (Ankei, 2003). This is easy to carry out in village kitchens using firewood. However, it is difficult to do this in Yaoundé, where gas stoves are prevalent. In Yaoundé, cassava is processed in a space- and time-saving manner, namely through fermentation using yeast. Both the residents of Yaoundé and the villagers say that bâton that is slowly and naturally fermented in the village tastes and smells different.

The next stage involves removing the cassava from the water, squeezing it dry, and then grinding it into paste. It is during this stage that the distinctiveness quality of village bâton is generated. There are three cooking methods (Fig. 5-1; 5-2; 5-3): the first method involves grinding the cassava into paste between two stones; the second involves pounding the cassava with a pestle and mortar; and the third



Fig. 5-1. Cooking method 1



Fig. 5-2. Cooking method 2



Fig. 5-3. Cooking method 3

involves using a milling machine that instantly converts the cassava into paste. The method that is considered to add the greatest taste is the stone method, which requires the most time and labor. There are some bâton makers who, after pounding the cassava with a pestle and mortar, grind it down further with stones.

The cooking method used is reflected in the taste and texture. Bâton that tastes good will have been kneaded thoroughly to deliver an elastic texture. It is difficult to achieve such a food texture using a machine.

All of these processing/cooking stages are practiced not only in the village but also in Yaoundé. But the residents of Yaoundé love “village bâton” and buy large quantities on the premise that the time-consuming and labor-intensive traditional preparation performed in the village is something special.

These two types of bâton can be visually distinguished as follows: (1) Yaoundé bâton is tied up with vinyl cord, whereas village bâton is tied up with banana fibers (because plant fibers cannot be acquired in Yaoundé); and (2) Yaoundé bâton is small and thin, whereas village bâton is long and thick (there is an abundance of material, so there is no need to be sparing).

In reality, however, people decide to purchase bâton after they have sampled the taste of the product exhibited. Thus, tastier products that are traditionally prepared are likely to sell at higher prices, but in practice, the likelihood of making a profit is low because of the enormous labor required, including the effort to acquire the materials.

CONCLUSION

The frequency of daily sales and of sales in the periodic market varies due to variations among households, which include variations in the need for cash, the frequency with which processed foods are produced, and the number of hands available to carry out the work. The frequency of sales also fluctuates due to seasonal changes in the distribution of labor. Nonetheless, the essential point here

is that commercial activities based on processed foods are carried out on a daily basis in the village. In other words, since colonial times, it is not specialized commercial activities but rather temporary commercial activities that have taken root in women's lives. As mentioned earlier, women play key roles in swidden farming, which is the principal occupation in N Village. Women are in a position to control production, and they use the produce they farm to obtain a cash income when necessary. Food processing, as a type of domestic technology, is the principal factor that enables cash generation in the village.

Even in the village shops, the distinct taste that comes from the cooking process employed is an essential element in sales. According to shopkeepers, the villagers know which people are good at making bâtons. Bâtons that have been made by master hands are sold out instantly, while other bâtons remain unsold for a long time. The commercialized domestic technology in the village is competitive, which may help the village to sustain the traditional methods of preparation described above.

Meanwhile, maintaining the traditional preparation, which requires extensive time and labor, may prevent the village's processed foods from being commercialized on a large scale. Village bâton results in the reevaluation of traditional preparation in cities because its appeal rests in the local food culture. In the context of urbanization, the domestic technology used by the village women is given added value and is commercialized in cities without mass production.

In the context of the increasing demand for food in urban areas, it can be said that food processing as a domestic technology ensures marketability in cities. Urban demand for processed foods that are produced in villages results in a broader range of options for village women who sell such products. Cassava is, on the one hand, the key material in the Eton food culture and on the other hand, a cash crop that, through sales both in the village and in the city, generates cash incomes for village women. The daily sale of processed food in the village is, along with the rising demand in the city, expanding the product's commercial sphere.

NOTES

- (1) The first daily shop in the village of research area was opened in 1962 by a woman in the village.
- (2) The Eton live in the tropical rainforest in southern Cameroon and in the border area with the Savanna. They are also known as the Beti, along with a number of other ethnic groups such as the Ewondo. At the beginning of the twentieth century, this ethnic group migrated from the Savanna area in the north toward the area they currently inhabit. They did not originally rely to a great extent upon agriculture but focused instead on hunting and gathering, along with small-scale crops including cassava, yam, and groundnuts. They used colonial rule as an opportunity to settle permanently, and their main livelihoods today are plantation agriculture and swidden cultivation.
- (3) FCFA means CFA franc (pronounced "cepha-franc"). It is the acronym for Franc de la Coopération Financière en Afrique Cenrtale, which is the currency that circulates in the former French colonies of Africa. The exchange rate with the Japanese yen is 1 yen to 5

- FCFA (as of 2011). In this paper, all monetary units are in FCFA, and the colloquial name of FCFA will be used. For reference: Yaoundé city multiple-passenger taxi (basic fare): 200 FCFA; gasoline (super) 1 L: 569 FCFA; newspaper 400 FCFA; a single cigarette: 25 FCFA (as of 2011).
- (4) Compost is not used in village farming.
 - (5) The two-week study targeted seven households. We recorded the food served for supper each day.

REFERENCES

- Ankei, T. 2003. Process of cassava Diffusion in Africa: a cultural-historical comparative study of technique of cassava processing (in Japanese). In (S. Yoshida, M. Hotta & M. Intou, eds.) *Tubers and Human Beings*, pp. 205–226. Heibon-Sya, Tokyo.
- Ankei, Y. 1981. Agriculture and economic activities of Songola, Zaïre (in Japanese). *Kikan Jinruigaku*, 12(1): 96–178.
- Fodouop, K. 1986. Le système de marchés du Sud-Cameroun à l'est de la plaine cotière. *Revue de Géographie du Cameroun*, 5(2): 124–138.
- 1987. Les marchés face au commerce sédentaire de détail dans le Sud Cameroun. *Revue de Géographie du Cameroun*, 7(1): 42–54.
- 1989. Les marchés du Sud-Cameroun: leur role dans l'organisation commerciale régionale. Compte-Rendu de These de Doctorat d'Etat Es-Lettres par l'Auteur. *Revue de Géographie du Cameroun*, 12(2): 157–163.
- Grimaldi, J. & A. Bikia, 1985. *Le Grand Livre de la Cuisine Camerounaise*. SOPECAM, Yaoundé.
- Guyer, Jane I. 1987a. Introduction. In (J. Guyer, ed.) *Feeding African Cities: Studies in Regional Social History*, pp. 1–54. Indiana University Press, Bloomington.
- 1987b. Feeding Yaoundé, Capital of Cameroon. In (J. Guyer, ed.) *Feeding African Cities: Studies in Regional Social History*, pp. 112–154. Indiana University Press, Bloomington.
- Institut National de la Statistique (INS) 2010. *Annuaire statistique du Cameroun*. Republique de Cameroun.
- Komatsu, K. 1996. Set of materials and food culture: A case study of an immigrated village in south-east of Cameroon (in Japanese). *Africa Kenkyu*, 48: 63–78.
- Shioya, A. 2005. Women's commercial activities in the urban hinterland in Cameroon: marketing and savings (in Japanese). *Yakara*, 38: 30–51.
- Sugiyama, Y. 1995. "Modernization" and women: a study of African women's livelihood (in Japanese). In (T. Akimichi, M. Ichikawa & R. Ootsuka, eds.) *Guidebook for Ecological Anthropology*, pp. 193–216. Sekai-Shisou Sya, Kyoto.
- Takeuchi, S. 1993a. A study of cassava production in the area of the Zaïre River (in Japanese). In (T. Takane, ed.) *Commercial Development of Agriculture in Africa*, pp. 19–61. Institute of Developing Economies, Chiba.
- 1993b. Structure of production and food supply to Kinshasa (in Japanese). In (T. Takane, ed.) *Commercial Development of Agriculture in Africa*. pp. 199–248. Institute of Developing Economies, Chiba.
- 1996. Urban food supply and the informal sector in Francophone countries in Africa (in Japanese). In (J. Ikeno, ed.) *Informal Sector in Africa and its Research Trends*, pp. 95–141. Institute of Developing Economies, Chiba.
- 1998. Food distribution and trader in the Democratic Republic of Congo: market structure and capital accumulation (in Japanese). In (J. Ikeno & S. Takeuchi, eds.) *Recon-*

sideration of the Informal Sector in Africa, pp. 57–99. Institute of Developing Economies, Chiba.

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