

THE ARK OF TASTE IN

# Ke nva

The title 'Ke nva' is rendered in a large, bold, sans-serif font. The letters are primarily black, but a central portion of the text is cut out, revealing a bright green background. This cutout has a jagged, torn-paper edge. The word 'Ke' is on the top line and 'nva' is on the bottom line. The overall composition is centered on a solid red background.

FOOD, KNOWLEDGE, AND STORIES  
OF GASTRONOMIC HERITAGE



THE ARK OF TASTE IN

# Ke n ya

FOOD, KNOWLEDGE, AND STORIES  
OF GASTRONOMIC HERITAGE



Università di Scienze  
Gastronomiche di Polenzo



Slow Food®



Slow Food®Kenya

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**B**iodiversity is the greatest promise for the future of humankind. Without it, the foundation for human life on the planet is lost, as is the very soil on which civilizations and cultures have been shaped and formed as the result of human adaptation to the natural environment.

Defending, protecting, and promoting biodiversity is therefore not simply one among a number of choices, advanced by the intellectuals of conservation or by nostalgic environmentalists: It is, rather, the only viable path forward. It is a moral duty that we, the generation that inhabits this historic moment, must take on for those who will come after us and live on this planet Earth, a planet that, today, we are trampling, hurting, and mistreating. From this point of view, the Ark of Taste, a global project that this book takes up in its African—and, in particular, Kenyan—context, is an initiative that seeks to create information, knowledge, and awareness about this unique heritage. Through the Ark, communities are invited to rediscover their agricultural and food heritage, in order not to lose the connection with the land that feeds us and will continue to feed us.

Talking about biodiversity and its protection is of crucial importance on the African continent. Africa is the place where, today, the phenomenon of land grabbing is taking its strongest hold. It is a continent where the onslaught of intensive agriculture—which appropriates the most productive lands, homogenizes production, pollutes the environment, and marginalizes small-scale agricultural producers—is particularly severe. It is the place where climate change creates the greatest hardship and where drought and a hostile climate are major obstacles to ensuring that everyone has the right to food and access to land. For these reasons it is important to know about, catalogue, and protect all those local varieties that find their natural habitat in Africa's pedoclimatic conditions and that, on the one hand, preserve cultural heritage and, on the other, represent the only democratic instrument for restoring to small-scale farmers the food sovereignty that we in the West have so often usurped.

As citizens, we must be aware that the gastronomic heritage of a country rests first and foremost on the shoulders of these people, who, among other things, are those who care for the environment, who keep marginal communities alive, who save soils from erosion, and who protect biological, cultural, and food diversity.

Defending biodiversity takes us toward a more sustainable future, and a sustainable future for Kenya and for Africa as a whole represents a hope for the future of the entire planet. This publication is intended as a tool to promote

Kenya's biodiversity and make it known to the wider public. The University of Gastronomic Sciences of Pollenzo and the Slow Food and Terra Madre networks carried out extensive fieldwork, meeting communities of producers and collecting stories, testimonies, and agricultural and gastronomic knowledge. What you have in your hands is the result of this collective work and it should be understood as an open process that will grow and in which we want to involve anyone interested in safeguarding the food heritage of this magnificent country. We are at the beginning of a long and fascinating journey of discovery. Great things lie ahead.

Carlo Petrini

# PREFACE

**T**he debate on climate change has come to occupy a central place in public discourse and has attracted attention across the globe. Temperatures are rising, rainfall patterns are changing, rivers and lakes are drying up, droughts and famines are increasing, deserts are spreading, and biodiversity resources are disappearing. It is important to note that most of the disasters related to climate change take place in developing countries, especially in Africa, despite the fact that these areas produce the least amount of greenhouse gases. This is mainly due to high dependence on natural resources for livelihood and limited capacity to cope with the variations and extremes that result from a changing climate. Severe fluctuations in weather patterns have adversely affected small-scale farmers, pastoralists, and indigenous communities, increasing poverty and food insecurity across Africa.

Industrial agriculture remains one of the biggest emitters of greenhouse gases. Intensive production systems and the unsustainable management of natural resources exert great pressure on food biodiversity. In addition, continued overreliance on a few hybrids and monocultures promoted by a handful of multinational corporations poses a grave threat to food biodiversity, jeopardizing traditional food cultures and the livelihoods of smallholder farmers.

This is compounded further by the promotion of genetic engineering (GE) and genetically modified organisms (GMOs), which are unreliable from a scientific point of view, economically inefficient, and environmentally unsustainable. The GMO lobby groups are showing signs of desperation. Once again they are on the offensive with major public relations projects targeting East Africa in an attempt to subvert African policy development for the sake of their own, narrow agendas. With their excessive influence over many aspects of global economic, political, and social life, multinationals' and lobbyists' immediate goal is to weaken national biosafety laws, thereby making it easier to push their contentious, high-risk products into African markets.

Furthermore, the indigenous and traditional knowledge systems that have sustained Kenyan communities for centuries are being eroded. As a result, there has been a loss of collective memory of traditional foods and biodiversity resources in some communities, poor intergenerational knowledge transfer, and neglect of indigenous practical knowledge.

Over the years, biodiversity has acted as an insurance against hunger and adverse weather conditions, helping communities in Kenya to remain resilient. Local crops have evolved genes for drought tolerance and disease resistance, enabling them to withstand the test of time. However, the levels of biodiversity loss being witnessed in Kenya and other African countries will continue to threaten the pursuit of food secure and food sovereign African nations. Agroecology and biodiversity conservation, which stand against the growing corporate takeover of the African food system, are the only viable solutions. Through collaboration with Slow Food and the University of Gastronomic Sciences, we have embarked on an ambitious project to catalogue traditional plant varieties, animal breeds, and processed products that are disappearing from our farms and tables. This publication reminds us of our rich Kenyan and African cultural and gastronomic heritage. Defending food biodiversity will help to ensure that our communities are food secure and to mitigate the impacts of climate change and the standardization of our diets.

**John Kariuki Mwangi**

Vice president of the Slow Food Foundation for Biodiversity  
Coordinator of Slow Food Kenya



# THE SASS PROJECT (SUSTAINABLE FOOD SYSTEMS FOR SUSTAINABLE DEVELOPMENT)

**F**unded by Italy's Ministry of Education, University and Research (MIUR), SASS aims to strengthen the relationship between agrobiodiversity conservation, nutrition, and health in sub-Saharan Africa. Working with local stakeholders, the project aims to develop strategies and policies to promote local supply chains in order to make them more sustainable and efficient.

It involves the participation of four Italian universities (University of Milan Bicocca, University of Cattolica, University of Pavia, and University of Gastronomic Sciences) in collaboration with the Dutch European Centre for Development Policy Management (ECDPM). In addition to these, there are local partners, such as the Naivasha Basin Sustainability Initiative (NBSI), Oikos, Kenyatta University, Nelson Mandela University, the Network for Ecofarming in Africa (NECOFA), and Slow Food convivia and Presidia in Tanzania and Kenya.

The project promotes the production, marketing, and consumption of neglected and underutilized species (NUS), also known as "orphan crops" (Padulosi et al., 2013). These are wild species, varieties, and ecotypes widespread in the Global South but rarely traded internationally, and studied and economically exploited only to a limited extent (Gruere et al., 2007). Interest in NUS arises from the fact that their role in ensuring food security and sovereignty in traditional agricultural systems, preserving biodiversity, and generating income and employment for local communities is widely recognized (Will, 2008; Jaenicke and Hoeschle-Zeledon, 2006). Nevertheless, these species are not developed to their full potential due to a lack of awareness about their real value and the difficulties that local and international populations face in marketing them. The project aims to offer theoretical and methodological tools to overcome these difficulties, starting from research conducted in three interdisciplinary sample areas in Tanzania (Arusha and Iringa) and Kenya (Nakuru).

As part of the SASS project, the University of Gastronomic Sciences of Pollenzo conducted an anthropological and ethnobotanical survey of the territories under investigation, identifying and cataloguing the NUS of plant, fungal, and

animal origin that characterize the local foodscape. The survey studied the patterns of trade and consumption associated with these NUS by verifying their presence in markets and informal places of exchange. The work carried out in the field allows the University of Gastronomic Sciences to support and implement the activities of the Ark of Taste, an initiative managed in collaboration with the Slow Food Foundation for Biodiversity that works to document and promote traditional food products at risk of disappearing. The work of the University has allowed Ark of Taste products to gain greater visibility at local and international levels, and has deepened the study of local gastronomic landscapes by identifying new products to be preserved, as was done during field work in the district of Nakuru. This Atlas provides a summary of the first results obtained during the work carried out in Kenya.

The selection and cataloguing of products, completed by researchers from the University of Gastronomic Sciences, was made possible thanks to collaboration with the local Slow Food Kenya network and in particular with members of the Slow Food Nakuru Convivium coordinated by John Kariuki, vice president of the Slow Food Foundation for Biodiversity. The 75 products described here represent a fundamental contribution to understanding and appreciating the richness of Kenya's gastronomic traditions and territories, and to protecting this natural and cultural wealth, beginning with the rediscovery and promotion of sustainable productive and cultural practices.

**Dr. Paolo Corvo**

Scientific Coordinator of the SAAS Project

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# ABOUT THE UNIVERSITY OF GASTRONOMIC SCIENCES

**F**ounded by the Slow Food movement and located in the heart of the food and wine region of Piedmont, Italy, the University of Gastronomic Sciences (UNISG) supports a unique educational design based on:

- cross-disciplinary learning
- practical experience
- study trips around the world

The distinctiveness of the University's programs attracts students from dozens of different countries who are interested in an original educational project that combines study and practice, books and life testimonies, science, management, craftsmanship, and traditional knowledge. These programs are complemented by study trip experiences that are designed to offer direct contact with producers and companies in the agri-food industry, as well as first-hand experiences of various regions and their cultural traditions around the globe.

The University is supported by over 130 companies in the agri-food sector, as well as institutions that support research activities and participate in the life of the University. These companies and institutions make up the Association of Friends and Strategic Partners Club of the University of Gastronomic Sciences.

The methodological and didactic approach of the University provides students with a holistic view of current and past food production systems, and allows them to learn how to develop models and alternative scenarios for the food systems of the future.

The University creates gastronomes, new professionals with knowledge and expertise in many food-related fields. Gastronomes work to develop methods of food production, distribution, and consumption that will create a more sustainable future for the planet.

At the heart of what defines a gastronome is a deep understanding of food as a value and its important role in creating and shaping society. UNISG's programs offer a comprehensive perspective of food, from cultural, social, economic, ecological, communications, and marketing points of view.

The current programs are:

- Undergraduate degree in Gastronomic Sciences and Cultures. (ITA, ENG)
- Graduate degree in Food Innovation & Management. (ENG)
- Master in Gastronomy: Creativity, Ecology and Education. (ENG)
- Master in Gastronomy: World Food Cultures and Mobility. (ENG)
- Master in Food Culture, Communication & Marketing. (ENG)
- Master in Wine Culture, Communication & Management. (ENG)
- Master in Ecogastronomy in Cuisine. (ITA)
- PhD Program in Ecogastronomy, Education and Society. (ITA, ENG)

# WHAT IS SLOW FOOD?

**S**low Food is a global, grassroots organization, founded in 1989 to prevent the disappearance of local food cultures and traditions and counteract the rise of fast food culture. Since its founding, Slow Food has grown into a global movement involving millions of people in over 160 countries, working to ensure that everyone has access to good, clean and fair food. Slow Food is the umbrella organization responsible for guiding and steering the action of the entire movement, which is composed of over 1,500 local chapters and 2,400 food communities, and reaches millions of people every year.

Slow Food promotes food that is good, clean and fair for all: good because it is healthy in addition to tasting good; clean because it is produced with low environmental impact and with animal welfare in mind; and fair because it respects the work of those who produce, process, and distribute it. Slow Food works to defend biodiversity and to promote a sustainable and environmentally friendly food production and consumption system; to spread sensory education and responsible consumption; and to connect producers of quality foods with co-producers (conscious consumers) through events and initiatives.

Slow Food is committed to protecting traditional, sustainable, quality foods, defending the biodiversity of cultivated and wild varieties as well as methods of cultivation and production. These are all threatened by the prevalence of processed food, industrial agribusiness, and the rules of the global market.

The Slow Food Foundation for Biodiversity was created in 2003 to safeguard food biodiversity and gastronomic traditions around the world. It promotes a sustainable model of agriculture that respects the environment, cultural identity, and animal welfare and supports the right of each community to decide what to plant, produce, and eat. Slow Food has become what it is today based on the safeguarding of traditional products and practices.

The Foundation's activity focuses primarily on countries in the Global South, where defending biodiversity means not only improving quality of life but guaranteeing the very survival of local communities. It finances and coordinates a group of international projects focused on protecting agricultural biodiversity: the Ark of Taste, 10,000 Gardens in Africa, Presidia and Narrative Labels, Slow Food Chefs' Alliance, and Earth Markets.

# WHAT IS THE ARK OF TASTE?

**T**he Ark of Taste is an online catalogue of foods at risk of disappearing that are part of the cultures and traditions of the entire world.

The Ark was created to point out the existence of these products, draw attention to the risk of their extinction, and invite everyone to take action to help protect them by seeking them out, buying and consuming them, telling their story, supporting their producers, and, in some cases (such as the case of endangered wild species at risk of extinction), promoting their conservation and reproduction.

The overall objective is not to create a seed bank, a collection of genetic material, or a museum to exhibit traditional knowledge, but to rediscover and give value to these resources in order to support local economies.

In addition to plant and animal species, processed products board the Ark because, together with plant and animal biodiversity, cheeses, cured meats, breads, and sweets are also disappearing. These products are expressions of farmers' and artisans' knowledge that exists not in written recipes, but as complex skills and practices passed down through generations.

## WHAT ARE THE CRITERIA FOR SELECTING A PRODUCT?

- 1. Products can be domestic species (local plant varieties and animal breeds), wild species (only if related to specific techniques for collecting, processing or traditional uses), or processed products.*
- 2. Products must be of particular sensory quality, as defined in local contexts: Chemical or physical analyses are not sufficient to judge the quality of a product, but nor is tasting. The origin of the product must be understood and communities must be consulted. Ultimately, it is fundamental to consider the palate of the community from which a product originates. A European product could be difficult to understand and appreciate for an African taster, just as an Asian product could be difficult to decipher and appreciate for a European.*

3. *Products must be connected to a territory and to the memory, identity, and traditional local knowledge of a community:* The products that interest us are strongly linked to their territory, not just in terms of climate and environment, but also in a cultural, historical, and physical context.
4. *Products must be produced in limited quantities:* The Ark of Taste is a catalogue of products, not producers. Therefore, it is not necessary to have an exact figure of the quantity produced (data which is, however, essential for establishing a Presidium), but it is important to at least identify an order of magnitude, to establish whether we are dealing with an artisanal or an industrial product.
5. *Products must be at risk of extinction,* whether real (i.e. imminent) or potential (i.e. when the local social and environmental situations are such that a reduction in the quantity of the product or the number of producers can be predicted for the coming years).

## HOW TO NOMINATE A PRODUCT

Anyone can nominate a product without being an expert, having particular skills, or being a Slow Food member. It is possible to nominate a product from your own area or from other communities or another country. You can nominate a product by filling out the simple form available on the Slow Food Foundation for Biodiversity website.

The nomination form will be evaluated by the national/regional commissions, in countries where they exist. The Foundation website lists the countries in which a commission exists and the relevant contact information for getting in touch with local working groups. These two bodies – the local commissions and the Slow Food Foundation for Biodiversity – will verify that the nomination fits the criteria established for the project. To do so, the Slow Food Foundation collaborates with advisers from different countries. If nomination forms are incomplete, additional information will be requested from the nominator.

After approval, the next step is to include a brief description of the product in the online catalogue.

At the time of printing this publication, Slow Food members have entered more than 4,850 products from 148 countries into the Ark of Taste.

The project: [www.fondazione Slow Food.com/en/what-we-do/the-ark-of-taste/](http://www.fondazione Slow Food.com/en/what-we-do/the-ark-of-taste/)

Nomination form: [www.fondazione Slow Food.com/it/cosa-facciamo/arca-del-gusto/segnalazioni-prodotti-dellarca/segnala-un-prodotto/ficha-de-propuesta-para-el-arca-del-gusto/](http://www.fondazione Slow Food.com/it/cosa-facciamo/arca-del-gusto/segnalazioni-prodotti-dellarca/segnala-un-prodotto/ficha-de-propuesta-para-el-arca-del-gusto/)

# WHAT ARE THE SLOW FOOD PRESIDIA?

**T**he Presidia (singular: Presidium), active since 1999, are projects in which Slow Food works with groups of small-scale producers to resolve difficulties they face, uniting isolated producers and connecting them with alternative markets that are more sensitive to their situation and appreciative of their quality products. To make the journey from being listed on the Ark to becoming a Presidium, it is essential to make direct contact with producers, who in turn must share Slow Food's values and philosophy and be motivated to develop the project.

## **A SLOW FOOD PRESIDIUUM CAN BE CREATED FOR:**

1. A traditional product at risk of extinction (an Ark of Taste product);
2. A traditional production practice at risk of extinction (e.g. fishing, breeding, processing, or cultivating);
3. A rural landscape or ecosystem at risk of extinction.

To create a Presidium, two aspects must always be verified: environmental sustainability ("clean") and social and economic sustainability ("fair").

## **WHAT IS THE DIFFERENCE BETWEEN THE ARK OF TASTE AND THE PRESIDIA?**

While the Ark of Taste is a catalogue of products, the fundamental characteristic of the Presidia is the relationship with producers and the creation of an initiative to support them. Starting a Presidium means visiting producers, finding out how they work and what difficulties they face, and understanding their social and cultural context and their market in order to succeed in putting a promotional initiative into action. The Slow Food Presidia directly intervene to safeguard traditional products at risk of extinction (products from the Ark) and represent, therefore, the next phase after cataloguing on the Ark. Naturally, it is not possible to have as many Presidia as there are products on the Ark. The hope is that many other organizations and institutions will also mobilize to save these products. Slow Food has established 540 Presidia in more than 60 countries around the world, and there are eight Presidia active in Kenya.



# SLOW FOOD FOR AFRICA: 10,000 GARDENS TO CULTIVATE THE FUTURE

**A**frica is a rich continent boasting a huge variety of peoples, cultures, and languages (over 2,000), and an extraordinary wealth of biodiversity. Africa is home to distinct terrains, landscapes, and climates; a diverse heritage of natural resources and foods (fruit trees, grains, vegetables, and animal breeds); and essential ancient knowledge. It is also a young continent, full of energy and creativity. Slow Food works with and promotes this wealth of resources, putting communities, people, and their knowledge at the center of all projects.

Since 2011, the Gardens in Africa project has involved over 50,000 people in 35 African countries, as well as tens of thousands of members and activists around the world. After the original target for the project (1,000 gardens) was reached at the end of 2013, Slow Food decided to re-launch the initiative in 2014 with a new challenge: To create 10,000 gardens across the continent. Creating 10,000 good, clean and fair gardens in African schools and communities means teaching young people about the importance of food biodiversity and access to fresh and healthy food, as well as creating a network of leaders who are aware of the value of their own land and culture. This network can give rise to the leaders of change across all continents, a change based on the liberation of traditional foods and knowledge in a social economy linked to the land and environment.

The gardens are practical models of sustainable agriculture, adapted to the individual characteristics of diverse settings—environmental, social, and cultural—and easily replicable. They can lead the way toward a different model of development, in which food production is reconnected with local societies and environmental awareness.

Slow Food is not simply creating a series of gardens in Africa, it is also promoting an idea of agriculture based on knowledge of the terrain and respect for biodiversity and local cultures; an agriculture that is capable of meeting the nutritional requirements of African communities without distorting social relations and destroying the environment, while also giving value to history and knowledge, with respect for the land and its ecological equilibrium.

The traditional varieties of fruits, vegetables, aromatic herbs, and medicinal plants grown in Slow Food gardens are comparatively disease and drought resistant since they have adapted over time to their specific environments. Seedbeds are created to reproduce seeds so that they do not need to be purchased every year. Compost is made with discarded vegetables, manure, and ash to nourish the land and keep it fertile and healthy. Plants are protected using traditional methods to avoid buying pesticides, which poison the soil and water. Water is conserved by keeping moisture in the soil through mulching, collecting rainwater, and implementing drip irrigation systems. The harvest supplies families and school canteens (in the case of school gardens), with the excess produce being sold at local markets or in small restaurants that sometimes develop next to the gardens.

This project has played a significant role in strengthening Slow Food in Africa. To date, more than 3,000 gardens have been established in 35 countries, involving more than 50,000 people.

## **10 ESSENTIAL INGREDIENTS FOR A SLOW FOOD GARDEN**

### **1. They are created by a community.**

The gardens bring together and value the capacities of all community members, uniting different generations and social groups (village or school associations, local administrators, and non-profit organizations). They recover the wisdom of older generations, make the most of the energy and creativity of younger people, and benefit from the skills of experts.

### **2. They are based on observation.**

Before planting a garden, it is necessary to learn about, observe, and get to know the local terrain, varieties, and water sources. The garden must be adapted to its surroundings and local materials should be used to make fencing, compost bins, and nurseries.

### **3. They do not need a large amount of space.**

By looking creatively at the space available, it is possible to find somewhere to put a food garden in the most unlikely places: on a roof, by the side of a footpath, and so on.

#### **4. They are gardens of biodiversity.**

Slow Food gardens are places for local biodiversity, which has adapted to the climate and terrain thanks to human selection. These nutritious and hardy varieties of vegetables, medicinal plants, culinary herbs, and fruits trees (e.g. bananas, mangos, citrus) do not need chemical fertilizers and pesticides.

#### **5. They produce their own seeds.**

Seeds are selected and reproduced by the communities. This means that every year the plants become stronger and better suited to the local area and money does not need to be spent on buying packets of seeds.

#### **6. They are cultivated using sustainable methods.**

Natural remedies based on herbs, flowers, or ash are used to combat harmful insects or diseases.

#### **7. They save water.**

Once again, an approach based on observation and creativity is fundamental. Sometimes it only takes a gutter, tank, or cistern to collect rainwater to resolve seemingly insurmountable problems and avoid more expensive solutions.

#### **8. They are open-air classrooms.**

Food gardens offer an excellent opportunity for teaching adults and children alike about local plant varieties, promoting a healthy and varied diet, explaining how to avoid using chemicals, and giving value to the craft of farmers.

#### **9. They are useful, but also fun.**

Food gardens are a simple and inexpensive way of providing healthy and nutritious food. But even in the most remote villages and the poorest schools, Slow Food gardens are also a place for games, celebrations, and fun.

#### **10. They are networked together.**

Neighboring gardens exchange seeds, while those farther away exchange ideas and information. The coordinators meet, write to each other, and collaborate. "Twinings" between schools and convivia from all over the world allow the creation of new gardens across the continent.

# THE SLOW FOOD CHEFS' ALLIANCE

**T**he Alliance project started in Italy in 2009 and, so far, has spread to 20 other countries, from The Netherlands to USA, and from Mexico to Kenya.

Its objectives are:

- to inspire the creation and strengthening of direct relationships (of work, collaboration, friendship, and solidarity) between chefs and food producers.
- to promote Presidia and Ark of Taste products, as well as good, clean and fair products made locally on a small scale, thus protecting food biodiversity at risk of extinction.
- to communicate about small-scale farms and artisanal food producers and raise their profile.
- to develop and strengthen the Slow Food network in local communities, bringing producers, chefs, and restaurateurs closer to the Slow Food values.
- to promote local gastronomic traditions and artisanal knowledge.
- to raise awareness about the need to make sustainable consumption choices.

- to translate Slow Food's international campaigns (Slow Fish, against food waste and GMOs, in favor of biodiversity and raw milk cheeses, to protect agricultural landscapes, etc.) into concrete, everyday actions.
- to provide concrete support to the Slow Food projects to protect biodiversity and the activities of the Terra Madre network.

The participating chefs have diverse backgrounds and cooking styles, but they all share a commitment to protecting agricultural biodiversity and safeguarding gastronomic knowledge and local cultures. They always source quality ingredients (local, sustainable, and seasonal) and communicate the origin of their products and the names of the producers who supply them.

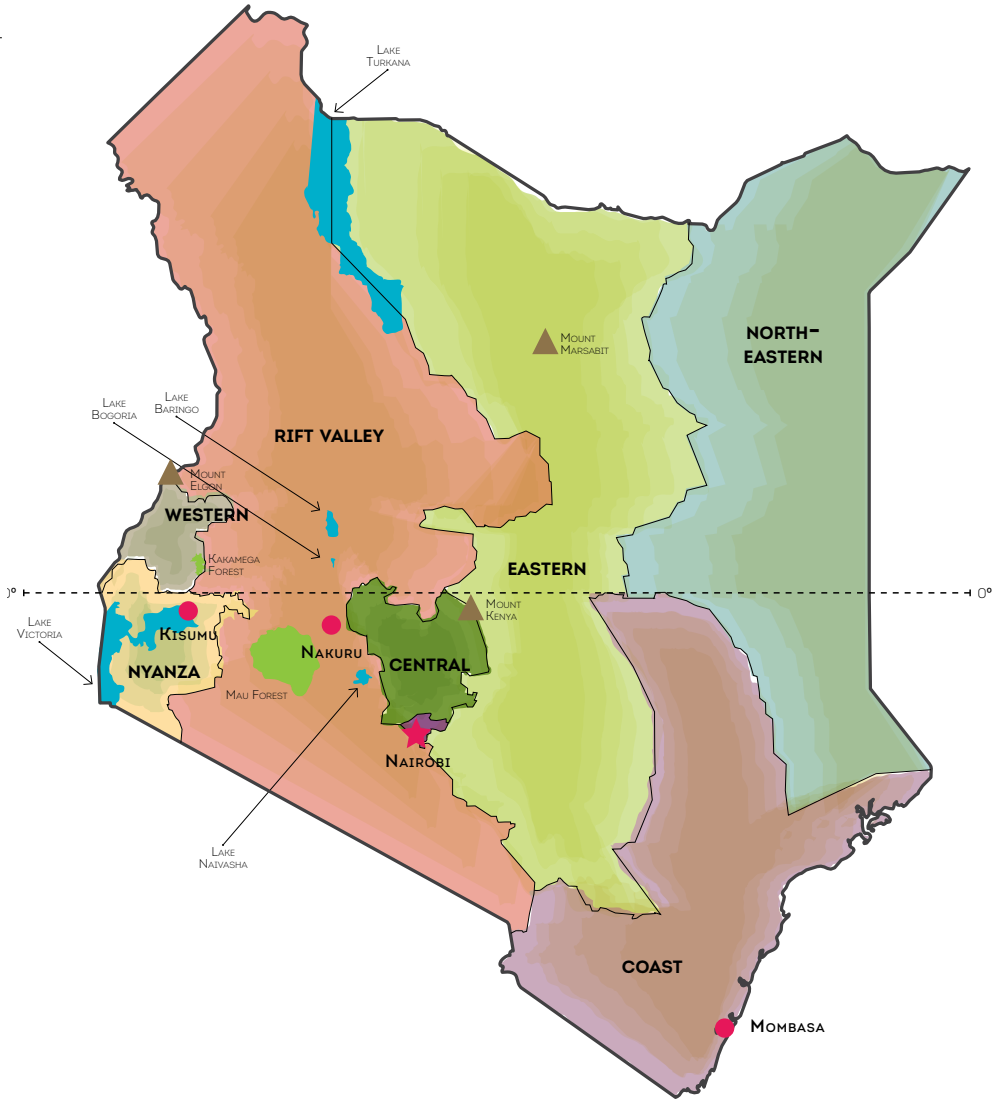
# ABOUT SLOW FOOD KENYA

**T**he Slow Food Convivia Association of Kenya (hereinafter referred to as Slow Food Kenya or SFK) is part of Slow Food, a global, grassroots organization, founded in 1989 to prevent the disappearance of local food cultures and traditions, counteract the rise of fast life, and combat people's dwindling interest in the food they eat, where it comes from, and how our food choices affect the world around us.

Slow Food Kenya started its activities in 2004 after the first edition of Terra Madre Salone del Gusto (an international food and agriculture event that brings together producers and artisans of the food industry from around the world every 2 years in Turin, Italy). It was officially registered in 2014 and launched in 2015. Today SFK brings together 28 local chapters (called convivia) and 60 food communities that are spread in different areas across the country. Its main activities focus on the defense of food biodiversity, sustainable agriculture, and the promotion of local and traditional food. It supports small-scale farmers, fishers, and herders as they rediscover or enhance traditional techniques and helps them to promote their food culture with pride and dignity by ensuring that everyone has access to good, clean and fair food.

The association has actively participated in different projects over the years. Through the Ark of Taste project, 75 products that are at risk of disappearing from Kenya's food culture have been identified and catalogued with the aim of pointing out their existence, drawing attention to the risk of their becoming extinct or abandoned within a few generations, and inviting Kenyans to take action to help protect them. Eight Slow Food Presidia have been established in the country, for Ogiek Honey, Molo Mushunu Chicken, Nzoia River Reed Salt, Lare Pumpkin, Molo Sheep, Pokot Ash Yoghurt, Mau Forest Dried Nettles, and Red Maasai Sheep. The aim of the Presidia is to sustain quality products at risk of extinction, protect unique ecosystems, recover traditional processing methods, and safeguard local breeds and plant varieties. Slow Food Kenya is also involved in Slow Food's flagship project 10,000 Gardens in Africa. This

initiative aims to create 10,000 good, clean and fair food gardens in African schools, villages, and urban areas to guarantee availability of fresh and healthy food to communities. More than 400 gardens have already been established in Kenya. The Slow Food Chef's Alliance is a network of chefs helping to defend food biodiversity across the world. It unites chefs from restaurants, hotels, canteens, and other food outlets. The chefs support the Slow Food projects by buying and using products from the Ark of Taste and Presidia. The Chef's Alliance in Kenya unites 10 chefs from Nakuru, Kiambu, and Nairobi counties who are working closely with small-scale farmers and food outlets to promote Kenyan gastronomy. Food and Taste Education seeks to reawaken our senses and increase our understanding of where our food comes from, how it is produced, and by whom. Adults and children learn to appreciate the cultural and social importance of food. Food and Taste Education activities continue to play a critical role in creating awareness about the differences between quality products and standardized, mass-produced alternatives in Kenya.





# NOTES

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## GET INTO THE FUTURE OF FOOD!

And study at a university located at a UNESCO World Heritage Site, the ideal place to immerse yourself in the world of food



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# CHAPTER 1

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## **FRUITS AND VEGETABLES**

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# N.1 CHEPKILUMNDA

*Brassica oleracea var. acephala* DC.



## CATEGORY



VEGETABLES

## PRODUCTION AREA

OLENGURUONE,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

KIPSIGIS  
(KALENJIN)

## SEASONALITY

### SOW



AT THE BEGINNING OF THE RAINY SEASON (MAINLY IN LATE MARCH OR EARLY APRIL)

### HARVEST



IT TAKES 3-4 MONTHS BEFORE LEAVES CAN BE HARVESTED.

## SENSORY ANALYSIS

### VISUAL

THIS VARIETY GROWS UP TO 1 METER IN HEIGHT AND HAS LIGHT GREEN LEAVES. IT IS AN ERECT ANNUAL HERB, OFTEN BRANCHED, WITH LOBED LEAVES THAT ARE SMALLER THAN TO THOSE OF OTHER BRASSICAS.

### TASTE

SIMILAR TO SPINACH BUT MORE BITTER.

### CONSISTENCY

HARD/TOUGH AND FIBROUS

## EDIBLE PARTS AND COOKING TECHNIQUES

### LEAVES

BOILED, STEWED,  
STEAMED

**C**hepkilumnda is a traditional green leafy vegetable grown in different areas of Kenya. This particular ecotype is cultivated mostly in the Olenguruone area of southwestern Kenya. It is grown by local people in kitchen gardens along with other vegetables for home consumption. The positive characteristics of this vegetable are a prolonged harvest and resistance to pests, diseases, and drought.

The plant is propagated by use of cuttings that are either bought or shared among farmers. The cuttings (about 20 centimeters long) are usually prepared and planted at the beginning of the rainy season. After 2-3 weeks, the cuttings

start to sprout. Tools used during the preparation of the cuttings include a sharp knife (for cutting off the stem from the parent plant) and a panga machete (for loosening the soil to ease planting).



## CULINARY USES

The leaves are eaten steamed and served together with *ugali*, a porridge-like dish made with different types of flour, preferably millet. They can also be boiled, fried with onions and tomatoes, and served with meat. On some occasions chepkilumnda is cooked together with other leafy vegetables such as black nightshade.

The cooked leaves have a characteristic sharp odor and are not bitter. Chepkilumnda has low acid levels and is ideal for people suffering from peptic ulcers.



## PRODUCT HISTORY

This crop has been in use for over twenty years. It is eaten especially during the harvest period, used for bridewealth payment, and served for circumcision ceremonies. It is mainly associated with the Kalenjin people. It is a crop linked to local food security for its ability to stay in the fields for long periods and its disease resistance. Presumably, this type of leafy vegetable was used in famine times, when the other, better-tasting types were not available.

Chepkilumnda is grown for both home consumption and for sale in the market because it generates good income. Chepkilumnda continues to thrive during the dry season, which means that there are still vegetables for the family to eat and sell.

Chepkilumnda is one of the traditional crops cultivated in Olengurone School Garden. This project was started in 2005 with support from NECOFA (Network for Ecofarming in Africa), the Slow Food Foundation for Biodiversity, and the Slow Food Central Rift Convivium. The project aims to provide students with skills to work in the agriculture sector using a sustainable approach.



## CURRENT STATUS

Farmers grow the crop both for family use and for sale, but the introduction of hybrid varieties in the area is threatening the future of chepkilumnda. Lack of a ready market for chepkilumnda gives hybrid varieties the upper hand, thereby threatening this local plant. Chepkilumnda is also facing competition from other leafy vegetables.

# N. 2 KIMUNYI MANGO

(KASIKEU MANGO, MAEMBE MA KIMUNYI)

*Mangifera indica* L.



#### CATEGORY



FRUITS AND NUTS

#### PRODUCTION AREA

MAKUENI, KITUI, AND MACHAKOS  
COUNTIES, UKAMBANI  
(EASTERN KENYA)

#### INDIGENOUS COMMUNITY

AKAMBA / KAMBA

#### SEASONALITY

##### HARVEST



DRY SEASON  
(DECEMBER - APRIL)

#### SENSORY ANALYSIS

##### VISUAL

THE FRUITS ARE GREEN IN COLOR WHEN UNRIPE. RIPE FRUITS MAY STAY GREEN OR DEVELOP SHADES OF ORANGE (WITH OR WITHOUT PATCHES OF GREEN). THE FRUIT CONTAINS A SINGLE, SMALL SEED.

##### TASTE

SWEET TASTE, EVEN SWEETER THAN HYBRID VARIETIES PRODUCED IN THE AREA.

#### EDIBLE PARTS AND COOKING TECHNIQUES

##### FRUIT

FRESH FRUIT  
EATEN RAW

This traditional mango variety, *maembe ma kimunyi* as it is known locally, is sometimes also called *kasikeu* in Ukambani, a stretch of territory between Nairobi and Mombasa.

The tree is successfully grown in a wide range of soils: It does well in sandy soils as well as on loam, black cotton, and even murram soils, depending on elevation. The requirements for good development of the trees are deep soil (at least 3 meters), adequate rainfall (500-1,000 millimetres), good drainage, and a suitable elevation (sea level to 1,200 meters). The plant grows into a huge evergreen tree that takes up to five years to begin producing fruits.

This variety is quite hardy and is resistant to pests, disease, and drought: It is often used as rootstock for grafting other, hybrid mango varieties. The fruit ripens very late compared to other varieties. Tools used in cultivation include the *jembe* (hoe), spades, local wooden wheelbarrows, a pruning *panga* (machete), and a grafting knife. Kimunyi mangoes are handpicked, collected in baskets, and transported home using wheelbarrows or carried on the back.



### CULINARY USES

The pulp of ripe mangoes, when not eaten fresh, can be processed into juice. Fruits eaten before they are ripe, however, are quite sour.

Today people are trying to add value to mangoes by chopping them into small pieces, drying them, and storing them so that they can be eaten out of season.



### PRODUCT HISTORY

The legendary sweetness of the kimunyi mango is referenced in a phrase shared by lovers in Ukambani, which translates to "you are as sweet as a kimunyi mango." This variety in particular is often given as a gift to loved ones. Traditionally kimunyi mangoes were eaten in season and used to make juice. The juice was then served to guests during special occasions such as naming and marriage ceremonies. It was also served to pregnant women.

The kimunyi mango and other local varieties are highly valued for home consumption in rural Eastern Kenya. It is produced and consumed by the Akamba people in Kasikeu. According to the local people, kimunyi trees are comparatively drought tolerant and less susceptible to pests and diseases than the improved varieties.

Current production is mainly for home consumption, with extra mangoes sold to neighbors and at the market if there are enough. Unfortunately mango production in Kenya is dominated by a few commercial cultivars. For this reason small-fruited local mango landraces are declining significantly and are threatened by genetic erosion.



### CURRENT STATUS

The kimunyi mango variety is rare and grows best in Makueni County in southern Kenya. Despite the fact that this variety produces good harvests for over 30 years, if a tree grows to a size considered too large, many farmers will chop it down and replace it with smaller hybrid trees that are faster to produce fruit but whose fruit is less sweet. Also, many of these hybrids are grafted onto kimunyi mango rootstock, meaning that the pure tree and its distinctive fruit are becoming more and more rare.

# N. 3 KIONZA (PIGEON PEA) *Cajanus cajan* (L.) Millsp.



## CATEGORY



LEGUMES

## PRODUCTION AREA

USEMEI AND NGAKU VILLAGES,  
MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA;  
MJIKENDA

## SEASONALITY

### SOW



OCTOBER - NOVEMBER

### HARVEST



JULY - AUGUST

## SENSORY ANALYSIS

### VISUAL

PODS ARE 10 CENTIMETERS LONG, STRAIGHT OR SLIGHTLY CURVED, WITH A HAIRY SURFACE, GREEN (OFTEN STREAKED WITH RED), DARK BROWN, OR PURPLISH BLACK. ONE POD HAS AN AVERAGE OF SEVEN PEAS INSIDE, WHICH HAVE A GREEN SURFACE, TURNING LIGHT BROWN WHEN DRIED.

### TASTE

NUTTY

### CONSISTENCY

CRISP

## EDIBLE PARTS AND COOKING TECHNIQUES

GREEN PODS,  
GREEN PEAS,  
DRY PEAS

BOILED, STEWED

**K**ionza is grown in the sandy soils of Usemei and Ngaku villages in Makueni County. This plant is an excellent nitrogen fixer. It grows into a large, tree-like shrub, producing lots of branches and giving high yields. Pigeon pea does well in temperatures of 18-38°C. It requires an annual rainfall of 600-1,000 millimeters. Seeds are planted directly in a deep, ploughed garden, at a spacing of 35-50 centimeters by 75-150 cm, and a depth of about 10 cm. The crop is usually cut near the ground when most pods are mature, or the mature pods are picked individually. Green pods are picked over a long period in home gardens. After the harvest the stems are cut back to facilitate regrowth. The seeds are shared or bought for cultivation.



Tools used are the *jembe* (hoe), *panga* (machete), and baskets or sacks for harvesting and threshing.

#### CULINARY USES

Kionza peas are larger and cook faster than other, similar legumes. The peas are cooked together with local *kinyanya* maize in a dish called *muthokoi*, and are also used to make *kitau*, a soft dish made with the addition of cooked cassava that is popular with babies and the elderly.

In the coastal region where the peas are not a main crop, the Mijikenda community uses the peas to make *mahamri ya baazi*, traditional Swahili doughnuts that are puffy and golden brown. They are made by combining pigeon peas with coconut milk, flour, sugar, and yeast, and are spiced with cardamom. The sweet is a local favorite breakfast snack.

#### PRODUCT HISTORY

There are games in kionza-growing areas associated with these peas and their harvest, played across generations. In one, people give their competitors each a pod that contains seven peas. Because these pods are quite common, there is a lively exchange of the pods between players, as they trade and shell the peas to prepare a meal. Bets are made and winners get rewards. Another competition tries to find the fastest shellers, and losers have to “pay” the number of kionza pods that they lost by. These games are often played by families and are a time in which grandparents tell stories and pass down knowledge to their grandchildren.

Kionza is very important because it is drought resistant, well adapted to Makueni County's climate, and, more importantly, because it fixes nitrogen in the soil and generates some income for small-scale farmers. It also has many traditional medicinal uses. For example, young leaves are applied to sores, herpes, and itches, and are also used to treat diabetes. It is believed that this product has the ability to prevent anemia and that it has anti-inflammatory properties.

Kionza peas are mainly cultivated for home consumption, with growers keeping this variety for their families while selling other pigeon pea varieties.

#### CURRENT STATUS

The production of kionza has been in decline due to low yields, the fact that it is labor intensive, and a lack of buyers. It is believed that this is due to the fact that this variety failed to meet consumers' preferences and because of its sensitivity to insects and pathogens. Stored kionza seeds are susceptible to insect infestation, and therefore seed viability deteriorates rapidly during storage and causes considerable economic loss.

# N. 4 KUNDE

*Vigna unguiculata* (L.) Walp.



## CATEGORY



LEGUMES

## PRODUCTION AREA

MUTYAMBA, KIBOKO,  
AND KITHASYU, MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## SEASONALITY

### SOW



RAINY SEASON  
(STARTING FROM MARCH)

### HARVEST



FLOWERING AND FRUITING BEGIN  
2 MONTHS AFTER SOWING. THE SEEDS  
MATURE IN 80-100 DAYS.

## SENSORY ANALYSIS

### VISUAL

THE PODS ARE LONG, SMOOTH,  
AND CYLINDRICAL. INSIDE THERE  
ARE 8-20 SEEDS, WHICH ARE  
SMALL (5-12 MILLIMETERS WIDE),  
ROUND, AND CREAM COLORED. THE  
SEEDS HAVE A DISTINCT WHITE EYE  
SURROUNDED BY A DARK RING.

### TASTE

IT TASTES LIKE SQUASH.

### CONSISTENCY

FIRM

## EDIBLE PARTS AND COOKING TECHNIQUES

### GREEN AND DRY SEEDS, LEAVES

BOILED, STEWED

**K**unde (cowpea) is a climbing, spreading, or erect annual herb in the legume family. The main areas in which the crop is grown are Mutyamba, Kiboko, and Kithasyu, all to the east or southeast of Nairobi. This Cowpea thrives in dry environments with as little as 300 millimeters of rainfall. The deep root system of the cowpea helps stabilize the soil and the leaves cover the ground, preventing moisture from evaporating.

Kunde is usually intercropped with cereals such as maize, pulses such as beans, and roots and tubers. Cowpeas can be grown as either an annual or

a perennial and have a short vegetative cycle, requiring only about 2 months for flowering and fruiting. Neem seed powder is used to protect the seeds in place of chemical pesticides.



## CULINARY USES

The dried seeds, fresh seeds, pods, leaves, and young stems are edible. Leaves and seeds of the cowpea are widely used as a food. They are eaten with *ugali* or mashed with maize and potatoes or other legumes.

The seeds are cooked with maize or often made into a rich stew, called *muthokoi*, which is eaten with *ugali* or other foods. To make this dish, the beans are boiled, fried, and finally stewed. Akamba mothers consume this dish while nursing. Cooking is done over a three-stone fireplace.



## PRODUCT HISTORY

Kunde is highly valued in Makueni County for its fast growth after rains or with irrigation. The crop is resistant to diseases, pests, and drought. It withstands harsh climactic conditions and can be produced year round when sufficiently watered, ensuring a continuous food supply for families and communities.

The plant is a very good source of tender, dark green leaves that are rich in iron, vitamin E, and vitamin K, and are used as a food by humans, insects, rodents, rabbits, goats, sheep, cattle, and tortoises. The bean pods, both green and dried, can be used as feed for livestock, especially during dry seasons, and increase milk production in goats and cattle.

Kunde was eaten on different occasions, including childbirth and initiation ceremonies, and was offered to nursing mothers for strength.

In Makueni County, cowpeas are mainly grown for home consumption, though a few people sell the leaves if there are extras.



## CURRENT STATUS

This crop is produced almost exclusively by small-scale farmers and the seeds are susceptible to damage from weevils if not stored properly, leaving farmers with nothing to plant the following season and reducing the production area.

In recent times, changes in temperature patterns have affected the yield and seed quality of cowpea. Both the quality and quantity of cowpeas are affected by the amount and distribution of rainfall.

# N. 5 LARE PUMPKIN

*Cucurbita maxima* Duchesne



#### CATEGORY



#### PRODUCTION AREA

LARE VILLAGE,  
NJORO DISTRICT  
(RIFT VALLEY)

#### SEASONALITY

##### SOW



DURING THE RAINY SEASON.

##### HARVEST



THE CROP IS READY 6 MONTHS  
AFTER SOWING.

#### SENSORY ANALYSIS

##### VISUAL

FRUITS ARE OVAL IN SHAPE AND VARY IN SIZE, WITH THE AVERAGE WEIGHT RANGING FROM 3-5 KILOGRAMS. THE SKIN IS LIGHT GREEN WITH WHITE STRIPES AND IT HAS ORANGE FLESH. THE SEEDS ARE LARGE AND WHITE.

##### TASTE

THE PULP IS SWEET.

##### CONSISTENCY

ONCE COOKED, IT HAS A CONSISTENCY SIMILAR TO THAT OF SWEET POTATO.

#### EDIBLE PARTS AND COOKING TECHNIQUES

##### FRUIT, LEAVES, SEEDS

BEVERAGES, BOILED,  
BAKED

##### WAYS OF PRESERVING

DRYING, FLOUR

The Lare Pumpkin is a local variety from Lare village in the Rift Valley region. It is a creeping, climbing plant with broad leaves and extensive vines. It does well in areas with annual rainfall ranging from 600-900 millimeters, at elevations below 2,200 metres, in loamy, silty, and alluvial soils. Sowing is done directly into the field by hand at a spacing of about 2 meters. The tool used for cultivation is the *jembe* (hoe). This pumpkin is usually cultivated with other vegetable species.

The Lare Pumpkin has a high yield. Both the fruit and the leaves are edible. This variety is well adapted to local conditions and provides good mulch for the soil.

In addition, the flowers attract bees, which increase pollination of other crops. Traditionally, the pumpkins were stored in pits in the earth, wrapped in dry grass. Today granaries are used. The seeds are kept for planting the following year, and for exchanging with other farmers.

### CULINARY USES

The Lare Pumpkin has many uses. The leaves are used as a vegetable in many dishes such as *kimito*, which also includes potatoes and broad beans. Due to its highly nutritious properties, it is also used in making light food for infants and the elderly.

The orange flesh of the pumpkins is used in different dishes, either boiled or in the form of flour, to enhance color and add nutrition. Pumpkin flour is mixed with wheat flour and used in making chapati bread and *maandazi* (doughnuts). Pumpkins are also used to make a juice, and the seeds are eaten boiled or dried and milled to make a flour that is used in porridge and for medicinal purposes.

### PRODUCT HISTORY

Lare is located on the eastern edge of the Mau Forest, East Africa's largest montane forest, in the dry highlands of the Rift Valley, an area that has experienced dramatic changes in rainfall patterns in recent years, bringing great concern for future food security. In an effort to remain resilient in a hostile environment, farmers in the Lare region have embraced pumpkin farming because this crop performs well in water-stressed areas, ensuring food security. The product is fed to infants because of its high nutritional value. It is normally consumed around the time of childbirth, by both infant and mother, and during initiation ceremonies. Locals believe that eating pumpkin helps increase a man's sexual prowess. In addition, the crop provides income for the producers, as it is sold in the local markets and neighboring regions. It is easy to transport and it can last a long time without losing its nutritional value. It is also used in local hotels along with other products to make mixed dishes. Pumpkin flour is also in high demand.

### CURRENT STATUS

Rainfall has become increasingly erratic as a result of climate change. The decreased quality of land due to drought has caused massive crop failures. But the Lare Pumpkin is resistant to harsh conditions, thus becoming an important source of food and income for farmers. However, production of this crop is threatened by the introduction of non-native varieties, which are faster growing and more productive.

**MORE INFORMATION ABOUT THE PRESIDIUM ON PAGE 188**

NOMINATOR: LEAH WANJIKU KINITA, SAMSON KIIRU NGUGI

# N. 6 MAMBUYU (MABUYU)

*Adansonia digitata* L.



CATEGORY



FRUITS AND NUTS; DISTILLED  
AND FERMENTED BEVERAGES

PRODUCTION AREA

MACHAKOS COUNTY  
(EASTERN KENYA)

INDIGENOUS COMMUNITY

AKAMBA / KAMBA

INGREDIENTS

BAOBAB SEEDS  
WATER

PREPARATION METHOD

TO MAKE THIS PRODUCT, BAOBAB FRUITS ARE OPENED AND THE SEEDS ARE SEPARATED FROM THE PULP, PEELED, SUNDRIED, AND ROASTED IN A PAN. THEY ARE THEN GROUND INTO A FINE POWDER IN A HANDMADE WOODEN MORTAR. FINALLY, THE GROUND SEEDS ARE BOILED WITH WATER TO PRODUCE A HOT BEVERAGE DRUNK IN THE MORNINGS LIKE COFFEE. THE SEEDS CAN ALSO BE FERMENTED TO CREATE AN ALCOHOLIC DRINK ENJOYED BY ELDERS.

**M**ambuyu is locally referred to as "our wild coffee" by people of the Akamba tribe in the dry area of Machakos, in southern Kenya. It is made from dehydrated seeds of the baobab tree (*Adansonia digitata*), locally called *mbuyu* (Swahili) or *muamba* (Kamba).

The baobab tree belongs to the family Malvaceae. It can grow up to 25 meters in height and may live for hundreds of years. It produces fruits 20-30 centimeters long with an ovoid, green, woody shell. Inside are numerous hard, reddish-brown seeds covered with a yellowish pulp. The ripe fruit pulp has a slightly sour taste. The seeds are harvested twice a year, in February and in December, and often children, who like the color of the seeds, assist in the harvesting.



## PRODUCT HISTORY

The baobab tree plays an important role in Akamba traditions and beliefs. It is said that the name "Akamba" is strictly linked to the baobab tree. The Akamba people came to the Machakos area through Kikumbuliu, where there were many muamba trees.

Among the Akamba, this tree was used as an *ithembo* (a place of sacrifice) and hence was considered a sacred tree.

Akamba people also use the bark of this tree in traditional medicine to treat fever in children. According to a local belief, baobab trees should not be debarked during or just before the rainy season for fear of causing drought.

Pregnant Akamba women once commonly drank mambuyu for its nutritional value (It is an important source of Vitamin C). Mambuyu is also among the traditional gifts brought to a home after a baby is born. The drink is said to be an excellent source of energy, providing people with the energy to travel long distances for trading. Because coffee used to be expensive the Akamba people believe that mambuyu is a gift from God, and so the locals used to water the baobab trees every morning to take care of them.



## CURRENT STATUS

Today mambuyu is produced mainly for personal or community use, though the prepared drink can occasionally be found at local markets. Baobab seeds can also be purchased locally for preparation of the drink, instead of being harvested directly. However, consumption of mambuyu is in decline, and it is considered underappreciated and unknown by many people, despite its nutritional value.

# N. 7 MAU FOREST DRIED NETTLES

*Urtica massaica* Mildbr.



#### CATEGORY



SPICES, WILD HERBS  
AND CONDIMENTS

#### PRODUCTION AREA

KARIRIKANIA VILLAGE,  
MOLO DISTRICT,  
NAKURU COUNTY  
(RIFT VALLEY)

#### INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

#### SEASONALITY

##### HARVEST



STINGING NETTLES GROW FROM  
MID-MARCH TO JUNE AND FROM  
SEPTEMBER TO OCTOBER.

#### SENSORY ANALYSIS

##### VISUAL

THE LEAVES ARE LARGE AND  
HEART SHAPED, THE SMALL GREEN  
FLOWERS ARE BORNE ON CLUSTERS  
ARISING FROM THE LEAF AXILS,  
AND THE FRUIT IS SMALL, ROUND,  
AND FLAT.

##### TASTE

FRESH NETTLES TEND  
TO HAVE A GRASSY,  
SPINACH-LIKE TASTE,  
WHILE DRIED NETTLES ARE  
SLIGHTLY BITTER.

#### EDIBLE PARTS AND COOKING TECHNIQUES

##### LEAVES, ROOTS

BOILED, STEWED,  
HERBAL TEA

##### WAYS OF PRESERVING

DRYING

**T**he stinging nettle is a perennial plant from the family Urticaceae that grows best in forest margins, clearings, or along streams and in other disturbed areas. It is often found adjacent to dwellings or cattle pens. It thrives in warm and cool climates in fertile soils. The young leaves are preferred for food, so the management of this plant involves frequent pruning to encourage regrowth. The plant is covered with irritating hairs: The sting is harsher in dry weather than when it rains.



The nettles are harvested manually, immediately immersed in water to soften the stinging effect, and then sold, either fresh or after being dried (they are dried in the shade because the sun affects their attractive bright green color) and ground to make a powder.



## CULINARY USES

The leaves feature in many traditional Gikuyu recipes, such as *mukimo*, prepared using mashed potatoes, corn, beans, and nettles. Together with millet flour, they are used in the local porridge. They are also used as a fresh vegetable, as a medicinal herb, and as an herbal tea. The roots are used to make soup.



## PRODUCT HISTORY

For generations, indigenous communities of the Mau forest in the Rift Valley have gathered leaves and herbs from the local area, including nettles, which have always been an important ingredient in Kenyan cuisine.

Stinging nettles are preferred because they are easily available during the dry seasons when other vegetables are not in production. They are used within the family unit as a vegetable to accompany the main dishes, for the elderly, and also for weaning babies. Herbalists use them to make local medication. Leaves are used in traditional medicine for treating anemia, fainting, colds, and backache. They are also used for feeding livestock and for treating cows affected with milk fever disease.

Stinging nettles are recommended as a dietary supplement for nursing mothers (the leaves contain 6% protein and 3.5% minerals and are a rich source of iron and vitamin A).

The stinging nettle provides an important source of income for the local community. While the leaves of young plants are mainly sold fresh at local markets, the dried nettles in powdered form have a wider market and are sold all year round.






## CURRENT STATUS

Since the early 1980s, the use of nettles has drastically declined. This is due to increasing deforestation and the erosion of knowledge regarding their culinary use. For these reasons, in recent years a group of women has started to grow nettles in the Molo highlands at an elevation of 2,000-3,000 meters, with the best results being obtained on very fertile land in specific areas where cattle once grazed.

# N. 8 MITOO (SLENDERLEAF)

*Crotalaria brevidens* Benth.  
*Crotalaria ochroleuca* G. Don.



CATEGORY		PRODUCTION AREA	INDIGENOUS COMMUNITY
 VEGETABLES		NAKURU COUNTY (RIFT VALLEY)	LUO
SEASONALITY			
SOW	 RAINY SEASON / SPONTANEOUS		HARVEST
			 EIGHT WEEKS AFTER IT HAS SPROUTED
SENSORY ANALYSIS		EDIBLE PARTS AND COOKING TECHNIQUES	
<b>VISUAL</b> ..... THE LEAVES ARE GREEN, EITHER SIMPLE OR COMPOUND WITH THREE LEAFLETS. THE NUMEROUS YELLOW FLOWERS BECOME TOUGH-SKINNED, INFLATED SEED PODS. THE NUMBER OF SEEDS CONTAINED IN A SINGLE POD DEPENDS ON THE SPECIES AND RANGES FROM 5 TO 50. THE SEEDS ARE KIDNEY SHAPED AND THEIR COLOR VARIES FROM OLIVE GREEN TO YELLOW-ORANGE OR BROWN.	<b>TASTE</b> ..... SLIGHTLY TO VERY BITTER, DEPENDING ON THE VARIETY.	<b>YOUNG LEAVES AND SHOOTS</b> ..... BOILED, STEWED	
	<b>CONSISTENCY</b> ..... THE COOKED LEAVES HAVE A SLIMY TEXTURE.		

**M**itoo (slenderleaf in English) is an annual or perennial herb in the legume family (Fabaceae) and is native to tropical Africa. The word "mitoo" comes from the Luo language and refers to *Crotalaria brevidens* and *C. ochroleuca*, both of which have a lower degree of toxicity than many other species of *Crotalaria* and are therefore suitable for human consumption. The two species differ in terms of both taste and the size of their leaves: *C. brevidens* is more bitter and has smaller leaves than *C. ochroleuca* (10x2 centimeres versus 13x3 cm).

The plant grows spontaneously among bushes, in the forest (often near the termite mounds), in pastures, and in cultivated fields. It is occasionally cultivated on a small scale. In several rural areas of Nakuru County, including Molo and the mountainous areas of the Naivasha district, women familiar with this species collect young leaves and shoots that grow wild at the edges of fields or forests bordering the villages.



### CULINARY USES

Mitoo leaves and shoots are prepared in a similar way to other traditional leafy vegetables. Because of its decidedly bitter taste and mucilaginous consistency, mitoo is consumed in small quantities and often combined with other vegetables including *murere* (*Corchorus olitorius*). Together with some *ugali*, mitoo often accompanies stewed meat. In the rural areas of Nakuru County (and more generally in Western Kenya), women soak the previously boiled leaves and sprouts in cow's milk or buttermilk (*mala*), leaving them to ferment for 3 days. In this way it is possible to improve the flavor of the vegetable (reducing the bitter taste) and preserve it for a long time, after which the leaves can be fried or combined with soups and stews.



### PRODUCT HISTORY

In the food culture of peoples from Central and Western Kenya, the consumption of leafy vegetables (especially wild and bitter herbs) including mitoo is particularly important among older women. They are among the few people holding the necessary knowledge to collect and prepare these products. The preference for this type of herb has played an important role in the conservation of these species. In addition to its taste, women appreciate mitoo for its slimy and mucilaginous consistency. This characteristic is associated with various healing properties including the lubrication of limbs and the ability to ease labor. Mitoo also plays an important ecological role within the local agricultural systems: Being a legume, it fixes nitrogen in the soil and ensures an excellent fodder source for livestock. Mitoo harvesting is managed almost exclusively by women and is for domestic needs. Only surpluses are sold, with sale taking place mainly in the local markets of rural areas.



### CURRENT STATUS

Mitoo consumption is limited due to several factors. On one hand, the available quantity is reducing due to prolonged drought periods and its cultivation is no longer common in Nakuru County. On the other hand, the change in eating habits among younger people, as well as their migration to urban centers, means that the knowledge and practices linked to this traditional plant are no longer passed on.

# N. 9 MOUNT MARSABIT WILD ARABICA COFFEE

*Coffea arabica L.*



**CATEGORY**



COFFEE

**PRODUCTION AREA**

MOUNT MARSABIT,  
MARSABIT COUNTY  
(EASTERN KENYA)

**SEASONALITY**

**HARVEST**



MAY TO JULY: EARLY CROP  
SEPTEMBER TO DECEMBER: MAIN (LATE) CROP

**SENSORY ANALYSIS**

**VISUAL**

THE FRUIT IS A DRUPE 10-15 MILLIMETERS IN DIAMETER, MATURING FROM BRIGHT RED TO PURPLE, AND TYPICALLY CONTAINING TWO SEEDS.

**TASTE**

BRIGHT CITRUS ACIDITY AND CHOCOLATE FLAVOR

**EDIBLE PARTS AND COOKING TECHNIQUES**

**SEEDS**

GROUND AND USED FOR PREPARING COFFEE

**WAYS OF PRESERVING**

FERMENTED, DRIED AND ROASTED

The origin of arabica coffee has been traced to southwestern and southern Ethiopia, where it grows spontaneously in the understory of mountain rainforests. It is now becoming rare in its wild form. However, there are two places where wild arabica coffee can be found outside Ethiopia: Kenya and Mount Boma (in South Sudan).

In Kenya, wild arabica coffee was found in the Marsabit Forest, at an elevation of 1,500-1,550 meters. Arabica coffee can still be seen here, growing in the understory and occurring in higher densities in open patches where it competes well with other shrubs and small trees.



## CULINARY USES

Wild coffee seeds are used in the preparation of homemade coffee. Processing involves separating the fruit pulp from the seeds. Seed are separated from the fruit pulp by squeezing the fruits in water. The seeds are washed, dried, and pounded in a mortar to remove the seed wall. Finally the coffee is roasted in pans and ground or pounded.



## PRODUCT HISTORY

Mount Marsabit is a basaltic shield volcano near the town of Marsabit in Eastern Kenya. It is an ecologically and socio-economically important ecosystem, located in the Marsabit National Reserve, established by the Kenyan Government in 1948. The forested mountain is surrounded by a vast area of open dry savannah, thus attracting a variety of wildlife, and is the only source of permanent surface water in the region.

Communities living around the forest utilize it for fuel, timber, and medicinal plants. They also obtain all their water from the wells and springs fed by the forest. Mount Marsabit forest is the only area in Kenya where *Coffea arabica* occurs in wild populations, though it isn't clear whether it is native or a naturalized occurrence. Wild *Coffea arabica* is among the species of interest to conservationists in this forest, and likely played an important role in coffee domestication in Kenya.

Wild coffee has been known to fetch good prices in the international market due to its connection to the territory, which gives it its unique characteristics. As a wild variety, Mount Marsabit coffee probably contains genes for resistance to various coffee diseases.



## CURRENT STATUS

Mount Marsabit wild arabica coffee production is under threat from climate change. In addition, like many forests in Kenya, the Mount Marsabit forest is under threat due to illegal encroachment, unsustainable harvesting practices, poor management, and degradation by dependent communities. This puts the future of the local coffee plants' vital genetic resources at risk, and Mount Marsabit coffee could soon disappear. This resource will be conserved if it can be transformed into real benefits for the communities living in the area.

# N. 10 MUKENEA

*Zanthoxylum chalybeum* Engl.



**CATEGORY**



SPICE, WILD HERBS AND CONDIMENTS;  
TEA AND INFUSIONS

**PRODUCTION AREA**

EASTERN KENYA

**INDIGENOUS COMMUNITY**

AKAMBA / KAMBA

**SEASONALITY**

**HARVEST**



MARCH, JULY – AUGUST

**SENSORY ANALYSIS**

**VISUAL**

FRUITS ARE ALMOST GLOBOSE FOLLICLES, 5-8 MILLIMETERS LONG, GLANDULAR, PITTED AND PINKISH; THE STIPE IS UP TO 1.5 MM LONG. THE SEEDS ARE OVOID, BLACK AND SHINY, AND 5-7 MM IN DIAMETER.

**TASTE**

LEAVES HAVE A STRONG LEMON AROMA.

**EDIBLE PARTS AND COOKING TECHNIQUES**

**BARK, FRUIT, LEAVES, ROOTS**

BOILED, HERBAL TEA, CONDIMENTS

**WAYS OF PRESERVING**

DRYING

**M**ukenea is found in most parts of Kenya in dry woodlands, bushlands, or grasslands, often near termite mounds and in rocky areas on the coast. It grows in well-drained red clay soils from sea level to 1,800 meters, in areas with an average daytime temperature of 12-32°C and a mean annual rainfall of 800-1,400 millimeters. It is a spiny deciduous tree. It can grow from 1.5-10 meters tall; the bole can be 15-40 centimeters in diameter and is conical with large woody spines up to 2 cm long; the crown is narrow and the branches are hanging.

Propagation is done by seed or with cuttings. Seeds are planted as soon as they are ripe. Harvesting is done throughout the year. Bark from the stem and roots is harvested by cutting and uprooting, respectively. The leaves and stems are sundried to increase their shelf life. The fruits are never stored as they lose viability quickly.



### CULINARY USES

Mukeneea's leaves, fruit, bark, and roots are used to make a medicinal tea that is believed to calm stomach aches and cure coughs, colds, chest pain, asthma, sore throats, wounds, malaria pneumonia, fever, and headaches. The bark is also used for flavoring soup. An infusion of the fruits or leaves is given as a tonic to children. The crushed leaves are applied to snakebites.



### PRODUCT HISTORY

Mukeneea has been used as food, tea, and medicine since at least the 16th century. This plant is strongly linked to the Akamba community of Eastern Kenya, the third largest Bantu-speaking tribe in Kenya.

The Akamba people of Ukambani have a rich ethnomedical knowledge based on their cumulative experiences in time and space. The Akamba people continue to identify medically useful plants in their environment. Different parts of mukeneea are still used in local folk medicine. Root and bark decoctions are used to treat menorrhagia, malaria, arthritis, and colds. Leaf infusions are used to relieve peptic ulcers and headaches. Root decoctions are administered to treat amoebic dysentery. Root powder is used against chest pains and coughs. The leaf infusion is used to bathe a patient suffering from convulsions. The product was consumed during birth ceremonies among the Akamba community. Pregnant women were given an herbal tea prepared from the leaves to ease child-birth. It was consumed throughout the year and considered both a food and a medicine by the community.



### CURRENT STATUS

Mukeneea is not commonly found in local markets in Kenya, but mainly harvested for home consumption. Sometimes, herbal medicines using mukeneea are sold. However, because of its food and medicinal values, this native plant faces threats of overharvesting if the wild trees are not maintained. Attention to the growth cycle of mukeneea and responsible harvesting methods must be considered to preserve this plant for future generations.

# N. 11 MUKOMBERO

## (MKOMBELA, WHITE'S GINGER)

*Mondia whitei* (Hook. f.) Skeels



### CATEGORY



SPICES, WILD HERBS  
AND CONDIMENTS

### PRODUCTION AREA

KAKAMEGA FOREST,  
KAKAMEGA COUNTY  
(WESTERN KENYA)

### INDIGENOUS COMMUNITY

LUHYA

### SEASONALITY

#### SOW



DURING THE ONSET OF THE RAIN

#### HARVEST



APRIL - SEPTEMBER

### SENSORY ANALYSIS

#### VISUAL

A PERENNIAL, WOODY CLIMBER (LIANA OR SHRUB) WITH A LARGE, TUBEROUS ROOTSTOCK PRODUCING STEMS UP TO 8 METERS LONG. THE LEAVES ARE LARGE (10-30 CENTIMETERS), OVATE WITH A CORDATE BASE, AND GREEN. THE PETIOLE AND VEINS ARE OFTEN REDDISH. THE ROOTS ARE PALE YELLOW TO BROWN ON THE OUTSIDE AND WHITE TO PALE YELLOW INSIDE. THE FLOWERS, WHICH HAVE AN UNPLEASANT ODOR, HAVE FIVE PETALS RANGING IN COLOR FROM PALE YELLOW TO REDDISH-PURPLE. THE FRUIT IS A PAIR OF LARGE, PALE GREEN, CUCUMBER-SHAPED FOLLICLES. IT IS ALMOST WOODY AND CONTAINS MANY SEEDS.

#### TASTE

THE ROOTS ARE BITTER AND AROMATIC AND TASTE LIKE A MIX OF GINGER AND LICORICE. THEY HAVE A VANILLA-LIKE AROMA.

#### CONSISTENCY

PASTY

### EDIBLE PARTS AND COOKING TECHNIQUES

BARK OF THE  
NARROW ROOTS,  
FRESH OR DRIED  
LEAVES

BOILED, TEA

**M**ukombero is a forest plant with aromatic roots from the family Apocynaceae. It is a perennial, woody, rather robust and vigorous climber that grows from a large tuberous rootstock. The plant grows as a climber and the basal portion of the stem is



usually leafless. The leaves and flowers mainly appear in the canopy of the supporting vegetation and are thus rarely noticed.

Mukombero predominantly occurs in moist to wet forests, such as the Kakamega tropical rainforest of Western Kenya, and in swamp forest, riverine forest, wooded savannah, and forest margins, at elevations up to 1,800 meters.

It is easily cultivated from seed. The seeds are collected as the fruit starts to split open. A sharp knife, *panga* (machete), and a hoe are the tools used to harvest the roots.



### CULINARY USES

Among the Luhya people, the fresh or dried leaves are cooked and eaten as vegetables. The dried, powdered leaves are used as condiment. The roots are used to flavor food and tea. The root bark is eaten raw as a snack or to freshen the mouth. The flavor is initially bitter and spicy but becomes sweet after chewing. The dried or fresh roots can also be cooked in meat or chicken stews as a spice to enhance flavor and to improve preservation.



### PRODUCT HISTORY

For many years in Kenya, communities living adjacent to Kakamega Forest have been using the root bark of mukombero in many different ways, ranging from chewing the raw roots to mixing root powder with porridge to increase appetite. This plant is connected to the identity of Luhya people in Kakamega County. They used to chew the roots for good luck before performing a difficult task.

Mukombero is still consumed by both young and old people. It is used as a symbol of peace and a sign of power. It is also appreciated for its healing properties: The leaves are used to treat hypertension, stroke, anemia, asthma, hangover, mastitis, and allergies, and are also taken to improve sleep, enhance urination, and ease birth pains. Men who are impotent or infertile are given mukombero as a remedy. In addition, the leaves serve as animal fodder.



### CURRENT STATUS

Because of its wide use in African traditional medicine, mukombero has become an endangered species. In some areas, especially around cities and towns, it is rare in the wild due to overexploitation by the local communities for commercial purposes. Because the root is the most popular part, harvesting it destroys the plant. Habitat destruction is also a threat. Efforts are underway in some places to increase the cultivation of this species in order to relieve pressure from wild populations and create a sustainable market for it.

# N. 12 MUKUYU (ECHOKE, SYCAMORE FIG)

*Ficus sycomorus* L.



## CATEGORY



FRUITS AND NUTS

## PRODUCTION AREA

NYERI COUNTY (CENTRAL KENYA),  
TURKANA COUNTY (RIFT VALLEY)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU:  
TURKANA

## SEASONALITY

### HARVEST



JULY - DECEMBER

## SENSORY ANALYSIS

### VISUAL

THE FRUIT IS AS EDIBLE FIG, UP TO 5 CENTIMETERS IN DIAMETER, RIPENING FROM PALE GREEN TO YELLOW OR RED. THEY GROW IN THICK CLUSTERS ON SMALL, LEAFLESS BRANCHES OR FROM THE LEAF AXILS. THE TREE HAS A SPREADING CROWN AND SMOOTH, YELLOWISH-BROWN BARK, AND GROWS UP TO 25 METERS TALL.

### TASTE

SWEET

### CONSISTENCY

SOFT AND CHEWY

## EDIBLE PARTS AND COOKING TECHNIQUES

### RIPE FRUIT, INNER BARK

FRESH, STEWED

### WAYS OF PRESERVING

DRYING, FLOUR

**T**he sycamore fig occurs naturally in forests, wooded savannahs, and along rivers. When cultivated, the trees are propagated from cuttings and planted during the onset of the rains. This species is fairly fast growing. In some areas it is intercropped with bananas. It usually takes 3-5 years to produce a sizeable harvest.

It grows at elevations up to 2,000 meters in areas with a mean annual temperature of 0-40°C. It prefers deep, well-drained, loam to clay soil rich in nutrients, and needs at least 8 hours of sunlight a day. The soil should retain moist

without becoming water-logged: Too little water cause the flowers and fruits to drop, while too much water causes failure to flower or stunts fruit growth. Extreme weather conditions can also greatly affect the tree's fruiting potential—for example, extreme heat and dry weather can slow or stop production.



## CULINARY USES

The figs are fleshy and sweet and can be eaten raw or cooked, or dried for later use.



## PRODUCT HISTORY

The sycamore fig is used for multiple purposes in various cultures throughout Kenya, and has many local names. It is an important source of shade for both people and livestock. The name *mukuyu* is shared among many peoples in central and southern Kenya. The trees are a valuable source of honey, as bees build their hives in holes in the trunk. The inner part of the root is used to weave fiber in some communities, and rope can be made from the inner bark. The wood is used to make beehives, utensils (such as mortars and bowls), and musical instruments. It is also used in construction and boat building.

The Turkana people of northwestern Kenya, who call this species *echoke*, make flour from the dried figs and mix it with grain flours to make a porridge called *atap*. They also feed the leaves to their cattle.

In Gikuyu traditions, mukuyu is a sacred tree. Sacrifices to Ngai, the supreme creator, were performed under this tree. It is considered a bad omen when a mukuyu tree falls, and elders must perform a cleansing ritual if this happens. Some ceremonies are still carried out under the mukuyu, and the trees are an important meeting place.

The bark, leaves, and milky latex of the sycamore fig all have medicinal value. The Gikuyu use the sap for toothache and the juice of the fruits as a topical treatment for skin diseases or irritation.



## CURRENT STATUS

The use of the sycamore fig is declining (the fruits are no longer commonly eaten) due to changing cultural practices and the abandonment of traditions—many people no longer have respect for these trees. Increased rates of land clearance for agriculture and a lack of water due to deforestation are the greatest threats facing this tree in Kenya. It is important to protect the sycamore fig not only because of its cultural value, but also because it is an important food source for a huge variety of wildlife.

# N. 13 MURERE (MURENDA, JUTE MALLOW)

*Corchorus olitorius* L.



## CATEGORY



VEGETABLES

## PRODUCTION AREA

WESTERN KENYA

## INDIGENOUS COMMUNITY

LUHYA

## SEASONALITY

### SOW



DURING THE RAINY SEASON.

### HARVEST



THREE WEEKS AFTER GERMINATING,  
THE LEAVES ARE READY FOR  
HARVESTING.

## SENSORY ANALYSIS

### VISUAL

IT IS A TALL PLANT, REACHING A  
HEIGHT OF 2-4 METERS. IT HAS NO  
OR FEW BRANCHES. THE LEAVES ARE  
ALTERNATE, SIMPLE, LANCEOLATE,  
AND 5-15 CENTIMETERS LONG, WITH  
AN ACUMINATE TIP AND A FINELY  
SERRATED OR LOBED MARGIN.

### TASTE

THE TASTE RESEMBLES  
THAT OF SPINACH.

### CONSISTENCY

YOUNG LEAVES HAVE A  
SLIMY TEXTURE  
(SIMILAR TO OKRA).

## EDIBLE PARTS AND COOKING TECHNIQUES

### YOUNG LEAVES, FRUIT, SEEDS

BOILED, CONDIMENTS,  
HERBAL TEA, STEWED

### WAYS OF PRESERVING

DRYING, FLOUR

**C** *Corchorus olitorius*, in the family Malvaceae, grows in different parts of the Rift Valley. It grows naturally in the salt plains and wilderness and is used for food in times of famine. In Western Kenya it is known as *murere* or *murenda*. The plants are harvested manually by uprooting. They are then spread on the ground to dry for about 3 days. Then the seeds are separated from the pods by shaking or threshing using sticks. They are cleaned and dried for an extra day to prepare them for storage. The healthy

seeds with a good shape and medium size are put aside to be planted the following season. Tools and equipment used include a knife to assist in uprooting the plants, baskets for collecting and transporting, and sticks for threshing the seeds when the murere is dry.



## CULINARY USES

The young leaves and fruits are used as a vegetable. They have a mucilaginous texture, similar to okra, when cooked. They are easily prepared by boiling them together with ash from bean leaves. The sauce is served with balls made from cassava, which are otherwise rather dry, and usually cooked into a kind of chicken stew. Among the Luhya people of Western Kenya murere is also eaten with starchy foods like rice, bananas, and *ugali* (prepared from corn or sorghum), which is the staple food of most local communities in Kenya. The seeds are used as soup thickener and in flavoring the dried leaves, which are used for making herbal tea, and can be eaten on their own.



## PRODUCT HISTORY

Murere requires less maintenance than other cultivated vegetables and can survive in most weather conditions. For this reason and for its nutritional value, this leafy vegetable plays an important role in local food security. Murere is an especially important vegetable for the Luhya people, and is closely linked to their identity. During special occasions such as circumcision; before, during, and after childbirth; as well as during burial ceremonies, murere was one of the most-appreciated vegetables. It is said to clean the stomach and relieve constipation due to its slimy texture. It is used traditionally to treat inflammation and pain as well as chronic inflammation of the urinary tract and bladder.

Murere is mainly grown for home consumption, though a few people sell their extra vegetable leaves when available.



## CURRENT STATUS

Murere is one of the most important leafy vegetables growing in Western Kenya. It is highly nutritious and is a source of income for farmers. However, this plant is declining due to replacement by high-yielding commercial, exotic vegetable varieties. A lack of available seeds has also led to this plant becoming underutilized.

# N. 14 MUTHEU (KITHEU)

*Rhus natalensis* Bernh. ex C.Krauss



## CATEGORY



SPICES, WILD HERBS AND  
CONDIMENTS

## PRODUCTION AREA

NGAKU VILLAGE, MUTYAMBUA AREA,  
MAKUENI COUNTY; CHYULU HILLS  
NATIONAL PARK  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## SEASONALITY

### HARVEST



AUGUST - SEPTEMBER

## SENSORY ANALYSIS

### VISUAL

SHRUB OR SMALL TREE UP TO 8 METERS  
TALL. THE BRANCHES ARE WHITISH OR  
GREY. THE LEAVES ARE COMPOSED OF  
THREE DARK GREEN, LEATHERY, OBOVATE  
LEAFLETS. THE FRUITS ARE OBLONG,  
LESS THAN A CENTIMETER IN DIAMETER,  
SMOOTH, AND RED WITH THIN FLESH  
AND A WAXY COVERING.

### TASTE

ONCE BURNT, THE  
BRANCHES PRODUCE  
AN AROMATIC SMOKE.  
FRUITS HAVE A SWEETISH  
ACID TASTE.

### CONSISTENCY

THE LEAVES ARE SMOOTH.  
WHEN BURNT TO CHARCOAL  
THE TEXTURE IS FLOURY/  
POWDERY.

## EDIBLE PARTS AND COOKING TECHNIQUES

### FRUIT, STEMS, LEAVES (MEDICINAL)

FRUITS EATEN RAW,  
ASH USED FOR  
PRESERVING DAIRY

**M**utheu is a shrub or small tree plant with smooth leaves and whitish-gray stems that grows wild in various parts of Kenya. It is found in Ngaku village in the Mutyambua area of Makueni County in central southern Kenya, and in the Chyulu Hills National Park. Some local farmers have started cultivating it.

This shrub grows in bushlands, wooded grasslands, and dry forest margins. After the fruits ripen they are harvested manually. They can be dried and then

crushed to get the seeds, or eaten fresh, in which case the seeds are discarded. The stems are harvested with a *panga* (a type of machete).

The local Akamba community uses mutheu leaves and stems to smoke the gourds in which traditional dairy products are stored. The neighboring Maasai people use a similar plant (called *mutamaiu*) for the same purpose.

### CULINARY USES

The fruits are eaten as a snack and are sour and refreshing. The stems and branches have no scent in their natural state but, when burned, produce a white smoke used to flavor and preserve milk and other dairy products. The smoke gives a particular aroma to yogurt and to the gourds in which milk and yogurt are stored, and increases the shelf life of dairy products. To prepare a gourd, a small branch of mutheu is left to dry. One end of the dried piece is then put in the fire to burn. When the end is completely burnt, it is crushed on the side and bottom of a gourd or calabash. This process is repeated until the inner part of the gourd is completely covered. The excess dust is removed and the gourd is then ready for milk storage.

### PRODUCT HISTORY

The preparation of mutheu yogurt was mainly done in the evening by the women. This method improved the shelf life of milk. In addition, the treatment of milk with mutheu ash was necessary to neutralize the bitter taste of the gourds that otherwise would have tainted the milk stored within. During the preparation of mutheu yogurt, it was common to hear singing or storytelling about community heroes. Traditionally, mutheu-scented yogurt was served to important guests as a sign of pride and respect, and was also given to respected people in the Akamba community such as the elderly and in-laws. The yogurt was also served during weddings and naming and initiation ceremonies.



### CURRENT STATUS

Today, the plant is locally rare and many members of the younger generation purchase fermented yogurt and milk from the supermarket. Mutheu cannot be found for sale and was traditionally always harvested from the wild. Recently, some have started to cultivate the plant, but in areas where this has not begun, overharvesting and the conversion of land for agriculture have put the future of mutheu at risk in the Akamba community. The traditional knowledge of how to sustainably harvest and use this plant must be passed down, along with the knowledge of how to propagate the plant for continued production.

# N. 15 MUU (KIMUU, BLACK PLUM)

*Vitex payos* (Lour.) Merr.



<p><b>CATEGORY</b></p>  <p>FRUITS AND NUTS</p>	<p><b>PRODUCTION AREA</b></p> <p>MUYAMBUA, MAKUENI COUNTY (EASTERN KENYA)</p>	<p><b>INDIGENOUS COMMUNITY</b></p> <p>AKAMBA / KAMBA</p>
<p><b>SEASONALITY</b></p> <p><b>HARVEST</b></p>  <p>DURING THE DRY SEASON (APRIL-JUNE)</p>		
<p><b>SENSORY ANALYSIS</b></p> <p><b>VISUAL</b></p> <p>THE FRUIT IS BLACK, OVAL OR RECTANGULAR IN SHAPE, AND SLIGHTLY SMALLER THAN AN APPLE. THE PULP SURROUNDS A SINGLE HARD SEED.</p> <p><b>TASTE</b></p> <p>NOT OVERLY SWEET. FRUITS TASTE LIKE PRUNES AND CHOCOLATE.</p> <p><b>CONSISTENCY</b></p> <p>SMOOTH PULP</p>	<p><b>EDIBLE PARTS AND COOKING TECHNIQUES</b></p> <p>FRUIT, YOUNG LEAVES</p> <p>RAW</p>	

**K** *imuu* is a tree with round, leathery leaves and a fruit that resembles black olives. It commonly grows in semi-arid regions, for example in Makueni County. It grows at elevations up to 1,600 meters in areas with 650-850 millimeters of annual rainfall. It grows best in sandy soils, less often in red clay and rocky soils. It grows to height of up to 10 meters. The tree can be propagated by seed or by root and stem cuttings.



*Muu* (the fruits) are ready for harvesting just as they begin to soften and their color changes to a black. To pick ripened *muu*, gently twist the fruit from the stem. Woven baskets were traditionally used during harvesting and the pulp was allowed to dry naturally in the sun for preservation.



## CULINARY USES

People harvest different parts of the tree for making herbal medicines used to treat various diseases. Fresh and dry fruits are taken to control diarrhea; sap from young trees is used for treating eye infections; and roots are used in different ways for treating stomach problems. *Muu* jam is made by washing the fruits, chopping them into small pieces, and heating them with sugar, stirring continuously to dissolve the sugar. In Makueni County children and herders in particular eat *muu* as a snack. Young leaves are boiled and eaten as a vegetable.



## PRODUCT HISTORY

Among the Akamba, the fruits are mainly eaten during times of food shortage. The pulp is rich in vitamins and minerals. Its vitamin C content is higher than that of oranges. The wood of *kimuu* is used for making firewood, poles, and spoons among the Akamba community. The tree is also a source of fodder and bee forage and is used for constructing beehives. Traditionally women were given a mixture of the boiled fruits and leaves to prevent premature labor and to control bleeding after childbirth.

Because the fruit blackens as it ripens, there is a saying in the Akamba community, *wiite ta muu ya kwitwa*, which compares a person's skin color to the fruit, saying that one is "as black as *muu* that has fallen from the tree for being too ripe." Children often gather the unripe fruits and store them in wood to speed their ripening, and elders would often tease children, telling them that the stored fruits would attract thunder and lightning to the house.

The fruits are gathered both for home consumption and sale. Women sell them in some local markets in Eastern Kenya.



## CURRENT STATUS

This tree has become locally rare. Many in the area have heard of it but never seen the fruit or the tree for themselves. *Kimuu* wood is popular in house construction and charcoal production, which has resulted in overharvesting. Sustainable harvesting methods should be emphasized to protect the future of this species.

# N. 16 NDEREMA (MALABAR SPINACH)

*Basella alba* L.



## CATEGORY



VEGETABLES

## PRODUCTION AREA

NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

LUO;  
LUHYA

## SEASONALITY

### SOW



RAINY SEASON

### HARVEST



HARVESTING STARTS 3 WEEKS AFTER SOWING AND CONTINUES AT REGULAR INTERVALS FOR UP TO 6 MONTHS (USUALLY 2-4 MONTHS).

## SENSORY ANALYSIS

### VISUAL

A PERENNIAL CLIMBING HERB WITH A GREEN OR BROWNISH-PURPLE STEM. THE LEAVES ARE SHINY, GREEN, THICK, AND USUALLY 5-10 CENTIMETERS LONG. THEY ARE SUBCIRCULAR, OVATE, OR HEART-SHAPED AND ARE ARRANGED ALTERNATELY ALONG THE VINE. THE SMALL FLOWERS ARE BORNE ON SPIKES GROWING FROM THE LEAF AXILS AND CAN BE WHITE, PINK, OR RED. THE SMALL FRUITS ARE ROUND AND WHITE, RED, OR BLACK.

### TASTE

THE RAW LEAVES HAVE THE FLAVOR OF CITRUS AND PEPPER. WHEN COOKED, THEY TASTE LIKE REGULAR SPINACH.

### CONSISTENCY

RAW LEAVES ARE JUICY AND CRISPY, WHILE COOKED ONES HAVE A SLIGHTLY MUCILAGINOUS TEXTURE.

## EDIBLE PARTS AND COOKING TECHNIQUES

### LEAVES

RAW, BOILED, STEWED

**N**derema, also known as vine spinach or Malabar spinach, is a climbing plant in the family Basellaceae that grows in tropical Asia and Africa. This plant grows spontaneously in wooded areas and across cultivated fields. It prefers full sun or partial shade in warm to hot, humid areas with fertile, moist soil. It is commonly found along streams, lakes, or other bodies of water.

Apart from growing spontaneously, nderema can be cultivated with other leafy vegetables or tree species that act as a natural support. The plant can be propagated through seeds or cuttings. Nderema grows rapidly, reaching lengths up to 9 meters.



### CULINARY USES

Once gathered, the leaves must be consumed as soon as possible—because of their high moisture content, they tend to deteriorate quickly. They can be eaten raw in a salad, boiled, or stewed. They are usually cooked together with other vegetables to balance their consistency, which is rather watery. Once cooked, they can be used as a primary ingredient in soups and are also good sautéed in a pan with oil and onions and served with starchy foods such as tubers and boiled plantain (green bananas), or with *ugali* made with corn or other cereals.



### PRODUCT HISTORY

Nderema used to play a crucial role in the food systems of some rural Kenyan communities. Its leaves are rich in iron and vitamin A, thus making it a food with invigorating and restorative properties. For these reasons, it was traditionally part of the diet of children and pregnant women. It is also considered a suitable food for weak or sick people, especially with mouth conditions such as aphthae or abscesses, because the soft texture of the leaves makes them easily chewable. The mucilaginous texture of the leaves is also associated with various healing properties. For example, cooked leaves are used as a natural remedy against constipation. Finally, the leaves serve as fodder for cattle and increase milk production.

The use of this plant is mainly associated with the Luhya and Luo communities in Western Kenya, but after the migrations that took place during the second half of the 20th century, its consumption spread to other areas. Today, this vegetable can be found in markets in Nakuru County, various rural areas, and to a smaller degree in urban centers. The product offered on the markets is usually gathered from the wild; more rarely, it is cultivated on a small scale.



### CURRENT STATUS

Though *Basella alba* is frequently consumed in other parts of Africa and Asia, and despite its excellent nutritional properties and medicinal uses, nderema is not often consumed in Nakuru County. The limited diffusion of this product is due to its mucilaginous texture, which is often not appreciated by people who are not used to it, and to the fact that the leaves deteriorate rather quickly, a crucial factor that hinders its sale.

# N. 17 NJAHE

(NJAHI, LABLAB BEAN)

*Lablab purpureus* (L.) Sweet



**CATEGORY**



LEGUMES

**PRODUCTION AREA**

CENTRAL KENYA

**INDIGENOUS COMMUNITY**

GIKUYU / KIKUYU

**SEASONALITY**

**SOW**



RAINY SEASON  
(LATE MARCH AND EARLY APRIL)

**HARVEST**



4-5 MONTHS AFTER SOWING.

**SENSORY ANALYSIS**

**VISUAL**

PODS ARE BROAD AND UP TO 10 CENTIMETERS LONG. SEEDS ARE BROWN TO BLACK WITH A WHITE HILUM (EYE) AND A LONG ARIL.

**TASTE**

A RICH FLAVOR SIMILAR TO THAT OF MUSHROOMS.

**CONSISTENCY**

VELVETY TEXTURE. BEANS HOLD THEIR SHAPE WELL DURING COOKING.

**EDIBLE PARTS AND COOKING TECHNIQUES**

GREEN OR DRY SEEDS, LEAVES

BOILED, STEWED

The *njahe*, also known as lablab, is a native legume (family Fabaceae), very important for the Gikuyu people in the central part of Kenya. It is a climbing perennial plant with thick foliage. It grows at elevations up to 2,000 meters above sea level and tolerates drought, heat, and a wide range of soil types. During the rainy season *njahe* is sown directly in the garden. The beans are left on the vine until they have dried. Once fully dry, the seeds are separated from the pods by hand. An easier method is to dump all the dried pods in a bag and either step all over the bag or hit it repeatedly with

a wooden stick or metal rod. Once cleaned, *njahe* are stored in the granary and used whenever cooking is to be done. Green and dry parts of the plant are used for feeding cattle, sheep, and goats, especially during the dry season. Because women are the ones primarily responsible for the cultivation and sale of *njahe*, it is a fundamental part of their diet.



## CULINARY USES

Dry or green beans are cooked after being soaked. The beans can be cooked with vegetables or maize or mashed with potatoes. They may also be boiled, fried, and used as *mboga* (relish) with *ugali*. The beans are cooked and consumed in various ceremonies and events in the social life of the community. During marriage negotiations Gikuyu people prepare *njahe cia athoni*, a dish made with bananas and *njahe*.



## PRODUCT HISTORY

At one time *njahe* beans were used for divination, and it is no coincidence that their name derives from the name of a mountain, Mount Kenya (Kĩrĩ Nyaga in the Gikuyu language), considered to be the dwelling place of God in the indigenous religion of this community. In fact, the names of seasons were based on this bean—for instance, *kimera kia njahe* means “the season of *njahe*.” This clearly shows that *njahe* was an important food for the Gikuyu people.

*Njahe* is still an important traditional food among the Gikuyu, served to visitors and during important ceremonies. During an *irua* ceremony, young girls are put on a special diet consisting of *njahe* and a heavy porridge. “*Irua*” derives from the Gikuyu word for pain. In a broad sense it refers to the set of preparations and rituals that make up initiation.

*Njahe* is also associated with fertility and the female reproductive system. It is said that at one time it was used in a ceremony for the cure of excessive menstrual bleeding, and it is still used today by pregnant women and new mothers, who eat dishes based on this bean especially after giving birth.





## CURRENT STATUS

The conservation of *njahe* in Gikuyu areas around Nairobi is at serious risk due to the expropriation of agricultural lands and the abandonment of local crops in favor of crops and cultivation practices introduced during colonialism. Despite its importance in some communities, *njahe* is still a neglected crop with unexploited potential.

# N. 18 NUKIAT

*Dovyalis abyssinica* (A.Rich.) Warb.



<p><b>CATEGORY</b></p>  <p>FRUITS AND NUTS</p>	<p><b>PRODUCTION AREA</b></p> <p>MAU FOREST (RIFT VALLEY)</p>	<p><b>INDIGENOUS COMMUNITY</b></p> <p>OGIEK / OKIEK</p>
<p><b>SEASONALITY</b></p> <p><b>HARVEST</b></p>  <p>FRUITS RIPEN IN MARCH - JULY AND OCTOBER - NOVEMBER</p>		
<p><b>SENSORY ANALYSIS</b></p> <p><b>VISUAL</b></p> <p>THE FRUITS ARE ROUND BERRIES. SMOOTH, ORANGE-YELLOW PULP WITH A SWEET-SOUR FLAVOR SURROUNDS THE SEEDS.</p> <p><b>TASTE</b></p> <p>SOUR WITH A SLIGHT SWEETNESS, AROMA REMINISCENT OF APRICOT.</p> <p><b>CONSISTENCY</b></p> <p>TENDER, SIMILAR TO EGG YOLK.</p>	<p><b>EDIBLE PARTS AND COOKING TECHNIQUES</b></p> <p><b>FRUIT</b></p> <p>BOILED, FRESH</p> <p><b>WAYS OF PRESERVING</b></p> <p>DRYING</p>	

**N**ukiat is a shrubby, thorny, spiny tree, 3-6 meters tall, with gray bark and dark green, oval-shaped leaves. It grows in the Mau forest in Kenya's Rift Valley, the largest montane forest in East Africa.

This species grows primarily in forest margins. The fruits are green ripening to bright orange or red, and make excellent preserves. Nukiat fruits are harvested from the wild but the trees can be also cultivated. They are propagated from seed collected from dried ripe fruits. They can also be grown from stem

cuttings. The seeds are cleaned, dried, and planted on loamy or sandy soil. The trees are used as fences or hedges around homes. Nukiat fruits are hand harvested by pulling or clipping them off the stem. Tools used for cultivation include the fork *jembe*, machete, and shovel. Woven baskets are used for harvesting. To increase the fruits' shelf life, sun drying is used as preservation method.



### CULINARY USES

Nukiat is eaten raw or added to porridge. It also used to make preserves. Among the Ogiek, women and young girls collect nukiat fruits and other berries, mash them with honey in a bamboo tube, and feed the resulting jam to children.



### PRODUCT HISTORY

Ogiek women living near Mau Forest collect many different wild fruits and herbs, among which are nukiat berries. In this respect, forests are gendered spaces in Ogiek society and are critical to women's efforts to meet their personal, household, and community responsibilities.

The nukiat is important in the lives of Ogiek hunter-gatherers living in Mau Forest, not only because of the food value of the fruits but also because the tree is important for medicinal purposes: A decoction of the roots is given to mothers who have had complications giving birth and is also taken for stomachache and fever. An infusion of the crushed leaves is used for digestive complaints. Young men hunting in the forest eat nukiat for enjoyment as well as to ease hunger pangs. Nukiat berries can be pressed to make juice. Boys are given these fruits to eat after their initiation rites because it is believed that they facilitate quick healing.



### CURRENT STATUS

Between 1973 and 2005, habitat destruction in Mau Forest resulted in a loss of 10% of the area's biodiversity.

The population of naturally growing *Dovyalis abyssinica* trees has been greatly reduced, thereby denying the Ogiek community and communities living adjacent to the forest the benefits of the tree. It is for this reason that today some communities are working to domesticate this plant in household and school gardens.

# N. 19 OBUKUFUMA (OBUKUSUMA)

*Termitomyces* sp.



## CATEGORY



MUSHROOMS

## PRODUCTION AREA

EPANGA VALLEY, BUNYORE,  
VIHIGA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

LUHYA

## SEASONALITY

### HARVEST



NORMALLY AVAILABLE EARLY  
IN THE RAINY SEASON (APRIL – MAY)

## SENSORY ANALYSIS

### VISUAL

IT HAS A GRAYISH CAP WITH  
A WHITE UNDERSIDE THAT CAN  
GROW UP TO 30 CENTIMETERS IN  
DIAMETER. THE STEM CAN BE AS  
LONG AS 45 CENTIMETRES.

### TASTE

WHEN DRIED, IT  
RESEMBLES CEP  
MUSHROOMS (*BOLETUS*).

### CONSISTENCY

FLESHY

## EDIBLE PARTS AND COOKING TECHNIQUES

### MUSHROOM

BOILED, FRIED,  
STEWED

### WAYS OF PRESERVING

DRYING, SMOKING

**O** *bukufuma*, or *obukusuma* as it is also called, is a large mushroom in the *Termitomyces* genus. It grows wild around Epanga Valley and the surrounding areas in north Bunyore in Vihiga County, Western Kenya.

Each rainy season the large mushrooms grow on and near termite mounds. The local termites live in symbiosis with the fungi, transporting the mushroom spores to their nests and depositing them on chewed woody debris. There the fungi grow, digesting the cellulose and lignin, leaving behind a sugary substance consumed by the termites.



The mushrooms are usually picked fresh during the morning hours and cleaned. They are then sun dried and smoked and can be stored for over 6 months. Dried obukufuma is usually stored in a well-ventilated basket.

#### CULINARY USES

Obukufuma mushrooms are generally sundried and smoked but they can also be eaten fresh. They may be boiled, fried, or stewed. The dried mushrooms must be soaked in water and washed before being cooked. Soda ash or *mush-eleka* (ash made from burnt dry vegetables) are traditionally added during the cooking to soften the mushrooms and to cook them faster.

Obukufuma mushrooms can be cooked alone or can be mixed with the leaves of cowpea plants and eaten as a vegetable with maize or sorghum. Luhya people also use them to flavor soups. Dishes prepared with mushrooms are served with starchy foods like rice, *ugali*, or chapati bread.

#### PRODUCT HISTORY

Wild food still plays an important role in the Luhya food system. During childhood, people are taught about harmful or poisonous plants, mushrooms, insects, and many other materials or products in the local environment. In particular, mushroom collection, production, and utilization are structured by a wide range of cultural norms and beliefs. When someone spots a mushroom before it is mature, he covers it with some moist grass and nobody else can pick that particular mushroom.

Mushrooms are considered gifts from the ancestors. The obukufuma mushroom has an important meaning to the local people. Among the Luhya of Vihi-ga County, the first one to see a mushroom is thought to have good luck. On the other hand, dreaming about mushrooms is a sign that illness will effect a person close to the dreamer.

#### CURRENT STATUS

The use of mushrooms as a food source has declined considerably in recent years. But mushrooms are nutritious, tasty, widely distributed, and readily available during the rainy season, so their use should be encouraged.

The increased use of artificial fertilizers on farmlands has reduced the availability of mushrooms. Reduced fallow periods also slow the accumulation of organic matter that encourages the growth of obukufuma. In addition, destruction of large termite nests to clear land for cultivation has negatively affected obukufuma's habitat.

# N. 20 SONGOW'O (MJAFARI, KNOBWOOD)

*Zanthoxylum chalybeum* Engl.



## CATEGORY



FRUITS AND NUTS;  
SPICES, WILD HERBS AND CONDIMENTS

## PRODUCTION AREA

KAPENGURIA,  
WEST POKOT COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

POKOT  
(KALENJIN)

## SEASONALITY

### SOW



OCTOBER - DECEMBER

### HARVEST



MAY - JULY, SEPTEMBER

## SENSORY ANALYSIS

### VISUAL

FRUITS ARE 5-8 MILLIMETERS IN DIAMETER, GRAY, PITTED. THE FRUIT SPLITS OPEN TO EXPOSE A BLACK SEED. THE MIDRIB OF THE LEAVES (WHICH HAVE A SMOOTH OR SERRATE MARGIN) IS PROMINENT AND OFTEN HAS LITTLE SPINES.

### TASTE

FRUITS ARE SPICY AND AROMATIC, LEAVES ARE AROMATIC.

### CONSISTENCY

A LITTLE BIT ROUGH.

## EDIBLE PARTS AND COOKING TECHNIQUES

### FRUIT, LEAVES, BARK

CONDIMENT, FRESH, HERBAL TEA

### PRESERVING

DRYING

**S**ongow'o is the Pokot name for *Zanthoxylum chalybeum*, known in Swahili as *mjafari* and in English as knobwood. It is a shrub or tree that grows up to 10 meters in height and has strongly scented, dark gray bark. It is found in most parts of Kenya (often near termite mounds) in dry woodland, bushland, grassland, rocky areas, and near the coast, at elevations up to 1,500 meters. The branches are lined with spines. The plant has aromatic leaves and small yellow flowers. It is propagated by seed or root sucker.

Songow'o leaves are picked during the growing season and used fresh. The bark is carefully stripped during the rainy season and dried for use in decoctions and liquid extracts. Fruits are also collected for use in decoctions, while the branches are used for smoking milk gourds and as toothbrushes.



## CULINARY USES

The fruits are chewed by Pokot women for good breath. The strongly aromatic leaves are used for flavoring tea. The leaves and bark are dried in the sun and ground in a mortar until they are turned into a fine powder. Sometimes they are just ground on or between rough stones. The powder produced is used to flavor tea and fruit juice. The leaves and seeds, which are strongly aromatic, are collected, dried in the sun, and then crushed to create a powder that is used to flavor tea and soup.



## PRODUCT HISTORY

The Pokot are a tribe within the larger Kalenjin community of the Rift Valley region. Songow'o is used in traditional medicine among the Pokot community. Tea made from fruits or leaves and decoctions made from the bark or roots are used as a cure for coughs, colds, chest pain, sore throat, and respiratory diseases such as asthma and tuberculosis. Bark or root decoctions are also used for malaria and fever. Smoke from the burning bark is inhaled to stop fainting and headaches. The branches are traditionally used for sweeping the household to rid it of fleas and mites because of its properties as an insect repellent, and are also placed in grain stores to reduce weevil attack. The dried seeds are used as beads in traditional garments. The wood is used as a fire starter and to make carved spoons, mortars, and other kitchen utensils. Long ago, songow'o was used for administering blessings during ceremonies including initiation, marriage, and childbirth. The bark is used for making tea among the Pokot people and is consumed to facilitate quick healing when the young men undergo circumcision rites.

In Kapenguria, a group of 35 Pokot farmers produce condiments derived from local songow'o trees. These farmers sell the fruit and the bark in many local markets across Pokot County.



## CURRENT STATUS

Songow'o is generally rare in many areas due to overexploitation for medicinal purposes, destruction of habitat, and urbanization. Without proper guidance for their sustainable use, songow'o and other plants with medicinal properties are in danger of becoming locally extinct or falling out of use.

# N. 21 TSIMBANDE (BAMBARA GROUNDNUT)

*Vigna subterranea* (L.) Verdec.



## CATEGORY



LEGUMES

## PRODUCTION AREA

KAKAMEGA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

LUHYA

## SEASONALITY

### SOW



AUGUST

### HARVEST



DECEMBER - JANUARY

## SENSORY ANALYSIS

### VISUAL

THE PODS ARE APPROXIMATELY 1.5 CENTIMETERS LONG, ROUND OR SLIGHTLY OVAL SHAPED, AND MAY BE WRINKLED.

EACH POD CONTAINS ONE TO TWO SEEDS, THE COLOR OF WHICH CAN BE BLACK, DARK BROWN, RED, WHITE, CREAM, OR A COMBINATION OF THESE.

### TASTE

STRONG BEANY FLAVOR

### CONSISTENCY

CRUNCHY

## EDIBLE PARTS AND COOKING TECHNIQUES

### SEEDS

RAW, BOILED, GRILLED

### PRESERVING

DRYING

**T***simbande*, known in English as the Bambara groundnut, is a major food for the Luhya community in Western Kenya, particularly in Kakamega County. The Bambara groundnut is grown to a lesser extent by the Giriama and Akamba people also on Kenya's coast, and by the Luo, neighbors of the Luhya. Tsimbande are grown in relatively poor soils (usually sand or loam) in hot regions, at elevations up to 1,550 meters. They are planted in rows or randomly, normally after the maize harvest, and harvested 4-5 months later. Chemical fertilizers need not be applied to areas where tsimbande is cultivated because the crop fixes nitrogen.

Harvesting is usually done by uprooting or digging out the entire plant and picking the individual pods, which grow just under the soil surface. The pods are often sundried and then threshed and winnowed to obtain the seeds.



## CULINARY USES

Seeds of the Bambara groundnut are cooked with maize or on their own and then mashed, fried, and made into a stew. They are normally cooked or eaten raw when vegetables are in short supply. The seeds can also be dried, pounded to remove the seed coat, winnowed, and boiled until they are cooked through, then stirred until smooth and served with rice or *ugali*. Among the Luhya, dry tsimbande can either be pounded or ground and the resulting meal made into a stew or sauce to be served with leafy vegetables. Unshelled pods are boiled, fried, and served with potatoes, banana, or ugali.



## PRODUCT HISTORY

The Bambara groundnut is an African indigenous crop. It is the third-most-important grain legume (i.e. pulse) in the African lowland tropics after the peanut (*Arachis hypogaea*, commonly referred to as the groundnut) and the cowpea (*Vigna unguiculata*). It is a popular traditional food among the Luhya people of Western Kenya.

A number of decades ago, tsimbande were considered important food during droughts and famine. They have a high ceremonial value and are prepared for people to eat during funerals and naming and bridewealth ceremonies.

The seeds are mainly produced for home consumption but sometimes women sell tsimbande to individuals or in the informal markets of the area.



## CURRENT STATUS

In Kenya, the Bambara groundnut is considered an orphan crop. Its production in Kenya, like that of many other traditional crops, has been declining for the past few decades. Despite the fact that tsimbande is still considered a delicacy by the Luhya community, current levels of production among other communities are low and decreasing. Tsimbande is at risk for a number of reasons: It is difficult to harvest, cooking the dried nuts takes a long time compared to other nuts (thereby requiring more fuel and water to process), and it is difficult to mill due to its fibrous shells. Additionally, it is usually given less value and priority in land allocation because it is grown by women.

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# CHAPTER 2

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## **HONEY**

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# N. 22 AKAMBA ACACIA HONEY (UKI WA NZUKI WA KITHIIA)



## CATEGORY



HONEY

## PRODUCTION AREA

MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## BEE KEEPING TECHNIQUES

TRADITIONAL HIVES ARE GENERALLY MADE FROM MATURE HARDWOOD TREES. BEEKEEPERS PLACE THE HIVES IN *ACACIA MELLIFERA* TREES NEAR STREAMS OR RIVERS, WHERE THESE TREES ARE CONCENTRATED. HONEY HARVESTING IS DONE AT NIGHT AND A SMOKER MADE OF STICKS IS USED TO CALM THE BEES. TRADITIONALLY, ONLY ADULT MEN IN GROUPS OF FIVE WERE ALLOWED

TO EXTRACT THE HONEY. THE TOOLS USED TO EXTRACT HONEY AND COMBS INCLUDE A KNIFE FOR CUTTING THE COMB, A SKIN BAG (CALLED *NGUSU*) SLUNG ON THE BACK BY A LEATHER THONG (*MUKIWA*) WORN ROUND THE FOREHEAD, AND FIREWOOD FOR SMOKING OUT THE BEES. ACACIA HONEY IS A PRODUCT THAT REQUIRES SOME PROCESSING, INCLUDING MANUAL SIEVING.

**U**ki wa nzuki wa kithiia is a special kind of honey among the Akamba people of Makueni County.

Traditional beekeepers classify bees into groups depending on size, appearance, and the color of their hairs and wings. The generic name for bees is *nzuki* (*Apis mellifera scutellata*). Honey bees source nectar from different acacia trees such as *Acacia mellifera* (*muthiia* in Kamba). The



Akamba community has a proverb that clearly describes the tree: *Kithiia kyu-manasya nthi na miw'a ya kyo'*, which means, "the muthiia plant sprouts from the ground with its thorns," indicating that bravery starts from a very young age.

*Acacia mellifera* honey is known to be almost transparent and viscous but, once it crystallizes, it becomes white or pale yellow. This honey crystallizes slowly due to its high fructose content.

Honey from *Acacia mellifera*'s white flowers is available in the dry seasons, from January to March and September to December.



## PRODUCT HISTORY

The Akamba are a Bantu-speaking people that live in the semi-arid area of Kenya's former Eastern Province, stretching east from Nairobi to Tsavo, and north up to Embu.

Among the Akamba, honey, either in a raw state or in the form of mead, plays a large part in religious ritual. For example, unprepared honey is used for offerings to the spirits of the ancestors (*aiimu*) when rain or food is desired. When a man dies, honey from his hives is eaten by those taking part in the funeral ceremonies. Unless he had opened a hive shortly before his death (in which case the honey is ready to consume), his hives must be opened in the first instance by a brother. Honey was exchanged as a gift during weddings.

Honey is used to preserve meat, to make local brew known as *kaluvu*, and to treat hoof and mouth disease in cattle. The wax is thrown away and the brood (eggs, larvae, and pupa) are eaten by men and believed to improve libido.

In Makueni county, honey is collected mostly for sale. Beekeepers trade their honey to middlemen and local brewers.



## CURRENT STATUS

A number of factors have contributed to the loss of traditional knowledge and practices of beekeeping. One is Christianity: Christian missionaries deemed the customs of brewing beer from honey and using honey to pay bridewealth unacceptable. Deforestation is another factor, and results in part from people cutting trees in an unsustainable way to burn charcoal. This has reduced the number of *Acacia mellifera* trees in the region.

# N. 23 AKAMBA *PROSOPIS JULIFLORA* HONEY



## CATEGORY



HONEY

## PRODUCTION AREA

MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## BEE KEEPING TECHNIQUES

THE BEEHIVE, CALLED *MWATU*, IS MADE FROM THE WOOD OF A TREE KNOWN AS *KITHULU* (*CROTON MEGALOCARPUS*). THE WOOD FOR THE HIVES IS SHAPED AND LEFT TO DRY IN THE SUN, TO RID THE BARK OF ITS UNDESIRABLE AROMAS. PREPARATION OF THE BEEHIVE CAN TAKE AN ENTIRE MONTH AND IS VERY DELICATE WORK. THE BEEHIVES ARE PLACED IN THE *PROSOPIS JULIFLORA* TREE.

DURING THE HARVEST, WHICH TAKES PLACE AT NIGHT, THE BEEKEEPERS LIGHT A SMOKE PRODUCING TORCH TO

SMOKE OUT AND STUN THE BEES SO THAT THE HONEY CAN BE EASILY COLLECTED.

IN THE PAST, HONEY WAS STORED AND EATEN IN CRUDE FORM (I.E. WITH THE COMB). TODAY THE LIQUID PART OF THE HONEY IS DRAINED FROM THE COMBS AND IS ENJOYED AT HOME. AFTER MANUAL PROCESSING, IT IS PACKAGED IN SMALL CONTAINERS AND STORED IN A COOL AND DRY PLACE.

**P***rosopis juliflora* honey is collected from the *Prosopis juliflora* tree, a leguminous tree that grows in semi-arid lands and whose bark is used to cure stomach pains. It is an evergreen tree native to South and Central America. In Kenya, the tree was first planted in the former Coast Province. It grows rapidly and tolerates arid conditions and saline soils. *Prosopis juliflora* is a good source of construction materials and it provides various en-

vironmental services such as soil conservation and rehabilitation of degraded soils. The species is also good bee forage, leading to high honey production.

The Akamba generic name for bees is *nzuki* (*Apis mellifera scutellata*). It is a small, dark bee with a slender body and mild temperament.

*Prosopis juliflora* honey is sweet, slightly floral, and very light in color. It usually has a thick consistency.



## PRODUCT HISTORY

For the Akamba, honey is an especially important product, with both nutritional and cultural value. One legend says that the gods living in the mountains gave honey to the Akamba ancestors, distributing it equally to the people regardless of their wealth. It is said that the Akamba ancestors positioned their hives high in the trees, as close as possible to the ancestral gods, and that, 4 months later, a community festival was organized so that the harvested honey could be shared.

From the time of placing the first beehive, the owner cannot cohabit with a woman until the bees start building a comb. When he finds that the bees have started building, he will usually brew some beer and pour out a libation for his ancestral spirits (*aiimu*) to give thanks.

Honey is used in various food preparations or added to infusions. Additionally, *Prosopis juliflora* honey plays an important role in ceremonies such as baptisms, weddings, and initiation rites.



## CURRENT STATUS

This honey is mainly consumed at home but is sometimes sold locally in small quantities. It is at risk of disappearing because the native bees are becoming rarer due to climate change and the number of people dedicating themselves to traditional beekeeping practices continues to decrease.

# N. 24 AKAMBA SISAL HONEY (UKI WA MAKONGE)

76



## CATEGORY



HONEY

## PRODUCTION AREA

MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## BEE KEEPING TECHNIQUES

HIVES ARE PLACED IN LARGE TREES NEAR SISAL (*AGAVE SISALANA*) PLANTATIONS. THE HONEY IS HARVESTED BY TWO MEN: AN EXPERIENCED MAN IS ACCOMPANIED BY A YOUNG MAN SO THAT THE HARVESTING KNOWLEDGE CAN BE PASSED ON FROM ONE GENERATION TO THE NEXT. HARVESTING IS DONE TWICE A YEAR, IN JUNE AND DECEMBER, THOUGH THE PATTERN IS CHANGING DUE

TO THE EFFECTS OF CLIMATE CHANGE. THE PROCESS IS CARRIED OUT IN THE EVENING BECAUSE BEES ARE LESS ACTIVE AT THIS TIME. SMOKE IS USED TO MAKE THE BEES DOCILE, AFTER WHICH THE HONEY IS COLLECTED. THE EXTRACTION IS BY MANUAL SQUEEZING AND SIEVING WITH A LIGHT PIECE OF CLOTH.

**B**ees make this honey from the sisal plant, locally known as *makonge*, hence the name *uki wa makonge* for the honey among the Akamba community. Sisal is native to southern Mexico but is cultivated and naturalized in many African countries.

The generic name for bees is *nzuki* (*Apis mellifera scutellata*). The physical appearance of the African honey bee is very similar to that of the European honey bee: Its upper body is covered in hairs and its abdomen is striped and dark.

The bees collect nectar from sisal flowers and make a honey that is thicker than the one collected from other plants. Its color ranges from cream to orange and it has a distinctive sour taste.

The hives are placed near sisal plantations or individual sisal plants but cannot be hung on the sisal plant itself because it has one stem, with flowers at the top. The hives are usually left in the trees for the whole season and honey is extracted over a period of 1-2 months.



## PRODUCT HISTORY

Among the Akamba community, honey is used as a form of bridewealth and it is traditional for a bridegroom to bring a bucket of honey to the bride's family as a token of appreciation and because it implies that the love the bridegroom has for the bride is as sweet as honey. The honey is also used for making mead, which can only be drunk by elderly men (*atumia*). However, young men who marry and settle down may be allowed to drink it under certain conditions.

Sisal honey is applied to open wounds for medicinal purposes. The wax is currently used in making candles and ointments, and propolis is mainly used for its medicinal properties, to improve digestion, and to make cosmetic products.

Honey is mainly harvested for home consumption but with changing times and community dynamics, beekeeping is now becoming a commercial activity. This is partially due to increasing awareness of the health benefits associated with honey.



## CURRENT STATUS

Uki wa makonge is rare because of the declining number of traditional beekeepers and because it is only produced near one sisal plantation in Makueni County. Christian missionaries deemed traditional marriage customs (paying bridewealth with honey, etc.) and the practice of brewing mead unacceptable. As a result, many Kenyans who converted to Christianity gave up the beekeeping tradition. The Akamba saying *yesu emuyo kwii uki wa nzuki*, which means "Christ is sweeter than honey," was used to encourage members of the community to join Christianity.

# N. 25 ILMUTIUK MBOYONG'J HONEY

78



## CATEGORY



HONEY

## PRODUCTION AREA

MAU FOREST,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

Ogiek / Okiek

## BEE KEEPING TECHNIQUES

TODAY THREE TYPES OF BEEHIVES ARE USED: BOX, KENYA TOP BAR (KTBH), AND THE TRADITIONAL LOG HIVE (SOMETIMES SMEARED WITH COW DUNG TO MAKE SURE THAT THEY ARE COMPLETELY SEALED). THE MEN ARE RESPONSIBLE FOR THE CONSTRUCTION, MANAGEMENT, AND PLACING OF THE HIVES ON THE TREE (UP TO 4 METERS

HIGH) AND ALSO THE HARVESTING. THE CEDAR TREE IS USED IN HIVE CONSTRUCTION. WOMEN CLEAN THE HONEY (SEPARATING IT FROM THE COMBS AND PROPOLIS) AND MAKE OTHER PRODUCTS FROM IT, LIKE CREAMS. HARVESTING TAKES PLACE FOUR TIMES A YEAR, DEPENDING ON THE TYPE OF HONEY AND RAINFALL.

**I**lmutiuk mboyong'j is a traditional honey collected by the Ogiek communities living near the Mau Forest. They prefer heavily forested areas where flowering plants are abundant. The honeybees source nectar from *mbovong'i tree* (a type of Euphorbia), acacia, and other plants, resulting in three different types of honey: mbovong'i, acacia, and multi-floral honey.

Ogiek beekeepers identify two different types of bees depending on the area: the lowland bee, smaller and brown, and the highland bee, which is thinner and

yellow. The latter one, which is the most widespread, produces a sweet honey that is generally preferred. They have hair on the thorax and less hair on the abdomen. They also have a pollen basket on their hind legs. Honey harvesting takes place in February, April, August, and December.



## PRODUCT HISTORY

The Ogiek people are one of Kenya's smallest tribes. In the dry season they live in the Mau Forest and around Mount Elgon, near the Ugandan border, and move out to the plains during the rainy season.

Though some communities have started practicing agropastoralism, the Ogiek have always lived in areas where there are forests adjacent to the plains. Bee-keeping and farming remain the most important activities in the Ogiek community, with a long history of beekeeping that has been passed down from generation to generation.

Ogiek communities used to gather honey from the wild. Beekeepers used three types of birds as indicators: *kecheiyat*, a bird that guides hunters to the honeycomb with its call; *wochewet* (eagle), which was used to predict luck in honey gathering; and *merewet* (a kind of falcon), which served as an indicator for season and migration of bees. Today most honey is produced in the hives but harvesters still look for wild honey when they go into the forest.

Honey is one of the ingredients in a traditional brew that is used in different ceremonies, such as initiation, marriage, and childbirth. Ogiek people use the honey to treat infections and relieve the pains resulting from childbirth. They mix it with medicinal plants and herbs gathered from the forest. Propolis is used during circumcision as it accelerates the healing process. Honey is also used in treating foot and mouth disease in cows.



## CURRENT STATUS

This traditional honey is now under threat from increased incidences of drought as a result of climate change; deforestation for fuel wood; lack of suitable refining equipment and facilities; a reduced number of hives; and pests (especially the honey badger). In Kenya, Slow Food is working together with local beekeeping communities to protect their products and the biodiversity of the natural environment.

# N. 26 LAKE BOGORIA ACACIA HONEY



## CATEGORY



HONEY

## PRODUCTION AREA

LAKE BOGORIA,  
BARINGO COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

ENDOROIS  
(KALENJIN)

## BEE KEEPING TECHNIQUES

THE ENDOROIS BEEKEEPERS USE VARIOUS TYPES OF HIVES, ONE OF WHICH IS THE KAPKUKUI SUPER LOG HIVE, DEVELOPED BY LOCAL PRODUCERS COMBINING TRADITIONAL AND MODERN TECHNIQUES. THIS HIVE HAS A CAPACITY OF 18-20 KILOGRAMS. IT IS PLACED ON BRANCHES AND TIED WITH A WIRE OR SUSPENDED FROM A STRONG BRANCH BY A WOODEN HOOK. HARVESTING

TAKES PLACE AT NIGHT WITH THE PRESENCE OF MORE THAN ONE PERSON. A TRADITIONAL SMOKER IS LIT AT THE HARVESTING SITE. ONCE UP THE TREE, THE BEEKEEPER OPENS THE HIVE, TAKES OUT THE COMB, AND PLACES IT IN A BAG MADE OF ANIMAL SKIN. THE HONEY IS EXTRACTED FROM THE COMBS BY USE OF MANUAL PRESSURE OR A CENTRIFUGE.

**W**estern Kenya is rich in mountains and lakes, some of which are very large. One of the biggest, Lake Bogoria, is in Baringo County. The Endorois people live on the shores of the lake, at an elevation of around 1,000 meters above sea level. Honey production is a very important activity for the Endorois and is practiced by many members of the community.



The bees that occur in this area are *Apis mellifera scutellata*. Beekeepers differentiate these honey bees from stingless bees.

Lake Bogoria acacia honey is collected twice a year (from June to July and September to January). It is brown and has a very sweet but delicate flavor with notes of vanilla.

Beekeepers place the hives on dry, standing trees on the shores of the lake. They look for the presence of certain plant species like *Acacia tortilis*, *Acacia mellifera*, *Ficus sycomorus*, and *Grewia similis*.



## PRODUCT HISTORY

Honey is an important product in the Endorois community. It is used in different ceremonies, including bridewealth payment, namings, initiations, and weddings. The honey is also used in making a traditional brew called *mriie*. *Mriie* is an important drink during the occasions listed above, as well as during the election of an age group leader and the blessing of young women before they give birth. Honey was and still is used to compensate traditional medicine men for their services. It is known for its medicinal properties, being used as an antiseptic, a cicatrizing balm, and a digestion aid. Honey is also used to improve the taste of bitter herbal drugs.

Traditional beekeeping is one of the environmentally most sustainable activities and provides an alternative income source to the local people. Lake Bogoria acacia honey is processed by the Kapkuikui Livestock Improvement Self-Help Group and other community groups. It can be sold fresh in the period following the harvest or aged for several months, in which case it is stored in traditional wooden barrels that are placed in a cool and dry place.



## CURRENT STATUS

The Endorois were expelled from the Lake Bogoria area in the 1970s because the Kenyan government wanted to make it a hunting reserve. After an almost 40-year battle, they have now managed to return to live on their lands. When they were evicted, the Endorois lost their beehives, and thus an important source of economic activity. Although honey production is gradually growing, it is at risk due to increasing deforestation in the area.

# N. 27 OGIEK HONEY



## CATEGORY



## PRODUCTION AREA

MARIASHONI DISTRICT,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

OGIEK / OIGIEK

## BEE KEEPING TECHNIQUES

OGIEK BEEKEEPERS USE TRADITIONAL LOG HIVES MADE FROM DRIED CEDAR, THOUGH THEY HAVE ADOPTED THE KENYAN TOP BAR HIVE AND LANGSTROTH HIVE TO INCREASE HONEY PRODUCTION. THE BEEHIVE IS HOLLOW, 1.4 METERS LONG, AND HAS A DIAMETER OF ABOUT 40 CENTIMETERS. THE HIVES ARE HUNG ON TALL CEDAR TREES AT A HEIGHT OF AT LEAST 10 METRES. BEEHIVE CONSTRUCTION IS DONE BY A FEW SKILLED MEN FROM

EACH CLAN. TOOLS USED FOR HARVESTING HONEY INCLUDE A SMOKER AND A BAG MADE OF DUKER LEATHER. HONEY PROCESSING IS DONE AT MARIASHONI COMMUNITY DEVELOPMENT CBO USING AUTOMATIC MACHINERY AND ALSO MANUALLY. REFINED HONEY IS STORED IN 250-GRAM AND 500-GRAM CONTAINERS FOR MARKETING.

**T**he Ogiek people are one of Kenya's oldest tribes, living in the Mau Forest and the forests around Mount Elgon near the Ugandan border. They are a Kalenjin-speaking people. The Ogiek's way of life is based on the natural resources provided by the forest: They are hunter-gatherers whose main activity is apiculture.

The small black African honey bees (*Apis mellifera scutellata*) kept by the Ogiek prefer the nectar produced by flowers of the *silibwet* plant (*Dombeya goetzeni*).

which gives the honey collected in August its characteristic whitish-gray color and distinctive flavor. Honey harvested in December, on the other hand, is slightly yellow in color and honey from February to April varies from reddish to almost black.

Among the Ogiek, it is forbidden to cut certain trees, especially silibwet—this plant is highly valued because it provides nectar for bees. It is also considered a sacred tree.



## PRODUCT HISTORY

Beekeeping is one of the major socioeconomic activities carried by the Ogiek community. During colonial rule the Ogiek people were exterminated and driven from their land. After many years of struggles, recently the Ogiek won a landmark land rights case at the African Court on Human and Peoples' Rights.

Aside from being a staple food, honey is used in different contexts and cultural practices like childbirth, circumcision, and marriage ceremonies. It is also the main source of energy during drought and famines, due its ability to keep for long periods. Traditional beer is also made from the honey and drunk by the elders during their meetings. Honey is also used as a preservative for smoked meat. Honey is also the vehicle of communication with ancestral spirits. It is given on certain occasions as a symbol of the establishment of new relations.

Traditionally honey was sold or traded to the Maasai who use it for making a honey wine and also as an essential ritual substance mixed with milk. Nowadays the production of honey for commercial purposes remains relatively low due to a lack of proper equipment for beekeeping, management, and processing, and inadequate knowledge related to beekeeping. These factors lead to low annual honey yield, low competitiveness of honey in the domestic market, and low returns for beekeeping enterprises.



## CURRENT STATUS

Mau Forest was heavily exploited due to increased demand for timber and wood. This led to destruction of the indigenous trees where the Ogiek source their honey. Reforestation programs have been launched, though many focus on exotic trees for commercialization. For the Ogiek, destruction of the forest means loss of their homes, staple foods, and way of life.

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# CHAPTER 3

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## **MEAT AND FISH**

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# N. 28 AKAMBA CHICKEN (MUSUKUI) *Gallus gallus domesticus L.*



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

MWALA DISTRICT,  
MACHAKOS COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## HUSBANDRY METHODS

THESE CHICKENS ARE FREE RANGE AND THEIR FORAGED DIET IS SUPPLEMENTED WITH ORGANICALLY GROWN CORN AND VEGETABLES. SMALL PIECES OF ALOE VERA ARE ADDED TO THEIR DRINKING WATER TO HELP PREVENT DISEASES.

THE CHICKENS ARE REARED AT HOME BY WOMEN. AT THE AGE OF 8 MONTHS, THE CHICKENS ARE LARGE ENOUGH TO BE SLAUGHTERED.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT, EGGS

### WAYS OF COOKING

BOILED, BAKED, FRIED, ROASTED

**T**he Akamba chicken, or *musukui* as it is called locally, is an indigenous breed of chicken raised in the Mwala District of Central Kenya, just east of Nairobi.

The breed is large, weighing up to 2.5 kilograms when mature. It is distinctive for its long, featherless neck and is well known for its tender meat. Akamba chickens are prolific layers and, because they are good incubators, they have a higher percentage of hatched eggs than other breeds.

## CULINARY USES

The meat is boiled or roasted and is served with *ugali*, rice, mashed potatoes, or *muthokoi*. Muthokoi is a traditional Akamba dish prepared by boiling maize and adding some ash to remove the outer covering of the maize kernels.

The eggs are eaten alone or served with bread, ugali, or rice. The yolks are large and yellow, and are commonly used in cakes.

## PRODUCT HISTORY

The meat of the Akamba chicken is prepared for special guests and brought as a gift by women when they are visiting important relatives. Locally, this breed is thought to be a good omen: If it is prepared for a visitor, their visit is considered successful.

Women in Eastern Kenya have historically been very active at a community level, through participation in food production. Chicken rearing is traditionally considered a women's activity, but provides assets that benefit the whole household. Local chickens are a ready source of savings and income for women. Chicken keeping also promotes crop diversification and investment in natural resource management.

The Akamba chicken is rarely found in markets. It is mainly sold directly by producers or prepared for home consumption, in small quantities. Farmers sell them to neighbors at the farm gate or to consumers in a local market. The animals are killed and dressed at a local butcher or at home. Akamba traders are known to transport chickens from Machakos, Kitui, and Makueni to Mombasa. They sell to individual customers or to small hotels and restaurants that often prefer to slaughter the birds themselves.

## CURRENT STATUS

This breed is considered at risk of extinction because the young chicks are particularly open to attack by predators because of their exposed necks. Because they are good layers, they have also been used to create hybrid breeds and many farmers have chosen to raise the hybrid layers instead of the more vulnerable original breed. Raising and eating hybrid chicken breeds instead of this native breed is also considered by some to be a sign of modernity.

# N. 29 BANJE

*Haplochromis* sp.



## CATEGORY



FISH AND SEAFOOD

## PRODUCTION AREA

EPANGA VALLEY,  
VIHIGA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

LUHYA

## FISHING SEASONALITY

JULY - JANUARY

## FISHING METHODS

MANY SPECIES OF FISH ARE OBTAINED FROM THE RIVERS IN WESTERN KENYA. FISHING WAS TRADITIONALLY CARRIED OUT VERY EARLY IN THE MORNING AND IN THE EVENING USING BOATS AND ALONG THE SHORE. TRADITIONAL TRAPS CALLED *KUMUKONO* WERE USED FOR FISHING IN SMALL STREAMS. THEY WERE WOVEN FROM REEDS GROWING ON THE RIVERBANK. FISH ARE NOW CAUGHT USING NETS OR HOOKS. FISHING TAKES PLACE THROUGHOUT THE YEAR UNLESS CONTROLLED BY THE FISHERY DEPARTMENT. YOUNG MEN ARE THE ONES PRIMARILY INVOLVED IN FISHING.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

WHOLE FISH

### WAYS OF PRESERVING

SMOKING

### WAYS OF COOKING

BOILED, STEWED

**B**anje belongs to the genus *Haplochromis* in the family Cichlidae. Its natural habitat is the swamps and streams in Western Kenya, in particular in the Epanga Valley.

Banje has a distinctive yellowish underbelly and, when young, bluish lips. This species can reach a length of 12 centimeters. It feeds on benthic invertebrates, periphyton, and macrophytes. It has a life span of about 1 year and reproduces throughout the year. It is a mouth brooder.



## CULINARY USES

Women prepare banje by smoking them for 1-2 days. The fish are then skewered on a stick for easy handling and placed in a cooking pot with a little water and traditional salt (*munyu mushelekha*). Some onion can be added, and the dish is served hot. It is eaten by all people irrespective of age and is mainly served with brown *ugali* (millet mixed with sorghum and cassava).

## PRODUCT HISTORY

Fishing has always been a major occupation for the Luhya people living in the wetlands of Western Kenya.

Fish supplements the diet of many rural communities and fishing is a hobby for many young people. Young local people often learn how to trap fish by making reed traps and placing them in deep waters along the stream. Women prepare the traps using traditional methods. Most of the fishers are involved in fishing for domestic consumption and local sales.

In the past, the wetlands were also used as a source of raw materials for making fishing equipment. The conical basket traps used by the Luhya people were woven from reeds. Another type of fish trap consists of a fence of close-set reeds tied together with papyrus stems and fastened to posts in a complex pattern.

*Haplochromis* fish are an important source of protein and other nutrients for many communities living in the area and fish is a food that the Luhya community values because of its nutritional content. Banje was consumed in ceremonies, specifically during childbirth and initiation.

## CURRENT STATUS

The main threat to this species is hybridization due to decreased water transparency; Eutrophication and erosion (which results in increased levels of sedimentation) interfere with mating recognition visual cues. In addition, overfishing is an issue. Many small species such as banje are caught not to be eaten, but to be used as bait for larger fish in Lake Victoria.

# N. 30 FONNTUMA



## CATEGORY



CURED MEAT  
AND MEAT PRODUCTS

## PRODUCTION AREA

MARSABIT COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

BORANA

## INGREDIENTS

BEEF OR GOAT MEAT  
OIL OR FAT  
SALT  
SUGAR  
CARDAMOM

## PREPARATION METHOD

FIRST, THE MEAT IS CUT INTO STRIPS AND DRIED FOR A FEW DAYS. NEXT, THE THIN, DRIED STRIPS ARE ROASTED OVER CHARCOAL AND THEN POUNDED, BREAKING THEM UP AND GIVING THEM A FILAMENTOUS TEXTURE, TO REDUCE THEIR SIZE AND INCREASE SURFACE AREA FOR ABSORBING MORE OIL DURING THE FRYING PHASE. POUNDING TAKES 1-2 HOURS DEPENDING ON THE SIZE OF THE PIECES OF MEAT. WOMEN USE TONGS MADE FROM DRY STICKS TO HOLD THE MEAT STRIPS DURING THE ROASTING PHASE. THREE TO FOUR STRIPS ARE GRASPED IN BETWEEN THE STICKS, HELD OVER THE RED CHARCOAL, AND TURNED CONTINUOUSLY. AFTER ROASTING, THE MEAT IS DEEP FRIED WITH SALT, SUGAR, AND CARDAMOM UNTIL IT TURNS GOLDEN BROWN.

THE STORAGE PROCESS IS ONE OF THE MOST IMPORTANT ASPECTS OF PREPARATION, FOR BOTH QUALITY AND SHELF LIFE. A TRADITIONAL WOODEN STORAGE CONTAINER CALLED EJITO IS USED. THIS INSIDE OF THE CONTAINER IS SMOKED USING SPECIAL STICKS IN ORDER TO DRY IT COMPLETELY AND IMPART FLAVOR. FONNTUMA CAN BE STORED FOR 3-4 MONTHS AND IS SERVED WITH GHEE.

The Borana people are pastoralists who live in the arid region stretching from southern Ethiopia to northern Kenya. Livestock products such as milk and meat are particularly important in Borana culture. The Borana use many traditional preservation techniques to in-

crease the quality and extend the shelf life of these products, guaranteeing a food source during times of shortage. *Fonntuma* is a traditional dried, roasted, pounded, and fried product made from beef or goat meat. Women are responsible for preparing fonntuma.

## PRODUCT HISTORY

Borana pastoralists have a profound knowledge of their livestock and local environment, acquired over a long time. Only a few talented individuals hold the knowledge (much of which is tacit) for making fonntuma. Elderly women prepare and process this traditional meat product. When a household slaughters a bull, women from the neighborhood come together to prepare fonntuma. This activity provides a space for interaction and knowledge transfer among community members. Arid and semi-arid areas are prone to famine, and fonntuma was the best anti-hunger food among the Borana community.

## CURRENT STATUS

The emergence of butcheries in the region has made it easier for people to obtain fresh meat, so traditional preservation techniques and the knowledge associated with them is declining. Due to lifestyle changes, the slaughtering of animals has decreased and now takes place only during ceremonies and some festive occasions, such that there are fewer opportunities for knowledge transfer. If the knowledge about this product is not passed down from the elderly women who possess it, fonntuma may disappear. Conscious efforts need to be put in place to address the intergenerational gap and create awareness among youth to ensure that traditional culinary and cultural practices are preserved.

# N. 31 FULU (LAKE VICTORIA HAPLOCHROMINE CICHLIDS) Haplochromini Poll



## CATEGORY



FISH AND SEAFOOD

## PRODUCTION AREA

LAKE VICTORIA  
(NYANZA PROVINCE)

## INDIGENOUS COMMUNITY

LUO

## FISHING SEASONALITY

JULY - JANUARY

## FISHING METHODS

TRADITIONALLY, THE FISH WERE CAUGHT WITH FISHING LINES, HOOKS, TRAPS, AND SPECIALLY DESIGNED BASKETS. TODAY, NETS ARE MORE COMMON. FISHING WAS CARRIED OUT VERY EARLY IN THE MORNING AND IN THE EVENING, FROM BOATS AND ALONG THE SHORE. FISHING WAS A DAILY ACTIVITY AMONG THE LUO COMMUNITY UNLESS CONTROLLED BY THE FISHERY DEPARTMENT OR CLAN ELDERS. THE FISHING COMMUNITY HAD TRADITIONAL AND TERRITORIAL RULES AND REGULATIONS, WHICH ENSURED THAT FISHERIES WERE EXPLOITED IN A SUSTAINABLE MANNER.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

WHOLE FISH

### WAYS OF PRESERVING

DRYING, SMOKING

### WAYS OF COOKING

BOILED, FRIED, ROASTED

**H**aplochromine cichlids are small, often brightly colored, and well adapted to a wide range of habitats and ecological niches. They differ in the size and shape of their bodies, head morphology, male breeding coloration, trophic specialization, and breeding behavior. The various haplochromine species are collectively referred to as *fulu* in the Luo language, *furu* in Swahili, and *nkejje* in Luganda.

Lake Victoria, the largest lake in Africa by surface area, is home to an astonishing diversity of fish: In the middle of the 20th century, there were over 500

species in the lake, many of them endemic. The majority of these species belong to the tribe Haplochromini in the cichlid family. Until the late 20th century, they made up 80% of the total fish biomass in Lake Victoria and played a key role in nutrient cycles.



## CULINARY USES

Once caught, and in order to improve their shelf life and flavor, the fish are sun dried and then smoked. They may be dried on the ground or on wooden skewers. The latter method makes it easier to smoke or roast the fish, or carry them to market. Because they are so small, fulu are eaten whole, often in a soup served with *ugali* (cornmeal), or cooked over charcoal. Traditionally, fulu were simmered with salt and milk. The meal was served with *ugali* made from sorghum, millet, or cassava. Today, however, fulu are rarely caught for food: Instead, they are used as bait for Nile perch.



## PRODUCT HISTORY

Fish is a common meal among the Luo community and fulu is significant for the community. It was consumed during ceremonies and special events, particularly during childbirth celebrations. Each woman visiting the nursing mother was supposed to bring fulu for both mother and child. It played a key role in bringing people together. It was also eaten during the Luo night festival, which is a celebration of Luo culture.

Among Luo fishers, rules governing the use of nets, hooks, bait, and canoes ensured the sustainable use of the lake's fish resources. There was adherence to the closed season, which coincided with the working period of the farms. Clan elders controlled access to the lake and, during the closed season, canoes were forbidden to go beyond a certain distance from shore. There was also an element of cooperation in the setting up of the boats.

Historically, fulu were an important source of protein and other nutrients for many communities living on the shores of the lake. Fulu were also important for generating income, and were commonly sold in markets as far away as Nairobi.



## CURRENT STATUS

Lake Victoria is severely ecologically degraded due to industrial pollution. Haplochromines declined at an astonishing rate due to overfishing, the introduction of predators such as Nile perch, a decrease in water transparency, and eutrophication. These are the main reasons why the various species known as fulu are at risk of extinction.

# N. 32 GATHUNGURA (KABUKU) *Lepus microtis* Heuglin



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## HUNTING METHODS

YOUNG MEN HUNT FOR HARES GRAZING ON THE FIELDS. DIFFERENT METHODS ARE APPLIED, INCLUDING USE OF TRAPS, DOGS, BOWS AND ARROWS, OR AMBUSHING THE ANIMALS AT NIGHT. TRADITIONALLY YOUNG MEN WERE EXPECTED TO BRING HOME

SOME HARE MEAT BEFORE UNDERGOING CIRCUMCISION AS A SIGN OF BRAVERY AND READINESS TO TAKE UP NEW RESPONSIBILITIES. HARE MEAT IS FOR HOME CONSUMPTION.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT

### WAYS OF COOKING

BOILED, FRIED, ROASTED

The savannah hare, known as *gathungura* in the Gikuyu language, is a wild animal that resembles the domesticated rabbit. It mostly occupies scrubby grasslands within woodlands and mountain regions. It is medium-sized, growing to 41-58 centimeters long and weighing 3 kilograms at most. It has a short tail, long, furry ears, and is richly colored with a grayish-brown back and a russet hue on the breast, neck, and legs. This is

a nocturnal species and relies on camouflage for hiding. It feeds on grass and herbs. Gathungura prefers bushy savannahs due to the availability of food and the ease of hiding from predators.

Female hares breed throughout the year with an average litter size of 1.6 young. The gestation period lasts up to 50 days. These animals reproduce very fast.



## CULINARY USES

After slaughtering, the meat is left for 2 days to lose moisture, as this is believed to improve the flavor. It is then fried and served with *ugali* or *irio*, an original dish of the Gikuyu people made with mashed potatoes, maize, and pumpkin leaves. It is also roasted and stewed. Hare was used especially during famine periods.



## PRODUCT HISTORY

*Gathungura* and other wild animals play an important role in the diet of the Gikuyu people of Central Kenya. The skin of this animal was used in making drums that were played during ceremonies, and for making Gikuyu traditional hats that were worn by elders. The fur was used for medicinal purposes: It was applied to open wounds to keep the wound dry and quicken the healing.

The hare has been characterized as a trickster in Kenyan/Bantu literature for a long time. The Gikuyu saying *wara ta wa gathungura* means "as cunning as a hare." Bright people among the Gikuyu community are referred to as being *mugi ta gathungura*, or "as bright as a hare." This clearly depicts the importance of this animal and the cultural ties it has with the community. Knowledge about the hare and other animals is transmitted from elders to youth through storytelling.



## CURRENT STATUS

Over the years, gathungura's habitat has declined in Central Kenya due to population pressure and deforestation. It is an important species to protect since communities can use it in times of famine for food security. Restoration of its natural habitat can play a big role in ensuring the survival of this animal.

# N. 33 KAMONGO (MARBLED LUNGFISH)

*Protopterus aethiopicus* Heckel



## CATEGORY



FISH AND SEAFOOD

## PRODUCTION AREA

LAKE VICTORIA (NYANZA),  
LAKE BARINGO (RIFT VALLEY)

## INDIGENOUS COMMUNITY

LUO;  
İLCHAMUS

## FISHING METHODS

IN LAKE BARINGO, MARBLED LUNGFISH ARE CAUGHT USING LONG LINES WITH MULTIPLE HOOKS, WITH PIECES OF FISH (USUALLY TILAPIA) AS BAIT. LINES ARE ANCHORED TO A ROCK ON THE SHORE AND KEPT NEAR THE LAKEBED THANKS TO SMALLER STONES POSITIONED

AT REGULAR INTERVALS. THE FISHERMEN WORK INDIVIDUALLY ON SMALL BOATS BUILT FROM AMBATCH WOOD (*AESCHYNOMENE ELAPHROXYLON*). THE LINES ARE PUT IN PLACE DURING THE AFTERNOON AND GATHERED THE FOLLOWING MORNING.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

WHOLE FISH, SLICES, FILLETS

### WAYS OF PRESERVING

SALT DRYING, SMOKING

### WAYS OF COOKING

BOILED, FRIED, ROASTED, STEWED

**T**he marbled lungfish (known as *kamongo* among the Luo) is a freshwater fish in the order Lepidosireniformes found throughout the waterways of Central and Eastern Africa. It has a long, tapered body and a large, flattened head. Its back is dark gray while the belly is lighter. Dark spots are present on the entire surface of the body. It is a fish of considerable size, able to reach a length of 2 meters and a weight of 17 kilograms, though most specimens do not exceed 130 centimeters in length. The marbled lungfish feeds mostly on mollusks, small fish, and aquatic insects. Young lungfish are exclusively insectivorous.



This species lives in shallow waters near the shores of lakes, in swampy areas, and in seasonal tributaries. It survives in hostile environments thanks its ability to breathe air. During the dry season, lungfish remain buried under the mud to avoid dehydration, breathing through a small hole.



## CULINARY USES

Lungfish is usually consumed fresh, although it can be stored with different techniques. Once caught, the fish is eviscerated, filleted, sliced, and then transformed. It can be preserved by salting, hot smoking, or through frying the slices in vegetable oil. The latter technique is more common in the northern part of the Rift Valley. The fish slices are then used to prepare soups, stewed, or fried again and served with starchy foods (*ugali*, porridge, etc.) and leafy vegetables.



## PRODUCT HISTORY

Although not native to Lake Baringo, marbled lungfish is an important food and economic resource for local fishing communities. Introduced during the 1970s, it began to be fished more frequently in the following decade. At first, the fishermen of the Ilchamus indigenous community (the historical inhabitants of Lake Baringo's shores) captured it with the same nets employed to catch tilapia. With the migration of Luo fishermen from Western Kenya, a change in the fishing technique was introduced and now long lines are common in Lake Baringo, as they are in Lake Victoria. The interaction between Ilchamus and Luo fishers favored the introduction of kamongo into the local community, which previously had almost no interest in eating this fish. Over time, the consumption of marbled lungfish has also spread beyond the fishing communities, guaranteeing a source of animal protein to local populations and therefore improving (or at least changing) the local diet.

In addition to its food importance, this fish represents an important source of income for the lake communities: Lungfish is sold locally or in the urban markets of nearby counties, including Nakuru.



## CURRENT STATUS

In recent years the marbled lungfish population—along with populations of other fish species that constitute the basis of local fisheries—has been decreasing, due to fishing pressure and the lack of adequate regulations. Additionally, increasing urbanization near Lake Baringo has led to water contamination and an acceleration of the eutrophication process.

# N. 34 KENGEI CHICKEN

*Gallus gallus domesticus L.*



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

ELBURGON,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## BREEDING METHODS

THE BIRD IS LOCALLY ADAPTED AND IT TAKES 7-8 MONTHS TO MATURE. A FREE-RANGE SYSTEM OF REARING IS PRACTICED AND SUPPLEMENTED WITH KITCHEN LEFTOVERS, MAIZE, SORGHUM, WHEAT, MILLET, AND VEGETABLES. ALOE VERA IS GIVEN TO THE BIRDS OR ADDED TO DRINKING WATER AS A WAY OF PREVENTING AND CONTROLLING DISEASES. THIS CHICKEN IS REARED IN THE RURAL PART

OF ELBURGON WHERE IT IS FED AND TAKEN CARE OF BY THE WOMEN IN THE VILLAGE, AS THEY TAKE CARE OF OTHER DOMESTIC CHORES. WHEN FULLY GROWN, THIS BREED OF CHICKEN IS SLAUGHTERED, SOMETIMES TO MARK A SPECIAL OCCASION. FOR INSTANCE, WHEN VISITORS ARRIVE, THEY ARE WELCOMED WITH GOOD MEAT OR EGGS.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT, EGGS

### WAYS OF COOKING

BOILED, FRIED

**K**engei is a short, broad chicken with a unique walking style from which it derives its name: It appears to limp while walking, making its walking style similar to that of a duck. Its plumage varies in color and can be red, brown, black, or grey, but is usually black with some white spots. Kengei chickens are heavier than other local chickens, weighing 2.5-3 kilograms. Roosters can usually be differentiated from hens by their

striking plumage, long, flowing tails, and the shiny, pointed feathers on their neck (hackles) and back (saddle), which are typically of brighter, bolder colors than those of hens. Adult chickens have a fleshy crest on their head (comb) and hanging flaps of skin under the beak (wattles). The kengei is a local breed linked to the Gikuyu communities living in Elburgon, Nakuru County.



## CULINARY USES

The chicken is fried or boiled and served with *ugali* (cornmeal), *chapati* (flat bread), or *irio* (mashed potatoes, maize, peas, pumpkin leaves or stinging nettle) as accompaniment. Traditionally, the eggs were fried and given to men as a source of energy that could help them while working in the fields.



## PRODUCT HISTORY

Kengei was a very popular breed in the Gikuyu community for its beauty, tasty meat, good mothering ability, and consistent egg laying. It was also preferred due to its resistance to diseases and adaptation to the climate conditions that are found in many parts of the Kenyan Rift Valley. The chickens were slaughtered and served to guests to show hospitality, and were also served to nursing mothers and during ceremonies such as weddings, namings, and circumcisions. During special occasions such as Easter and Christmas, they are slaughtered so that people can enjoy the juicy meat.

The number of chickens owned by a family was a reflection of wealth. The Gikuyu saying *ihenya ria muthuri ni kuengea* ("the running of the elderly is limping") means that elders perform their duties slowly but perfectly. The saying was used to ask for patience from young people receiving guidance from the elderly. They had to listen and follow the elders' advice no matter how strange it sounded.

This breed of chicken is mainly reared for home consumption rather than for commercial purposes.



## CURRENT STATUS

Though some families still keep kengei chickens, the breed is at a risk of extinction due to the fact that it matures slowly and does not reproduce very fast. It is also believed that the birds are heavy feeders, which discourages farmers, pushing them to raise exotic and improved breeds.

# N. 35 KIDIMU CHICKEN (KUKU WA KIDIMU)

*Gallus gallus domesticus L.*



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

KILIFI COUNTY  
(COAST)

## INDIGENOUS COMMUNITY

GIRIAMA  
(MJIKENDA)

## BREEDING METHODS

THESE CHICKENS, KNOWN LOCALLY AS *KUKU WA KIDIMU*, ARE REARED IN KILIFI COUNTY (ON KENYA'S COAST) MAINLY BY GIRIAMA WOMEN AS THEY CARRY OUT THEIR DAILY ACTIVITIES. KIDIMU CHICKENS ARE KNOWN TO GROW SLOWLY, TAKING 8 MONTHS TO REACH FULL SIZE. THEY ARE GOOD FORAGERS AND WILL EAT A WIDE RANGE OF FOODS, SUCH AS INSECTS, CEREALS (MAIZE, SORGHUM, WHEAT

BY-PRODUCTS, AND MILLET), GRASSES, AND KITCHEN LEFTOVERS. CHICKENS ARE SLAUGHTERED BY CHOPPING OFF THE HEAD AND HANGING THEM UPSIDE DOWN TO DRAIN THE BLOOD. THE FEATHERS ARE THEN PLUCKED, THE INNARDS ARE REMOVED, AND THE MEAT IS CUT INTO PIECES THAT ARE EVENTUALLY COOKED. THIS BREED OF CHICKEN IS MOSTLY SLAUGHTERED FOR THE FAMILY TO EAT, NOT FOR VISITORS.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT, EGGS

### WAYS OF COOKING

BOILED, FRIED

**T**he Kidimu chicken is a special breed with a very different appearance from other chickens. At first glance, someone unfamiliar with this chicken may even think that it is sick. It has ruffled feathers that characteristically curl upwards, unlike other chickens. It was once common throughout Kenya's former Coast Province, but these days it is restricted mainly to Kilifi County (about 60 kilometers north of Mombasa). Its feathers vary in color from black, brown, and white to red or blueish. It weighs between 2.3 and 2.7 kilograms. Kidimu roosters are bigger than hens and have feathered feet.

## CULINARY USES

Kidimu chickens are kept both for eggs and meat. They are mainly boiled and fried, and are considered to be more flavorful than other breeds from the region. Pilau rice cooked together with some meat, spices, and onions is considered the best dish to accompany boiled Kidimu chicken.

## PRODUCT HISTORY

The Kidimu breed has been kept for generations within the Giriama community and this chicken was commonly used during festivals.

It was, and still is, a taboo to slaughter and serve Kidimu chicken to visitors (which is expressed in the phrase *kuku wa kidimu hachinjiwi mgeni*, or, "Kidimu chicken is not slaughtered for visitors to eat."). This demonstrates the close cultural tie between this breed and the Giriama community.

Diviners traditionally used this breed in healing rituals. There is a belief among the local community that after showering seven times with clean water, a few drops of Kidimu chicken blood, and the leaves of a particular tree, one would be healed of any ailment. When a chicken is used as a sacrifice, it is strangled by hand and a knife is never used.

This chicken plays an important role in Giriama proverbs. One common saying is *kuku wa kidimu manyonyake si kasoro*, which means, "a hen with naturally ruffled feathers is not defective," indicating that every person has his/her own unique characteristics.

## CURRENT STATUS

Where it is still kept, this chicken is mainly raised for consumption in the household, but it is also sold on a small scale in villages. However, since this breed of chicken grows slowly and is less productive than others, many people have replaced it with imported breeds that grow faster and larger. Furthermore, with the spread of Christianity and Islam in the region, the ritual and cultural uses of this breed have lost their importance. For these reasons, the number of Kidimu chickens has declined and, without a concerted effort to preserve the population and its genetic biodiversity, this breed and its historical ties to the Giriama community may be lost in the near future.

# N. 36 MGONGO WAZI



## CATEGORY



FISH PRODUCTS

## PRODUCTION AREA

LAKE VICTORIA  
(NYANZA)

## INGREDIENTS

NILE PERCH BONES  
SALT  
OIL

## PREPARATION METHOD

THE PREPARATION BEGINS WITH THE FILLETING OF THE FISH. THE HEAD, SKELETON, AND TAIL THAT REMAIN AFTER THE FILLETS ARE REMOVED ARE SALTED AND DRIED IN THE SUN. THIS LAST STEP IS CARRIED OUT BY HANGING THE CARCASSES ON WOODEN FRAMES FOR A PERIOD THAT CAN VARY ACCORDING TO THE SEASON. USUALLY THIS OPERATION IS CARRIED OUT DURING THE DRY SEASON. ONCE DRIED, THE BONES AND HEAD ARE TRANSPORTED TO THE SALES POINTS WHERE THEY WILL BE FRIED IN VEGETABLE OIL AND THEN SOLD.

**M**gongo wazi refers to the skeletal part of Nile perch (*Lates niloticus*) that remains after the fillets have been extracted—in other words, the head, spine, and tail. This byproduct is also referred to as Nile perch "frame." Local fish traders process fish skeletons bought from fish processing and export factories: The frames are air dried and deep fried before being sold to local people as nutritional and affordable food. Mgongo wazi is linked to Lake Victoria, whose natural resources provide livelihood to millions of people in Kenya, Uganda, and Tanzania. Since the mid-20th century, the lake has become an important place for the fishing of Nile perch.

## PRODUCT HISTORY

Nile perch, a predatory fish, was introduced into Lake Victoria in the mid-1950s to get rid of the small fish, also referred to as “trash fish.” Nile perch thrived and multiplied and have formed the basis of a massive commercial fishery in the countries around the lake for the last several decades.

Fishing activities directed toward exports have led to an increase in the price of Nile perch, making it difficult for local inhabitants to buy it. As a result, local people have developed a strategy to compensate for the disappearance of native species caused by the introduction of Nile perch: They use the bony remains of fish as an easily accessible protein supply and a source of income to supplement fishing and other economic activities. In Obunga Beach, a densely populated informal settlement between Kisumu and the regional airport, a group of women buy Nile perch frames, process them, and sell the product locally. In this way they are able to make the income they need to buy food and educate their children.

Mgongo wazi is popular in poor areas because it is nutritious and affordable—100 shillings buys enough to make a meal for a family of four people. In the local cuisine, mgongo wazi is used to prepare a traditional soup: The bones are chopped into small pieces and boiled with vegetables and aromatic herbs. This dish is often given to sick people as a tonic.

## CURRENT STATUS

The introduction of Nile perch into Lake Victoria, and the fishing industry that grew as a result, has had catastrophic ecological impacts, including pollution (from new settlements and agriculture) and the decline of many fish species endemic to the Lake Victoria basin. In addition, the rise of the fishing industry for export to the European market upset the traditional, small-scale fishing economy and the subsistence of local populations. Locals came to rely on the Nile perch industry and many people migrated to the Lake to seek economic opportunities but, since the early 2000s, the Nile perch population has been declining. This has allowed many native species to rebound, but has also left countless people with less income or completely out of work. And now, even mgongo wazi—which locals depended on when fish became too expensive—has become hard to find because animal feed manufacturers buy up many of the frames to make fishmeal. This source of competition and the overall decline in Nile perch have driven the price of frames up. Once considered “poor man’s food,” mgongo wazi is now too expensive for many poor people to afford.

# N. 37 MINDET (HARVEY'S DUIKER, EAST AFRICAN RED DUIKER)

*Cephalophus harveyi* Thomas



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

MARIASHONI,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

OGIEK / OKIEK

## HUNTING SEASONALITY

HUNTING USED TO BE A DAILY ACTIVITY AMONG THE OGIEK COMMUNITY BUT TODAY HUNTING IS MAINLY CARRIED OUT DURING HOLIDAYS IN APRIL, AUGUST, AND DECEMBER. YOUNG BOYS DO MOST OF THE HUNTING.

## HUNTING METHODS

*MINDET* IS FOUND IN AREAS WITH DENSE COVER AND A HIGH DIVERSITY OF SMALL-STEMMED PLANTS. LOCAL PEOPLE HUNT THE ANIMAL USING BOWS AND ARROWS OR TRAPS. ONCE THE *MINDET* IS CAPTURED, IT IS SLAUGHTERED IMMEDIATELY IN THE FOREST AND THE MEAT IS BROUGHT TO THE VILLAGE.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT

### WAYS OF COOKING

BOILED, ROASTED

**M***indet* is a small bovid that lives in coastal, lowland, and montane forests (including Mau Forest) or forest patches, riverine forest, areas with scrub and thickets, and other habitats with thick cover.

It is a rich orange-red color with deep brown to nearly black fur on the legs. The face is red and the forehead is black. Both sexes have horns. Mindet are primarily browsers, eating leaves, shoots, seeds, fruit, buds, and bark. Females tend to be slightly larger than males. They have a gestation period of around 210 days.





## CULINARY USES

Mindet were an important source of food for the Ogiek community. Traditionally, they were hunted, slaughtered, and then boiled, and seasonings were added after cooking. The meat can also be roasted.



## PRODUCT HISTORY

The Ogiek people, one of Kenya's oldest tribes, live in the Mau Forest and the forests around Mount Elgon near the Ugandan border. The Ogiek have hunted and gathered most of their food since time immemorial, with honey and bush meat sourced from the forest being particularly important.

Mindet skin was used in making clothes that were worn during initiation and wedding ceremonies, or on a daily basis. The skin could also be sewn together to make mattress. Clothes made with mindet skins were used as a mantle by beekeepers during harvesting. In the past, mindet were hunted mainly for household consumption.



## CURRENT STATUS

Mindet inhabit regions with dense vegetation. Today, mindet rely on protected forest areas and populations are declining due to deforestation for timber, agriculture, and human settlements, especially near rivers. The overexploitation of this species as a source of bushmeat is also a threat. Some communities have stopped hunting mindet in order to allow the local population to rebound, but Harvey's duiker is widely hunted throughout its range, often with dogs and wire snares. Beyond posing a threat to mindet, the destruction of forested areas in the Ogieks' ancestral lands to accommodate agriculture and a growing population jeopardizes the Ogieks' ability to manage their land and resources as they see fit and as they have done, sustainably, for generations. Much of the forest that remains is in reserves, where indigenous peoples are often not allowed to engage in traditional subsistence practices.

# N. 38 MOLO MUSHUNU CHICKEN

*Gallus gallus domesticus L.*



#### CATEGORY



BREEDS AND ANIMAL HUSBANDRY

#### PRODUCTION AREA

TURI, MOLO DISTRICT,  
NAKURU COUNTY  
(RIFT VALLEY)

#### INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

#### BREEDING METHODS

THE BIRD GROWS SLOWLY AND ONLY REACHES MATURITY BETWEEN 6 AND 8 MONTHS OF AGE. THE CHICKENS FORAGE FOR INSECTS AND EAT KITCHEN SCRAPS.

WOMEN ARE IN CHARGE OF CHICKEN REARING AND SLAUGHTERING. THE CHICKENS ARE SLAUGHTERED WITH A KNIFE: THE BIRD'S HEAD IS HELD FIRMLY,

THE ARTERY AND VEINS ALONG THE NECK ARE CUT, AND THE BLOOD IS ALLOWED TO DRAIN. THE BIRD IS THEN DUNKED INTO A POT OF BOILING WATER, THE FEATHERS ARE PLUCKED, AND THE BODY IS RINSED. FINALLY THE CHICKEN IS CUT INTO PIECES FOR MEAT.

#### PARTS USED AND PROCESSING

##### PRODUCTS DERIVED FROM THE ANIMAL

MEAT, EGGS

##### WAYS OF COOKING

BOILED, FRIED, ROASTED

The Molo District is located in the Kenyan Rift Valley. Here the Gikuyu community has always raised the Mushunu Chicken, a native breed playing an important part in local food traditions. The Mushunu has an unusual appearance: It is a large bird with an elongated body and a completely featherless neck and head. Its plumage varies in color from black to white, red, or blue. It weighs between 3 and 4 kilograms. The breed is very popular due to its tasty meat, excellent eggs, and good brooding behavior.

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## CULINARY USES

Chickens are usually cooked to celebrate important festivals or when there are special guests. Whether boiled, roasted, or fried, chicken is generally accompanied by rice or corn *ugali*. According to tradition, women and children eat the wings and neck; the thighs are for the boys and men; the breast is reserved for the husband. The eggs, which are small with a bright brown shell and intense yellow yolk, are used to make food such as pancakes and porridge.

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## PRODUCT HISTORY

The chickens are mainly eaten during celebrations and the arrival of the guest. In Turi, farming methods are passed down from generation to generation. Traditionally, women and children are mainly responsible for looking after the birds. In Elburgon, the Karunga women's group has started to raise Mushunu Chickens. The women earn income from the sales of eggs and meat and put the proceeds into revolving credit funds. This business has helped the women in their social and economic activities and in empowering them, as they do not have to rely on men for all their needs.

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## CURRENT STATUS

The Molo area suffered badly from the violence in 2008: A number of people were killed, there were many refugees, houses were destroyed, and most of the cattle were killed. The women lost most of their animals (chickens and sheep) and are now trying to recover by gradually building up small farms again. Moreover the availability of mushunu chickens has declined. This breed needs to be promoted to keep it from disappearing.

# N. 39 MOLO SHEEP

*Ovis aries L.*



#### CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

#### PRODUCTION AREA

MOLO HIGHLANDS,  
NAKURU COUNTY  
(RIFT VALLEY)

#### BREEDING METHODS

MOLO SHEEP HAVE BEEN BRED IN THE HOMONYMOUS REGION OF KENYA SINCE THE BEGINNING OF THE 20TH CENTURY AND ARE DESCENDED FROM THREE FOREIGN BREEDS: CORRIEDALE, HAMPSHIRE DOWN, AND ROMNEY. MOLO SHEEP ARE FOUND IN THE HIGHLANDS, WHICH TEND TO BE VERY COLD AND

RAINY. AS SUCH, THEY HAVE ADAPTED TO THESE CLIMATES WITH AN ABUNDANCE OF THICK WOOL. IT IS THE RESPONSIBILITY OF THE YOUNGEST BOYS IN THE FAMILIES TO CARE FOR THE SHEEP EACH MORNING, ENSURING THAT THEY ARE EATING GRASS, WEEDS, AND SWEET POTATO VINES AMONG OTHER FEEDS.

#### PARTS USED AND PROCESSING

##### PRODUCTS DERIVED FROM THE ANIMAL

MEAT

##### WAYS OF COOKING

BAKED, ROASTED, STEAMED

**T**he Molo Sheep is a local, well-adapted breed. This sheep is easily distinguished from others by its very thick white fleece, which covers its forehead and cheeks, forming a beard that surrounds its face. It has a small, stocky body, short legs, and a very long tail. The cool and rainy climate in the highlands (2,500 meters above sea level) provides ideal conditions for raising this breed. The animals live on pastures and feed mainly on grass.

Molo Sheep are very hardy and resistant to disease. They give birth several times a year, unrelated to seasons, and are slaughtered from the age of 6 months, when they reach an average weight of 14 kilograms.

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## CULINARY USES

The tender and succulent meat is highly valued. It is usually baked, roasted, or steamed. Molo lamb meat is also used to prepare a stew known as *kondoo wa kuokwa mazigani*. This stew is slow cooked in a traditional earthenware pot and served with green leafy vegetables and potatoes. Dishes prepared with Molo Sheep meat are still an integral part of meals prepared during special occasions such as bridewealth payment.

## PRODUCT HISTORY

The early history of this breed is linked to colonialism and the gradual marginalization of the local tribes. It has become an important cultural and economic resource for local communities. Over time, the mix of breeds resulted in the type that exists today. The arrival of British sheep breeds in Kenya dates back to the late 19th century, when British settlers arrived in the White Highlands to build a railway between Kenya and Uganda. The substantial cost of this project resulted in strong criticism from Britain, which subsided only with the promise of fertile land for English settlers. From 1901, certain areas of the highlands became reserved solely for European farmers who brought new breeds of animals to their settlements; local communities such as the Maasai were confined to reservations.

The Molo community uses the very highly regarded wool to make clothes, carpets, woven rugs, scarves, and handcrafts, made for domestic use and for sale in the local region.

It is possible to find Molo Sheep meat at local butchers, but purchasing the entire sheep is expensive. Many restaurants miles away from Molo claim to sell Molo lamb, but this is likely to be untrue.

## CURRENT STATUS

After Kenyan independence in 1963, sheep farms began to be neglected and the agricultural development project that had been designed for the Molo highlands collapsed. The situation was compounded further by subdivision of land, which left little space for sheep farming. Today, although it is universally recognized as one of the best sheep breeds in the country, there are just a handful of farmers who continue to breed the Molo. And although you may find it on restaurant menus, chances are it is not genuine Molo meat.

# N. 40 MUTURA



## CATEGORY



CURED MEAT  
AND MEAT PRODUCTS

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

SMALL OR LARGE  
INTESTINES OF GOATS  
OR COWS  
INTESTINE (MINCED)  
AND LEG MEAT  
BLOOD  
SPICES AND HERBS  
VEGETABLES

## PREPARATION METHOD

THE ANIMAL IS SLAUGHTERED AND THE INTESTINES REMOVED, EMPTIED, AND CLEANED THOROUGHLY WITH WATER. SOME OF THE INTESTINE IS THEN FINELY CHOPPED ALONG WITH SOME LEG MEAT AND COOKED WELL. HERBS AND SPICES SUCH AS ROSEMARY AND *piri piri* ARE ADDED FOR EXTRA FLAVOR. ONCE THE MEAT IS COOKED, BLOOD FROM THE SLAUGHTERED ANIMAL IS ADDED TO THE POT (*SUFURIA*) AND THE MIXTURE IS STIRRED UNTIL THE BLOOD IS COOKED. WHEN THE FILLING IS READY, ONE END OF THE INTESTINE IS TIED WITH A STRIP OF BANANA BARK, THE SAUSAGE IS STUFFED, AND THE OPEN END TIED OFF IN THE SAME WAY. THE STUFFING MUST BE DONE WHEN THE MIXTURE IS STILL HOT.

**M**utura, also called African sausage, is a traditional meat product found in Gikuyu lands of Central Kenya. It made from either the small or large intestines of goats or cows that are stuffed with cooked minced intestines, leg meat, and blood, and seasoned with vegetables, herbs, and spices such as *piri piri*, a local variety of chili.

Traditionally Gikuyu people minced the meat using a very sharp machete called a *panga*. The meat was placed on a tree stump (*gitiri*), which was used as a chopping board, and cut into fine pieces. This way of preparing mutura is still common today. According to local people, it makes the sausages sweeter and juicier.

Once stuffed, mutura is usually boiled for few minutes and then roasted on hot coals until it is golden brown. This delicious sausage is served by itself as an appetizer.



## PRODUCT HISTORY

Mutura was and still is an essential product at Gikuyu gatherings, made to satisfy the hunger of guests before the main meal. It is usually prepared for wedding ceremonies. On this occasion, a goat is slaughtered and offered to all the wedding guests.

Slaughtering is carried out early in the morning at the host's homestead. Men are in charge of organizing the place and bringing all the tools (knives, pots, etc.) required for this operation. When everything is settled, the goat is hung up, the throat is sliced, and the blood is drained into a container. Salt is added in order to prevent coagulation and preserve the blood in jelly-like form. Finally, men prepare the sausages while women boil and cook the other meat. Mutura and goat meat are served with other traditional dishes and brews such as *muratina* (honey wine).

The preparation of traditional mutura requires particular skills that are passed down through generations.



## CURRENT STATUS

Mutura is still made in very small quantities in both rural and urban areas when gatherings are led by elders. It is at risk of extinction, however, because the younger generation often prefers the modern sausages that are aggressively promoted by marketing companies. Unfortunately, it's becoming harder to find this delicacy in an increasingly industrialized country.

# N. 41 NDERIT (SOUTHERN TREE HYRAX)

*Dendrohyrax arboreus* A. Smith



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

MAU FOREST  
AND MOUNT ELGON  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

OGIEK / OKIEK

## HUNTING SEASONALITY

HUNTING WAS A DAILY  
ACTIVITY AMONG THE OGIEK  
COMMUNITY BUT TODAY  
HUNTING IS MAINLY CARRIED  
OUT BY YOUNG BOYS DURING  
HOLIDAYS IN APRIL, AUGUST,  
AND DECEMBER

## HUNTING METHODS

THIS ANIMAL WAS DISLODGED FROM THE TREE AND THEN KILLED ON THE GROUND, AND THE PRECISE METHOD VARIED BETWEEN HUNTERS AND BASED ON THE SEASON. IN SOME CASES THE HUNTERS COULD CLIMB UP THE TREE AND KNOCK THE HYRAX DOWN WHILE THE OTHERS WAITED ON THE GROUND. DURING THE RAINY SEASON, WHEN THE HYRAXES HIDE IN HOLES, A STICK COULD BE INSERTED INTO THE HOLLOW CAVITY AND RATTLED AROUND MAKING THE HYRAX LOSE ITS GRIP – IT WAS THEN FORCED OUT AND KILLED. IN ADDITION TO THIS, THE ANIMALS COULD BE SMOKED OUT OF THEIR HOLES. OTHER METHODS INCLUDED THE USE OF BOWS AND ARROWS AND TRAPS.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT

### WAYS OF COOKING

BOILED, ROASTED

**D***endrohyrax arboreus* is found in southeastern Africa: Its range extends southward from Kenya and Uganda to South Africa. *D. arboreus* lives in forested areas. It inhabits alpine, mountain, highland, lowland, and riverine forests and is found in the Mau Forest.

The *nderit* resembles a guinea pig. Long, soft, gray-brown fur covers the body and the underside is paler. The hairs are lighter near their tips. The ears have a fringe of white hair. A dorsal gland is ringed by cream-white hair. These animals weigh just over 2 kilograms on average and have an average length of 50 centimeters.



The nderit is folivorous (it eats mostly leaves) and feeds on nearly 150 different plant species, eating leaves, petioles (discarding the leaf), twigs, shoots, fleshy fruit, and hard seeds.



## CULINARY USES

The hyrax (locally known as nderit) played an important role as a source of food in the Ogiek community. Due to its softness, hyrax meat is ideal for women weaning babies. Children were given hyrax meat mixed with honey during weaning. The mothers used to chew the hyrax meat to soften it, after which it was dipped in pure honey and given to the baby. Traditionally, nderit were slaughtered and boiled without additional seasonings. Later they were hung to dry for few hours before consumption.



## PRODUCT HISTORY

The nderit was significant in the traditions of the Ogiek people, the oldest of the hunter-gatherer tribes living in Mau Forest between Nakuru and Narok counties.

Nderit skin was used in making clothes that were worn during initiation and wedding ceremonies, or on a daily basis. The skin could also be sewn together to make a mattress. Clothes made with nderit skins were used as a mantle by beekeepers during honey harvesting.

Burnt nderit fur mixed with water or honey was used as medicine against cough for children. The stomach entrails acted as a remedy for aching ribs and the ash could help in healing scar tissue. The community believed that covering a newborn in nderit skin guaranteed good health. The cry of the nderit during the day was a warning for an impending disaster. It was believed to be a bad omen when a nderit entered a house and, in such cases, it wasn't supposed to be killed as this could cause deaths in the family. Excursions would be abandoned if a hyrax crossed one's path, as they were believed to be animals of misfortune.



## CURRENT STATUS

The nderit depends on the forest and specific tree species for survival. It prefers dense forests away from villages, with the presence of bamboo being an added advantage. Increased deforestation and the introduction of exotic forest plantations has seriously affected these habitats, putting the future of this animal at risk. Farming and the establishment of settlement schemes in the forests have resulted in declines in the nderit population.

# N. 42 NGWARE

Multiple species of francolin, subfamily *Perdiciinae*



## CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## HUNTING SEASONALITY

APRIL - SEPTEMBER

## HUNTING METHODS

THE BIRDS ARE USUALLY CAPTURED AFTER BEING TRACKED. THEY CAN ALSO BE TRAPPED BY SPREADING FERMENTED BARLEY IN AN AREA WHERE THEY ASSEMBLE TO FEED. AFTER FEEDING ON THIS, THE BIRD BECOMES "DRUNK" AND THEREFOR LESS MOBILE AND EASIER TO CATCH. THEY ARE HUNTED IN MUCH OF THEIR RANGE USING LOW NETS AND EASILY CAUGHT USING DECOY BIRD CALLS.

## PARTS USED AND PROCESSING

### PRODUCTS DERIVED FROM THE ANIMAL

MEAT, EGGS

### WAYS OF COOKING

BOILED, ROASTED

**N***gware* is the Gikuyu name for the francolin, a wild bird native to Kenya that is hunted for its delicious meat. It is mainly a terrestrial bird that runs along the ground, usually flying in short bursts of less than 30 seconds. The ngware is usually smaller than a chicken, weighing about 1 kilogram. It is covered with feathers ranging in color from brown to black.

The bird used to exist in the thickets and forests close to where the Gikuyu people lived, mainly in Central Kenya. It lives close to human settlements and can be domesticated. The main breeding season is from April to September

and the nest is a hidden scrape in the ground. The nest may sometimes be made above ground level in a niche in a wall or rock. The clutch contains six to eight eggs but larger clutches have been observed. Ngware feed on seeds, grains, and insects, particularly termites and beetles.



## CULINARY USES

Both white meat and eggs from ngware were used in Gikuyu traditional cuisine. Meat was traditionally roasted and served with vegetables and *ugali* made with different type of grains such as millet and sorghum. Ngware meat is light, easy to digest, and good for the blood.

During the dry season, ngware was hunted because there were no vegetables to accompany the meal and therefore people opted to hunt and enjoy this delicacy with *ugali* or cassava.

In the past, wild game and game birds were eaten only by men. Women rarely ate meat and then only when it was handed to them by their husbands.



## PRODUCT HISTORY

Ngware are known for their loud, early morning calls, which make a "kwarrrr, kwarrrr" sound. Many local people think of the bird as a natural alarm clock.

There are a number of proverbs associated with the bird. One of them states *gutire ngware nyinyi muhuririo-ini*, meaning, "no ngware is small when it claws the soil," interpreted to mean that everyone can do great good or evil according to his or her actions. Another is *ngware ikirara muti iguru ndiatigire thi kuri kwega*, which means, "the francolin sleeps on a tree because it is not alright on the ground," interpreted to mean that each person knows his or her business best. These proverbs show how this bird is valued in Gikuyu traditions.

Nowadays ngware meat is rare and not usually seen for sale, but is instead mainly eaten in the household.



## CURRENT STATUS

These birds used to be numerous because the land was not cleared for cultivation. Today, the ngware population has declined greatly due to continued clearing of thickets and forests for agriculture. The disappearance of this bird's original habitat means that in some areas it has already been lost. If the ngware disappears, it also means the loss of valuable Gikuyu traditions.

# N. 43 RED MAASAI SHEEP (TANGANYIKA SHEEP)

*Ovis aries L.*



#### CATEGORY



BREEDS AND  
ANIMAL HUSBANDRY

#### PRODUCTION AREA

KAJAJADO DISTRICT,  
KAJAJADO COUNTY  
(RIFT VALLEY)

#### INDIGENOUS COMMUNITY

MAASAI

#### BREEDING METHODS

THE HOUSING STRUCTURE FOR SHEEP IS FENCED WITH WOOD AND CHAINS TO DETER PREDATORS. BOTH CONTROLLED AND UNCONTROLLED BREEDING ARE PRACTICED. CONTROLLED BREEDING AVOIDS LAMBING DURING DRY SEASONS AND MATING TAKES PLACE IN JUNE AND JULY. THE MAASAI PEOPLE AIM

TO MINIMIZE THE DISTANCE BETWEEN THE BOMA (WATER POINT) AND GRAZING LOCATIONS FOR THE SAKE OF BOTH ANIMALS AND HERDERS. SHEEP SLAUGHTERING WAS COMMON MAINLY DURING WEDDING AND INITIATION CEREMONIES.

#### PARTS USED AND PROCESSING

##### PRODUCTS DERIVED FROM THE ANIMAL

MEAT

##### WAYS OF COOKING

BOILED, FRIED, ROASTED

**A**lso known as Tanganyika sheep, Red Maasai Sheep are so called because the Maasai people of East Africa traditionally raised them. They can be found in southern Kenya and northern Tanzania and parts of Uganda, in the arid and semi-arid regions of the Great Rift Valley. This breed, which is distinct for having hair instead of wool, is used primarily for meat. The most preferred (and therefore most common) color is red, but sheep are also seen with brown and occasionally pied coats. They have a relatively heavy body, are short (73 centimeters tall at the withers for males, 62 cm for females), fat tailed, and slightly fat rumped. Males weigh 45 kilograms on

average while females weight 35 kg at maturity. Notably, they are also resistant to the *Haemonchus contortus* parasite and other local diseases, which makes them an excellent pastoral breed.



## CULINARY USES

The Maasai eat mature sheep of 12 months old or older. The sheep are used both for meat and lard. The meat is either roasted or boiled and eaten throughout the year, especially during ceremonies like marriages and initiations. Meals prepared at the homestead are organized by women and can include various types of stews and other dishes made with sheep meat. Traditionally, meat was either roasted or fried and then mixed with blood. It is served with *monono* or *ugali* made from corn flour.



## PRODUCT HISTORY

Red Maasai Sheep are found especially in Kajiado District and the surrounding area. According to legend the Red Maasai Sheep was the first animal kept by the Maasai. They were involved in the beginning of Maasai life and the rearing of animals.

Red Maasai Sheep are still significant to the Maasai community especially during ceremonies and bridewealth payments: The bridegroom brings five Red Maasai Sheep to the girl's parents to be allowed to continue with the marriage arrangements. It was the most preferred animal to be given to individuals as a gift. In addition, Red Maasai Sheep are valued for their uniform red color, since traditional Maasai clothes as well as the sand in the area are red.

When a ceremony is being held a Red Maasai Sheep is slaughtered. During drought seasons the Maasai usually sacrifice a sheep to make the rain come. The sheep to be sacrificed should be of solid color, without any spots. The sheep used to be kept for home consumption but farmers started to run businesses with butcheries and market the meat.



## CURRENT STATUS

Red Maasai Sheep husbandry has declined over time due to crossbreeding with dorpers, the small stature of this local breed, and because it grows hair rather than wool. Today the majority are crossbreeds, and pure Red Maasai Sheep are less common, making the future of the breed uncertain. The unpredictable seasonal changes and recurrent droughts may, however, lead to greater demand for well-adapted and sustainable sheep such as the Red Maasai.

# N. 44 RUKURI (MEAT PRESERVED IN HONEY)



## CATEGORY



CURED MEAT  
AND MEAT PRODUCTS

## PRODUCTION AREA

GITHUNGURI,  
KIAMBU COUNTY  
(CENTRAL KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

HONEY  
SHEEP, GOAT, OR CATTLE MEAT

## PREPARATION METHOD

TO MAKE *RUKURI*, HONEY IS HARVESTED AND STORED IN WOODEN CONTAINERS. WHEN ANIMALS ARE SLAUGHTERED (USUALLY TWO AT A TIME, ONE FOR THE FAMILY TO EAT FRESH AND ONE WITH WHICH TO MAKE *RUKURI*), THE RIBS ARE REMOVED AND THE MEAT IS CUT INTO STRIPS AND PUT OVER THE FIRE TO IMPROVE ITS AROMA AND FLAVOR. THE MEAT IS THEN PUT INTO A CONTAINER, CALLED *IKUMBI*, WITH HONEY FOR A MINIMUM OF 80 DAYS BEFORE IT IS READY TO BE SOLD. IN THIS WAY, IT CAN BE PRESERVED FOR A VERY LONG TIME.

**R***ukuri* is a traditional Gikuyu cured meat made from roasted sheep, goat, or cattle that is preserved with honey. Rukuri made with sheep and goat used to be more common than that made with beef. Meat might be dipped in honey and eaten right away, without time in storage. However, rukuri that has been aged for a long time is considered to have a better flavor. Traditionally, Gikuyu men kept beehives in their gardens to harvest the honey to use as a sweetener, as a medicine, to make traditional beer (called *muratina*), and as a food preservative to make products like rukuri. The honey allows meat to be preserved without refrigeration. It also improves the flavor of the meat.

## PRODUCT HISTORY

Traditionally rukuri played an important role in family decision making. Conversations between husband and wife would begin after he presented her with a piece of rukuri. This token showed a man's love and respect for his wife, and helped to keep marital harmony.

As a preserved product, rukuri could be eaten on a daily basis. However, during special occasions, such as the celebration of bridewealth payments or other rites of passage, special pieces of meat would be dipped into freshly harvested honey to prepare for guests.

Rukuri used to be considered food for the rich because both animals and beehives require important investments. Also, a family had to have enough animals to be able to slaughter them in order to make rukuri. Animals were precious for the family because they provided meat and rukuri was used as bridewealth (men gave rukuri to the intended wife's family).

Rukuri is traditionally consumed with a special tool called *jife* (a sort of hook) that allows one to take the meat without touching the honey. It used to be eaten alone on a calabash plate. It was offered only to the most respected guests, usually men. Women could also eat it, as long as they were respected. Rukuri is referred to as "food for the future" because it can be preserved for up to 50 years.

Rukuri appears in traditional Gikuyu sayings. One saying associated with rukuri asks, *ni nyama kana ni rukuri?* which means, "is it just meat, or is it rukuri?" Another saying is used when someone tries to hide something from another person, prompting them to ask, *kari rukuri?* meaning, "is it rukuri?" to imply that whatever is being hidden must be of great value. *Cama ta rukuri* is another saying, meaning "as sweet as rukuri." This collection of sayings shows the importance of this product in the Gikuyu community, and the fact that it cannot be substituted with other products.

## CURRENT STATUS

Rukuri is made in the home for personal and family consumption and is not found for sale. While rukuri is considered a special treat, fewer and fewer individuals still make it today. Many have adopted other methods of preservation, such as refrigeration. In addition, the cost of procuring beehives and beekeeping materials is high, so fewer people keep their own bees. Limited knowledge about this traditional food preservation method among younger generations means that this typical Kenyan food may soon be lost.

# N. 45 SIRIGONIOT



## CATEGORY



CURED MEAT  
AND MEAT PRODUCTS

## PRODUCTION AREA

MARIASHONI,  
NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

OGIEK / OKIEK

## INGREDIENTS

GAME MEAT OR BEEF  
HONEY  
SALT

## PREPARATION METHOD

ONCE CAPTURED, THE ANIMAL IS SLAUGHTERED IMMEDIATELY AND ITS MEAT DIVIDED INTO SMALLER CUTS, WHICH ARE WRAPPED IN LEAVES AND THEN TIED WITH VEGETABLE FIBERS. THE CHUNKS ARE THEN TRANSPORTED TO THE VILLAGE WHERE WOMEN TAKE CARE OF THEIR PREPARATION. THE MEAT IS CUT INTO THINNER SLICES, SPRINKLED WITH SALT AND HONEY, SKEWERED ON 1-METRE STICKS POSITIONED AROUND THE BONFIRE, AND SMOKED. DURING THE SMOKING PROCESS, THE MEAT IS TURNED OVER SEVERAL TIMES TO ENSURE UNIFORM COOKING. ONCE READY, IT IS PLACED IN A *LEKWELEET*, A CONTAINER MADE FROM BAMBOO FIBERS GATHERED IN THE FOREST AND SUBSEQUENTLY INTERTWINED.

**S**irigoniot is a salted, dried, and smoked meat traditionally prepared in the Ogiek hunter-gatherer communities of Mariashoni, a village in the north-central area of the Mau Forest in Nakuru County.



This product consists of thin slices of meat sprinkled with salt and honey, dried in the open air, and finally smoked next to an open fire. The meat is skewered on a 1-meter wooden spit called *saartit* in the local language.

In the past, this technique was used to preserve the game hunted in the forest. The same method was used to preserve beef, which the Ogiek obtained from the neighboring Maasai communities in exchange for honey or other forest products. Today, Ogiek from Mariashoni prepare sirigoniot using mainly beef. The dried meat can be cooked directly on the flame or roasted in the ashes. In the latter case, the outer skin is removed and then the meat is minced and served with *ugali*.



## PRODUCT HISTORY

Until the second half of the 20th century, the Ogiek practiced a semi-nomadic lifestyle based on honey harvesting and hunting. Over the course of the year, communities living in Mau Forest moved from the highlands to the plains in the eastern part of the forest, following seasonal migrations of bees and wild animals. Hunting was carried out in groups and meat (especially of large animals) was distributed to each community member. Game hunting involved the use of dogs, bows and arrows, spears, sticks, and traps. The most valued animals were antelope, wild pigs, buffaloes, and elephants. Hunting, as well as other activities carried out in Mau Forest, was regulated by various tenets and customs intended to conserve the ecosystem's resources and use them in a sustainable way. Drying and smoking wild game allowed the Ogiek to preserve the meat for several months, thus avoiding waste and guaranteeing an important protein source during seasonal migrations and famine periods.



## CURRENT STATUS

The Ogiek living in Mariashoni continue to hunt, albeit less frequently than in the past. Communities here have had to cope with drastic declines in the local habitat and wildlife, mainly due to deforestation, climate change, and land conversion for agriculture. Due to these changes, the Ogiek have to adapt their lifestyle, increasingly basing their livelihood on agriculture and cattle and sheep herding rather than hunting.

These ongoing dynamics are leading to the erosion of traditional practices and knowledge, including techniques for preserving meat. Today very few people continue to produce sirigoniot, and those that do tend to use beef, not wild game.

# N. 46 SUPOREI (BARINGO TILAPA)

*Oreochromis niloticus baringoensis* Trewavas



#### CATEGORY



FISH AND SEAFOOD

#### PRODUCTION AREA

LAKE BARINGO,  
BARINGO COUNTY  
(RIFT VALLEY)

#### INDIGENOUS COMMUNITY

İLCHAMUS

#### FISHING METHODS

İLCHAMUS PEOPLE LIVING NEAR LAKE BARINGO CONTINUE TO FISH LIKE THEIR ANCESTORS DID IN HAND-CRAFTED RAFTS (CALLED *İLKADİCH*) MADE FROM THE LIGHT WOOD OF THE AMBATCH TREE (*AESCHYNOMENA ELAPHROXYLON*). UNTIL THE SEC-

OND HALF OF THE 20TH CENTURY, FISHING WAS CONDUCTED (TO MEET DOMESTICS NEED) WITH A ROD AND LINE ONLY. NOWADAYS LOCAL PEOPLE FISH (ALSO FOR COMMERCIAL PURPOSES) USING GILLNETS.

#### PARTS USED AND PROCESSING

#### WHOLE FISH

BOILED, STEWED, FRIED

**S** *uporei*, or Baringo tilapia, is a perch-like, golden fish endemic to Lake Baringo in Kenya's Great Rift Valley. It is a sub-species of the Nile tilapia and is easy to breed. Male and female adult fish reach an average length of 30 centimeters and 20 cm, respectively. Males are more colorful than females, which are reddish-brown. The species is the fastest growing of the tilapias, taking only 4 months to reach a harvestable size.

Lake Baringo is one of the important freshwater lakes in the Kenyan Rift Valley. It is a world Ramsar Site (belonging to a list of wetlands of international

importance) and is important for socioeconomic reasons and for biodiversity. Despite this, the lake is threatened by siltation resulting from human activities in its catchment.

## CULINARY USES

Among the Ilchamus, fish is prepared and served with millet or cornmeal. It can also be served alone without any accompaniments. Due to its rich protein content, a fish soup is given to infants suffering from *kwashiorkor* (severe protein malnutrition). Traditionally, fish soups are mixed with various herbal medicines, allowing the soup to act as a carrier material for the medicine. The flavor of suporei meat is mildly sweet and milky. The fish is of high nutritional quality, making it the most popular fish in the region.

## PRODUCT HISTORY

For generations, fishing has played an important role to the social and economic life of the Ilchamus people, a Maa-speaking community living to the south and southeast of Lake Baringo. They number about 35,000 and are closely related to the Samburu who live to the northeast. Fish is so valuable to the community that one of the major town centers in the area was given the name *Kampi ya Samaki*, meaning "the fish town." Historically, fish were used to pay bridewealth, with one big, fat fish being enough to earn a man a bride. The Ilchamus practice pastoralism and are the only group to engage in both cattle rearing and fishing. Most other pastoral communities in the area have traditionally regarded the consumption of fish as taboo.

The large number of suporei once formed a vibrant fishery that supported a fish processing factory and a well-known fish market. However, between the 1960s and 1980s, fish production dropped from between 500 and 600 tonnes to less than 200 tonnes per year. Today, the fishing industry is characterized by fluctuations that have even led to closure of the fishery during the dry season.

## CURRENT STATUS

Although Lake Baringo is an important economic lifeline for the communities in the basin (during prolonged droughts, the fishery is the only source of income), the Baringo tilapia is used on a very limited scale for food. Overfishing, environmental concerns (such as nearby businesses emitting sewage into the lake), and pollution from soil erosion have compromised the suporei population. Indiscriminate fishing in shallow waters with nets that do not meet fishing standards results in immature fish being caught, and other fish species introduced to the lake have negatively influenced the suporei's ability to survive.



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# CHAPTER 4

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## **PROCESSED PRODUCTS**

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# N. 47 BUSIA DRIED CASSAVA



## CATEGORY



VEGETABLE PRESERVES

## PRODUCTION AREA

BUSIA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

LUHYA

## INGREDIENTS

CASSAVA ROOTS

## PREPARATION METHOD

CASSAVA ROOTS ARE PEELED, WASHED, AND SUN DRIED FOR ABOUT 6 HOURS TO GET RID OF EXCESS MOISTURE. THE SEMI-DRIED ROOTS ARE THEN PILED IN A CORNER OF THE KITCHEN AND COVERED WITH A SACK FOR A PERIOD OF 3-5 DAYS. ANY MOLD THAT FORMS DURING THIS PERIOD IS SCRAPPED OFF WITH A BLUNT KNIFE. NEXT, THE ROOTS ARE PUT ON A CLEAN FLOOR AND CRUSHED WITH A STONE INTO BIG, SOFT PIECES. THE PIECES ARE SUN DRIED FOR A PERIOD OF 12-14 HOURS.

**T**his product is made by drying cassava (*Manihot esculenta*). It is a traditional processed food of the Luhya people living in Western Kenya, particularly in Busia County. It is produced using locally grown cassava, especially the bitter varieties. This crop is drought resistant and well adapted to the climate conditions of the area. The bulk of cassava produced in the region is used for human consumption and surpluses are processed into starch or used for animal feed.

Through dehydration, local farmers can preserve the cassava roots and at the same time detoxify them (bitter cassava contains cyanogenic compounds) and improve their otherwise-bitter taste. Dried cassava roots can be kept for several years.

This product has an irregular shape and a smooth consistency, with the texture of the surface resembling plaster.



## PRODUCT HISTORY

Cassava is an important staple food in Busia County and the dried roots have always been an important resource during famine periods. Cassava production involves both men and women in the local communities: Men take care of the cultivation while women have the duty to peel, cut, and dry the roots.

Dried cassava is a primary ingredient in different local recipes: The dried roots are mixed with sorghum, finger millet, or maize and milled into flour. They can also be milled into flour without any cereal. The flour is added to boiling water and stirred until it cooks into either *ugali* (thick porridge) or *uji* (light porridge). Uji is a beverage while ugali is served with fish, meat, or any green leafy vegetable.

Dried cassava roots are prepared both for home consumption and to sell. Women sell them directly in the local markets and traders sell them across Kenya, especially in the northern and western parts of the country. This product represents an important economic resource for the rural families of Busia County.



## CURRENT STATUS

The method used in Busia for drying/detoxifying cassava is more labor-intensive than many other traditional processing techniques, such as simply boiling cassava (which is less effective as a detoxification method) or cutting the roots into chips for drying and milling. The conservation of this traditional product is at risk for several reasons. On the one hand, changing eating habits have caused people to turn away from dried cassava in favor of foods that are deemed healthier. On the other hand, the presence of industrial flours on the market (often cheaper than the traditional ones) makes the commercialization of this product difficult.

# N. 48 BUTUTIA



## CATEGORY



DISTILLED AND  
FERMENTED BEVERAGES

## PRODUCTION AREA

KIRINYAGA COUNTY  
(CENTRAL KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIRUYU

## INGREDIENTS

FINGER MILLET  
(*ELEUSINE CORACANA*)  
WATER

## PREPARATION METHOD

THE PROCESS OF PREPARING *BUTUTIA* STARTS WITH THE WINNOWER OF THE MILLET TO REMOVE DIRT AND ANY FOREIGN MATERIAL. THE MILLET GRAINS ARE SOAKED IN WATER AND THEN PLACED IN WELL-VENTILATED OPEN PANS AND ALLOWED TO GERMINATE. THE GERMINATED MILLET GRAINS ARE THEN SUN-DRIED. THE MILLET IS GROUND USING GRINDING STONES, AFTER WHICH THE FLOUR IS MIXED WITH WATER. THE MIXTURE IS THEN LEFT TO FERMENT FOR 3 DAYS, AND THE RESULT OF THIS PROCESS IS LOCALLY CALLED *KIMERA*. *KIMERA* IS THEN DILUTED IN WARM WATER AND FILTERED TO HAVE A HOMOGENOUS FINAL PRODUCT. THE RESULTING FILTRATE IS *BUTUTIA*, WHICH IS KEPT IN A COOL, DRY PLACE TO MAINTAIN ITS FRESHNESS.

**B** *ututia* is a fermented drink made from finger millet that used to be prepared by the Akirinyaga community (Gikuyu) in Central Kenya. Finger millet is an annual plant widely grown as a cereal in different areas of Kenya. Its other names include *wimbi* and African millet. Bututia is prepared using finger millet grains that are first germinated and sun dried.



Women prepare bututia, put it in gourds, and take it to the men working in the fields. After fermentation, the brew has a thick consistency due to the presence of residual grains. Traditionally, they are removed using filters that have been attached to wooden straws through which the beer is drunk from a pot. Usually the drinking pot is shared by a large group of people. Bututia has an acidic taste, a porridge-like consistency, and a light brown color.



## PRODUCT HISTORY

This brew was very popular and was consumed during special occasions like harvesting and during land preparation when the rains were believed to be near.

Among the Akirinyaga community, bututia was used as a measure of the amount of land that had to be prepared. During land preparation a gourd full of bututia would be halfway buried a few meters in front of the starting point to keep it cold. Bututia was then drunk using funnels made from banana leaves (locally known as *mbari*) and the process was repeated by burying another gourd. This served as a motivator for people to continue working and maximize the time they had at their disposal. Land preparation was thus a communal affair in which men moved from one homestead to another.

Bututia is produced both for home consumption and for sale. This brew has been maintained during over a hundred years of Christianization and modernization. Akirinyaga people still prefer bututia despite the spread of commercial beers and beverage brands.



## CURRENT STATUS

This product is at risk of disappearing due to increasing preference for standardized products. In recent years commercial flours made from maize and other cereals have replaced the homemade flour made from finger millet. The change in social values to promote individualism has also affected the product negatively.

# N. 49 EBITATA BREAD



## CATEGORY



BREAD  
AND BAKED GOODS

## PRODUCTION AREA

VIHIGA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

ABANYOLE  
(LUHYA)

## INGREDIENTS

LISOTSI BANANA  
MAIZE/MILLET/  
SORGHUM FLOUR  
WATER

## PREPARATION METHOD

TO PREPARE THIS BREAD, BANANAS ARE PEELED, CUT INTO PIECES, AND MIXED WITH SORGHUM OR MAIZE FLOUR AT A RATIO OF 1:1. THE INGREDIENTS ARE KNEADED TOGETHER UNTIL THEY FORM A DOUGH. THE MIXTURE IS THEN MADE INTO SMALL LOAVES BY HAND AND WRAPPED IN FRESH BANANA LEAVES. THESE ARE THEN STEAMED OVER A POT OF BOILING WATER FOR ABOUT TWENTY MINUTES.

**E***bitata* is traditional bread made from ripe bananas mixed with maize flour. The main ingredient of ebitata bread is the lisotsi banana, a type of banana cultivated mainly in Vihiga County. Lisotsi bananas are cultivated by the Abanyole people of Vihiga County in Western Kenya. The fruit has a sticky texture and contains a lot of starch, making it suitable for

the preparation of breads and sweets. In addition, the ripe bananas are thought to prevent stomach aches. Dishes prepared with this variety of banana are considered particularly delicious, nutritious, and healthy.

Ebitata bread is very sweet even though the recipe does not include any added sugar. The crust on the outside is hard but the inner part is very soft.



## PRODUCT HISTORY

Ebitata or *omukati kwe lisotsi* is a traditional product of the Abanyole community, one of the 18 sub-tribes of the Luhya tribe of Western Kenya. Traditionally, this sweet bread has played an important role during social events. Women used to prepare it for ceremonies, especially weddings and namings. During these events, it was usually served with tea or porridge. At individual homes, families would prepare this bread during special days such as Easter and Christmas, but recently the preparation and consumption of this product has declined—only a few people still remember the art of making ebitata bread.



## CURRENT STATUS

Ebitata bread is no longer as widespread as it once was, due to the lack of the main ingredient necessary for its preparation: In Vihiga County, the lisotsi banana variety is not widely grown because many farmers have concentrated on producing the Cavendish varieties for income. Commercialization of other varieties has made many farmers forget to conserve this special variety and thus traditional ebitata bread is likely to be lost.

# N. 50 GOMBA YA MARIGO



## CATEGORY



FRUIT PRESERVES

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

MUTORE BANANA  
SHEEP FAT

## PREPARATION METHOD

THIS PRODUCT IS ONLY PREPARED USING THE MUTORE VARIETY OF BANANA. THESE ARE PEELED AND ROASTED ON BURNING COALS UNTIL COOKED THROUGH. AFTER ROASTING, THE BANANAS ARE CUT WITH A KNIFE, PLACED ON SHEEPSKIN TO DRY OUT, AND THEN CRUSHED WITH A PESTLE. ONCE THE PASTE IS PERFECTLY UNIFORM, IT IS MIXED WITH LIQUEFIED SHEEP FAT, WHICH ACTS AS A PRESERVATIVE. ONCE THE FAT IS ADDED, THE PRODUCT CAN BE CONSERVED FOR UP TO 3 MONTHS.

**G**omba ya marigo is a traditional dish in the Gikuyu community. It is prepared with a special variety of banana known as mutore in the Gikuyu language. Cooked bananas are mixed with fat in order to conserve them for a long time. The mutore banana is a traditional

variety that mainly grows in Central Kenya. It has green skin and orange flesh with a high content of carotenoids. This variety of banana is usually harvested for home consumption. The fruits are roasted or baked before they are eaten. The stems and leaves are used to feed livestock.



## PRODUCT HISTORY

Bananas were, and still remain to this day, an important source of nourishment for the Gikuyu community. Every family in Central Kenya (the ancestral home of the Gikuyu people) has a couple of banana trees, and some even have whole groves. Different varieties of banana are cultivated and prepared differently depending on their individual characteristics. Some varieties are considered good only when mature, while others are eaten boiled or roasted while they are still unripe or almost ripe.

Among the Gikuyu, unripe mutore bananas were traditionally the first food given to babies. The bananas were roasted or baked in hot ashes and the skin removed. The mothers chewed the flesh and gave it to their children using their finger as a spoon.

Mutore bananas have also played an important role in traditional Gikuyu ceremonies, especially during marriages. Gomba ya marigo and other dishes prepared with this banana were offered to the guests. Furthermore, the dry banana fibers (from the bark and shoots) were used to indicate the place where a wedding would take place.



## CURRENT STATUS

Gomba ya marigo was extremely popular during long voyages, especially those undertaken in search of fertile land. The increase in the population and the subdivision of land reduced these trips and led to the abandonment of this product. Modern technology (like refrigeration) has led to the increase in more standardized products and has made the pride in this traditional product decrease dramatically.

# N. 51 KALUVU (KIMEE)



## CATEGORY



DISTILLED AND  
FERMENTED BEVERAGES

## PRODUCTION AREA

KASIKEU,  
MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## INGREDIENTS

SAUSAGE FRUIT  
SUGARCANE OR HONEY

## PREPARATION METHOD

TO MAKE *KALUVU*, SUGAR CANE IS CUT INTO PIECES AND CRUSHED IN A MORTAR WITH A WOODEN PESTLE. THE PULP IS MIXED WITH WATER TO DISSOLVE OUT THE JUICE AND IS THEN FILTERED WITH A SIEVE MADE OF BANANA FIBERS. FINALLY, THE LIQUID IS PUT IN A GOURD NEAR A FIRE AND SLICES OF DRIED SAUSAGE TREE FRUIT ARE ADDED TO MAKE THE FERMENTATION START. THE BREW IS READY AFTER 3-5 DAYS.

THE SAME PREPARATION METHOD IS USED FOR *KALUVU* MADE FROM HONEY, ALTHOUGH THIS DRINK IS NOT SO COMMON AS *KALUVU* MADE FROM SUGAR CANE.

**K**aluvu, also called *kimee*, is a fermented brew made in the Kasikeu area of central southern Kenya by the Akamba people. It is made from sugarcane juice or honey mixed with slices of dried sausage fruit (*Kigelia africana*).

*Kigelia africana* is known by different names: *muatine* (Kamba), *mwengea* (Swahili), and the popular European name, "sausage tree," due to the shape of its fruit. The fruits of this tree are large gray-green "sausages." They may be up to

60 centimeters long and weigh up to 6 kilograms. In Makueni County the fruits are harvested from the wild in April and May, and occasionally in December and January.

Before being dried and used as an ingredient for kaluvu, these fruits are boiled for a long time to extract their natural juices, which are not palatable.

Kaluvu can be brewed in a barrel or a calabash (dried gourd). It is usually drunk from a drinking vessel made of half a small calabash.



## PRODUCT HISTORY

Traditionally only men were allowed to drink kaluvu, as it was considered inappropriate for women to drink alcohol. However, many women did brewing. Older men consumed this drink, especially during wedding ceremonies. Before the arrival of Christianity in the area, kaluvu was an integral part of wedding ceremonies. It was traditional for the groom to offer a dried gourd filled with this drink, along with a blanket, to the parents of the bride before she was married. When both sets of parents shared this drink, it was considered to indicate a sealing of the marriage accord. Friends would also take this drink together to show an agreement.

Kaluvu was also used in prayers at shrines, especially when asking for rain. Traditionally, a few drops of the drink would be poured out at the beginning of the prayer to "share" with the ancestors, while speaking the words *kundia vau*, which means, "drink from there."

The brew was also given as payment to casual workers, or as a token of appreciation for help. For example, when a person died, the young men who helped to dig the grave were rewarded with a jar of kaluvu.

As a homemade product mainly for rituals or special occasions, kaluvu is sold directly by brewers, and not in bars.



## CURRENT STATUS

In the past, kaluvu was made naturally, without any additives. However, administrators have been forced to ban this drink in many villages due to abuse from corrupt brewers who use methanol or other additives to speed up fermentation and create adulterated drinks that are harmful to those who drink them.

The sausage fruits used to create the brew have also become increasingly rare, due to many riverbeds where they grow drying up. As a result, this drink is being forgotten and replaced by other, commercially produced alcoholic drinks.

# N. 52 KINOLO BANANA BREAD (MKATE WA NDIZI)



## CATEGORY



BREAD AND  
BAKED GOODS

## PRODUCTION AREA

KILIFI COUNTY  
(COAST)

## INDIGENOUS COMMUNITY

GIRIAMA  
(MJIJKENDA)

## INGREDIENTS

LOCAL BANANA VARIETIES  
CORN FLOUR

## PREPARATION METHOD

TO PREPARE *KINOLO*, RIPE BANANAS ARE PEELED, PLACED IN A *KINU* (MORTAR), MIXED WITH CORN FLOUR, AND POUNDED USING A *MCHI* (PESTLE). THE RESULTING PASTE IS ROLLED INTO SHAPE USING BANANA LEAVES AND ARRANGED IN A COOKING POT. HOT WATER IS ADDED TO COVER THE PREPARATION, AND THE COVERED POT IS LEFT TO COOK OVER A MODERATE FIRE.

**K**inolo is a bread-like product made from ripe, sweet bananas (usually of the *mabuki* variety) and corn flour. The resulting cooked breads may be purple, brown, or pink in color, depending on the corn variety used to obtain the corn flour. Typical kinolo has a high ratio of



bananas to flour, producing bread with a sweet taste and a fragrant aroma. The bread loses these qualities when made with too much flour.

Kinolo bread is usually prepared using different kinds of corn flour (from white and colored maize) but specifically using sweet bananas.



## PRODUCT HISTORY

Due to the high perishability of ripe bananas, it is difficult to store surplus. Sometimes extra bananas are sold at the market, but the preparation of kinolo bread increases their value, as it can be stored for longer than the bananas themselves. When the bread is sold it helps the community to earn income. The preparation activities are usually carried out by women. Kinolo bread is served with tea at breakfast or for evening tea. Traditionally the bread was served to important guests. It was also eaten during occasions such as wedding, naming, and burial ceremonies, as well as for bull and cock fighting ceremonies.



## CURRENT STATUS

Kinolo is mainly made in coastal regions of Kenya and is sold in at least one local market. Recently, however, the traditional technique of making this bread has changed. In addition, younger generations are now more used to eating white, wheat-based breads, and are less aware of breads like kinolo.

# N. 53 MUKURUGUCU



## CATEGORY



VEGETABLE PRESERVES

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

CORN  
SOYBEANS  
OTHER LEGUMES  
*KAHURURA*  
(CUCURBIT LEAVES)

## PREPARATION METHOD

THE PREPARATION OF *MUKURUGUCU* BEGINS WITH BOILING CORN AND SOYBEANS. VARIOUS GREEN VEGETABLES SUCH AS *KAHURURA* CAN THEN BE ADDED TO MAKE A PASTE. *MUKURUGUCU* IS SERVED ON ITS OWN OR TOGETHER WITH VEGETABLES OR SOME STEW, AS THE SIDE DISH. IT CAN BE PRESERVED FOR SEVERAL DAYS IN THE POT AFTER COOKING WITHOUT GOING BAD.

**M**ukurugucu is the name of a paste made with several ingredients mixed together: corn, soybeans, legumes, and *kahurura*, the leaves the fig-leaved gourd (*Cucurbita ficifolia*). Pumpkin or other cucurbit leaves can be used as a substitute. *Cucurbita ficifolia* is originally from highland regions of Latin America, but came to Europe,

Asia, and Africa in the 16th and 17th centuries. It occurs in tropical Africa in the highlands of Ethiopia, Kenya, and Tanzania. It is an extensive creeper or climber cultivated in Kenya's central highlands, especially by the Gikuyu. The leaves have three to five rounded or obtuse lobules.

Fig-leaf gourd is grown primarily for its leaves. The immature fruits are occasionally eaten, but are considered inedible in most parts of Kenya. The leaves are used in the preparation of mukurugucu and other traditional dishes such as *irio*, a mixture of maize, pulses, and unripe bananas and/or potatoes.

It grows spontaneously in cultivated areas.



### PRODUCT HISTORY

Mukurugucu is a traditional product of the Gikuyu community in Central Kenya. This paste was prepared for home consumption, and everybody in the family shared the meal. It was also prepared during communal activities such as the harvest and the building of traditional huts.

It is still an important meal among the Gikuyu due to its great nutritional value: It is a complete meal, containing carbohydrates, proteins, and vitamins.



### CURRENT STATUS

This product is at risk of extinction because of the decline of some of the plant species, such as kahurura, which is no longer cultivated due to changes in eating habits and lifestyle among the younger generation. This has triggered its gradual disappearance. Intergenerational knowledge transfer about this product and other traditional foods is no longer common and this leaves young people with inadequate information for safeguarding mukurugucu. In addition, cooking this meal in the family is viewed as a sign of poverty, which is why people are reluctant to prepare it.

# N. 54 MURATINA



## CATEGORY



DISTILLED AND FERMENTED  
BEVERAGES

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

SAUSAGE FRUIT  
HONEY OR  
SUGARCANE

## PREPARATION METHOD

TO MAKE *MURATINA*, SAUSAGE FRUITS ARE CUT INTO PIECES AND DRIED UNDER THE SUN, AFTER WHICH THEY ARE BOILED IN WATER. AFTER BOILING THEY ARE REMOVED FROM THE WATER AND SUN DRIED AGAIN. THEY ARE THEN ADDED TO A SMALL AMOUNT OF SUGAR CANE JUICE OR HONEY AND KEPT IN A WARM PLACE. IF THERE IS NO WOOD TO SUSTAIN A CONTINUOUS FIRE, THE *MURATINA* CAN BE LEFT IN THE SUN DURING THE DAY. THIS PROCESS TAKES ABOUT 24 HOURS, AFTER WHICH THE FRUITS ARE AGAIN REMOVED AND SUN DRIED. AFTER DRYING, THE FRUITS ARE FINALLY MIXED WITH MORE SUGARCANE JUICE OR HONEY BASED ON THE AMOUNT OF THE FINAL DRINK REQUIRED. THIS MIXTURE IS THEN LEFT TO FERMENT FOR 1-4 DAYS.

**M**uratina is a common weak beer served in rural parts of Kenya. This brew is made in the Central Province of Kenya, mostly by the Gikuyu people. It is prepared from honey, sugar, or sugarcane and is named after the fermenting agent, the sausage tree fruit (*Kigelia africana*). The tree is so named due to the long, sausage-like fruits

that it bears. The fruits hang on string-like twigs that drop down from the tree branches. Individual fruits can grow to around 60 centimeters long and can weigh up to 6 kilograms.

The fruit increases the alcohol content, gives flavor to the drink, and, most probably, inoculates the drink with the right kind of yeast for the fermentation. The final drink has a sour, alcoholic taste. Muratina is traditionally drunk out of cow horns.



## PRODUCT HISTORY

Muratina has played an important role in the social and cultural traditions of the Gikuyu community of Kenya. Muratina is one of the items that a groom gives to his bride-to-be as bridewealth. This ceremony starts with the *ruracio*, a feast where the groom and his family bring the bridewealth to the bride-to-be's home. Muratina (*njohi ya uuki* in Gikuyu) is served to elders as a sign of respect. At the end of the day, the bride and groom are invited to come into the meeting: The father of the bride will then pour some of the muratina into a *ruhia*, a traditional drinking vessel, and as part of the Gikuyu traditions he will ask his daughter if she is sure that she wants him to partake of the drink, thus symbolizing the official start of the bridewealth arrangements. During the wedding ceremony, the bride's family gives the bride some honey for preparing muratina in the new household.



## CURRENT STATUS

This traditional alcoholic drink has been passed down from generation to generation and had an undisputed role in many social events in Gikuyu culture, such as births, initiations, weddings, and other special occasions. Today an influx of beverages made outside the area has created a preference among younger generations for the standardized tastes of these modern drinks.

# N. 55 MUSHELEKHA



## CATEGORY



SALT: SPICES, WILD HERBS  
AND CONDIMENTS

## PRODUCTION AREA

WESTERN KENYA

## INDIGENOUS COMMUNITY

LUHYA

## INGREDIENTS

BEAN PODS, DRY MAIZE COBS,  
SORGHUM HUSKS, BANANA PEELINGS

## PREPARATION METHOD

DRY VEGETABLE WASTE IS BURNT TO OBTAIN ASH. THE ASH OR *LIKOSHE*, AS IT IS KNOWN IN THE LUHYA LANGUAGE, IS MIXED WITH WATER AND PUT IN A TRADITIONAL POT CALLED *LUSHELEKHO*. THE *LUSHELEKHO* HAS HOLES IN IT THAT ALLOW CLEAN *MUSHELEKHA* TO SLOWLY DRIP OUT. THE FILTRATE IS RICH IN POTASSIUM SALT.

**M**ushelekhha is a traditional lye obtained from the ashes of burnt bean pods, dry maize cobs, sorghum husks, and banana peelings. The ash, once filtered, is mainly used to tenderizer tough vegetables, to improve flavor, and to preserve the green color of vegetables. Vegetables cooked in mushelekhha are known to keep longer without spoiling. Using this lye also improves the texture of slimy vegetables.

Mushelekha is used only with certain vegetables, such as cowpea, *mitoo* (*Crotalaria* spp.), *murere* (*Corchorus olitorius*), pumpkin leaves, and *nderema* (*Basella alba*). It is also used to cook meat and fish, as a tenderizer and to improve flavor. It is important to use the right quantity of mushelekha in order not to cause a burning sensation in the mouth and to avoid making the food too tender.



## PRODUCT HISTORY

Mushelekha is a traditional product of the Luhya people of Western Kenya. They use this traditional lye for the preparation of dishes made with local vegetables. Mushelekha may be used in different ways: Usually a pot of water is placed on the fire to boil and the lye is added and boiled for a few minutes. Then vegetables are added and the pot is covered. The cooking vegetables are stirred to ensure even cooking and to avoid burning. Finally, salt is added to taste. Other ingredients may be added including groundnut paste, milk, cream, *ghee*, and animal fat. A second method of cooking using musheleka involves placing the pot containing water and vegetables on the fire and adding the mushelekha once the contents of the pot start boiling.



## CURRENT STATUS

Mushelekha is becoming rare and is used only in rural areas of Western Kenya. Outside of these areas it is replaced with sodium bicarbonate, even though this product imparts a different texture and flavor to the vegetables to which it is added.

# N. 56 NGARABA



## CATEGORY



CEREALS AND FLOURS; CAKES,  
PASTRIES AND SWEETS

## PRODUCTION AREA

KIRINYAGA COUNTY  
(CENTRAL KENYA)

## INDIGENOUS COMMUNITY

AKIRINYAGA  
(GIKUYU)

## INGREDIENTS

PEARL MILLET  
(*Pennisetum glaucum*)  
WATER

## PREPARATION METHOD

TO PREPARE NGARABA, MILLET IS GROUND USING A MILLSTONE PLACED ON TOP OF BANANA LEAVES, WHICH ARE THERE TO HOLD THE FLOUR. THE PROCESS IS KNOWN AS *GUJARIRIA* AND CONTINUES UNTIL ALL OF THE MILLET IS GROUND. THEN THE FLOUR IS SIFTED IN A TRADITIONAL SIEVE TO GET RID OF ANY HUSKS OR OTHER UNWANTED MATERIAL. THE FLOUR IS THEN PLACED IN A CONTAINER AND MIXED WITH WATER, WHICH IS THEN KNEADED MANUALLY TO PREPARE THE DOUGH. THIS IS THEN GROUND YET AGAIN, IN A PROCEDURE THAT IS KNOWN AS *GUKIA*. A HANDFUL OF THE DOUGH IS GROUND WITH A STONE, WATER IS ADDED, AND THE PROCESS CONTINUES USING EVER-SMALLER STONES UNTIL THE GRAIN IS PERFECTLY SMOOTH. THE DOUGH IS THEN ROLLED IN CORNHUSKS AND TIED AT THE ENDS USING STRING MADE FROM THE HUSKS THEMSELVES. THE CORNHUSKS CONTAIN ANTIOXIDANTS. THE PROCESS IS REPEATED UNTIL ALL OF THE DOUGH HAS BEEN ROLLED. THE STUFFED CORNHUSKS ARE THEN PLACED IN A PAN WITH WATER COVERING THEM AND ARE BOILED FOR 30 TO 40 MINUTES ON A HIGH FLAME.

**N**garaba is made from pearl millet and is closely associated with communities in Kirinyaga County that used to prepare it. The community produced pearl millet mainly for *bututia* (uncooked porridge), *ucuru wa mukio* (local and traditional porridge from the region) and ngaraba.

Pearl millet is a drought tolerant crop that grows in semi-arid regions below 1,500 meters above sea level. It does well on sandy soils but can be grown in heavy clay soils and will even produce a crop on poor soils. It requires annual



rainfall of 400 to 800 millimeters. Traditionally, the heads of the pearl millet were cut, spread out to dry, threshed, and winnowed. Before using the millet, it was processed into flour using *ithiga*, one grinding stone on top of another, and made into ngaraba.

The product has an oval shape and the surface is grayish-brown. Its taste is sweet and the consistency is firm.



## PRODUCT HISTORY

Ngaraba is eaten cold and can be served to accompany tea or vegetables. It has always been considered a food with a high energy content and was consumed every day.

Millet is a staple food in the Kirinyaga area. Local people used to cultivate a lot of millet due to its resistance to harsh climate conditions and pest infestation, as well as its high nutritional value and high content of protein, fiber, vitamins, calcium, and iron. Ngaraba was mainly prepared by women to be served to men who used to move for long distances in search of pasture for animals. It was considered good food for travelling. Herders ate this bread-like product in the morning before they went out to graze their animals, and would not eat anything else all day. Sometimes they would carry this product in case they couldn't get home for several days. Ngaraba was and is an important fallback in times of food scarcity or famine, and it is important that people continue cultivating millet. Ngaraba was often consumed during bridewealth negotiations. The bridegroom's family was served this food to show that they were welcome. During drought and famine, ngaraba was the best anti-hunger food product.

Another commodity in high demand in the region was grinding stones, *ithiga ria gukia*. These were bought for grinding millet, finger millet, and sorghum, all of which were grown locally. According to one person born in the 1880s, it took two women to carry the amount of grain exchanged for one grinding stone.



## CURRENT STATUS

Due to modernization and the introduction of new grinding machines, the traditional way of grinding ngaraba is disappearing, even though traditional ngaraba is still recognized as an incredibly nutritious dish. Due to the long preparation time, communities are starting to use alternative processing methods that are much easier, such as cooking millet as porridge. The younger generations are not familiar with ngaraba and some of the older members of the community admit that they last ate ngaraba more than 30 years ago, but that they would love to help revive it.

# N. 57 NZOIA RIVER REED SALT



Slow Food Presidium®

#### CATEGORY



SALT; SPICES, WILD  
HERBS AND CONDIMENTS

#### PRODUCTION AREA

NABUYOLE, WEBUYE DISTRICT,  
BUNGOMA COUNTY  
(WESTERN KENYA)

#### INDIGENOUS COMMUNITY

BUKUSU  
(LUHYA)

#### INGREDIENTS

MUCHUA PLANT  
WATER

#### PREPARATION METHOD

TO PREPARE THIS SALT, BUNCHES OF REEDS ARE ARRANGED ON STONES BY THE RIVER AND ALLOWED TO DRY. THEY ARE THEN HEATED ON A SLOW FIRE FOR UP TO 3 DAYS. THE RESIDUAL ASH IS MIXED WITH HOT WATER, FILTERED, AND BOILED IN A LARGE PAN OVER A FIRE. WHEN THE LIQUID HAS COMPLETELY EVAPORATED, A PURE SALTY MIXTURE IS LEFT ON THE BOTTOM. IT IS COLLECTED, PACKED INTO BANANA LEAVES, AND DRIED UNDER HOT ASHES OVERNIGHT. PEPPER IS SOMETIMES ADDED, GIVING THE SALT A SPICY FLAVOR.

In Western Kenya, local communities have developed a distinctive method for extracting salt from an aquatic plant. In the Webuye district, salt is made from reeds and sedges found in swampy areas. Here *muchua*, a type of thin reed very similar to papyrus (*Cyperus papyrus*), grows in the

waters of the Nzoia River in the dry season (from September to March). Reaching a height of about 2 meters, it is ready for harvesting when the flowers wilt and the highest leaves are almost dried out; before this the salt concentration is too low. Local people believe that this plant is capable of filtering water. This reed is also appreciated by animals, especially goats and sheep.



## PRODUCT HISTORY

Western Kenya was historically excluded from the distribution of commercial salt due to poor transportation infrastructure. For this reason, the local population had to design a method for extracting their own salt from an aquatic plant. It is thought that the origins of this practice date back to the 17th century when the Bukusu community, a sub-division of the Luhya people, migrated eastward from Congo. Since then, the practice has been handed down over generations.

It is said that a long time ago when the reeds became rare due to drought, the villagers used to make the salt from goat droppings. They collected them and followed the same process as explained above.

Every producer gives this product a female name, such as *kumunyū kwa lukhayo*. "Lukhayo" is a name given to a wife who is kind, welcoming, and hardworking.

This salt has various uses in traditional medicine. The locals use it to disinfect wounds, build marrow, and help strengthen bones. Before the last drying it is also used to cure intestinal parasites and sore throats.



## CURRENT STATUS

Nzoia River Reed Salt production is very limited as it requires a demanding and time-consuming process and because imported marine salt, first brought with British colonization, has rapidly replaced it. Large-scale deforestation has also caused river levels to drop, with a consequent reduction in marshy areas where the reeds used to produce the salt grow. Only the Bukusu community in the village of Nabuyole, in Webuye district, continues to produce salt using the traditional method.

# N. 58 POKOT ASH YOGURT



## CATEGORY



CHEESE AND DAIRY  
PRODUCTS

## PRODUCTION AREA

TARSOI, TARTUR, LITON, AND  
CHAUNET VILLAGES, WEST POKOT  
COUNTY (RIFT VALLEY)

## INDIGENOUS COMMUNITY

POKOT  
(KALENJIN)

## INGREDIENTS

ASH OF *OZOROA INSIGNIS*,  
GOAT'S OR COW'S MILK

## PREPARATION METHOD

THE MILK IS COLLECTED IN A CALABASH, A TRADITIONAL CONTAINER MADE FROM PUMPKIN AND GOURD VARIETIES, AND LEFT TO STAND FOR AT LEAST 3 DAYS. TO MAKE A CONTAINER FROM A GOURD, THE HARD SKIN IS HOLLOWED OUT, DRIED, AND SMOKED OVER THE WOOD OF *CROMWO*, THE SAME TREE USED FOR THE ASH. ONCE THE WHEY HAS BEEN DRAINED, THE GOURD IS CLOSED AGAIN AND AGITATED WITH REGULAR MOVEMENTS. WHEN THE YOGURT IS READY, THE ASH IS ADDED, PROVIDING DISINFECTANT PROPERTIES, A DISTINCTIVE AROMA AND A CHARACTERISTIC BRIGHT GRAYISH COLOR.

In West Pokot, communities in the villages of Tarsoi, Tartur, Liton, and Chaunet traditionally produced an unusual food product: a yogurt made using milk from cows (crosses between local breeds and zebu) or goats, mixed with the ash of *Ozoroa insignis*, a tree locally known as *cromwo*. This

native tree, from the family Anacardiaceae, is known for its antiseptic properties and faint scent of peanut butter.

This dairy product is obtained through the acidification of raw milk. No starters are used and fermentation develops after a few days, either from the natural flora or from the bacteria growing on the sides of the vessel in which is made.

The raw milk from cows and goats is not mixed, but processed separately to make two different types of yogurt. The animals graze in open pastures and are milked by hand twice a day.



## PRODUCT HISTORY

Known in the local dialect as *mala ya kienyeji* or *kamabele kambou*, ash yogurt used to be extremely important in the diet of the Pokot community, and was one of the staple foods for herdsmen looking for pasture.

The cow's milk yogurt is for men, while the goat's milk yogurt, a product with an intense flavor recognized for its nutritional value, is for women and children. Ash yogurt is still prepared today by fermenting the milk inside dried hollow gourds, then adding the ash to give it an aromatic note, and is often eaten together with millet porridge.

Among pastoralist communities of West Pokot, herbs have played an important role in preserving meat and milk. To prepare *cromwo* ash, the stems of *Ozoroa insignis* are peeled and dried. One end of a stick is burnt and the charcoals formed are dusted on the inner wall of the gourd. The excess powder is removed and then milk is introduced. According to local people, ash yogurt may be preserved for up to a year.



## CURRENT STATUS

As livestock farming is now less widespread and milk is less available, there has been a significant reduction in the production of this yogurt. In addition the community has lost pride in their traditional food culture. Today ash yogurt is only produced by a few families for their own consumption. Surplus, which is rare, is sold at local markets.

# N. 59 SUKARI NGUURU (JAGGERY)



## CATEGORY



SPICES AND CONDIMENTS

## PRODUCTION AREA

HOMA BAY COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU;  
LUHYA

## INGREDIENTS

SUGARCANE

## PREPARATION METHOD

TO PREPARE *SUKARI NGUURU*, SUGARCANE IS COLLECTED AND TRANSPORTED TO A SPECIAL BUILDING TO BE PROCESSED. FIRST, CANE JUICE IS EXTRACTED BY PASSING THE CANES THROUGH METAL ROLLERS OPERATED MANUALLY OR BY MOTOR. THE JUICE IS FILTERED THROUGH SHEETS, POURED INTO ALUMINUM POTS, AND BOILED OVER A WOOD FIRE TO OBTAIN A DARK, VISCOUS LIQUID. THIS LIQUID IS POURED INTO CONICAL METAL MOLDS AND COOLED UNTIL IT SOLIDIFIES.

**S**ukari nguuru is a raw sugar obtained from the milling and boiling of sugarcane juice. Known in different parts of the world with several names (including jaggery, *panela*, or *raspadura*), the origin of this product is linked to the colonial era and, more specifically, the introduction of large-scale sugarcane cultivation in Africa and South America. In Kenya, su-

kari nguuru is produced in various regions, especially in the western part of the country, an area with the ideal conditions for growing sugarcane. In particular, Homa Bay County is one of the most important regions for the production of sugarcane and its derivatives.



## PRODUCT HISTORY

The production of sukari nguuru is mostly a small-scale activity, often carried out at the domestic level. Sugarcane farmers are the ones who deal with the preparation of this product. In this way, they can add value to the raw material and generate a source of supplementary income for their family. Men are primarily responsible for production, while women are involved in selling sukari nguuru in local markets. In some cases, the product is also marketed outside the production area in the major urban centers of Western Kenya.

Sukari nguuru is a fundamental element of the diet of various rural Kenyan ethnic groups: The Gikuyu use it to prepare *muratina* (a fermented beverage), while among the Luhya it is used as a sweetener for porridge and hot drinks. Small pieces of sukari nguuru are a typical dessert given to children in rural areas. This product, in addition to being cheaper than refined sugar, has superior nutritional qualities: It is rich in minerals, including iron, calcium, phosphorus, magnesium, and potassium.



## CURRENT STATUS

In recent years there has been a decline in the consumption of sukari nguuru, as this traditional product has been replaced by refined sugar. This change is due to shifting consumption habits, especially in urban areas, and to national policies that favor large sugar-producing companies at the expense of small producers of sukari nguuru. In some areas, craft production has been banned as it is linked to the illegal production of alcoholic beverages.

# N. 60 UCURU WA MUKIO



## CATEGORY



DISTILLED AND  
FERMENTED BEVERAGES

## PRODUCTION AREA

NYERI, KIRINYAGA, MURANG'A, AND  
KIAMBU COUNTIES (CENTRAL KENYA);  
EMBU COUNTY (EASTERN KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

DRIED MAIZE  
WATER

## PREPARATION METHOD

MAIZE, PREVIOUSLY SOAKED IN WATER, IS GROUND WITH A LARGE MORTAR AND PESTLE (CALLED *NDIRI NA MUTI*) UNTIL A SOFT FLOUR (CALLED *KIMERE*) IS OBTAINED. THIS FLOUR IS MIXED WITH WATER TO CREATE A PORRIDGE MIXTURE. ANY MAIZE HULLS OR UNGROUND KERNELS ARE REMOVED AT THIS POINT, AND THE MIXTURE IS PLACED IN A CLAY POT (*NYUNGU*) TO COOK OVER A FIRE. AFTER BOILING, THE COOKED PORRIDGE IS STORED IN A GOURD (*KINYA*), WHICH IS SEALED WITH A DRY EAR OF CORN (*MUCHAKWE*). THE MIXTURE IS ALLOWED TO FERMENT FOR 7 DAYS.

**U**curu wa mukio is a traditional fermented porridge in the Gikuyu community. It is prepared in Nyeri, Embu, Kirinyaga, Murang'a, and Kiambu counties, the homeland of the Gikuyu.

It is made from dried maize that is soaked in water for 24 hours to soften. Ucuru wa mukio is usually served cold, typically in a dish made of half of a calabash gourd (*kiihuri*). The porridge has a smooth consistency and sweet-and-sour taste.



## PRODUCT HISTORY

Traditionally, *ucuru wa mukio* was prepared mostly by women and consumed together by everyone. Most people carried a gourd of the cold *ucuru* as a thirst quencher while travelling and also while working in the fields. It was not given to babies.

*Ucuru wa mukio* was traditionally prepared for ceremonies, including childbirth, bridewealth payments, circumcisions, and harvest time. During circumcision, an important rite of passage, the boy stayed in seclusion for a certain period, after which an adult man led him to his mother's house, where he was served fermented porridge as a sign of welcome.

The importance of this dish for the Gikuyu community is also shown in many traditional sayings that are associated with *ucuru*. For example, the local proverb *nyoroku ta ucuru wa mukio* means, "smooth like the traditional porridge."

*Ucuru wa mukio* is made in homes for family and community consumption, not sold commercially. Each woman has her own recipe for this dish that she learnt from her mother.

## CURRENT STATUS

Today, the introduction of machines for grinding flour has changed the traditional method of grinding flour for porridge. Porridge flour has been commercialized and is now made from various grains besides maize, such as millet and sorghum, and even from tubers, such as cassava and sweet potatoes. These new types of flour have resulted in the decline of the traditional porridge, which is strongly linked to the local community. The new flours lack the unique taste and smooth consistency of *ucuru wa mukio*.

## N. 61 USORO



## CATEGORY



DISTILLED AND  
FERMENTED BEVERAGES

## PRODUCTION AREA

COAST

## INDIGENOUS COMMUNITY

GIRIAMA  
(MJIKENDA)

## INGREDIENTS

GREEN CORN  
WATER

## PREPARATION METHOD

TO MAKE THIS PRODUCT, GREEN CORN IS COLLECTED, PUT IN A *KINU* (MORTAR), AND MASHED USING A *MCHI* (PESTLE). THE RESULTING PASTE IS MIXED WITH WATER AND STIRRED AND THEN THE DREGS ARE SEPARATED. THE RESULTING LIQUID IS FERMENTED FOR FEW DAYS AND THEN COOKED IN A *SUFURIA* (A METAL POT) UNTIL IT IS READY, AT WHICH POINT IT IS PUT INTO AN EARTHEN POT TO COOL DOWN. AFTER COOLING, IT IS CONSIDERED READY FOR CONSUMPTION.

**U**soro, as the Giriama people from Kenya's former Coast Province call it, is a local food known to have been consumed by the forefathers of this community.

It is a fermented drink made from the green kernels of a local variety of maize. The product is white like coconut milk and has a bitter taste.



## PRODUCT HISTORY

The Giriama are a Bantu-speaking people living in the coastal areas of Kenya. They are a subgroup of the Mijikenda, whose name literally means "nine homes" or "nine homesteads" in Swahili. The coastal strip contains fertile farming land. The Giriama are experienced farmers that rely on maize, millet, rice, coconut palms, and peas as staples.

Usoro used to be consumed during long journeys. The ancestors of the Giriama community used to prepare usoro and put it in a gourd to be brought along and consumed during their journeys. Usoro was also prepared and consumed during pre-wedding ceremonies and during harvesting.



## CURRENT STATUS

Usoro is only made for personal or community use, and not sold commercially. Today many young people do not know what usoro is or how to prepare it due to the influx of readily available foods and products that have been introduced from other areas. If the tradition of making this product is not passed on to the next generation, it could be lost from Giriama culture.

## N. 62 WENYE



## CATEGORY



CURED MEAT  
AND MEAT PRODUCTS

## PRODUCTION AREA

NYERI, MURANG'A,  
AND KIAMBU COUNTIES  
(CENTRAL KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## INGREDIENTS

INTESTINES AND STOMACH (GOAT)  
FRESH BLOOD (GOAT)  
SALT  
SPRING ONIONS  
RED PEPPERS

## PREPARATION METHOD

TO PREPARE *WENYE*, SALT IS ADDED TO FRESH BLOOD TO PREVENT COAGULATION. MEAT IS CUT INTO SMALL PIECES AND COOKED WITH SPRING ONIONS FOR 10-15 MINUTES. THEN PEPPERS ARE ADDED TO THE MEAT MIXTURE, WHICH IS COOKED FOR ANOTHER 10-15 MINUTES. THE MIXTURE IS THEN REMOVED FROM THE FIRE, COVERED, AND LEFT TO REST FOR ANOTHER 5-10 MINUTES. *WENYE* IS OFTEN SERVED WITH *UGALI* OR POTATOES.

**W**enye is a Kenyan food made using goat intestines and stomach lining (called *mahu*). Ingredients include offal, fresh blood, salt, spring onions, and red peppers.

Wenye is a traditional preparation among the Gikuyu community. All the meat from the back and the neck plus vegetables such as cilantro, spring onions, garlic, carrots, bitter herbs, and green and red peppers are used to prepare the dish.



## PRODUCT HISTORY

During bridewealth payment ceremonies wenye is used to make a traditional sausage that is eaten only by the married couple. It is also eaten by elders as a sign of respect and is consumed on other occasions, such as wedding ceremonies and initiation ceremonies.

In Gikuyu communities, whenever a goat is slaughtered, several traditions are followed during its preparation and consumption. Wenye is prepared when a goat is slaughtered at home or in the village, and traditionally it is prepared by young men and consumed mainly by men. The men normally cook the meat and intestines together with vegetables, bitter herbs, and spices. They then add the salted blood and the excess fat. This fatty mixture is left to fry in its own fat on a low heat, and is used to stuff *mutura* and other traditional sausages. Since wenye can be prepared quickly, it is often part of the first or second meal to be consumed after slaughtering a goat, as people use the rest of the animal in other preparations. Today, wenye is still prepared by some households in the Gikuyu community.



## CURRENT STATUS

The production of wenye is in decline for a number of reasons. Some interpretations of Christianity discourage the consumption of blood, so many Christians in the area avoid eating and preparing wenye. As a result, many people in the younger generations, especially in urban areas, are unfamiliar with weyne.

# NOTES

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# CHAPTER 5

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## **STAPLES**

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# N. 63 BULRUSH MILLET (UWELE, MAWELE, MWELE, MIWELE)

*Pennisetum glaucum* (L.) R.Br.



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

MAKUENI, KITUI, AND MACHAKOS  
COUNTIES, UKAMBANI  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## SEASONALITY

### SOW



FROM MID-MAY TO EARLY JUNE

### HARVEST



BETWEEN LATE SEPTEMBER  
AND EARLY DECEMBER

## SENSORY ANALYSIS

### VISUAL

THE SEEDS RANGE IN COLOR FROM  
WHITE TO BROWN, BLUE, OR ALMOST  
PURPLE. MOST ARE SLATE GRAY.  
THEY ARE GENERALLY SMALLER THAN  
THOSE OF WHEAT. THE AVERAGE  
WEIGHT OF A GRAIN IS ABOUT 8  
MILLIGRAMS.

### TASTE

SLIGHTLY BITTER

### CONSISTENCY

SMOOTH AND CREAMY

## EDIBLE PARTS AND COOKING TECHNIQUES

### GRAINS

BOILED, ROASTED

### PRESERVING

DRYING, FLOUR

**B**ulrush millet is an erect annual grass, usually between 50 centimeters and 4 meters tall. It is cultivated in areas below 1,500 meters above sea level, requires 400 to 800 millimeters of annual rainfall, ranging from and does well in sandy and clay soils. It is well adapted to arid and semi-arid areas and it used to be widely grown in Ukambani, the homeland of the Akamba people. In this region, bulrush millet is used for making *kinaa*, a paste made with milk.



Traditionally the heads of the plants are cut, spread out to dry, threshed, and winnowed. The grain may be stored almost indefinitely when kept in the right conditions. Before using it, the millet grain is pounded to remove the husks. Among the Akamba, millet is stored in large containers made from twigs and grass stalks. The container is smeared all over with cow dung to keep insects away. When stored in this way, millet can last for more than 10 years.



## CULINARY USES

Bulrush millet is particularly known in Kenya for its use in preparing kinaa. To make this product, dry bulrush millet is roasted and ground into a smooth flour, which is then mixed with milk and eaten as needed. It is nutritious and it is easy to pack the flour and milk separately for preparation on the road. The paste is also often used to wean young children.

Among the Akamba people, millet flour is also used to prepare *isandi*. To make it, the flour is put in a gourd with milk and left to ferment. In recent times the grain has been used to make chapati.



## PRODUCT HISTORY

Bulrush millet is easy to grow and is drought resistant. It suffers less from diseases and pests than sorghum, maize, and other grains. The grain contains at least 9% protein and a good balance of amino acids. It is rich in fiber and vitamin B1. It has more oil than maize and is a "high-energy" cereal. It does not have the tannins and other compounds that reduce the digestibility of sorghum.

Bulrush millet is strongly tied to the heritage of the Akamba, who traditionally used millet flour during long-distance trading to prepare kinaa, *isandi*, and a special bread called *kimutu*. This bread could be carried for several days without spoiling. In addition, millet was used in many occasions such as marriage ceremonies, death rites, and the payment of bridewealth.

In Ukambani, bulrush millet is mainly grown for subsistence and it is sold locally.



## CURRENT STATUS

The high labor requirements associated with cultivating bulrush millet mean that this crop is now considered endangered in the area, and those who wish to continue making traditional kinaa must do so with expensive imported millet. One women's group that cares for orphans and vulnerable children maintains a plot of bulrush millet in the area of Syiembeni.

# N. 64 GITHIGO MAIZE

*Zea mays* L.



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## SEASONALITY

### SOW



LONG RAINY SEASON (USUALLY LATE MARCH OR EARLY APRIL)

### HARVEST



4-5 MONTHS AFTER SOWING

## SENSORY ANALYSIS

### VISUAL

THE PLANT HAS A TALLER STALK THAN COMMON MAIZE, AND WHITE, RED, AND PURPLE KERNELS THAT ARE LARGER THAN THOSE OF THE COMMON VARIETIES.

### TASTE

SWEET FLAVOR THAT EMERGES WHEN THE SEED IS CHEWED.

### CONSISTENCY

THE DRIED KERNELS HAVE A STARCHY TEXTURE.

## EDIBLE PARTS AND COOKING TECHNIQUES

### GRAINS

BOILED

**G***ithigo* is a traditional variety of maize cultivated by the Gikuyu community in Central Kenya.

This variety is resistant to pests and diseases and well adapted to local environmental conditions. The height of the stalk made it the most resistant variety against nematode infestation. In addition, it has good yields.

In Central Kenya maize is harvested in the dry season to avoid incidents of grain rotting in the field. On small farms the maize is left to dry on the stalks. The cobs are then removed from their husks by hand and then stored. Maize is

periodically dried in the sun until the grains are completely dry. For conservation purposes, the maize cobs are preserved in granaries or hung in the kitchen where the maize comes in contact with smoke which protects it from pests.



## CULINARY USES

The large size of the kernels makes this maize ideal for preparing of *githeri*, a simple and nutritious dish made from boiled maize. To prepare the dish, maize and beans are put in a pot full of water and left to boil until soft. Many different kinds of beans can be used in this dish, which is an ideal source of protein (something often lacking in the poor diets of many Kenyans). The dish can be flavored further by adding vegetables, potatoes, or even meat. If all of these ingredients are then mashed and mixed correctly, the result is *mukimo*. *Ugali*, or porridge, is prepared from stone-ground maize flour.



## PRODUCT HISTORY

Maize was introduced to Kenya in the 19th century and has become the main staple crop among Gikuyu people. Githigo maize is believed to have been brought by missionaries before World War I.

This variety of maize is the main ingredient in traditional dishes eaten during important ceremonies like initiations, pre-weddings, weddings, celebrations of the birth of a child, and even engagements. Mukimo, the traditional meal for the Gikuyu community, was not considered a special meal unless it included githigo maize.

Githigo maize matures faster than other maize varieties, making it an important food security crop. This traditional maize variety requires no artificial fertilizers, just compost and farmyard manure.

Women usually grow maize for domestic consumption, while men are often responsible for cultivating it as a commodity.



## CURRENT STATUS

Due to the growing promotion of hybrid seeds, and a lack of understanding about the consequences of biodiversity loss, this variety is at risk of extinction. In fact, it is incredibly difficult to find githigo maize either directly from farmers or on the market. The situation is further aggravated by government policies that privilege hybrids and GMOs. Some laws even criminalize the reproduction of githigo seeds by farmers.

# N. 65 GITOGO KIIRU (RED BANANA)

*Musa acuminata* Colla



## CATEGORY



FRUITS AND NUTS

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## SEASONALITY

### SOW



AT THE BEGINNING OF RAINY SEASON  
(LATE MARCH TO EARLY APRIL)

### HARVEST



THE PLANT TAKES 18 MONTH TO PRODUCE  
FRUIT, AND A FRUIT TAKES ROUGHLY 3  
MONTHS TO BE READY FOR HARVESTING.

## SENSORY ANALYSIS

### VISUAL

THE FRUITS ARE SHORTER AND PLUMPER THAN THE AVERAGE BANANA. THE SKIN IS DEEP RED OR MAROON WHEN RIPE AND THE FLESH IS CREAM TO LIGHT PINK. *Kiiru* MEANS "BLACK" AND REFERS TO THE FACT THAT THE BANANA'S COLOR IS NOT BRIGHT.

### TASTE

SWEET, SOME WITH A SLIGHT MANGO FLAVOR, OTHERS WITH AN EARTHY FLAVOR

### CONSISTENCY

SOFT

## EDIBLE PARTS AND COOKING TECHNIQUES

### FRUIT

RAW, BAKED, FRIED, ROASTED

The *gitogo kiiru* banana variety does well in fertile, well-drained loam soils in areas with 1,000-2,500 millimeters of annual rainfall (well distributed throughout the year) and temperatures between 20 and 30°C, at elevations between 600 and 1,800 meters above sea level.

Gitogo kiiru banana trees are propagated with suckers. Pieces of the corm with one or two eyes can also be used. A pit (1x1x1 meter) is prepared and then the topsoil is mixed with manure or compost. The sucker is planted in this mixture

at a depth of 30 centimeters. Dry matter is used to mulch the banana sucker to ensure moisture retention. Tools and equipment used include the *panga* (machete), *jembe* (hoe), spade, wheelbarrow, and watering can.

Gitogo bananas are harvested at varying stages of maturity depending on market requirements. For home consumption, the bunch is cut from the stem after the fingers begin to ripen. At this stage the fruits will ripen fully within 1-2 weeks.

◆

### CULINARY USES

Gitogo kiiru bananas are eaten in the same way as yellow bananas, by peeling the fruit before eating. They are frequently eaten whole, chopped, or added to fruit salads, but can also be baked, fried, and roasted. The bananas can be mashed together with lablab beans and served during important occasions. Gitogo kiiru bananas are sometimes sold dried.

Among the Gikuyu people, gitogo kiiru bananas are the main ingredient in traditional dishes such as *mukimo*, *itaha*, and salads that are served during important occasions such as wedding ceremonies, bridewealth payment ceremonies, and initiations.

◆

### PRODUCT HISTORY

The gitogo kiiru banana is appreciated in the Gikuyu community due to its high nutrient content. The ripe bananas are given to nursing mothers to restore their strength. Bunches of these bananas are used in bridewealth payments. Bananas planted on the way up to and at entrance of the house are a sign of respect and welcome for visitors during weddings and other social functions. Often, important visitors are given a bunch of gitogo kiiru bananas as a sign of respect.

This variety is cultivated mainly for home consumption. Excess bananas are sold informally to generate some income but, due to its decline, this variety is no longer found in markets.

◆

### CURRENT STATUS

The gitogo kiiru banana is at a risk of extinction because, due to cultural erosion, the knowledge associated with its cultivation is no longer being passed on to the younger generations. The introduction of tissue culture has forced people to adopt hybrid varieties that mature faster than traditional varieties.

# N. 66 KIBWEZI AND NZAUI FINGER MILLET (WIMBI)

*Eleusine coracana* (L.) Gaertn.



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

KIBWEZI AND NZAUI DISTRICTS,  
MAKUENI COUNTY  
(EASTERN KENYA)

## SEASONALITY

### SOW



AT THE START OF THE  
RAINY SEASON

### HARVEST



AROUND 6 MONTHS AFTER  
BEING PLANTED

## SENSORY ANALYSIS

### VISUAL

THE GRAIN IS SMALL AND OVAL  
SHAPED AND THE COLOR RANGES  
FROM LIGHT BROWN TO BROWN.

### TASTE

SOUR

### CONSISTENCY

WHEN PORRIDGE IS  
PREPARED FROM GROUND  
MILLET IT BECOMES THICK  
AND ACQUIRES A CREAMY  
CONSISTENCY.

## EDIBLE PARTS AND COOKING TECHNIQUES

### GRAINS

BEVERAGES, BOILED,  
STEWED

### PRESERVING

DRYING

**F**inger millet is an annual grass that grows in tufts and has erect, light-green stems. The leaves are dark green, linear, and mainly smooth with some hair along the edges, and the inflorescence is a cluster of 3–26 “fingers” composed of dense spikelets where the grain, or seed, is produced. It is mainly grown in Eastern Kenya. It does well in areas with moderate rainfall (500–1,000 millimeters annually) at 500–2,400 meters above sea level with an average temperature of about 27°C. It can adapt to a wide range

of soils. It is sown directly by broadcasting or planted in furrows. Harvesting is done when the heads turn brown, at which point they are cut, dried threshed and winnowed.

## CULINARY USES

Finger millet is an ingredient used in many typical Kenyan dishes. It is eaten as porridge (*uji*) or used to make *ugali*. Ugali made from millet is served during wedding ceremonies. Finger millet is considered one of the best grains to use in making porridge cooked with milk for weaning children in the area of Ukambani. *Wimbi* flour porridge is also served to nursing mothers and mothers who have just given birth, to restore their strength. Local brews are made from millet flour.

## PRODUCT HISTORY

Finger millet is considered an important product for food security. It is an excellent diet source of methionine (an essential amino acid) and is productive in a wide range of environments.

It is an important source of income for women, who process it into various dishes and beverages. In addition, the dry stems are used to make traditional bowls, which have cultural value, as they are presented to visitors when they come to the homesteads. In addition, finger millet was served after the payment of bridewealth and during wedding festivals and circumcision rituals.

In the Kibwezi and Nzau districts the grain is harvested each season by small-scale farmers and is mostly destined for personal consumption. There is increased demand for this variety and its products on the market and it is currently selling better than other varieties. There is also a high demand for brewing purposes.

## CURRENT STATUS

In spite of the preference for finger millet grain in Kenya, the production of this crop and the area devoted to its cultivation have been declining. While Kenyans appreciate products made with *wimbi*, low production levels mean that many must do without this ingredient or purchase grain imported from other African nations at high prices. Moreover, finger millet has greater labor requirement than other crops. Most of the labor input is required for weeding and land preparation. The high labor requirement increases the production cost of finger millet compared to other crops such as maize.

# N. 67 KINYAANYA MAIZE

*Zea mays L.*



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

KATHIANI, MWALA,  
AND KATHONZWENI,  
MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## SEASONALITY

### SOW



APRIL, DURING THE ONSET  
OF THE RAINS

### HARVEST



DURING THE DRY SEASONS, SINCE  
RAIN CAUSES ROTTING IN THE FIELD

## SENSORY ANALYSIS

### VISUAL

LARGE, FLAT, WHITE KERNELS OF  
UNIFORM SIZE

### TASTE

SWEET

### CONSISTENCY

STARCHY AND HEFTY

## EDIBLE PARTS AND COOKING TECHNIQUES

### FRESH AND DRY KERNELS

BOILED

**K**inyaanya is a variety of maize grown in Kathiiani, Mwala, and Kathonzweni, Eastern Kenya, to the east and southeast of Nairobi. It is a fast-maturing, delicious, sweet variety.

Kinyaanya maize flourishes in temperatures of about 15°C and needs between 1,200 and 2,500 millimeters of annual rainfall. It requires well-drained loam soils.

This variety has long been a staple food for the local Akamba community, whose people come together to harvest the crop. Younger generations harvest together, while adults form another group: This promotes socializing and relationships.



## CULINARY USES

Kinyaanya maize is used in many local preparations. *Muthokoi* is a dish prepared by boiling crushed maize with beans. It is served with butter. Those who work long hours often consume it for lunch. Another dish is *githeri*, a traditional Kenyan stew consisting of beans, maize, meat, and vegetables.

Crushed kinyaanya is also used to make porridge and *ugali*, two breakfast dishes. Kinyaanya maize and related dishes are not found for commercial sale but used for home consumption.

## PRODUCT HISTORY

In the past, during the harvest, special songs and dances were performed. The harvest would also bring people together to discuss community issues. The kinyaanya harvest season was very important to the Akamba people for the feeling of unity that it brought. Community members would visit the sick and the disadvantaged and give them words of encouragement. During the special harvesting event called *methyla*, people would cook and eat together while selecting seeds for the next season.

Originally, seeds were exchanged, not bought or sold. Today, new varieties are sold by large commercial organizations to farmers in the surrounding areas. Kinyaanya maize seeds can only be found among older farmers who have kept the crop and had the seeds passed down by previous generations.

Currently kinyaanya maize is cultivated in the community gardens of Mwala and Kathonzweni. Gardeners are faced with the challenge of continuing to grow kinyaanya seeds in the face of the introduction of hybrid seeds. They have decided to save two indigenous varieties of maize, kinyaanya and *kinyalili*. The indigenous maize is used to make ugali, githeri, and muthokoi, which are staples for the surrounding communities. The community's main activity is producing seeds, though the women also look after beehives. The group has also started table banking (members save together and borrow when the need arises) to increase their income.

## CURRENT STATUS

Unfortunately, this variety is at risk of being lost due to its use in the development of hybridized and genetically modified corn varieties, thanks to its desirable characteristics like resistance to disease, pests, and weeds. These new varieties are sold by large commercial organizations to farmers in the area.

# N. 68 KINYALILI MAIZE

*Zea mays* L.



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

MWALA AND KATHONZWENI,  
MAKUENI COUNTY  
(EASTERN KENYA)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA

## SEASONALITY

### SOW



APRIL, DURING THE ONSET  
OF THE RAINS

### HARVEST



4-5 MONTHS AFTER SOWING

## SENSORY ANALYSIS

### VISUAL

THE PLANT IS SHORT, GROWING TO A HEIGHT OF ABOUT 1.5 METERS. THE MAIN DISTINGUISHING FACTOR IS THAT THE COB HAS A VERY BROAD BASE AND A NARROW TIP WITH A VARYING NUMBER OF ROWS. THE KERNELS ARE LARGE AND FLAT BUT THIS CAN VARY BASED ON THEIR LOCATION ON THE COB. THEY ARE USUALLY WHITE.

### TASTE

SWEET

### CONSISTENCY

STARCHY AND HEFTY

## EDIBLE PARTS AND COOKING TECHNIQUES

### GREEN AND DRY GRAINS

BOILED

**K**inyalili is a local variety of maize cultivated in the southeastern part of Kenya, especially in Makueni County. Kinyalili maize does well in temperatures above 5°C, in areas with 500-1,000 millimeters of rain annually. It requires well-drained, fertile loam soil. Harvesting is usually done during the dry season to avoid the incidence of maize rotting in the field. The maize stalks are cut and piled in several places in the field in straight heaps to allow the grain to dry. The cobs are then removed from their husks. Traditional tools such as *panga* (machete) and *jembe* (hoe) are used for cultivation.

After removing the kernels from the cobs, the grain is dried in the sun. Then it is winnowed and packed in sacks. The maize cobs can also be stored without removing the kernels. This maize is also hung in the kitchen so that it comes into contact with smoke, which preserves the maize and deters pests.

### CULINARY USES

This maize variety is mainly used to make two special dishes called *muthokoi* and *ngima*. Preparing these dishes for in-laws signified that you were ready to take good care of their daughter. Muthokoi is an Akamba dish prepared from maize whose pericarp has been removed using a mortar and pestle. The lean maize grains are then mixed with legumes and cooked in a pot. Ngima is popularly known as *ugali* in Swahili. To prepare it, maize flour is boiled with water. The mixture is stirred until a thick paste is obtained. It is the staple food of many groups in Kenya. Ngima is also the name of a traditional ceremony celebrated when a child is born. The parents slaughter a goat or bull on the third day after the birth. Many people come to feast and celebrate with the family, and women who have borne children get together to give a name to the child.

### PRODUCT HISTORY

The Akamba believe that every serious farmer must have some seeds and that failure to store them invites hunger upon the family. Including this variety of maize in the bridewealth was appreciated by the man's in-laws because it was considered a sign of responsibility that could ensure that the family would have enough food at all times.

According to Akamba tradition, women are supposed to plant maize. This is believed to increase the percentage of germination due to the attention given by women especially in ensuring that the seeds are placed at the right depth. Weeding is carried out by both men and women, using oxen and hoes, respectively. Women are in charge of harvesting and selecting seeds for the following season. The selected ears are hung from the kitchen ceiling as way of saving them, ensuring that they are free from moisture and protected against pests.

### CURRENT STATUS

Kinyalili is at a risk of extinction as a result of the introduction of hybrid seeds, which are more readily available than this variety. Also a kilogram of kinyalili sells for double the price of other varieties. Efforts are underway to start multiplying the seeds and share them among the community through the Gardens in Africa project.

# N. 69 KITWA (MUHOGO, KABANDA MENO)

*Manihot esculenta* Crantz



## CATEGORY



ROOTS AND TUBERS

## PRODUCTION AREA

NZIU DISTRICT, MAKUENI COUNTY  
(EASTERN KENYA); KILIFI DISTRICT,  
KILIFI COUNTY (COAST)

## INDIGENOUS COMMUNITY

AKAMBA / KAMBA;  
GIRIAMA  
(MIJIKENDA)

## SEASONALITY

### SOW



OCTOBER - DECEMBER

### HARVEST



STARTING IN SEPTEMBER

## SENSORY ANALYSIS

### VISUAL

THE TUBERS OF KITWA HAS TIGHT, BROWNISH SKIN. THE INTERIOR IS LIGHT IN COLOR AND HAS A STARCHY CONSISTENCY.

### TASTE

SWEETER THAN OTHER VARIETIES. IT IS LESS SWEET AND TAKES ON A SOUR FLAVOR WHEN GROWN IN MORE FERTILE SOILS.

### CONSISTENCY

LEATHERY

## EDIBLE PARTS AND COOKING TECHNIQUES

### ROOTS, LEAVES

BOILED, ROASTED,  
BAKED

### PRESERVING

DRYING, FLOUR

**K**itwa is a cassava variety with a brownish skin that is also known as *muhogo* in Kiswahili or *kabanda meno* (a name that means that the raw tuber is hard on the teeth) among the Giriama community.

It grows in the poor, sandy soils of the Nziu District of Makueni County in central southern Kenya, as well as in the Kilifi district of southeastern Kenya. The tubers have a tight skin that must be peeled of slowly and with care. Unlike many other cassava varieties, kitwa is susceptible to powdery mildew, which reduce yields. Kitwa is, however, a drought-resistant crop. Kitwa is prop-

agated exclusively from stem cuttings and is usually planted during the rainy season. It takes 8 to 10 months to be ready for harvesting. It is dug from the soil with help of a jembe fork. After harvesting, the stems are stored in a dry place until the next planting.



## CULINARY USES

The roots are the most-consumed part of the plant but the leaves are also edible. The fresh cassava is used to make *kachiri*, or crisps, which are preferred to the potato crisps sold in supermarkets. These are eaten especially around Christmas time. In other areas, the cassava is cooked and mashed together with maize and pigeon peas to make a meal favored by children and the elderly. Dried kitwa can be ground into flour and used in baking bread, cakes, biscuits, *chapati*, and *ugali*. The flour can also be used to starch clothing.

In the Akamba communities cassava roots are used in the preparation of *nzukimwa*: Roots are peeled, sliced into small pieces and mixed with green maize and cooked beans. The mixture is fried in oil with onions. Water is added and the mixture is left to boil.



## PRODUCT HISTORY

Cassava is one of the main staple foods in the Akamba community of Nziu district. This crop plays an important role in local food security: Planting and harvesting time is flexible and the roots can be harvested when really needed; kitwa and other traditional varieties are tolerant of poor, dry soils; the plants can be multiplied by vegetative propagation without the need for seeds, allowing farmers to continue growing the crop without financial input; and kitwa is resistant to drought and thus able to feed the community even in times of famine.

Kitwa was a main food source during long-distance walks (food for the journey) because once eaten it prevented hunger from returning quickly. The product was present during the naming of children after birth. Kitwa is mostly grown for home consumption, but some producers sell the tubers and cassava crisps on the market.






## CURRENT STATUS

Because of its lack of resistance to powdery mildew, only a few farmers still specialize in planting this variety. Many of these growers are older and unless the seeds and knowledge of crop management are passed to younger generations, it may soon be lost. Kitwa has been associated with poverty for a long time, which is the main reason why production has been declining.

# N. 70 LISOTSI BANANA

*Musa sp.*



<p><b>CATEGORY</b></p>  <p>FRUITS AND NUTS</p>	<p><b>PRODUCTION AREA</b></p> <p>VIHIGA COUNTY (WESTERN KENYA)</p>	<p><b>INDIGENOUS COMMUNITY</b></p> <p>ABANYOLE (LUHYA)</p>
<b>SEASONALITY</b>		
<p><b>SOW</b></p>  <p>THE SUCKERS ARE SPLIT FROM MOTHER PLANT AND PLANTED DURING THE RAINY SEASON (FROM MID-MARCH TO EARLY APRIL).</p>	<p><b>HARVEST</b></p>  <p>A PLANT TAKES ROUGHLY 8 TO 12 MONTHS TO MATURE. FRUITS ARE HARVESTED 90-150 DAYS AFTER THE FINGERS START TO FORM.</p>	
<b>SENSORY ANALYSIS</b>		<b>EDIBLE PARTS AND COOKING TECHNIQUES</b>
<p><b>VISUAL</b></p> <p>THE SKIN OF THE FRUIT VARIES FROM GREEN TO YELLOW DEPENDING ON MATURITY.</p>	<p><b>TASTE</b></p> <p>SWEET WHEN RIPE</p> <p><b>CONSISTENCY</b></p> <p>GLUE-LIKE TEXTURE WHEN UNRIPE</p>	<p><b>RIPE FRUIT</b></p> <p>BOILED, ROASTED</p>

**L**isotsi is a hardy banana variety that withstands droughts and diseases. For optimal growth, lisotsi requires a warm, humid climate with an average temperature of 20-30°C and 1,000 to 2,500 millimeters of annual rainfall.

Lisotsi bananas are cultivated by the Abanyole people of Vihiga County in Western Kenya. The Abanyole are one of the sub-tribes that make up the larger Luhya community, whose ancestors are believed to have migrated from Egypt, following the Nile River up to Khartoum before entering what is now Uganda and Kenya.

In Vihiga County bananas are harvested all year round. For home consumption, a bunch is cut from the stem after the fingers begin to turn light green. Bananas harvested at this stage will ripen within 1-2 weeks. Tools used include hoes, the *panga* (machete), *jembe* (hoe), spade, wheelbarrow, and watering



### CULINARY USES

Lisotsi bananas are eaten boiled or roasted. This banana is the principal ingredient of *ebitata*, a traditional bread made from ripe lisotsi bananas mixed with cereal flour, which is then kneaded into dough, cut into balls, wrapped in banana leaves, and steamed. It is served with tea or porridge. It is an important and popular product for Abanyole people during formal ceremonies such as weddings.



### PRODUCT HISTORY

Eating ripe lisotsi bananas does not cause an upset stomach. Lisotsi used to be eaten by everyone, especially during drought periods (due to its hardness).

In the Abanyole community, banana fruits and leaves are related to the birth of a new child. When a woman gave birth to a boy, a spear was put outside the house to the right, and if the child was a girl a pot supporter made from banana leaves was put to the left side of the house. When people came to visit the home they knew the sex of the child before entering the house. They would bring food, especially bananas.

In the past, if the clan doubt that the child was their blood relation, they performed a ritual to confirm whether the child belonged to them or not. One of the elders would cook unripe bananas. Once ready, he took a piece and mashed it to give to the baby. He would ask the baby to eat the mashed banana if they were indeed of the same blood. If the child ate the mashed banana, it was taken as a sign that she/he was a blood relation. If the child refused, however, she/he would die.



### CURRENT STATUS

This variety is disappearing due to the introduction of new banana varieties. Today, the lisotsi banana is not widely grown because many farmers have concentrated on producing the Cavendish variety for income. Commercialization of other varieties has made many farmers forget to conserve this special variety.

# N. 71 MARUKU

*Dioscorea bulbifera* L.



## CATEGORY



VEGETABLES

## PRODUCTION AREA

EMUHAYA DISTRICT,  
VIHIGA COUNTY  
(WESTERN KENYA)

## INDIGENOUS COMMUNITY

ABANYOLE  
(LUHYA)

## SEASONALITY

### SOW



MARCH-SEPTEMBER  
(MAINLY IN AUGUST AND SEPTEMBER)

### HARVEST



TUBERS APPEAR AFTER 3.5 MONTHS AND,  
AFTER 6.5 MONTHS, HARVESTING BEGINS  
AND CONTINUES UNTIL THE 11TH MONTH.

## SENSORY ANALYSIS

### VISUAL

FRUITS ARE CAPSULES 2.5  
CENTIMETERS LONG. THE YAMS  
HAVE A BUTTERFLY SHAPE AND  
ARE YELLOW INSIDE. THE OUTER  
SKIN IS GRAY WITH A THIN GREEN  
LAYER UNDERNEATH.

### TASTE

CLOSE TO THE TASTE OF  
WHITE POTATOES WHEN  
COOKED

### CONSISTENCY

FIBROUS

## EDIBLE PARTS AND COOKING TECHNIQUES

### BULBILS

BOILED, ROASTED

**M**aruku is a variety of *Dioscorea bulbifera*, the air potato or aerial yam, that bears "tubers" (actually bulbils) along its stem, at the base of the leaves. It grows to a height of about 10 meters and produces yams only once a year. After the yams mature, the plant dies back and remains dormant in the ground until the next season, when it sprouts again. The tuberous root can last a year or more in the ground waiting for suitable environmental conditions to sprout.

Although some wild varieties of this plant can be poisonous, many varieties are cultivated for human consumption in Africa. The bulbils are the most-often



consumed part of the plant. When the bulbils are ready, they can be picked like fruit. Maruku is associated with the tropical forests of Western Kenya. It is cultivated in home gardens and in banana plantations. The plant can easily be intercropped with cereals and green leafy vegetables. The crop requires sufficient water to produce high yields. It is primarily men who grow maruku, and harvesting it requires strength and particular skills.



### CULINARY USES

Maruku is boiled with salt, peeled, and eaten with tea, usually as a snack. It can be also eaten after being roasted in the ashes of a fire and then peeled. Before cooking, the tubers are soaked in cold water for 2 days to dissolve toxic compounds. Maruku is mainly used when there is a shortage of other foods.



### PRODUCT HISTORY

In Vihiga County, maruku is considered a delicacy and appreciated especially by many elderly people who still grow it. Maruku has also played an important role in the social life of local people. The crop occupies a special place in different traditional ceremonies such as circumcision, bridewealth negotiations, weaning babies, and other social occasions.

The Abanyole (a sub-tribe of the Luyha people in Western Kenya) use maruku as a treatment for measles in children. It has been used in traditional medicine to treat diarrhea, dysentery, conjunctivitis, fatigue, and depression, among other ailments.

Maruku is still being grown by a few farmers in Emuhaya district and the surrounding areas within Vihiga County, but in small quantities. It is mainly cultivated for personal or family use, and maruku is only rarely found for sale commercially, when an abundant crop produces excess yams.



### CURRENT STATUS

The cultivation of this crop in Kenya has declined considerably in recent years. Maruku is disappearing in most gardens as farmers transition to monocultures of other crops. Continuous clearing of natural forests and a lack of knowledge transfer from the elderly to the younger generations have contributed to reducing biodiversity on farms and to the disappearance of crops such as maruku. Very few people still intercrop it within their banana plantations.

# N. 72 MUIBAÌ SWEET POTATO (NGWACÌ YA MUIBAÌ)

*Ipomoea batatas L.*



## CATEGORY



ROOTS AND TUBERS

## PRODUCTION AREA

KIAMBU, NYERI, NYANDARUA, AND MURANG'A  
COUNTIES (CENTRAL KENYA);  
EMBU COUNTY (EASTERN KENYA)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## SEASONALITY

### SOW



MARCH-APRIL, AUGUST-SEPTEMBER

### HARVEST



JULY AND DECEMBER

## SENSORY ANALYSIS

### VISUAL

THE TUBERS ARE LONG AND STRAIGHT. THE SKIN IS LIGHT BROWN AND THE FLESH IS CREAMY WHITE WITH A CRUMBLY TEXTURE.

### TASTE

LESS SWEET THAN COMMON SWEET POTATOES

### CONSISTENCY

FRIABLE

## EDIBLE PARTS AND COOKING TECHNIQUES

### TUBERS, LEAVES

BOILED, ROASTED

**M**uibai is a sweet potato variety that was cultivated by the Gikuyu community during the precolonial and colonial periods (until the first half of the 20th century). It was grown in reserves designated for workers in colonial masters' farms, located in parts of modern-day Kiambu, Nyeri, Nyandarua, Murang'a, and Embu counties. It was normally cultivated during the long rainy season (*mbura ya njahi*), and the short rainy season (*mbura mwere*). Sweet potatoes were intercropped with yams. Women were in charge of planting and harvesting the tubers.

Sweet potatoes can be planted at any time as long as there is sufficient moisture in the soil. However, it is best to plant sweet potatoes early in the rainy

season. Usually, muibai sweet potatoes are ready to harvest when the leaves and ends of the vines start turning yellow. Harvesting is done by digging up the tubers using a hoe, known locally as *jembe*. Locally made baskets, *vyondo*, are used to collect and transport the harvested sweet potatoes.



## CULINARY USES

Traditionally, these sweet potatoes were boiled or roasted in hot ashes and serving in the morning with sugarless tea, or *dubia*.

Sweet potato leaves are also edible and are a good source of minerals and vitamins. Young leaves are used as a green vegetable. They are boiled and fried with onion and tomatoes. They can also be used to prepare sauces. While sweet potato tubers are commonly eaten all over Kenya, the use of the leaves in the kitchen is less common. The sweet potatoes are also boiled and mashed with wheat flour to make dough for *chapati*.



## PRODUCT HISTORY

Among the Gikuyu people muibai sweet potatoes were and still are one of the most important crops for the Gikuyu people. They are known as "breakfast food" and are usually boiled the night before, after cooking and eating dinner. Traditionally, in the morning, tea with milk was made and every member of the family would enjoy a good piece of muibai sweet potato with the tea.

Since they are drought resistant, many families still grow these sweet potatoes in their gardens. It is still good crop for food security since it has a number of different uses. The tubers are a source of food while the vines provide fodder for sheep and goats. The sweet potatoes were also used to barter for goats and were, therefore, an important means of accumulating wealth. *Ngwaci ya muibai* were mostly consumed during the traditional Gikuyu rite of passage of circumcision. It was believed that the tuber provided energy, strength, and quick healing to the young initiates.



## CURRENT STATUS

Ngwaci ya muibai is at risk of extinction because it is being replaced by higher-yielding hybrid varieties and because of lack of knowledge about this particular variety. The younger generations are much less interested in cultivating indigenous crops, and changes in the eating habits of the Gikuyu community mean that more people are consuming processed, modern foods as opposed to traditional foods. As such, this variety is at risk of being lost from the local gastronomy and food biodiversity.

# N. 73 MUTAHATO BANANA

*Musa sp.*



## CATEGORY



FRUITS AND NUTS

## PRODUCTION AREA

CENTRAL KENYA

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU

## SEASONALITY

### SOW



AT THE BEGINNING OF RAINY SEASON  
(BETWEEN LATE MARCH AND EARLY APRIL)

### HARVEST



THE PLANT TAKES AROUND 2 YEARS TO  
REACH MATURITY. THE FRUIT TAKES 3-4  
MONTHS TO BE READY FOR HARVESTING.

## SENSORY ANALYSIS

### VISUAL

THE SKIN VARIES FROM GREEN TO  
YELLOW (DEPENDING ON MATURITY).  
THE INTERIOR IS WHITE OR ORANGE.

### TASTE

NEUTRAL TO SWEET  
DEPENDING ON THE RIPENESS  
OF THE FRUIT.

## EDIBLE PARTS AND COOKING TECHNIQUES

### RIPE AND UNRIPE FRUIT

BOILED, ROASTED

The *mutahato* is one of the tallest banana cultivars, reaching heights up to 9 meters. It takes a period of 2 years to mature and thrives in fertile, well-drained soil. It produces a delicious fruit that is eaten ripe and also cooked or roasted. This type of banana is most productive in areas with annual rainfall ranging from 1,000-2,500 millimeters, at elevations up to 1,800 meters above sea level.

Gikuyu farmers use many parts of the banana tree. The leaves are used for wrapping cooked food that is then roasted; they may also be used as covers for pots. At the end of the banana bunch is a vestigial bulb that is part of the

flower. This bulb, called *mukono* in Gikuyu, is used as a container for liquid. Banana leaves and stems are given to cattle and goats as fodder, mostly during drought periods.



## CULINARY USES

Mutahato bananas are used to prepare a special meal called *thiiri*. Green bananas are peeled and roasted. They are then cleaned (by scratching the surface with a knife) and mashed into a paste that is served in portions locally known as *mataha*, ready for eating. This variety of banana is also boiled together with peas, mashed, and given to young boys after circumcision to provide energy and strength.

Dishes prepared from mutahato bananas are used to prevent diseases in women and children.



## PRODUCT HISTORY

In the Gikuyu community, the mutahato was considered the best banana due to its high nutritional content and was therefore used for weaning babies. The bananas were roasted or boiled, chewed thoroughly by the mothers, and given to the baby. This method of feeding babies was very popular in rural areas but changing hygiene norms have led to its decline. Ripe and unripe mutahato bananas were also given to nursing mothers to restore their strength. They were also given to mothers as a present after the birth of a child. Bunches of bananas were given during the payment of bridewealth. Bananas planted on the way up to and at entrance of the house is a sign of respect and welcome for visitors during weddings and other social functions.

Mutahato bananas are grown both for home consumption and for sale in local markets. Farmers growing this type of banana sell it to the Gikuyu community especially during traditional ceremonies.



## CURRENT STATUS

This variety of banana is at a risk of extinction due to the fact that only a few people are growing it, mostly the elderly. In addition, the introduction of tissue culture has forced people to adopt hybrids that mature faster than traditional varieties. Farmers' preference for growing new varieties is largely due to market demand.

# N. 74 NDUMA (TARO)

*Colocasia esculenta* (L.) Schott



## CATEGORY



ROOTS AND TUBERS

## PRODUCTION AREA

NAKURU COUNTY  
(RIFT VALLEY)

## INDIGENOUS COMMUNITY

GIKUYU / KIKUYU;  
KALENJIN

## SEASONALITY

### SOW



NORMALLY PLANTED DURING THE RAINY SEASON BECAUSE IT REQUIRES QUITE A LOT OF WATER DURING THE FIRST STAGES OF GROWTH

### HARVEST



MAINLY HARVESTED ONCE A YEAR: THE CROP IS READY FOR HARVEST 7-10 MONTHS AFTER PLANTING

## SENSORY ANALYSIS

### VISUAL

THE CORMS LOOK SIMILAR TO TUBERS SUCH AS CASSAVA. THEIR SHAPE IS IRREGULAR BUT OFTEN OBLONG OR OVATE-OBLONG. THEY ARE BROWN OUTSIDE AND CREAM COLORED WITH BROWN SPOTS INSIDE, AND RESEMBLE A COCONUT IN COLOR AND SIZE.

### TASTE

SWEET, SIMILAR TO CORN

### CONSISTENCY

FIBROUS AND STARCHY

## EDIBLE PARTS AND COOKING TECHNIQUES

### ROOTS/CORM, LEAVES

BOILED, FRIED, ROASTED

### PRESERVING

DRYING, FLOUR

**T**aro is also known as *nduma* among the Kalenjin and Gikuyu peoples who hail from Kenya's Rift Valley. It is a perennial plant harvested at intervals. It has creeping roots with fleshy corms and its many-branched stem reaches to a height of between 0.5-1.5 meters, bearing numerous large ovate leaves and a few stalked white flowers. Nduma does well in waterlogged areas and on riverbeds because it requires wet conditions and consumes a lot of water. It is possible to grow nduma away from riverbeds by planting it in trenches. Harvesting of nduma begins by removing the deep corms from their waterbeds using a hoe or blunt machete. Farmers pay careful attention to the root to reduce damage to the corm.

## CULINARY USES

Nduma roots (corms), boiled or fried, are served with different stews or eaten with a cup of tea in the morning before going to work, as they provide plenty of energy for the day. They are also a source of fiber. Nduma may be powdered and used to thicken soups and stews made from either cereals or vegetables. It is also used as a substitute for potatoes and bread. Among the Gikuyu of the Rift Valley, nduma is boiled together with sweet potato. Leaves can be used for *mukimo*, a mixture of maize, *njugu* (nuts), beans and/or *njahi* (black beans), nduma and/or pumpkin leaves, bananas (ripe), and potatoes. They are usually served with fried beef and steamed cabbage.

## PRODUCT HISTORY

Nduma were known to be found at grandmothers' homes. Each grandmother had a *kianda*, a low-lying flooded garden patch. Whenever a visitor came, the grandmother would harvest a few corms from the *kianda*. Back in the house, she would place few nduma in the hot ash of her cooking place and leave them there to bake for an hour or so. Both the cover and the baked mass were very nice to eat with a cup of tea. It was the equivalent of cake but with no additives, not even salt. People in rural areas who use a three-stone hearth still prepare nduma in this way. Nduma was an important product associated with initiation ceremonies, where it was believed that the meal had the ability to provide energy and to heal wounds. Nduma was also eaten during childbirth, where it was believed to provide energy to nursing mothers.

During the main harvest the farmers were able to gather lots of corms and ended up selling them. This allowed them to earn high incomes because very few people were (and are) involved in producing nduma.

## CURRENT STATUS

The introduction of industrial products like bread, cakes, and biscuits has reduced the consumption of nduma, especially among young people who refer to it as a traditional food for the elderly. Urban migration has also greatly affected the production because the older generation left behind in farms cannot work efficiently in the fields, hence there has been a decrease in production. Introduction of Rwandan varieties has also contributed to the diminishing of the indigenous variety, which are best adapted to the region.

# N. 75 NYANKUNDI MILLET

*Eleusine coracana* (L.) Gaertn.



## CATEGORY



CEREALS AND GRAINS

## PRODUCTION AREA

MICHINA VALLEY,  
KISII AND NYAMIRA COUNTIES  
(NYANZA)

## INDIGENOUS COMMUNITY

ABAGUSII  
(KISII)

## SEASONALITY

### SOW



LONG RAINY SEASON  
(FEBRUARY - MARCH)  
SHORT RAINY SEASON (AUGUST)

### HARVEST



JULY - AUGUST  
DECEMBER - JANUARY

## SENSORY ANALYSIS

### VISUAL

THE SEEDS ARE SMALL, ROUND,  
AND WHITE.

### TASTE

SWEETER THAN OTHER  
FINGER MILLET VARIETIES

### CONSISTENCY

CRUNCHY

## EDIBLE PARTS AND COOKING TECHNIQUES

### GRAINS

BOILED, STEWED

### PRESERVING

DRYING, FLOUR

**N***yankundi* is a traditional finger millet variety from the west of Kenya. In this region, finger millet is planted in both the long and short rainy seasons. Planting finger millet in the short rainy season requires a lot of labor, especially to clear the fields, which is a most arduous operation. On the other hand, sowing the crop in long rainy season can be risky for the crop due to damage by diseases, high rainfall, and cold temperatures.

Abagusii (Kisii) people living in the Michina Valley area cultivate the crop. Locally known as *obori*, finger millet is considered the domain of women. They are in charge of many tasks related to millet production. Apart from participat-



ing in weeding, they are involved in seed selection, drying, threshing, processing, and storing the grains.



## CULINARY USES

Nyankundi millet is used to make porridge, *busea* (a local brew), and *ugali*, a mixture of millet flour and water served with vegetables or traditional yogurt. Nyankundi millet porridge is made from fermented millet flour and is often consumed by nursing mothers, young children, and those recovering from illness. It is typically consumed in the morning, as part of breakfast, but can be taken at any time of day, either hot or cold. Sometimes, cassava or sweet potato flour is also mixed in. Among the Abagusii people, the word for ugali is *obokima* or *obuba*. The name "obuba" is also suggestive of one who likes eating large quantities and frequently.



## PRODUCT HISTORY

The Abagusii tribe is one of the oldest Bantu groups in western Kenya. Their ancestors arrived in the region from Uganda and later moved from the Mount Elgon area to their current lands, 500 years ago.

Nyankundi has been cultivated in the Michina area since the pre-colonial period, mainly by the Abagusii community. In the past, the Abagusii bartered finger millet with the Luo and other tribes of western Kenya.

Even today, finger millet is valued as a major crop in the area. This cereal plays an important role in the dietary habits and economy of subsistence farmers. Staple foods prepared from the grain are major sources of minerals and nutrients and are also served after the payment of a dowry and during wedding festivals and circumcision rituals. Traditionally, the head of the family will taste the dishes before they are served to the other members of the household to bless the harvest. During weddings, *obuba* (finger millet ugali) is offered to people visiting the bride's home prior to the wedding ceremony.

The product is grown for home consumption and also sold on the market, where it is in very high demand.



## CURRENT STATUS

Although people prefer finger millet grain, its production has been in decline in recent years due to several production constraints including high labor requirement, weeds, and pests and diseases. The introduction of hybrid grains has also led some farmers to abandon local heirloom millet varieties such as nyankundi.

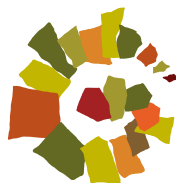


# CHAPTER 6

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## **PRESIDIA**

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Slow Food Presidium®

# LARE PUMPKIN

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A R K O F T A S T E | K E N Y A

## **PRODUCTION AREA**

Lare village, Njoro district, Nakuru County, Rift Valley

## **PRODUCERS**

30 producers belonging to the Nganoini Farmer Field School

## **CONTACTS**

Presidium producers coordinator

Leah Wanjiku Kinita

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Presidium coordinator

Samson Kiiru Ngugi

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The Presidium was created in 2009 following a study on traditional foods in the Molo area carried out by students at the University of Gastronomic Sciences in Pollenzo, Italy. It is made up of 30 producers (8 men and 22 women) who belong to the Nganoini Farmer Field School. They work together on all phases of production, from selection of seeds to cultivation and commercialization of the product. The Presidium aims to help the producers promote and commercialize their products on local markets, in school canteens, etc.

# MAU FOREST DRIED NETTLES

## **PRODUCTION AREA**

Karirikania village, Mau Forest, Molo district, Nakuru County, Rift Valley

## **PRODUCERS**

32 producers belonging to the Utugi Self Help Group

## **CONTACTS**

Presidium producers coordinator

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Presidium coordinator

Samson Kiiru Ngugi

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Created in 2009 following a study on traditional foods of the Molo region carried out by students of the University of Gastronomic Sciences in Pollenzo, Italy, the Presidium aims to help growers increase nettle production and promote the product in restaurants and at local markets, with the support of the Slow Food Central Rift Valley Convivium. The 32 Presidium producers belong to the Utugi Self Help Group, based in Karirikania village. The Presidium also provides them with tools, equipment, and protective clothing. In addition to cultivating nettles, the producers raise sheep for meat and wool (to make carpets, dolls, mats, and bags).

# MOLO MUSHUNU CHICKEN

**PRODUCTION AREA**

Turi region, Molo district, Nakuru County, Rift Valley

**PRODUCERS**

37 producers belonging to the Kihoto Self Help Group

**CONTACTS**

Presidium producers coordinator  
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Presidium coordinator  
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The Presidium was created in 2009 following research on traditional food products carried out in collaboration with the University of Gastronomic Sciences in Pollenzo, Italy. Its main objective is to support local communities by providing a new boost for farming the Mushunu Chicken. Equipment (incubators, for example) has been purchased to enable the number of birds to be increased and to improve control of animal health. A plan was also drawn up to increase the availability of feed (by cultivating cereals and legumes, and purchasing mills to process the feed). The Presidium has also organized several training sessions, involving international farmers and veterinarians. Furthermore, thanks to the Presidium, electricity has now arrived in the producers' villages.

# MOLO SHEEP

## **PRODUCTION AREA**

Molo highlands, Nakuru County, Rift Valley

## **PRODUCERS**

160 people gathered in six breeders' associations and 27 women who process the wool, gathered in the Karunga Women's Group

## **CONTACTS**

Presidium producers coordinator

John Wachira

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Presidium coordinator

Samson Kiiru Ngugi

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After Kenyan independence in 1963, sheep farms began to be neglected and the agricultural development project that had been designed for the Molo highlands collapsed. The situation was compounded further by subdivision of land, which left little space for sheep farming. Today, although it is widely recognized as one of the best sheep in the country, there are just a handful of farmers who continue to breed the Molo Sheep. It is rarely found on the menus of hotels and restaurants. The Presidium was set up in 2014 as part of an eco-tourism project. Slow Food Kenya and the NGO NECOFA (Network for Ecofarming in Africa) have organized trainings to improve breeding, animal welfare, and the production chain linked to meat and wool.

# NZOIA RIVER REED SALT

## **PRODUCTION AREA**

Nabuyole area, Webuye district, Bungoma County, Western Kenya

## **PRODUCERS**

30 producers belonging to the Nabuyole Self Help Group

## **CONTACTS**

Presidium producers coordinator

Jotham Wamukota Wasike

Tel. +254 727828455

Presidium coordinator

John Kariuki Mwangi

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[j.kariuki@slowfood.it](mailto:j.kariuki@slowfood.it)

The Presidium was created in 2009 following a study on traditional products carried out in collaboration with the University of Gastronomic Sciences in Pollenzo, Italy. The Presidium aims to help the community improve the quality of the salt by providing processing equipment, as well as by supporting promotional and commercialization activities. The 30 producers, who belong to the Nabuyole Self Help Group, have prepared production protocols. The Presidium is also working on a project to reforest the area in order to recreate marshlands where the reeds can grow.



# OGIEK HONEY

## **PRODUCTION AREA**

Mariashoni district, Nakuru County, Rift Valley

## **PRODUCERS**

12 groups of beekeepers belonging to the Macodev cooperative

## **CONTACTS**

Presidium producers coordinator  
Martin Lele Kiptiony (Chairperson)  
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Presidium coordinator  
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s.ngugi@slowfood.it

The Presidium was launched to protect the Mau Forest ecosystem and promote the value of the Ogiek people's ancestral culture through their most important product, honey. The Macodev cooperative, which brings together 12 groups of beekeepers, is working to increase production volumes, differentiate the various types of honey produced, improve packaging, and promote the honey in shops, restaurants, and hotels. Since 2015 the Ogiek community has taken part in responsible tourism initiatives in collaboration with the Slow Food Foundation for Biodiversity and NECOFA.

# POKOT ASH YOGURT

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A R K O F T A S T E | K E N Y A

## **PRODUCTION AREA**

Tarsoi, Tartur, Lition, and Chaunet villages, West Pokot County, Rift Valley

## **PRODUCERS**

About 26 producers, members of Tarsoi Association

## **CONTACTS**

Presidium producers coordinator

Moses Pacha

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Presidium coordinator

John Kariuki Mwangi

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The Presidium was created in 2009 following research on traditional foods carried out by students at the University of Gastronomic Sciences in Pollenzo, Italy. The producers in the Presidium already belonged to the Tarsoi Association. With assistance from technical experts, the Slow Food Foundation is helping the producers to improve the quality and quantity of their yogurt by optimizing each stage of production, from animal health and milking to processing and preserving the milk. There are also plans to set up and equip a communal workshop. In addition, the Presidium is working to increase awareness of the product in the district and neighboring areas, and to give producers opportunities for international exchanges to share information.

# RED MAASAI SHEEP (NTARE NA NYOKIE – MAASAI)

## **PRODUCTION AREA**

Rosarian village, Nakuru County, Rift Valley

Ol'Keri village, Narok County, Rift Valley

## **PRODUCERS**

40 Maasai producers from two communities, one in Rosarian (Nakuru County) and one in Ol'Keri (Narok County).

## **CONTACTS**

Presidium producers coordinator

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Presidium coordinator

John Kariuki Mwangi

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j.kariuki@slowfood.it

The Presidium will be launched in late 2018 as part of the project Empowering Indigenous Youth and Their Communities To Defend And Promote Their Food Heritage (2017-2020). This ongoing collaboration between IFAD and Slow Food seeks to empower indigenous communities and youth, and improve the livelihoods of beneficiaries by protecting and promoting their food heritage and upholding the sustainability and resilience of their practices.

Thanks to the IFAD and Slow Food initiative, synergies will be created to strengthen the indigenous Maasai community through capacity building, technical support, exchanges and experience sharing, formation of community groups, and creation of market linkages. As one of the marginalized groups in Kenya, Maasai communities will be involved in the national and global Indigenous Terra Madre activities. The ITM network is also a platform for exchange enabling indigenous communities to work together and find solutions to common problems.



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ARK OF TASTE | KENYA

## **SLOW FOOD**

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# “Biodiversity is the greatest promise for the future of humankind”.

Without it, the foundation for human life on the planet is lost, as is the very soil on which civilizations and cultures have been shaped and formed as the result of human adaptation to the natural environment.

Defending, protecting, and promoting biodiversity is therefore not simply one among a number of choices, advanced by the intellectuals of conservation or by nostalgic environmentalists: It is, rather, the only viable path forward. It is a moral duty that we, the generation that inhabits this historic moment, must take on for those who will come after us and live on this planet Earth, a planet that, today, we are trampling, hurting, and mistreating.

From this point of view, the Ark of Taste, a global project that this book takes up in its African—and, in particular, Kenyan—context, is an initiative that seeks to create information, knowledge, and awareness about this unique heritage. Through the Ark, communities are invited to rediscover their agricultural and food heritage, in order not to lose the connection with the land that feeds us and will continue to feed us.

**Carlo Petrini**

Founder and President of Slow Food



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