Seeds of Survival and Celebration

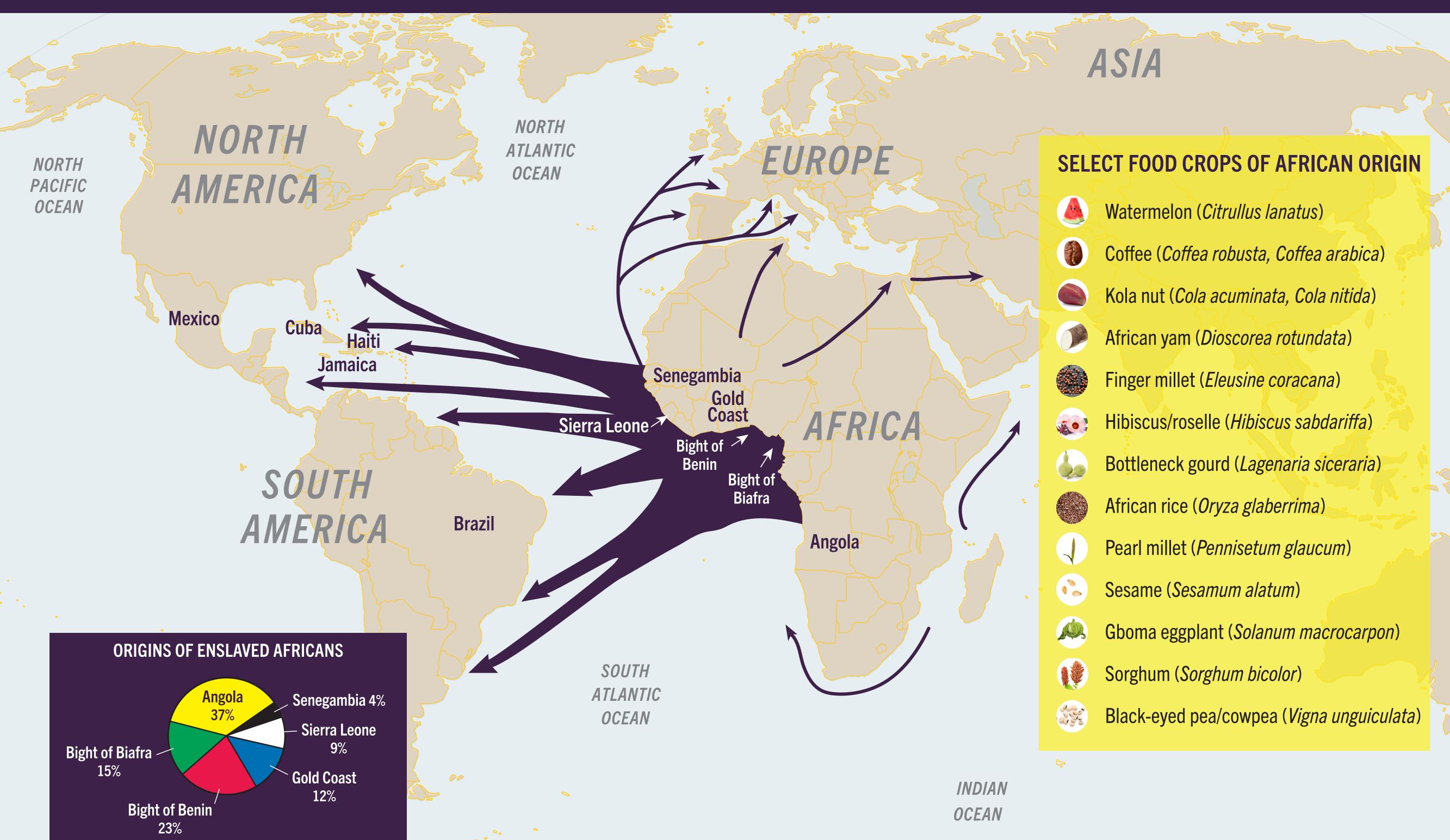
Plants and the Black Experience

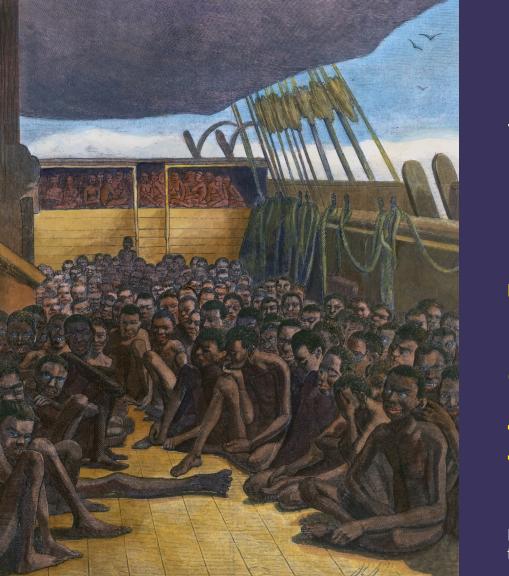
Many dishes in America today were first prepared by enslaved people and their descendants using their culinary excellence and the plants that came with them from West Africa.

What were first "cuisines of survival," the foods prepared by enslaved people quietly made their way into the dishes prepared for plantation owners, and eventually became regional staples.



Plants first domesticated in Africa make up a large share of the world's food supply today.





From 1502 - 1867, the transatlantic slave trade displaced 12.5 million Africans on an estimated 30,000 voyages—the largest forced migration in history. Dozens of Africa's cultivated plants made their way to the Americas as provisions on slave ships.

The grains, medicinal plants, and root vegetables occasionally left over from the Atlantic crossing provided enslaved Africans access to familiar plants, which they grew around their living quarters.

Image: Slave deck of the ship 'Wildfire' transporting 510 captives from Africa to the Caribbean (wood engraving in Key West in 1860 with modern color).

A Culinary Fusion

Enslaved Africans used African plants to continue some of their food traditions of specific West African cultures, and they also integrated these plants in new ways with Native American and European foods. Depending on geographic location and available ingredients, these dishes evolved into a variety of regional cuisines.

Foods prepared by enslaved Africans have made a big impact on cuisines of the Americas today.

While African plants came to the Americas primarily on slave ships, it was enslaved Africans who pioneered the cultivation of these familiar plants to relieve hunger, have more food choices, enjoy customary food preferences, and treat illnesses. These African food staples—including black-eyed peas, okra, greens, and rice—were slowly introduced into the meals of slaveholders by the enslaved cooks who prepared them.

Today, we recognize their culinary skill in popular dishes like gumbo, fritters, Caribbean callaloo, Hoppin' John, and many more.

BLACK-EYED PEAS

Enslaved Africans and their descendants grew black-eyed peas in their domestic vegetable gardens and traditionally cooked them in a savory combination of pork, such as smoked ham hocks or bacon, onions, aromatic spices, and collard greens. Hoppin' John is a classic Soul Food dish that represents good luck and prosperity when eaten on New Year's Day.



GREENS

Continuing a West African custom of incorporating leafy green vegetables into one-pot dishes such as soups and stews, enslaved African cooks slowly simmered collard greens and other greens with ham hocks or pork belly—today a signature dish in Black and Southern cuisine.



OKRA

Generations of enslaved Africans boiled or fried the pods of okra and combined them with rice and black-eyed peas. They often added okra to peppery soups and stews with available ingredients such as seafood, chicken, and pork, giving rise to gumbo, a word derived from *ki ngombo*, or its shortened form *gombo*, meaning okra in several West African languages.



SWEET POTATO

Sweet potatoes were a staple food source for enslaved Africans throughout North America, especially during winter months when food rations were low. They were roasted, fried in lard, or mashed and sweetened with molasses and seasoned with spices. Sweet potato pie is a traditional Soul Food dessert especially popular during Thanksgiving and Christmas. Some people in the U.S. call this plant a yam, a name also used for a staple root vegetable native to West Africa.



RICE

African rice has been an important staple in many traditional African dishes. It was stocked as provisions on slave ships and was often grown in garden plots of enslaved Africans as well as throughout southern states for local consumption. By the early 1700's, an Asian rice variety, Carolina Gold, was grown using the forced labor of enslaved Africans who knew how to cultivate wetland rice. The increased yields from this cultivation made rice a commercial crop in Georgia and the Carolinas.



CORN

Corn was central to the diet of enslaved Africans in North America, and learned from Native Americans how to make ash cakes with corn meal moistened with water or animal fat and baked over a fire. Another variation was hoe cakes—a mixture of corn flour and water cooked on a flat surface over a fire. Coarsely ground corn cooked as porridge was the precursor to today's classic corn grits. Corn flour was also used to make cornbread, still popular in America today.



Sorghum and Millet: Hope in the Face of Climate Change

Millet and Sorghum are two African crops that show great potential for combatting food insecurity brought about by climate change. These grains are heat and drought tolerant, making them well-suited for their native range within the dry subtropics of West Africa, a major cradle of ancient crop domestication.

Both historically and in the present day, millet and sorghum have been staple crops in many regions of Africa and throughout the world.

These grains first arrived in the Americas on slave ships, often stocked as provisions to feed captive Africans during the Atlantic crossing. Millet and sorghum were grown by enslaved Africans around their living quarters, which has been documented throughout North, Central and South America. Millet and sorghum flour were used to bake cakes and breads. Ground millet and sorghum were boiled into porridge, a technique enslaved people also used to cook ground corn, which was the genesis of grits.



Sorghum is the world's fifth most important cereal crop grown in dry regions of every continent, but was first domesticated in Central Eastern Sudan more than 5,000 years ago. Today, sorghum is a staple food source for more than 500 million people in more than thirty countries including tropical areas of Central America.



Pearl millet was domesticated in the Western Sahara more than 4,900 years ago and reached South Asia in ancient times. In the past 1,000 years, pearl millet has been cultivated in agroforestry systems, particularly under the canopies of shea trees and remains a major food crop throughout Africa and India.

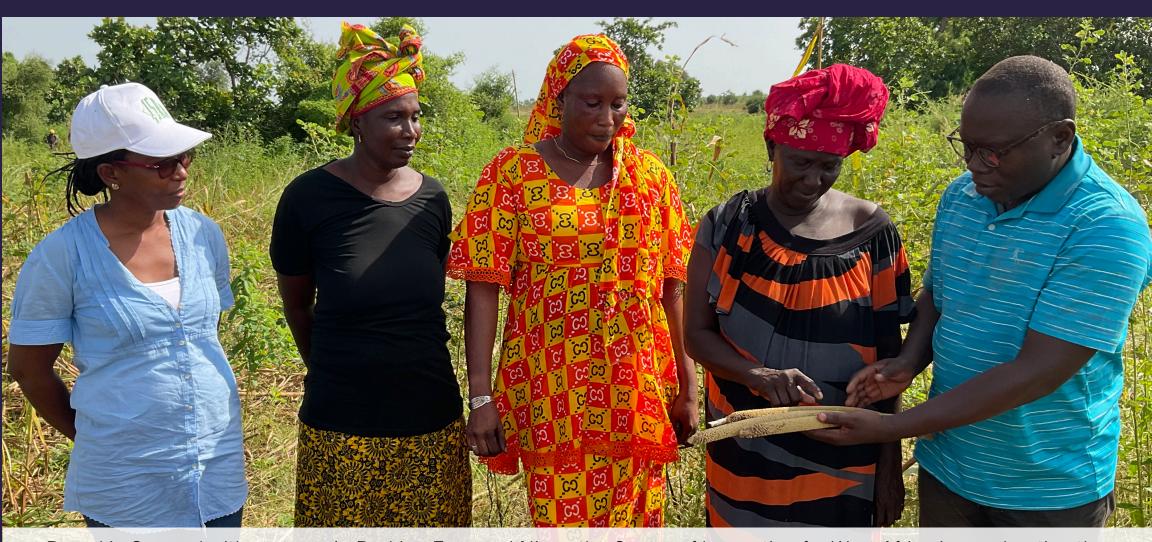


Finger millet was domesticated in East Africa 7,000 years ago and reached India by 3000 B.C. Finger millet is one of the richest grain sources of minerals including calcium and the amino acid lysine, deficient in many other cereals. Today, it is cultivated throughout Africa, India, Nepal, China, and Japan.

Cornell is part of an international research group that grows varieties of sorghum and millet that will thrive in changing climates.

At the Feed the Future Innovation Lab for Crop Improvement, Cornell plant breeders and social scientists are partnering with researchers and farmers in East and West Africa to improve local crops that are essential for food security. The Centers of Innovation based in Uganda and Senegal act as regional hubs to confront common challenges of frequent droughts, devastating floods, low crop productivity, and pest and disease outbreaks that threaten livelihoods.

The knowledge of African farmers, which has accumulated from thousands of years of experience, is key to breeding varieties of sorghum and millet best suited for areas enduring drought and high temperatures. Learn more at **ilci.cornell.edu**.



Based in Senegal with partners in Burkina Faso and Niger, the Center of Innovation for West Africa is accelerating the development of climate smart varieties of sorghum, pearl millet and cowpea that target nutrition security, resilience, and economic growth in West Africa.