



**Back by popular demand:  
The benefits of traditional  
vegetables**

— ONE COMMUNITY'S STORY —



# INTRODUCTION



Agricultural biodiversity—the varieties of plants, animals and microorganisms used to benefit people—is critical for improving the nutrition and health of the urban and rural poor.

The lack of micronutrients, including certain vitamins, minerals and other components needed for a healthy diet, is a pervasive and growing threat throughout the world. One result of this ‘hidden hunger’ has been a spectacular rise in obesity, heart disease, type II diabetes and various cancers, especially in developing countries, where many people have adopted an oversimplified diet based on the cheapest refined carbohydrates and fats.



So-called neglected or underused crops are often an important source of nutrition as well as being adapted to the marginal environments in which they grow. And yet, a lack of scientific research and development has limited the appreciation of their benefits. Over time, local communities have tended to replace these plants with more prestigious introduced crops that are often less nutritious and less suited to local climate and soils.

For example, communities in the high Andean mountains of South America have traditionally consumed several types of Andean grains. The most popular include quinoa, cañihua, amaranth and chocho (also known as tarwi).

Like most traditional species, Andean grains are extremely nutritious and hardier than many commercial crops. They are rich in protein and essential amino acids. The leaves contain high levels of protein and iron, which is easily absorbed thanks





to the high level of vitamin C that is also present. Andean grains are also easily digested, making them particularly suitable for babies, children and elderly people.

Nevertheless, these grains have suffered a decline in status, especially in urban areas, where they have been replaced with cheaper, less nutritious foods such as pasta and rice.

Like Andean grains, the minor millets of South Asia are very nutritious and well suited to marginal lands. Yet they too suffer from low status, which makes it difficult to sell them to modern consumers.

African leafy vegetables have suffered the same decline in status as these and other traditional crops. About 900 species of leafy vegetables grow in sub-Saharan Africa. These plants were once a key part of people's diets and culture. Women grew the vegetables in their gardens, providing year-round supplies of nutritious foods to supplement the family diet. Then foreign crops such as cabbage and carrots were introduced. Because of their exotic origins, these new crops acquired a special status and came to symbolize modernity. Communities gradually stopped growing traditional leafy vegetables in their gardens, and began to grow the lucrative—though less nutritious—'modern' crops instead.



This booklet describes how reintroducing traditional leafy vegetables had an impact on the lives of people in a community near Nairobi, Kenya, thanks largely to the inspiration of one farmer.







## SIX YEARS AGO STEPHEN KIMONDO,

**who lives in the village of Kiserian, near Nairobi, would never have dreamed of growing the leafy vegetables that bring him such good fortune today. Swayed by market preferences, he grew more fashionable ‘foreign’ crops such as cabbage. Now he plans to intensify his production of traditional vegetables and will train other farmers to do the same. This is his story.**



Rows of vegetables grow neatly on Stephen's four-hectare plot of land and a new irrigation system has just been put in place. The farm has expanded greatly since he started growing and selling traditional leafy vegetables, and Stephen is now considered a great success in the community.

"I used to eat traditional leafy vegetables as a child but I only started growing them in 2000," says Stephen. "When I first started farming, I grew vegetables such as cabbages, kales and tomatoes. Then I met Stanley Mwangi at Family Concern, a local NGO. He showed me how easy and profitable it is to grow leafy vegetables and told me how nutritious they are. I decided I would grow them on a commercial scale, and it has been a great success. Now I grow a variety of crops like spinach, nightshade, spiderplant, amaranth, jute plant, sweet potatoes and pumpkins.





“Stanley introduced me to IPGRI staff, who put me in touch with supermarkets that were interested in selling my produce. Most of my vegetables are now sold from big supermarkets in Nairobi. I earn more than enough from selling them to pay the employees on my farm. Depending on the time of year, I have between 40 and 60 people working for me.”

Growing leafy vegetables has had a tremendous impact on Stephen’s income, his family’s diet and their way of life.

“My family has been completely converted,” says Stephen.

“We no longer eat the cabbages and kales we were used to. We eat traditional leafy vegetables instead.”



Recently, Stephen has been busy training other farmers to grow leafy vegetables as well as advertising the value of a diverse diet around the community. African leafy vegetables are rich in important micronutrients, among them vitamin A, iron and zinc.

African leafy vegetables are well suited to Kenya's climate and soil, and Stephen is confident about the future. "I am very happy that more people are growing and eating traditional vegetables," he says. "Like me, my neighbours used to think that modern crops were better than the foods they grew up eating. Now that they understand the value of traditional vegetables, they are proud to grow them in their fields."





## LEAH MURUGI WORKS ON STEPHEN KIMONDO'S FARM.

**Leah Murugi has worked on Stephen's farm for many years, but has only recently started to feel secure in her job. "Things have changed since Mr Kimondo started growing leafy vegetables," she explains. "I used to work in the fields only once or twice a week. Now I am here almost every day."**



“I was brought up with these vegetables,” Leah says. “My mother used to cook them for dinner. But as I grew older, it was no longer considered acceptable to eat them. They were considered old-fashioned. So I got used to eating other vegetables instead, particularly cabbage. Since Mr Kimondo started growing traditional vegetables, I have started to eat them again and I hardly eat cabbage at all anymore.”





Tonight Leah's grandchildren are coming over for dinner.

She will prepare a meal of leafy vegetables. "I am happy that my grandchildren will be brought up eating these vegetables too," she says.





MARY WANGARI  
WORKS AT THE  
TUSKER SUPERMARKET  
IN NAIROBI.

**Mary Wangari is a fresh produce assistant at the Tusker supermarket in Nairobi, one of the supermarkets that stocks Stephen's vegetables.**

**Mary marvels at how attitudes towards traditional vegetables have changed.**



“Not long ago these vegetables would have been snubbed in local villages, let alone sold at city supermarkets,” she says. A major public awareness campaign supported by IPGRI helped to boost the popularity of leafy vegetables in Nairobi. Today, the demand for Stephen’s vegetables is so great that, despite his daily delivery, there still are not enough to meet consumers’ needs.



“Nothing is left of the stock by the time we close in the evening,” Mary says. “Often I throw away bunches of kale or cabbage because they have been on the shelves too long. But I never throw away the leafy vegetables.”







STANLEY  
MWANGI HELPS  
TRAIN FARMERS TO  
GROW TRADITIONAL  
VEGETABLES.

**Stanley Mwangi works for Family Concern, a local  
NGO. “I have been working with farmers who grow  
indigenous leafy vegetables for the past year and  
a half,” says Stanley.**



He met Stephen through an IPGRI project that helped introduce local farmers to large supermarkets in Nairobi. Stanley trained Stephen to improve his production of leafy vegetables.



“So far I have worked with over 400 farmers and have no doubt that this number will continue to grow,” says Stanley. “The training has a multiplier effect because the trained farmers tell others about the benefits of traditional vegetables as a source of food and income, and that leads to more training.”





MUMBI KIMONDO IS  
STEPHEN KIMONDO'S  
DAUGHTER.

**“I love traditional vegetables,” says Mumbi. “They are easy to prepare and very tasty. My favourite is a leafy vegetable called managu, even though my parents prefer to mix a number of vegetables together.”**





Mumbi's taste for leafy vegetables is rare among people her age. "Sadly, only a few young people know about these vegetables," she says. "I think we need to convince young people to include leafy vegetables in their diets. They don't know what they're missing and it would be good for them too."

"I am very proud of my father," Mumbi says. "He managed to become successful growing vegetables that until recently were considered weeds."





PETER RUHI IS ONE  
OF THE FARMERS  
STEPHEN TAUGHT TO  
GROW TRADITIONAL  
VEGETABLES.

**“I used to eat these vegetables as a child,” says Peter. “I missed eating them and so I started growing them and selling them informally five years ago. But I had never thought of growing them on a large scale until I met Stephen. Visiting his farm was a very useful experience for me. It opened my eyes to a whole world of possibilities, including selling my crops at supermarkets in Nairobi. He also taught me how to improve my irrigation methods, and introduced me to improved vegetable varieties.”**



“I make a point of sharing this valuable information with my neighbours, who are also interested in growing leafy vegetables,” Peter concludes. “In this way they can have the same benefits that have come to my family: a better income and a healthier diet.”





GRACE WAMBUI IS  
PETER RUHI'S WIFE.

**“I must admit that I was concerned when my husband told me he was going to expand his farming to leafy vegetables,” says Grace. “But now I appreciate how easy they are to grow and to cook. They truly have made a difference in our lives.”**





“My husband and I remember eating these vegetables  
as children. I want Edith, our baby girl, to be brought up  
eating them too.”





JOHN MUNENE  
IS A FARMER IN  
THE VILLAGE.

**“I am really impressed at how profitable it has become to grow traditional vegetables,” says John. “I’ve been Peter Ruhi’s friend for a long time and I’ve seen how much he has gained from growing them.”**



“He is now teaching me what he has learned from Stephen Kimondo,” says John. “I hope that soon I too will be tending my own plot of traditional leafy vegetables.”



**Stephen Kimondo's story is only one example among many. IPGRI and its partners are working with communities around the world to ensure that traditional, yet neglected, crops are safeguarded and used to guarantee a better and healthier future for us all.**



## **International Plant Genetic Resources Institute**

IPGRI undertakes, encourages and supports research and other activities on the use and conservation of agricultural biodiversity, especially genetic resources, to create more productive, resilient and sustainable harvests. Our aim is to promote the greater well-being of people, particularly poor people in developing countries, by helping them to achieve food security, to improve their health and nutrition, to boost their incomes and to conserve the natural resources on which they depend. IPGRI works with a global range of partners to maximize impact, to develop capacity and to ensure that all stakeholders have an effective voice.

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