

Can an African "green revolution" help feed the world?

Katy Migiro, Reuters

SABA SABA, Kenya, May 2 (AlertNet) - Her bare feet coated with mud, Sabena Gitau trudged down the rain-sodden hillside to her banana plantation, machete in hand.

She chose and cut several giant bunches of bananas, which she strapped to a motorbike to be taken to nearby Saba Saba town, 77 km (48 miles) north of Nairobi, to be weighed, graded and sold.

A decade ago, Gitau made the same 10 km trip a couple of times a month, on foot with her bananas on her back, earning about 420 shillings (\$5) for the dawn-to-dusk trek.

Today, after planting improved varieties and working as part of a cooperative to boost her access to markets, the 59-year-old grandmother earns 30,000 shillings (\$360) a month from her bananas, selling them at 13 shillings a kilo rather than three.

"I am not educated. My father denied me that chance. But I've made something of my life," said Gitau, who has bought seven dairy cows with some of her profits.

She also recently planted 100 passion fruit vines as part of an \$11 million project, funded by the Bill and Melinda Gates Foundation and Coca Cola, to have 50,000 Kenyan and Ugandan smallholders produce fruit for Minute Maid juice and double their incomes in the process.

As the world looks for ways to boost food production by at least 70 percent by 2050 to feed an increasingly hungry planet, many people are looking to sub-Saharan Africa -- a region with 50 to 60 percent of the planet's unused arable land.

Crop yields in Africa average about one metric ton per hectare. That's well below many other parts of the world that produce up to seven tons per hectare, suggesting there is potential for big boosts in production.

Experts say efforts like Gitau's banana project -- which combine improved seeds and crop varieties, better access to markets and information for small-scale farmers, improved transportation and the like -- could be part of the blueprint for a 21st century agrarian revolution in Africa.

'THE LAST FRONTIER'

"Africa is now the last frontier in terms of arable land," said James Nyoro, the Rockefeller Foundation's managing director for Africa. "With the population growing

Can an African "green revolution" help feed the world?

Published on Electronic Component News (<http://www.ecnmag.com>)

to 9 billion, the rest of the world will have to depend upon Africa to feed it."

Some in the sector see huge promise.

"I have no doubt whatsoever that Africa can feed itself and that Africa can be a major contributor to world food security," Namanga Ngongi, the former president of the Alliance for a Green Revolution in Africa (AGRA), told AlertNet.

"If you only increase productivity by 50 percent in Africa, Africa will go from food deficit to food surplus. And that can be done with access to simple inputs that are available today."

The barriers that have so far held back Africa' agricultural success are formidable. They include lack of land tenure, particularly for women, and shrinking plot sizes; limited use of irrigation and fertilizer; unreliable water supplies; and inadequate access to credit.

Unpredictable weather, degraded soils, inefficient markets and poor infrastructure compound the problem, while a history of political instability, conflict and poor governance has made investors reluctant to pump money into agriculture.

But experts say the formula for increasing yields for African smallholders, who make up 80 percent of the continent's farmers, is relatively simple. Just organize them into larger groups, provide them with better materials and training and connect them to markets.

"In a sense, it's a no brainer," said Gordon Conway, a professor of international development at Imperial College, London. "Give them fertilizer. Give them seed. Give them water. And they can do it."

The Food and Agriculture Organization (FAO) projects that sub-Saharan Africa's share of the total world production of cereals will be 8.6 percent in 2050, up from 4.5 percent in 2005-07.

"That said, with improved management and inputs, in many places African crop yields have the potential to double or even triple," said Christopher Matthews, the FAO's media relations officer in Rome.

Gitau formed an association with 100 other farmers, so that they could aggregate their produce and attract big buyers from Nairobi, instead of being exploited by local middlemen.

They started selling bananas by the kilo, instead of using the "eyeball" method, where buyers size up the fruit - and the degree of desperation on the farmer's face - and haggle.

Secondly, Africa Harvest, a non-profit organization headquartered in Nairobi, taught Gitau's group how to grow higher yielding, disease-resistant tissue culture bananas.

Can an African "green revolution" help feed the world?

Published on Electronic Component News (<http://www.ecnmag.com>)

The big question is how to scale up these scattered success stories and turn around Africa's dismal record as the only continent where per capita food production has declined over the past 20 years.

SEEDS OF CHANGE

One of the biggest challenges lies right at the start of the chain: seed production.

"If you're able to have good seed and appropriate fertilizer, and on time, I think really the production side of agriculture would probably be resolved," said AGRA's former president, Ngongi.

AGRA is providing technical support to 70 seed companies across Africa to produce more seed. In 2011, they produced 40,000 metric tons of seed, which AGRA hopes will rise to 250,000 metric tons by 2018 and reach 5 to 10 million farmers.

In drought-prone parts of Kenya, as few as 10 percent of farmers buy seeds.

"They just save seed and recycle," said James Karanja, director of Freshco, a private seed company set up after liberalization of the market in the late 1990s.

"You have to train them and show them: 'Just sacrifice those few coins, that 200 shillings (\$2) you have. Buy this seed. It's going to make a difference in your life.'"

Yet farmers living on the edge of hunger are understandably wary about spending money on the unknown.

"It's not as simple as saying: 'Hey, the seed is out there. Why the hell aren't you using it?'" said Kostas Stamoulis, director of the FAO's Agricultural Development Economics Division.

"If I use it and it fails, then my family will die from hunger. If you have a family that lives from hand to mouth, you are not going to take that risk."

Rajiv Shah, head of the U.S. Agency for International Development (USAID), believes greater investment in agricultural research is the number one priority for Africa to achieve a green revolution.

"Agricultural research in sub-Saharan Africa pays off a return on investment of \$25 for every dollar invested," he told AlertNet, highlighting a USAID-funded project that has tripled maize yields in Kenya with better seeds and improved techniques.

Farmers also need information about improved seeds and training in better crop management to maximize their yields.

"I believe farmers could double their yields just from knowledge," said Rachel Zedeck, founder of Backpack Farm, a for-profit enterprise that sells organic farming products in a canvas rucksack and teaches farmers how to use them.

Can an African "green revolution" help feed the world?

Published on Electronic Component News (<http://www.ecnmag.com>)

"It's really all about education so farmers know what they should be buying," Zedeck said. "Then it's linking to [finance](#) [1] so that they can afford to buy better quality products."

WAKING UP

Crucially, after decades of neglect, African governments appear to be waking up to the importance of investing in agriculture -- if not for food security, then for political stability.

"I think governments are more conscious today for almost the selfish reason of staying in power," said Ngongi, referring to riots over high food prices that affected several countries in 2008. "A lot of them were African countries that came close to the brink of civil unrest."

Whatever their motivation, key players are talking up Africa's Green Revolution ahead of global meetings this year, from the G8 and G20 to Rio+20, where food security initiatives will take centre stage.

"Every other part of the world has done it, so we are very confident we can see that kind of productivity growth leading to food and hunger reductions here in Africa as well," USAID's Shah said.

(This story is part of a special multimedia report on global hunger produced by AlertNet, a global humanitarian news service run by Thomson Reuters Foundation)

(Additional reporting by [Laurie Goering](#) [2] in London; Editing by [Tim Large](#) [3] and [Sonya Hepinstall](#) [4])

Source URL (retrieved on 03/07/2014 - 7:11am):

<http://www.ecnmag.com/news/2012/05/can-african-green-revolution-help-feed-world>

Links:

[1] <http://www.reuters.com/finance>

[2] <http://blogs.reuters.com/search/journalist.php?edition=us&n=laurie.goering&>

[3] <http://blogs.reuters.com/search/journalist.php?edition=us&n=timothy.large&>

[4] <http://blogs.reuters.com/search/journalist.php?edition=us&n=sonya.hepinstall&>