## Hungry farmers: The challenges of African agriculture

by Roger Thurow in the July 25, 2012 issue



Francis Wanjala Mamati praying for rain. PHOTO BY ROGER THUROW

Read the sidebar article on the G8 and food.

In Lutacho, Kenya, the rains were late. It was mid-March 2011, and the farmers of western Kenya were still in the grip of the brutally hot dry season. The year before, the seasonal rains that usher in the corn planting began at the end of February; by March of that year the first shoots of the stalks were already pushing through the soil. Now, though, the fields remained parched and the farmers nervous.

Every day, first thing in the morning, the farmers looked toward Mount Elgon on the Kenya-Uganda border and searched for the harbingers of rain. Their eyes scoured the mountain slopes for signs of mist. They scanned the sky to spot any hint of a cloud. They strained to feel the slightest breeze that would bring a change of weather.

And every day the farmers' worry increased. They knew that a drought, bringing great hunger, was spreading across the eastern and northern realms of their country and throughout the Horn of Africa. Western Kenya, one of the breadbaskets of the region, was usually blessed with good rains. But the extended dry season had made some of them anxious that the drought might reach them as well.

"What if it doesn't rain?" I asked Agnes Wekhwela, one of the farmers. She was 72 years old, two decades beyond the average life expectancy in Kenya. Her face was creased with wrinkles and wisdom. She had more experience divining the weather than most anyone else.

"It will rain," she said firmly.

It was a cloudless day, with a brilliant blue sky. "How can you be so confident?" I pressed.

"God knows where we live," she said, again with great certainty. "God knows who we are."

A few days later, her bedrock faith was confirmed. The rain began falling, the farmers planted, the heat and the anxiety broke.

That conversation with Agnes became a touchstone for me. Yes, I thought, God knows where the farmers live, God knows who they are. But do we? Do we in far-off, rich America know? Do we care?

That conversation and those questions drove my efforts to report on the lives of these farmers, their hopes and fears, their struggles and triumphs. Every day I was with them, my conviction grew stronger: we must know who they are.

Why? Consider the challenge facing all of us on this planet in the coming decades: to meet the demands of a growing population and the growing prosperity of that population, the world needs to nearly double food production by the year 2050. Estimates place another 2.5 billion people on earth in that time, which is the equivalent of adding two Chinas or two Indias. Already, there are 1 billion people in the world who are chronically hungry. Adding to the challenge, this doubling needs to happen on roughly the same amount of arable land and with less water than is being used now. All the while, a growing demand for biofuels is channeling more and more food, especially corn, into gas tanks instead of stomachs. This adds to the unprecedented strain on the global food chain, as do extreme climate patterns that are wreaking havoc on harvests across the world.

Where will the needed doubling come from? Not likely from the present breadbaskets of the United States, Canada, Europe and Australia, where the great jumps in yields over the past decades have been narrowing. Nor can we confidently count on repeat performances of the large gains in productivity in India, China and Brazil.

From where, then, will come the quantum leaps in production? Africa. Because it is so far behind the rest of the world agriculturally, Africa has the potential to record the biggest jump in food production of any region by applying technologies, infrastructure and financial incentives that are common most everywhere else. Africa, where the hybrid seeds that revolutionized American agriculture in the 1930s are only now beginning to spread, is the one continent where yields of corn, wheat, rice, beans and an array of local crops have yet to have their growth spurts. Its yields lag as much as 90 percent behind the yields obtained by farmers elsewhere. With only 4 percent of its farmland irrigated, Africa has water resources that are underutilized. With one-third to one-half of its harvest routinely going to waste, Africa could give an immediate boost to the world's food supplies if it improved its storage facilities and had more efficient markets.

With all this potential, Africa's long-neglected smallholder farmers, who already produce the majority of the continent's food, have become indispensable. It will be impossible to multiply global food production without creating the conditions for them to grow and bring to market as much food as they can. We continue to neglect Africa's smallholder farmers at our own peril. This is why we must know who they are.

Africa's smallholder farmers work fewer than five acres of land; most often they work only one or two acres, barely enough to feed their families, let alone have surplus production to provide income. They are a majority of the population in most African countries. More than two-thirds of them are women.

These farmers are the victims of the "criminal negligence" of agriculture development foretold by Norman Borlaug, the father of the Green Revolution, for which he won the Nobel Peace Prize in 1970. "We will be guilty of criminal negligence, without extenuation, if we permit future famines," Borlaug warned back then. And that is what came to pass.

After Borlaug's new breeding system produced a wheat strain that conquered famine in India, Pakistan and other places in Asia in the 1960s and '70s, a long era of abundant and cheap food dawned, and the world turned away from agricultural development. The movement to spread new farming advances to hungry countries

derailed before it could reach Africa. Aid to farmers and investment in rural areas in Africa by both the international community and the continent's governments declined precipitously, shrinking to negligible levels through the 1980s and '90s and into the 21st century. The private sector, particularly the agriculture industry, also largely ignored the smallholder farmers, deeming them too poor, too remote and too insignificant for its attention.

This became the prevailing development philosophy throughout the rich Western world: our farmers, who are heavily subsidized by our governments, are producing vast stockpiles of food cheaper than farmers can produce anywhere else. Better the poor countries buy their food from us than produce it themselves. And if they are hungry—if famine were to flare up from drought, turmoil or evil politics—we'll feed them with our food aid.

The negligence has produced one of Africa's cruelest ironies: its farmers are its hungriest people. They rise every morning to grow food, yet they don't harvest enough to feed their families. They endure an annual hunger season, which stretches from the time the food from the previous harvest runs out to the time the next harvest comes in. In this period, portions are rationed, and daily meals can shrink from three to two to one to none. Malnutrition rises; the youngest, particularly, struggle to survive. For some smallholder families, the hunger season lasts one or two months; for others, it can go on for nine or ten months.

Hungry farmers—what an absurd, tragic phrase. It ought to be an oxymoron. But for tens of millions of people in Africa, it is a truism.

The smallholder farmers of Africa are often recipients of American food aid. They are grateful for such aid when they face starvation—but they would rather receive assistance to grow their own food so they wouldn't be hungry in the first place. They would rather have access to seeds, soil nutrients, financing and agricultural advice than to bags of food grown half a world away. Food aid is vital in saving countless lives each year when hunger emergencies arise, but food aid won't prevent the next famine. Only agricultural development will.

This imperative yields a more hopeful irony: these hungry farmers, these recipients of the world's food aid, are now being counted on to help feed the world.

Who are they? They are farmers like Leonida Wanyama, Zipporah Biketi, Rasoa Wasike and Francis Mamati. Like all of us, their top two goals are to care for their

families—namely by eliminating the hunger season—and to educate their children as best as possible. I followed their lives throughout 2011.

All four are members of a new social enterprise organization called One Acre Fund, which seeks to reverse the neglect of smallholder farmers by providing access to better seeds, small doses of fertilizer, agriculture extension advice and financing to pay for it all. The farmers come together in groups of eight to 12 to help each other through the seasons. They give their groups inspirational names like Hope, Faith, Mercy, Grace, Happiness, Success.

Leonida's group was called Amua, a Swahili word meaning "to decide."

What have you decided? I asked Leonida when we first met.

"We have decided," she said, "to move from misery to Canaan."

They had found their inspiration in Exodus 3:17: "And I have promised to bring you up out of your misery in Egypt into the land of the Canaanites . . . a land flowing with milk and honey." They were setting forth on a modern-day exodus, fleeing the hunger season for the promised land of bigger harvests, healthier children and more prosperous farms. They weren't going anywhere physically, but by improving their agriculture they hoped to end up light-years from where they were.

Zipporah, a praise leader in her church, was named for the wife of Moses. She too was hoping to lead her family on an exodus from hunger. As 2011 began, her youngest child, David, had a swollen belly, a common sign of malnourishment; her two daughters were thin as twigs. They lived in a tiny hut made of sticks and mud with a thatched roof that leaked into the bedroom.

For Rasoa, inspiration for her exodus was written on her mud walls literally, with chalk. "With God everything is possible," she had scrawled on the wall of her living room. There were other exhortations as well: "Lord is good all the time" and "Nothing but prayer."

Francis, too, prayed without ceasing for better harvests. He didn't know the precise date he was born in 1957, but he thought it must be May or June. Why then? His mother had given him a middle name: Wanjala. In the local language, Wanjala means hunger. He must have been born during the hunger season, and May and June were usually the worst months of all. He wanted nothing more than to change

his name to Wekesa, which means harvest.

When given access to better seeds, small levels of fertilizer and proper agriculture advice and financing, these farmers are doubling or tripling their harvests of corn and vegetables. They are shortening their hunger seasons. They are also creating hope that they will be able both to feed their families and to educate their children. This would be a remarkable accomplishment, for that equation had always been an either/or proposition or, most frequently, neither/nor.

Who are they? They are at the center of President Obama's Feed the Future Initiative, which seeks to create the conditions for smallholder farmers to grow as much food as possible, to store it and then to transport it to an efficient market that can give them a profit for their work. Momentum for such agricultural development is building among big donors like the Bill and Melinda Gates Foundation and the Howard G. Buffett Foundation, in countless corporations, in humanitarian organizations like Bread for the World and ONE and in the once-indifferent hallways of institutions like the World Bank and the International Monetary Fund.

But the question remains: Do we care? While these farmers were setting off on their exodus from the misery of the hunger season in 2011, this momentum to reverse the neglect of agricultural development was under grave threat in the U.S. Congress. The budget-cutting fervor was targeting foreign aid, particularly programs like Feed the Future. Bread for the World and the Alliance to End Hunger and other faith-based groups led a drive to create a "circle of protection" around programs designed to reduce hunger and poverty in the U.S. and abroad. They largely succeeded in preserving this spending in the 2011 and 2012 budgets, but the assault is on again for 2013.

Leonida and her neighbors in western Kenya know that their journey to a figurative land of Canaan will be a lengthy one. But they also know it is the only way to eliminate the hunger season. They long to move from being subsistence farmers on the edge of survival to being farmers who can sustain improved harvests over many years. They want to advance from merely farming to live to farming to make a living. They dearly desire to do more than just survive. They want to thrive.

This is why, facing the great challenge of increasing global food production, we must know who they are. For if these farmers succeed, so might we all.