



FOOD FOR 9 BILLION



## Soil is ground zero in African farming debate

By [Jori Lewis](#)

June 04, 2012 | 12:00 AM

Listen to this story



Kofi Boa, agronomist and no-till evangelist. Ghana's farmers face tough choices in search for fertility boost. - [Jori Lewis](#)

**Kai Ryssdal:** We've been working on a big population and food project for the past half year or so geared around this question: With the United Nations saying there are gonna be 9 billion people on the planet by the middle of the century, how are we gonna feed them all? In Africa right now, a continent with one of the

[Latest Stories](#)[Popular Now](#)[Mentioned on Air](#)[Podcasts](#)

---

Today on our series [Food for 9 Billion](#), Jori Lewis went to Ghana to find out how they might do that.

---

**Jori Lewis:** For farmers, it all comes down to the dirt. I've come to Kumasi, in central Ghana, to visit the Soil Research Institute. Ghana sits due south of Spain, Morocco and Mali, and right now, is West Africa's superstar. After discovering some 3 billion barrels of oil in 2007, Ghana's economy went into overdrive. In 2011, it was the world's fastest-growing economy.

It has one of the fastest-growing populations too -- more than 20 million now. Kumasi is in the Ashanti region, where rolling hills and forests support corn and yam, cocoa and coffee. In the years to come, these hills will need to produce more than ever before.

Dr. Francis Tetteh from the Soil Research Institute is standing on the side of one of those hills now, showing me a deep pit. He's uncovering the secrets of the dirt itself.

**Francis Tetteh:** There are two kinds of soils in the whole of the Ashanti region. This area, you see here, has the two groups coming together.

He says that for thousands of years subsistence farmers have been taking nutrients out of the soil and not putting them back. In effect, farmers are mining the soil. And this is the problem all over Africa: the nutrients are gone and the soil can't produce.

Not far from the Soil Research Institute, I find the tiny village of Fufuo. It's a town

[Latest Stories](#)[Popular Now](#)[Mentioned on Air](#)[Podcasts](#)

In the 1980s, a development project brought things farmers had never had before: improved corn seeds, fertilizers and herbicides. This changed everything -- bigger corn, bigger harvests and more money. But once that project ended, farmers still couldn't afford fertilizers on their own. Even today with the Ghanaian government subsidizing fertilizer prices, the cost is still too much.

Agronomist Kofi Boa said that fertilizer is sometimes necessary, but not always. What farmers need are better ways to manage the soil. Boa is a devotee of what's called "no-till" farming, where farmers simply leave all the unused parts of crops to decompose on the field. That makes a mulch that keeps moisture in and adds back nutrients. The soil stays covered and is restored by nature.

**Kofi Boa:** You see here, you can really sense life. Unlike here, you don't see anything here. But when you come here, wherever you have the mulch. You see this one? This is telling you there is an activity.

But no-till has a downside: weeds like you wouldn't believe. Enter agrochemical company Monsanto. It sells farmers an herbicide to kill those weeds -- an herbicide called glyphosate, better known as Roundup.

On the road we pass men in protective boots and gloves with chemical cans on their backs and sprayers in their hands. Boa says the secret to no-till farming's adoption in Ghana was actually glyphosate. And that eventually, the product took over.

[Latest Stories](#)[Popular Now](#)[Mentioned on Air](#)[Podcasts](#)

Boa says no-till systems also need cover crops to prevent erosion and other plants to deliver more nutrients to the soil. But all that has been a harder sell to Ghanaian farmers than glyphosate and fertilizer. After all, why let the dirt rest and recharge when chemicals can help it produce without interruption?

Across the country, in the northern regions of Ghana, small farmers are looking for different solutions because they want and need to. In the north, the savannah stretches out dry and flat. And the rains come just once a year. Farmers can't afford a lot of fertilizers, herbicides and improved seeds, so they manage their entire farms -- from water to waste streams -- and make use of everything.

In a northern Dagomba village, I meet farmer Richard Dahaman. He invites me to share a typical midday meal -- rice and a sauce made from peanut butter. Dahaman shows me around his house and fields. He shows me his rainwater tank where his 30 sheep sleep, and where he collects the sheep droppings, which allow him to cut back on fertilizer. And best of all, it's working for him. He said that before, he wasn't doing much and wasn't making much money either.

**Richard Dahaman:** I was alone, a bachelor. Even the money I was getting wasn't enough for me. And now, I have a family.

Now, his yields and his money have increased. He's sending his children to school and adding on to his house. But Kofi Boa says this practice takes a lot of work. And it will never be as easy as simply buying fertilizer and glyphosate. And as farmers are more successful, there's no way to keep them from switching to what's easy.



Latest Stories

Popular Now

Mentioned on Air

Podcasts

to be committed.

He dreams of a day governments will subsidize compost as well as fertilizer; when enterprising farmers plant cover crops to go along with their hybrid corn; when people recognize that to feed as many as we're going to need to, soil matters. Just as much as the crop.

In Ghana, I'm Jori Lewis for Marketplace.

**Ryssdal:** Our series [Food for 9 Billion](#) is a collaboration with [Homelands Productions](#), the [Center for Investigative Reporting](#) and [PBS NewsHour](#).

RELATED ARTICLES

WTC site plans move forward

Business at Ground Zero

African-Americans hit hard by housing crisis

Why a lot of military vets like farming



SHOW COMMENTS



Latest Stories

Popular Now

Mentioned on Air

Podcasts

SUBSCRIBE

Follow the Podcast

support us



WORLD



# Queen's Diamond Jubilee brings joy and complaints

By Christopher Werth  
June 04, 2012 | 12:00 AM

Listen to this story



Jamie Newell dressed himself in the Union Jack for the Queen's Diamond Jubilee. -

**Kai Ryssdal:** Queen Elizabeth's Diamond Jubilee celebrations -- 60 years on the throne -- continue, should you have missed the 1,000-boat flotilla on the River Thames yesterday. The queen's throwing a garden party tonight, complete with a concert outside Buckingham Palace. Paul McCartney, Stevie Wonder and Elton John are just some of the stars performing.

How all the partying's going over at a time of renewed austerity in the U.K.? Christopher Werth has the story from London.

---

**Christopher Werth:** It's not always pretty, but it's pretty much everywhere in London right now -- the strains of the British national anthem reaching every corner of the capital. An estimated one million people came here yesterday to watch the queen float by. To recover, the entire country has an extra day off today.

David Kern, an economist with the British Chambers of Commerce, says that's going to hurt the British economy.

[Latest Stories](#)[Popular Now](#)[Mentioned on Air](#)[Podcasts](#)

Flat just as Britain has slipped into a double dip recession. Extra days off are projected to cost the country as much as \$3.5 billion. But Justin Urquhart-Stewart of Seven Investment Managements says that doesn't take into account the benefits of a little merrymaking.

**Justin Urquhart-Stewart:** We tend to forget that holidays do have a positive impact on productivity.

People feel good, he says, and they go spend a little money. The Queen's Jubilee is expected to give hotels and other tourism industries a \$1.4 billion boost.

Londoner Nigel Hutchinson is celebrating, and says he's happy to do his part.

**Nigel Hutchinson:** In times of recession, we are in a time when we actually need some enjoyment in our lives. So I would say long live Great Britain, long live Queen Elizabeth, long live the Great British Monarchy.

But not everyone feels that way. Several people turned out in London yesterday to protest a royal family that costs taxpayers about \$49 million a year.

Anti-royalist Louise Radici.

**Louise Radici:** At a time when there's a growing gap between rich and poor, it is outrageous that a family has this much prestige. If the royal family and the very rich in this country paid their fair share of taxes, there wouldn't be the growing number of poor that we have in this country now.



Latest Stories

Popular Now

Mentioned on Air

Podcasts

RELATED ARTICLES

Property taxes falling

Big BCS payouts go only to a select few



SHOW COMMENTS

Subscribe to the MARKETPLACE® newsletter.

myname@myemail.com

SUBSCRIBE

Follow the Podcast

support us

Business • World • Life • Tech • Sustainability • Education • Wealth & Poverty • Entertainment • Money

ACCESS:



**Latest Stories**

**Popular Now**

**Mentioned on Air**

**Podcasts**

© 2016 **Minnesota Public Radio. All Rights Reserved.**

[About](#) | [Contact](#) | [Terms of Use](#) | [Privacy Policy](#) | [Feedback](#)