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WorldArk

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HEIFER HAITI

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Dear Fellow Activists,

WE ALL SAW A HUGE SIGNIFICANT BIRTHDAY come to pass recently when our fragile and beautiful Earth became home to its 7 billionth person. Over the next 30 years, another 2 or 3 billion people will join us. What does this monumental population growth mean?

For one thing, the global food system is struggling to provide for us all. Food prices peaked in 2008 and again in 2011, sparking riots and export bans. Land grabs, rising oil prices, biofuel development, distribution failures and water shortages are all reshaping our world and the very character of poverty and hunger. All these forces are also surely contributing to geopolitical disturbances and the distressing spike in malnutrition and poverty around the world.

The era of cheap food driven by the Green Revolution is over. We are at the age of the unthinkable, in which struggles over land, water and resources are becoming more common and more dangerous. I believe we are shifting into a level of disorder that will increasingly surprise us. The reality is that with poverty and food insecurity rising, it will be even more difficult to feed all 7 billion of us.

Agricultural productivity is now the hottest issue in development. Organizations and foundations are rediscovering the critical importance of agriculture and are promising to do more to help smallholder farmers feed themselves and their neighbors. From our point of view, it's about time!

There are substantial opportunities in the short term. By using the best seeds, plants, fertilizers and husbandry, yields can be multiplied by factors of three or four. Reversing ill-advised political moves such as subsidies for biofuel can free up vast acreage for human food production. We can drastically cut food waste, now estimated around 30-50 percent.

At Heifer, we're spearheading what's been called the livestock revolution. We must reach a rapidly growing group of smallholder farmers to inspire agroecological productivity, biodiversity, financial security and health to create the surplus needed to feed the surging population. There are 650 million smallholder farmers in the world—80 percent of them women. They grow 70 percent of the food that is eaten every day. By doubling their productivity, they can feed the world! It can be done.



Children finish a meal of millet porridge in Diarrere, Senegal.

We need to focus on the people we work with and touch the lives of as many as possible. We need to acknowledge that our project participants are our peers. How do we begin to shift Heifer's approach to an open-sourced, self-sustaining system where peer production, training and self-reliance dominate? We offer a seedling of that through our signature practice of Passing on the Gift, wherein every recipient becomes a donor. But are we taking full advantage? We need to do more, and we will.

"The power of individuals has never been greater," said Danish physicist Niels Bohr. I believe we need to ask ourselves, as we enter this age of the unthinkable, "What does it demand of us?"

I am enthusiastic and optimistic about joining forces with you, as well as volunteers, project participants and staff, to respond to this new challenge of making sure all 7 billion of us are fed. Thank you for joining me as we work to transform our world to a more caring and peaceful place.

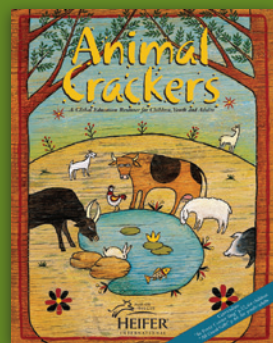
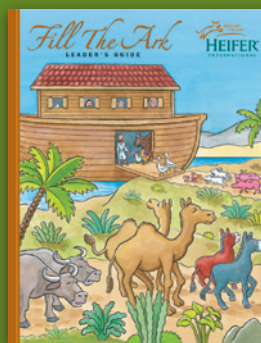
Sincerely,

Pierre U. Ferrari

President and CEO Pierre U. Ferrari

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Visit heifer.org/congregations or call (800)422-0474.



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Once completed, this handmade boat will be outfitted with a 15-horsepower engine so fishermen can travel farther from shore to bring in bigger catches.

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 Cover and top photos by Geoff Oliver Bugbee

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THE NEED FOR FEED

The Holiday 2011 issue of *World Ark* went a long way in explaining the training families receive before being given livestock. Since I grew up on a farm where we had chickens, pigs, cattle and horses, I know how much feed was needed. We utilized the manure on our garden and fields. We raised the hay, grain and corn we fed our animals. I often wondered how families would be able to provide for the livestock given to them.

SHARON KING
St. Louis, Mo.

CEO LETTER HITS HOME

Dear Pierre, I take the liberty of calling you by your first name, not because we've met or are friends, but because your letter at the beginning of the 2011 Holiday *World Ark* makes me feel as if we are friends in spirit.

Your letter rings with conviction, sincerity, hope, determination and humility. It, quite literally, brought tears to my eyes.

As a single parent, doing the best I can to both make a difference in the world and support my family, your message was profound and created a sense

of community and urgency for this member of the Heifer International family.

Giving to your organization has become a holiday tradition in our home. Your catalogs and magazines are read cover to cover and discussions of where we think our limited funds would have the most impact are serious and thoughtful. Our selection, once made, is a cause for joy and quiet pride.

I pledge to increase our gift to Heifer International this year. Yesterday my youngest daughter said, "if I had lots of money, I'd buy an ark." While our gift won't be that lavish, the fostering of your cause in the hearts of the next generation will, I hope, make up for our modest commitment.

KRISTA KATZ AND KIDS
CLAIRE, DYLAN AND EMMA
Waterville Valley, NH

EAT LESS MEAT

I enjoyed the article on Zambia and was pleased to see that you do a comprehensive evaluation of your programs. However, I do take issue with one of the author's assumptions. Thomaz Chianca stated, "Access to protein, especially meat, has improved but still remains limited. Participants indicated that they eat meat (mostly chicken and fish) about two times per month.... It's an important improvement but still far from the ideal." Protein in the diet is unarguably important, but expecting people the world over will rely on meat to supply it is unrealistic. My family doesn't eat meat more than two times per month, not because it is morally wrong, but because it is unsustainable. Eggs and milk, as well as legumes and nuts, all supply good protein. I would hope that this view would be conveyed to recipients and that quantity of meat consumed would not be used to evaluate the success of Heifer programs.

ELIZABETH VERBECK
Rogue River, Ore.



Brothers

In the photo, the men are smiling broadly, though two lifetimes ago they were enemies. They are from Cambodia – no, Kampuchea. During the horrific years of the 'killing fields' they fought on opposing sides until landmines took a leg from each man.

They sit, looking into the camera; one leans into the other and has his hands on the other man's shoulders. The man being leaned into wears a pale blue shirt with the legend "peace for all" under a dove logo. Beneath the smiles are telltale plastic sheaths over prosthetic limbs.

The only escape from the past is acknowledgement – and then refusal of the old hatreds. The only way forward is through forgiveness and development recognizing the rights of all.

The men smile, call each other "brother," and I imagine now, with a water buffalo from Heifer International, dare to dream of a better, more peaceful future for their families.

This poem, contributed by Andrew Shattuck McBride of Bellingham, Wash., was inspired by a story that ran in the Fall 2011 issue of *World Ark*.

Q&A HOLIDAY

What is your favorite Heifer animal? Why?



My favorite Heifer animal is a sheep because it was my son, Collin's, favorite. He died at age 19 in a motorcycle accident on Nov. 7, 2007, and I collect money from family and friends each holiday season to purchase Heifer sheep in his memory. I started this project in November of 2008 and so far, I've collected enough money to purchase 135 sheep from Heifer! It gives me so much peace knowing that my son is still bringing joy to so many people around the world. The holiday season is difficult for those who feel the loss of a loved one, but collecting money to buy Heifer sheep to send around the world in my son's memory makes the holiday season more joyous, exciting and special for me.

LORIJO PETERS
Manheim, Penn.

My wife supports your fine work and so do I, but is promoting goats such a good idea?

There was a calendar out recently that had a picture called "Goats In Trees." These goats were high in a tree eating the last remaining leaves. Below, the arid ground was bare, the goats had eaten everything!

The Sahara is spreading. My question is, how much is climate change and how much is overgrazing? Anyway, your work is very important.

I have two favorites, chickens and pigs, great small farm animals.

ROBERT THOMPSON
Bee Log, N.C.

***Editor's note:** Caring for the Earth is a big part of Heifer's mission, and we've seen the havoc free-roaming goats can cause. That's why Heifer participants living in environmentally sensitive regions must build what we call zero-grazing pens before receiving their goats. These spacious pens allow the animals plenty of room but keep them from devouring crops and other vegetation. Animals are frequently taken out of the pens for supervised exercise.*

Mine are poultry, rabbits, pigs and guinea pigs.

They require relatively little food to sustain them, have low environmental impact and short gestation periods, with multiple births with each pregnancy.

CARMEL HARA
Berkeley, Calif.

Q&A FEBRUARY

How do you teach children the importance of giving?

E-mail your answers to worldark@list.heifer.org. Please limit your answer to 250 words or fewer. We reserve the right to edit responses for length, clarity and grammar.

We want to hear from you! Please send your comments to worldark@list.heifer.org. Include your name, city and a telephone number or e-mail address. Letters may be edited for length and clarity, and may be published online as well as in print. Because of the volume of mail we receive, we cannot respond to all letters.

Text HEIFER to 56500 to receive our mobile alerts (message and data rates may apply).



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Since 1944, Heifer has helped 13.6 million families in more than 125 countries move toward greater self-reliance through the gift of livestock and training in environmentally sound agriculture.

Heifer International is a member of InterAction, the largest alliance of U.S.-based international development and humanitarian non-governmental organizations, and of Global Impact. Federal and state employees may designate gifts to Heifer through payroll deduction by entering CFC #12079.

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Tipping the Scales



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Greece



Canada



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Japan



Korea

For the first time in history, more people around the world are overweight than underweight. The economic and health costs for both extremes are high, and climbing higher.

- In 2010 there were **1.5 billion people suffering obesity**, compared with 925 million people who were undernourished.
- **Hunger is the world's No. 1 health risk**, killing more people than AIDS, malaria and tuberculosis combined.
- Worldwide, **obesity has more than doubled since 1980**.
- Researchers estimate that **one out of every three males and two out of every five females born in 2000** will be diagnosed with diabetes.
- **10.9 million children under age 5** die in developing countries each year, and malnutrition and hunger-related diseases cause 60 percent of those deaths.
- At least **2.8 million adults die each year as a result of illnesses related to being overweight or obese**.
- There is enough food in the world today for everyone to have enough to eat.
- Being hefty comes with a hefty price tag. Extra medical care and lost productivity caused by obesity or **being overweight cost people in the United States roughly \$270 billion each year**.
- Nauru, an island country in the South Pacific, is the fattest place on Earth, **with 97 percent of men and 93 percent of women overweight or obese**.

Sources: World Food Programme, International Federation of the Red Cross

Frankenfurters

Scientists looking for alternatives to large-scale meat production, with its smelly feed lots and polluting waste lagoons, are now growing meat in vitro. This potential meat of the future is produced in laboratories by extracting and isolating self-dividing stem cells from cows, pigs, sheep and chickens. It works fine in theory, but so far the process is extremely slow and yields only small amounts of not-very-tasty meat. Learn more about laboratory-made meat at invitromeat.org

Incredible Shrinking Animals

A number of animals and plants around the world are shrinking, and a new study suggests climate change is responsible. A study that appeared in the journal *Nature Climate Change* found that 38 of 85 species reduced in size over recent decades. Shrinking species include polar bears, strawberries, corn, cotton, scallops, shrimp, crayfish, carp, salmon, herring, frogs, toads, iguanas, robins, red-billed gulls, squirrels, lynx and wood rats. Study authors reason that warmer temperatures cause animals to burn more calories. Critics of the study say changes in body size are a normal phenomenon and aren't necessarily linked to warmer temperatures.



PHOTO BY ASHLEY WHEATON

Peepoo, A New Loo?

More than 1.2 billion people around the world live in homes with no toilets. In the slums of Nairobi, people walking at night take care to avoid "flying toilets," plastic bags filled with excrement and then hurled into the night. A Swede named Anders Wilhelmsen created the Peepoo as an environmentally friendly alternative. Made of biodegradable plastic, the bag acts as a treatment plant that can be buried and used as fertilizer. Learn more at peepoople.com



PHOTO BY RUSSELL POWELL

Country Come to Town

More than 800 million people worldwide rely on urban-grown food, and this number is likely to grow as urban populations increase. Urban farming is also becoming more popular in the United States, where windowbox gardens and backyard chickens abound.

Jargon

CAGE CULTURE: An aquaculture production system made of a floating frame, net materials and a mooring apparatus to hold and cultivate large numbers of fish. It can be installed in reservoirs, rivers, lakes or oceans.



PHOTO COURTESY OF JON BON JOVI SOUL FOUNDATION

Hard Luck Café

Hair band heartthrob Jon Bon Jovi opened his own restaurant, but it caters to a different clientele than most other celebrity-owned nightspots. The Soul Kitchen, located in a former auto body shop in Red Bank, N.J., is a pay-what-you-can restaurant for the hungry.

Prices don't appear on the menu at all. Instead, customers leave what they can in an envelope on the table. If they can't pay with cash, diners can bus tables, wash dishes or volunteer on community projects.

Bon Jovi said he worked hard to make sure the restaurant doesn't have a soup kitchen feel. Tables are set with linens and silver. An herb and vegetable garden right outside provides fresh ingredients for the entrees, which include gourmet offerings like grilled salmon and chicken with homemade basil mayo.

The Soul Kitchen is the latest project of the Jon Bon Jovi Soul Foundation, which has already built 260 homes for low-income families.

Ask a Goat



As if giving someone a goat isn't fun enough, Heifer International's splashy new online tool shows children how gifts of livestock can alleviate hunger and poverty. Heifer teamed up with Jellyvision Labs to create the interactive experience, which uses animation to explain how Heifer's model transforms communities. Visit www.heifer.org/sarah and let Sarah the goat help you decide which animal you'd like to give to a family in need.

Last Bites



Mosquitoes can't bite you if they can't fly, so scientists are working on a way to keep the disease-spreading pests grounded. Anthony James, a molecular biologist at the University of California, Irvine, added corrupting genes to the dengue-spreading *Aedes aegypti* mosquito. The genes render the females unable to move. Since females are the only mosquitoes that require a blood meal, taking the females out of commission could slow the spread of mosquito-borne diseases. James is testing the theory in Chiapas, Mexico. His goal is to eradicate the dengue virus that infects 100 million people each year.

Mosquito-borne disease is facing attack on another front, too. For the first time ever, a vaccine to protect children against malaria is proving effective. Called RTS,S, the vaccine was developed by GlaxoSmithKline and is being tested on 15,000 children in sub-Saharan African countries. So far, infants who received the vaccine saw their risk of infection with severe malaria reduced by 47 percent. Thanks to The Bill & Melinda Gates Foundation for donating \$200 million to help fund the research.

Harvest:

Parsnips

Parsnips? Really? Well, yes. Although they're not a particularly popular feature on American menus, this root vegetable that looks like a fat, white carrot is inexpensive and easy to prepare. Starchy enough to serve as a stand-in for potatoes, parsnips are also a fine ingredient for soups, salads and side dishes. Try peeling them, then roasting them with olive oil, salt and a drizzle of maple syrup.

For gardeners, the handy thing about parsnips is that you don't have to harvest them in the fall. In fact, some people think they're tastier the longer you leave them in the ground. Some gardeners dig them up throughout the winter as they need them. Others wait until spring, when parsnips are at their sweetest.



Curried Parsnip Soup

Ingredients:

- 2 tablespoons butter
- 1 medium onion, chopped
- 1 pound parsnips, peeled and cubed
- 1 clove garlic, finely chopped
- 2 teaspoons curry powder
- 3 ¼ cup boiling vegetable broth
- ½ cup milk
- salt and pepper to taste
- red pepper flakes or paprika for garnish

Saute the onion in a large pan over medium heat until soft, about five minutes. Add the parsnips, garlic and curry powder to the pan, and saute for a couple of minutes. Pour the vegetable broth into the pan, stir and simmer for 15 minutes, until the parsnips are soft. Remove from heat and blend with a hand mixer, immersion blender or regular blender for 30 seconds to one minute. Pour back into the large pan, then stir in milk and heat through. Season with salt and pepper, and garnish with paprika or pepper flakes.

CORNERSTONES IN ACTION

For decades, families and communities around the globe have used the principles of Heifer's Cornerstones to build successful projects and become self-reliant. What exactly are these principles, and how can they help strengthen and enrich our own lives? *World Ark* is featuring a different Cornerstone in each issue, along with suggestions on how to put them into practice.

The 12 Cornerstones form the acronym PASSING GIFTS. This month: **Nutrition and Income**



HOW IT WORKS: Heifer recipients enjoy improved diets and finances through the consumption and/or sale of milk, eggs, cheese, honey, meat and wool. Other Heifer recipients use draft power to increase crop yields or get products to market more easily. It's not uncommon for project participants to share extra milk with their neighbors or to loan out their oxen to help other farmers till their fields.

IN ACTION: Be aware of the impact your diet has on others. Do you know how your produce was grown and harvested? Were the workers who picked and processed your food paid a living wage? Whenever possible, opt for locally and sustainably grown fruit, meat and vegetables.

Nutrition and Income

Healthy Homes, Healthy People



Peter Williams recently left a career in architecture to found Architecture for Health in Vulnerable Environments (ARCHIVE), to address a lack of coordination between aid efforts to improve human health and those that provide better housing. ARCHIVE builds homes using innovative designs that improve hygiene and reduce illness. In late 2010, design teams from all over the world submitted innovative plans to ARCHIVE's Haiti Housing Design Competition. The winning designs are under construction in Saint-Marc, a coastal Haitian community 62 miles from Port-au-Prince. *Utne Reader* named him one of 25 Visionaries Who are Changing Your World in 2011.

By Erik Hoffner, *World Ark* contributor

WorldArk: *Why did you leave your architecture career to found ARCHIVE?*

PETER WILLIAMS: As an architect, I had the opportunity to work on some of the most incredible projects around the world, but the bigger and more involved they were, the more difficult it became to reconcile my early life experiences growing up in Jamaica where communities struggle to break cycles of poverty. I believe there's an urgent need to address poor living conditions and widespread, preventable diseases by improving housing and health simultaneously. These problems are almost always dealt with in isolation, which is not cost-effective. Six in every 10 people die from infectious disease every year, and at the same time, 1.2 billion people live in what is considered poor housing, or slums, which put their health at greater risk. No other organization was addressing this on a global scale, so I saw the need to bring this issue to people's attention.

How did you choose the countries where you are launching healthy housing initiatives?

Haiti was chosen because after HIV/AIDS, tuberculosis is the biggest killer, and research has shown that properly ventilated indoor environments can significantly reduce its transmission. In addition, Haiti's cholera challenge can be addressed effectively by ARCHIVE homes, which provide safe water storage and sanitation.

In Cameroon, the problem is different. Malaria is one of the top three causes of death, in part because of the prevalence of insecticide-resistant mosquitoes in the region. The Cameroon pilot seeks to demonstrate that malaria transmission can be combated through eliminating breeding sites and improving housing construction.

Wouldn't it be cheaper, quicker and easier to supply people with bed nets in Cameroon?

With one child dying every 45 seconds from malaria in sub-Saharan Africa,

bed nets would seem to be an obvious way of tackling this problem. However, bed nets are ineffective unless used correctly, and washing and drying them in strong sunlight further limits their efficacy. Mosquito-proof housing should be part of an integrated approach to malaria control.

How can such designs alleviate poverty and hunger?

Healthy housing is one of the most effective strategies to alleviate poverty because it lowers medical expenses due to illness. One study found that household costs due to malaria in two African communities ranged from \$9 to \$20 per month. Alleviating the burden of disease would significantly reduce the poverty trap, since more can then be spent on nutrition. Better health also reduces school absenteeism and increases work productivity, both of which translate to increased earning potential. Owning a home also results in improved access to credit.

What key features does an ARCHIVE home contain?

These homes improve temperature control for their occupants, minimize indoor smoke from cooking, reduce indoor moisture and humidity, improve airflow and provide clean water and sanitation. Lastly, our design and building practices prioritize the use of renewable building materials such as bamboo, and stove designs which use alternative cooking fuels, reducing the need for firewood and therefore slowing deforestation rates.

Do ARCHIVE homes aid in food preservation and storage? How?

Absolutely, storage of food is an important part of any sustainable housing design. Keeping moisture out and maintaining desirable indoor temperatures ensure that fresh food is well preserved with minimal use of energy.

How does ARCHIVE involve communities?

The community is central to design, development and delivery. ARCHIVE believes that health, prosperity and development are not created by top-down, one-size-fits-all schemes, but by empowering people to come up with their own solutions. At every stage of the project, the local community is involved, from an initial consultation that informs the design to regular feedback sessions to address issues as the project is completed. The homes are built using local labor and materials, and future occupants also contribute, through sweat equity, a

predetermined number of hours assisting in the construction.

Will your projects increase skills and create jobs in the host countries?

Yes. Home-based enterprises are developed with each project to ensure that residents are provided with improved skills, access to credit, and/or income generating opportunities. We're also designing and building a vocational school in Saint-Marc at which local people will be trained in sound building practices, carpentry and plumbing.

How is ARCHIVE funded, and how are homes financed?

ARCHIVE receives individual donations as well as foundation and corporate support. Recipients also pay part of the cost of each home, which goes to a local community-based organization that manages a community revolving loan fund. This fund helps to offset maintenance costs and helps in scaling up the projects with less

external support.

Does ARCHIVE partner with other NGOs?

We seek partnerships that harness the strength of each organization to deliver the greatest good to the communities most in need. Partnerships with local financial institutions, which provide microcredit, are an example.

What do you hope ARCHIVE's future will look like?

One community at a time, we will deliver projects which pair intervention with education about how living conditions affect residents' health. On a grander scale, we hope that multilateral organizations, governments and large aid agencies will invest in improved health and living conditions for communities in need by adapting the principles we advocate.

Learn more about ARCHIVE's work and progress at www.archiveglobal.org.



Breathe House, voted the top design for Haiti, is now one of several models under construction.

The Triple Threat of



(Left) Vendors and buyers mingle at the Muribe Village market in Tanzania. (Right) Children share a meal of millet in Bamtou Village in the Western Region of Cameroon.



Unstable Food Prices

... and What Can Be Done About It



PHOTO BY JAKE LEVELL



PHOTO BY JAKE LEVELL

BY STEPHEN C. SMITH

GEORGE WASHINGTON UNIVERSITY

THE SCOURGE OF HUNGER today is worse than it was a decade ago. In the aftermath of the first food price spike and the 2008-2009 global financial crisis, for the first time more than 1 billion people were significantly malnourished. Conditions improved slightly in 2010, but food prices spiked again in 2011, pushing the United Nations Food and Agriculture Organization's food price index to a record high. About 925 million are currently hungry, not far from the all-time record. A family living in poverty in a low-income country may spend almost three-quarters of their income on food.

Although prices have fallen somewhat from their peak earlier in 2011, "high food prices are likely to continue and volatility may increase in coming years, making farmers, consumers and countries more vulnerable to poverty and food

insecurity," according to the FAO's "State of Food Insecurity in the World 2011" report.

When food prices rise, so does hunger. In summer 2011, the United Nations declared a famine under way in parts of Somalia. Tens of thousands of people have died, a majority of them children, according to the U.N. Severe hunger caused by drought, conflict and inequity is now found throughout the Horn of Africa. One problem is that some local food is exported out of the famine-struck area. The reason is simple: starving people don't have sufficient means to buy food, so traders sell it elsewhere, fetching a higher price.

Looking closely at the links between food prices and malnutrition can help leaders, governments and organizations lay a foundation for building sound policies and programs to end hunger.

Over the previous 40 years the world has learned to grow much more food, and prices fell substantially for a time. The Green Revolution brought improved crop varieties to Asia and productivity rose, increasing output and pushing prices down. Incomes of people living in poverty rose—not nearly enough, but many were able to afford more food than before. And in some parts of the world—China most prominently—incomes grew enough that many millions of people were able to add animal-based foods to their diet.

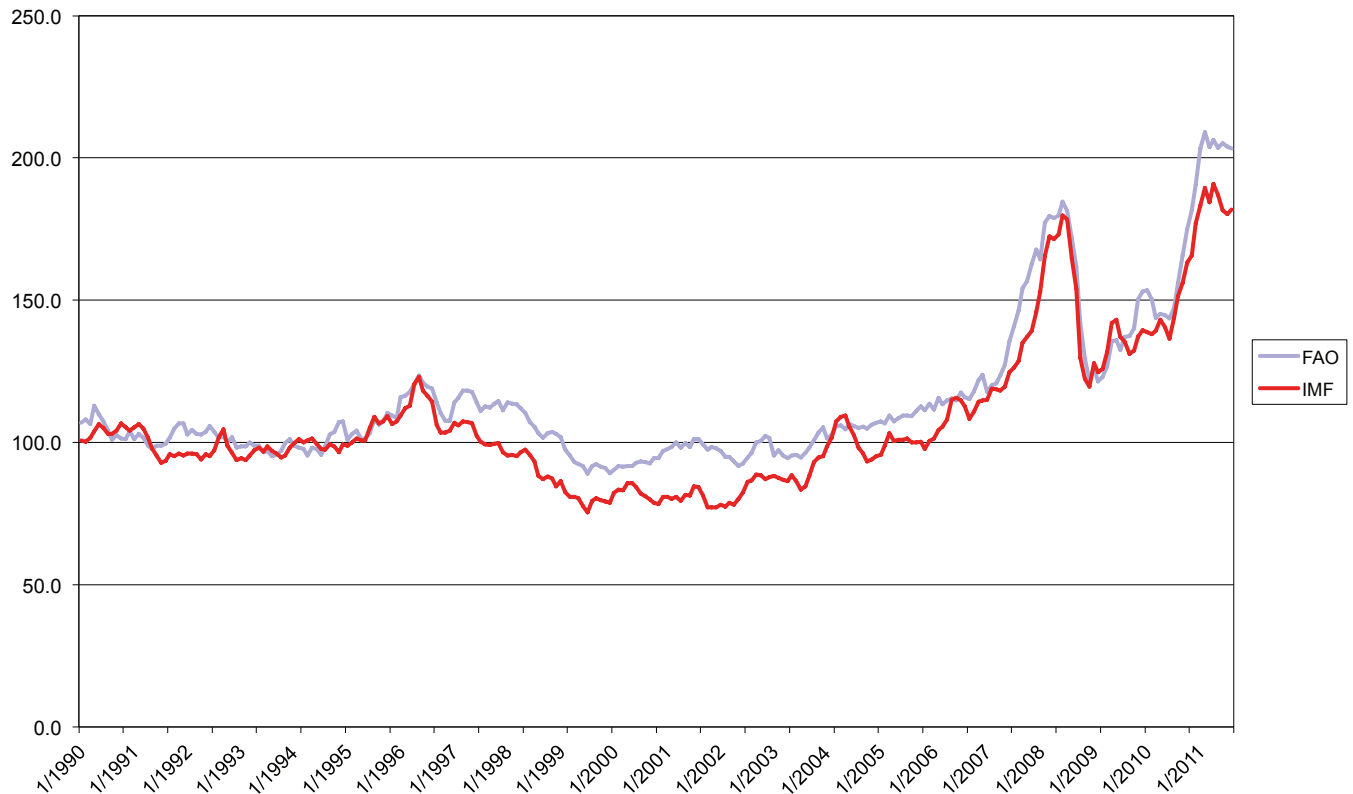
The United Nations declared Oct. 31, 2011, the “Day of 7 Billion,” a world population milestone. Within about 35 years, more than 9 billion people will need access to adequate food. Indeed,

in May 2011 the U.N. raised its estimate of the peak population to 10 billion by the end of this century. But the number of people is the smaller part of the problem. The critical issue is what the people do: how much do they consume, in what ways, and what environmental damage do they cause? Without some needed adjustments, a return of the world food problem is threatening.

THREE TROUBLING CHANGES IN FOOD PRICE PATTERNS

By 2002, food prices started an unmistakable rising trend; in addition, prices became more variable and volatile; and finally, a third problem of upward spikes of food prices emerged.

MONTHLY REAL FOOD PRICE INDICES JANUARY 1990 - AUGUST 2011



Definition of terms

Trend: A consistent pattern over an extended period, for example growth that averages close to 2 percent for many years in a row.

Volatility: Reflects how much prices fluctuate around a mean or trend in a standard manner.

Spike: A rapid, temporary shift up, beyond a trend for a period of time.

A woman sells vegetables in the rubble-strewn streets of Port-au-Prince, Haiti.



PHOTO BY BRYAN CLIFTON

THE RISING FOOD PRICE TREND

Clearly, rising food prices harm people living in poverty. But the effects are subtle. If the price of corn rises, as it did in 2007, smallholder corn producers, who sell a little of their corn on local markets and whose incomes are slightly below the absolute poverty line, may find that this price rise increases their incomes to pull them out of absolute poverty.

On the other hand, for those with too little land to be able to sell corn and who are net buyers of corn on markets, this price increase can greatly worsen their poverty. Farm laborers can find that at least a little of the higher corn prices get passed on to them in the form of higher wages, and this can more than make up for higher food prices. But the urban poor—a growing faction of people living in poverty—are nearly always hurt by food price increases. Often the evidence suggests that many of the rural poor are hurt as well, sometimes substantially.



INCREASING FOOD PRICE VOLATILITY

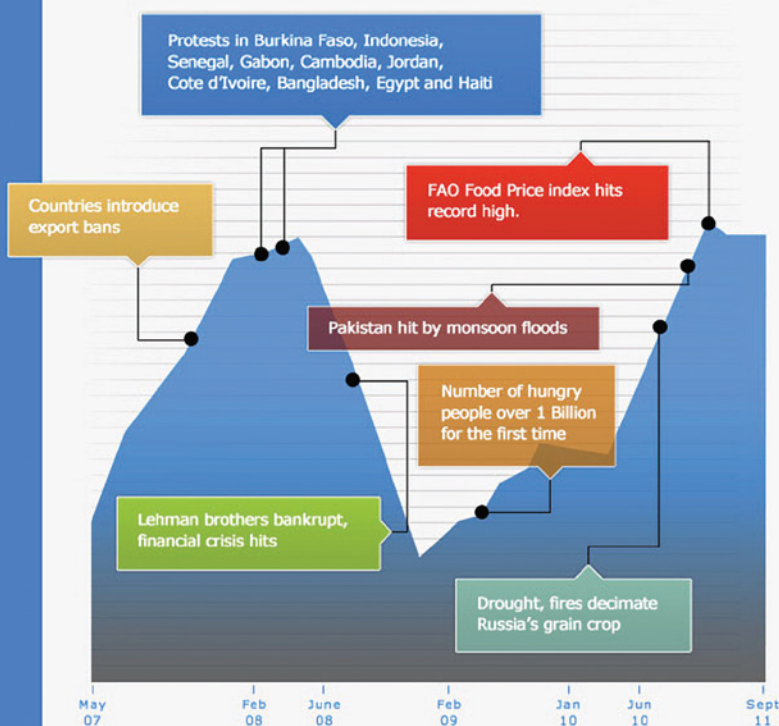
Greater volatility also makes it hard to plan for sufficient food. Smallholder farmers, many of them living in poverty yet also selling some of their harvest on the market to pay for other essentials, now face greater risks.

High Food Prices



Food Price Rollercoaster

between September 2007 & September 2011



The good news is that some years they get a pleasant surprise and find higher prices for their goods at the market. But, in other years, unexpectedly low prices can be disastrous. When they can do little more than pay for costs to farm, the family may face severe malnourishment.

THE NEW SCOURGE: FOOD PRICE SPIKES

Upward price spikes pose a third challenge for ending hunger. You can see two spikes in the graphic on Page 14. These sudden changes are about prices going up for a time, and far more than can be accounted for by any normal volatility (even while volatility is also rising). These spikes particularly harm people living in poverty who are not in the agricultural sector, such as urban dwellers and people on the margins of rural society. Although the poor often devise ingenious ways of saving even in the harshest of conditions, major food price spikes can overwhelm the ability of struggling families to cope.

WHY IS THIS HAPPENING?

LEADING EXPERTS WEIGH IN

Leading experts on food prices and their impact on people living in poverty convened at George Washington University on Sept. 30 for a daylong conference to better understand these three food price problems and consider action plans. More than 100 participants joined the discussion.

The Rising Food Price Trend

Food prices are about 80 percent higher than they were in 2000, reversing a long declining trend of previous decades. Nora Lustig, a professor of Latin American Economics at Tulane University, said some of the price increases reflect longer-term forces that if left unchecked will lead to higher future food prices. These forces include diversion of food to biofuels production, increase in demand for grains through shifts to meat production due to higher incomes in China and elsewhere, a possible slowdown in the growth of output per acre of agricultural commodities, higher energy prices affecting agricultural input costs, and a decrease in available land to convert to farming. Finally there is the negative impact of climate change on developing-country food production, with far worse effects likely ahead of us.

Long-term forces cannot explain the volatility, let alone the spikes. But the spikes were exacerbated by a number of unfavorable policies that interfered with food prices, such as subsidies and



PHOTO BY JACQUELYN

Vegetable and meat vendors display their offerings at the Meigu County market in China.

mandates for biofuels. As Alain de Janvry, a professor of agricultural and resource economics at the University of California at Berkeley, pointed out, “the demand for energy is simply so big compared to the food market that it could completely overwhelm any price predictions” that do not take energy policy into account.

Furthermore, there is not a large global market for food in relation to total demand. Most countries strive for food self-sufficiency, largely for national security reasons. Embargoes of food exports by such countries as Egypt, Vietnam and Russia reflect this reluctance to allow a freer global market when it comes to food.

The World Bank reported in 2008 that growth in output per acre was leveling off and that prices would continue rising. In fact, prices increased far faster than even the World Bank predicted. Lustig explained that while “food is energy for human survival, food commodities have turned into in-

dustrial commodities, energy for machines.” The result is less energy for people—at best, more expensive energy—when so many remain deprived of even a minimum of calories. “A majority of studies show that those who get hurt outnumber those who benefit” when food prices increase, she said.

In the 20th century, food prices fell close to 1 percent per year. Dr. Keith Fuglie, an economist at the U.S. Department of Agriculture, said that in the early 1900s, falling shipping costs steered prices lower, with producers sending food from where it was grown cheaply and abundantly to where food prices were high. In the later decades of the 20th century, rising output per acre drove prices down.

Today, that yield growth is slower, but Fuglie found we are still making gains despite smaller additions to inputs than before (especially the smaller number of workers in agriculture). This

is a new and encouraging discovery. It should be putting downward pressure on food prices. Looking ahead, these forces may continue to slow the rate at which food prices increase. Findings like Fuglie's help reassure us that, while new problems complicate work toward a world free of hunger, with continued commitment the goal can still be attained.

But Fuglie also found that these gains were not present in Africa, where most of the increase in population is expected. And although encouraging, his work is retrospective: It does not take into account the projected worsening of environmental stresses not only from climate change but from localized deforestation, water scarcity, falling water tables, declining soil fertility, erosion, salinization and other pollutants.

Madame Mederbey tends her parched millet patch in Douroum Village, Far North Province, Cameroon.



PHOTO BY GEOFF OLIVER BUGBEE

Increasing Food Price Volatility

As climate change increasingly plays into agricultural productivity, output will be more volatile, said Maximo Torero, an economist and division chief at International Food Policy Research Institute. Even if today's price volatility is a passing phase due to unregulated financial markets and other bad policies, volatility in some form will still be with us. So we have to take it seriously and plan to cushion people living in poverty from its harmful effects.

Most of the factors pushing food prices up are also worsening the volatility of those prices, Torero said. For example, just a few countries account for the majority of exports of most staples. Government mandates to use ethanol, a corn-based biofuel, also increase volatility as well as price. And as volume in futures markets has increased, this also makes the price of food vulnerable to volatility: High volatility attracts more financial market participants, who learn that they can make money on trading, which can amplify instability. Finally, high futures market prices lead to high current market prices, a consequence of speculation.

Food Price Spikes

Food price spikes are certainly not unprecedented. Remember the major shocks of the 1970s? But food price spikes returned with a vengeance in this century and conditions threaten more.

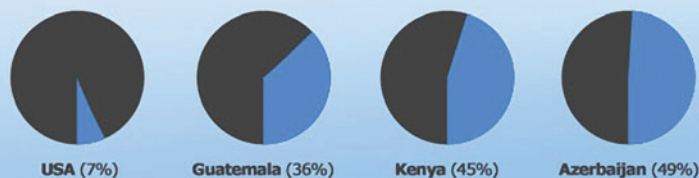
Joachim von Braun, a professor at the University of Bonn and former director general of International Food Policy Research Institute, said the new spikes are driven by three factors:

Energy markets: High oil prices are not just raising the costs of fertilizer but also giving farmers in rich countries incentive to use their crops for biofuel.

Financial markets: There is a clear and growing link between food market volatility and financial crises.

Speculation: The "speculation effect partly depends on the 'nervousness' of the market," von Braun explained. "What is called speculation actually stabilizes prices when the market is less nervous," because it can push markets to find

Family spending on food



Source: US Department of Agriculture

KEY ■ % of income spent on food ■ % of income remaining for other bills

A poor family in a poor country spends as much as 70% of its income on food.



What happens when food prices go up?



PHOTO BY DARCY KIEFL



PHOTO BY GEOFF OLIVER BUGBEE

prices consistent with supply and demand more quickly. But speculation is destabilizing “when the market becomes nervous as a result of changes in fundamentals, policies and structures.” Shifts in sentiment can result in spikes.

FINDING SOLUTIONS: WHAT CAN BE DONE?

The Rising Food Price Trend

Experts agree the food supply must be increased through technological and institutional innovations that benefit subsistence and smallholder farmers. Investing in sustainable agricultural growth can also counteract rising scarcities, de Janvry said. He and other members of an expert panel hosted by the UNFAO agree productivity must be boosted in sub-Saharan Africa.

Governments must invest in smallholder productivity in the face of climate change and resource scarcity, Torero and de Janvry said. Torero

also stressed the need to reduce waste by cutting both postharvest loss in developing countries and gross and unnecessary waste in developed countries.

Markets can be a great help in keeping price increases in check. When prices rise, this should create an incentive for people to invest in agriculture, increasing its productivity. When these constructive market forces are impeded, people living in poverty also suffer through higher food prices.

Increasing Food Price Volatility

We need to have safety nets in place when prices rise, Lustig said. “Even if aggregate poverty measures show a decline (most don’t), shouldn’t we protect the extreme poor from becoming poorer as a result of higher food prices?”

Like other analysts, de Janvry and the UNFAO panel called for improved international trade

(Top) A family in the Guatemalan highlands shares a meager meal.
(Bottom) Siblings in Douroum Village in Cameroon share a bowl of millet.



PHOTO BY RUSSELL POWELL

*(Above) Faith Achieng Onyango and Judith Achieng Adeya harvest cassava in their garden in Kenya.
(Right) Tan Thi Phuong works in the family garden with daughter Hoang Anh Ly in Vietnam.*



PHOTO BY MATT BRADLEY

rules. The rules in place today were conceived in the context of structural overproduction by major producers who subsidized production and exports. World Trade Organization negotiations failed to resolve this problem. Subsidized exports from the United States and other developed countries greatly harm small farmers in low-income countries who cannot compete against an artificially low price bankrolled by subsidies from the U.S. government.

“Negotiations need to be reopened from the perspective of access to food for consumers in poor countries,” said de Janvry, particularly “multilateral rules for disciplines on export restrictions, better respect of contractual obligations by commercial actors,” and protection of “poor consumers from undue competition by rich consumers.”

De Janvry also suggests that mandates for using biofuels “should be coordinated to help stabilize

world food prices instead of contributing to price spikes.” This means that only when food prices are so low that they harm small farmers should we stimulate demand—for example through corn for use as ethanol—but remove subsidies and mandates as soon as prices start to rise to where they can harm poor consumers.

De Janvry also recommended a focus on small-holder farming as a cheap and effective safety net for the poorest rural and peri-urban people. Of course, this has been part of Heifer International’s focus for many decades and remains relevant in a world of food price volatility and insecurity.

Food Price Spikes

When food prices surge, Lustig recommended that countries “use targeted safety nets: food stamps, school feeding programs, food-for-work, food distribution programs” that reach poor families and vulnerable people.



PHOTO BY CHRISTIAN DEVRIES

Beefing up the world's stockpile of food could also help stabilize prices and head off spikes, de Janvry said, adding that the global community must "reopen the debate on coordination of storage policies." Torero and von Braun also proposed the need for a global emergency grain reserve. Von Braun suggested creating an international grain reserves bank to curb food price volatility.

De Janvry prescribed improving international trade rules and regulating speculation to help stabilize food prices, while Torero pointed out that regulation cannot be so heavy-handed that it undermines the stabilization effect. A balance has to be found.

Torero proposed an international working group to regularly monitor the world food situation and trigger action to prevent excessive price

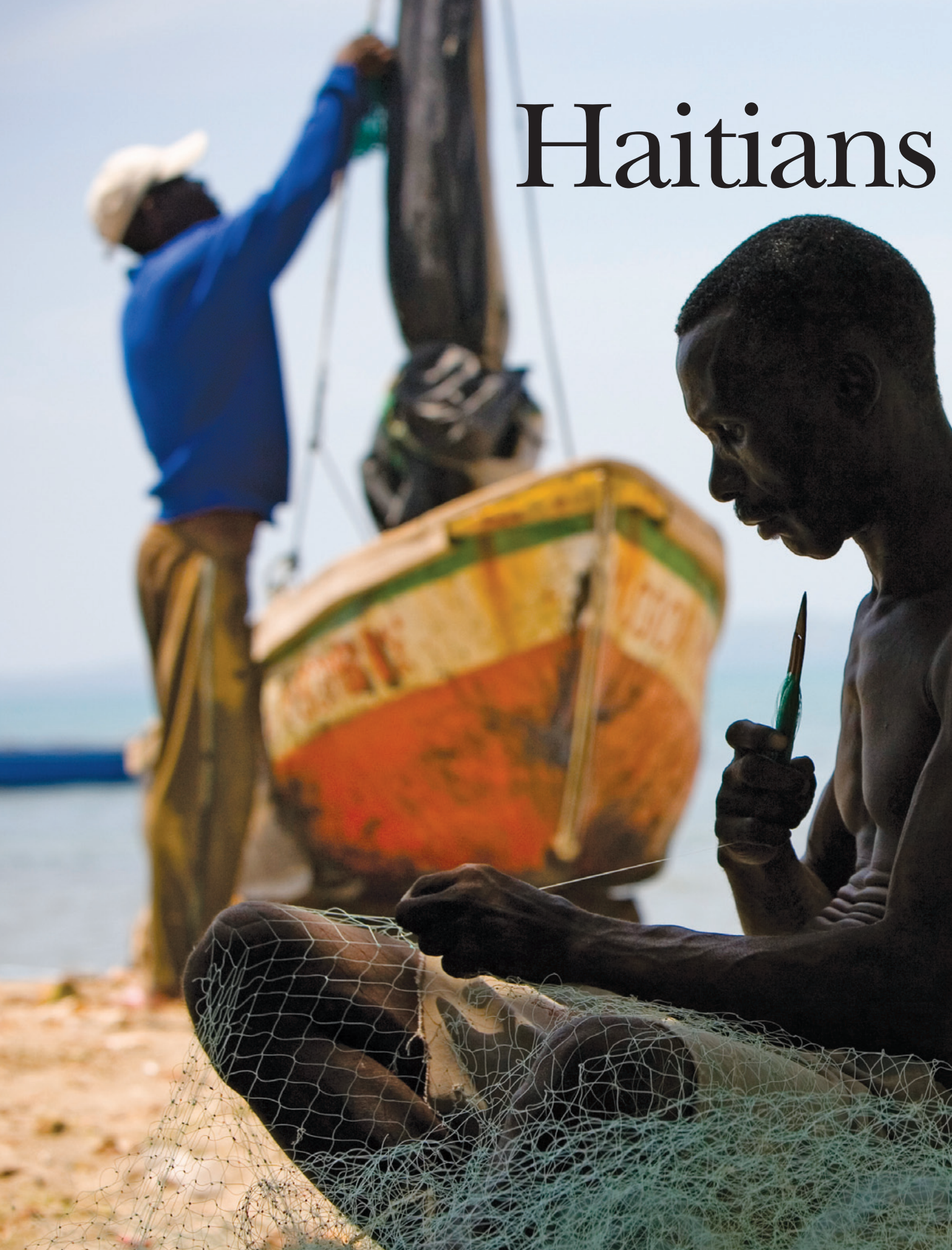
volatility. The World Bank took on this task in November, and reported that factors "bode well for food prices in the coming months."

Piecemeal efforts won't work when it comes to attacking high and volatile food prices, said de Janvry, who called for a global effort. "Can the world get organized to avoid recurrent food crises?" he asked.

The three food price threats—toward higher prices, greater variance, and dangerous price spikes—have harmed many people living in poverty. It is important to address food price issues now, while there is time to prevent matters from becoming even more serious in coming years. Governments, international and nongovernmental organizations, academia, small farmers and the private sector, working together, can all make important contributions. ■

Bernardino Zapata-Gonzales and daughter Zaida Zapata-Velarde work in the family garden in Bolivia.

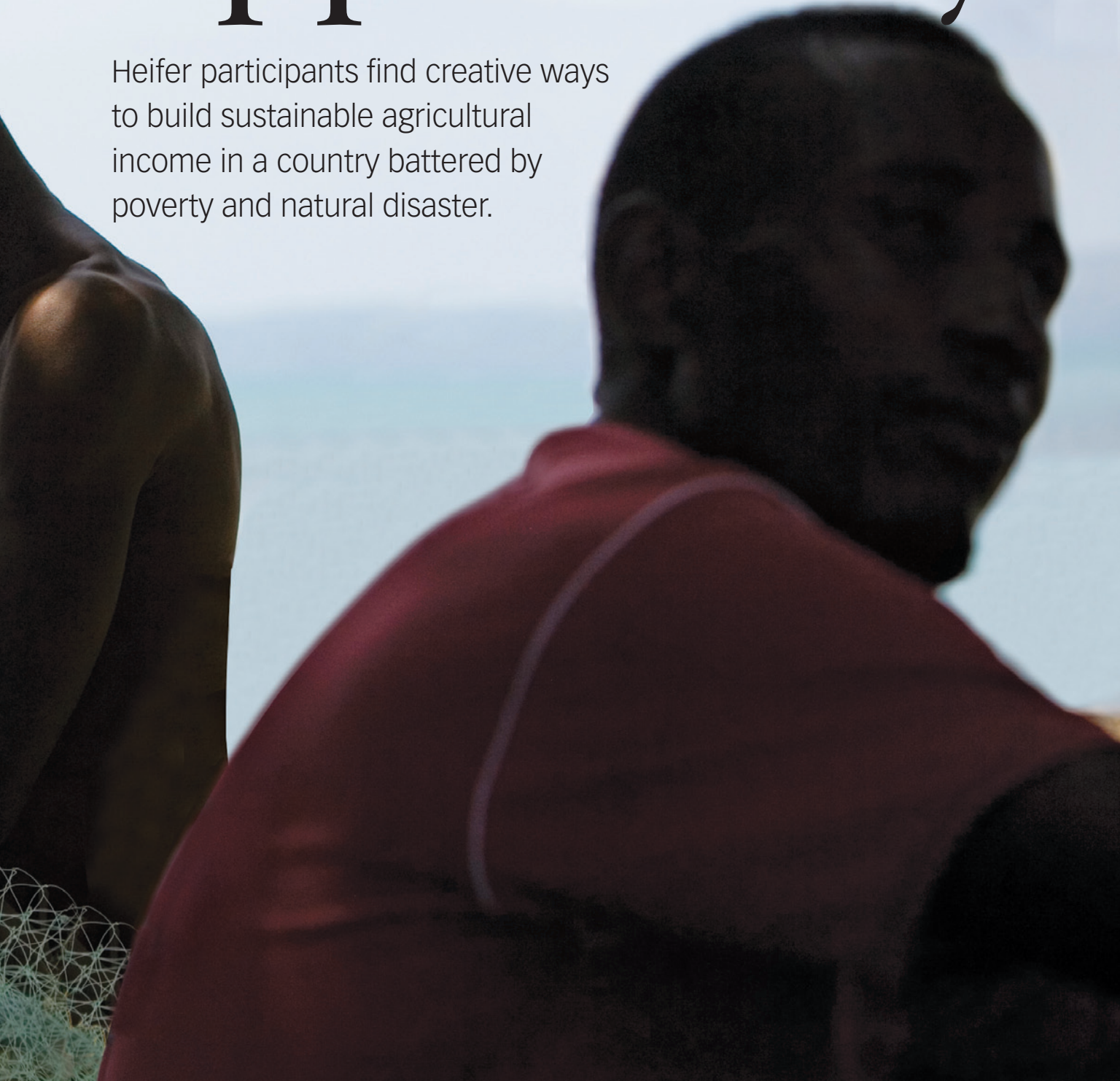
Haitians



Reach for Opportunity

by **Katya Cengel**, *World Ark* contributor
photos by **Geoff Oliver Bugbee**

Heifer participants find creative ways to build sustainable agricultural income in a country battered by poverty and natural disaster.



CANCE, Haiti—Jessie Clairvil was 7 days old when she was tossed out of the third floor of a Port-au-Prince apartment building. By the time she was thrown into the hands of waiting neighbors, the third floor was more like a first floor, the two floors below having already collapsed.

A refrigerator was hurtling toward Jessie's mother, Roseline Jean Pierre, when she jet-tisoned Jessie out of the building. Jessie's 5-year-old sister made it out next, followed by Jean Pierre, who jumped just before the rest of the building collapsed into rubble, one of many destroyed during the 7.0 magnitude earthquake that rocked Haiti on Jan. 12, 2010. The quake killed more than 316,000 people, according to the Haitian government.

"God saved me," said Jean Pierre, sitting in a field in Cance a year and a half later.

She is 26 and slim, with strong bone structure and pink toenails. In Port-au-Prince she had many friends and went out frequently. In Cance, a rural community on the outskirts of the southern Haitian city of Les Cayes, she wears a baseball hat to protect her from the sun. After the earthquake reduced much of the capital to rubble, Jean Pierre and her daughters fled south and west, to where her father's family is from. Having grown up in Port-au-Prince, she did not know what family she would find in the area and was surprised to meet her first cousin, Isaac Cherestal. Her mother, Rose-Ella Delsoin, later joined her in Cance, and Cherestal helped Delsoin find work sewing school uniforms.

Jean Pierre is one of 600,000 Haitians who fled Port-au-Prince following the earthquake, flooding rural areas that lacked the infrastructure to support them. In addition to having to feed the newcomers, CAPAS (Coopérative d'Appui à la Production Agricole du Sud), the farming organization Cherestal belongs to, lost 5,000 pounds of pepper spice it was unable to transport to market in the chaos following the disaster.

Recognizing that rural organizations such as Cherestal's needed quick help if they were to survive, Heifer initiated a program one year after the quake to supply more than two dozen organizations with animals.


Jean Pierre received a gray and brown calf in July. She will use the proceeds from selling milk to buy another cow and eventually hopes to earn enough to build a house. She currently lives in the farming organization's office. It is too early to plan her youngest daughter's future, but she would like her oldest, 6-year-old Fridgie, to be a doctor. Fridgie frequently plays with Cherestal's 5-year-old daughter, Imelda, and the girls share the kind of closeness their parents, first cousins, were not able to experience growing up far from each other.

The Heifer program that provided Jean Pierre's calf is just one of many initiated under a three-year plan launched after the earthquake to restore rural livelihoods and promote sustainable food and income security for 12,000 families, explained Hervil Cherubin, Heifer Haiti's country director. The programs range from fish farming to draft animal training and stretch from north to south and east to west.

"Heifer received many requests for help from all over the country," Cherubin said. "Since we work with local organizations, we pick organizations that have the capacity to carry on the project and fit Heifer's plan."

In September, Cherubin introduced the continuation of the plan in the form of Rural Entrepreneurs for Agricultural Cooperation in Haiti (REACH), a five-year, \$18.7 million commitment to rebuild rural communities and improve economic opportunities in Haiti. An integrated crop-livestock project, REACH will help more





Roseline Jean Pierre, 26, received a gray and brown calf in July 2011. She will use the proceeds from selling milk to buy another cow, and eventually hopes to earn enough to build a house.



Ernilia Laurent, 28, (at right) sprinkles seeds on a mountainside garden in Ivoire. Laurent hopes improved yields will help her to afford an apartment in the lowlands town where her three children will go to school.

than 20,000 vulnerable rural families on a number of fronts including job creation, income generation, skills training and disaster preparedness.

“This is a one-of-a-kind project that came from what the people needed (bottom up) and not what we think was good for them (top down),” Cherubin said.

Both programs promise help for a country damaged by

natural disasters, corrupt regimes and improper aid long before the earthquake struck. Countless organizations came to Haiti’s aid post-earthquake, but Heifer is one of the few that focuses on what history has proven to be the basis of progress, increasing agricultural productivity and thereby building the foundation of a more advanced economy.

The Path Ahead

The road to Ivoire in West Haiti is treacherous. From the nearest city of Montrouis it takes an hour of bone-

shaking travel battling stone outcroppings, steep cliffs and dangerous switchbacks in a Land Cruiser to reach the community. It is a journey that keeps many away but drew Heifer, said Ewaldy Estil, head of Heifer’s northern office.

“When we started as Heifer in Haiti we were trying to work with people very marginalized, people very poor,” said Estil, who joined Heifer in 2000.

Clinging to the Chaîne des Matheux mountain range nearly 3,000 feet up, the people here eke out a meager existence farming the rocky and steep terrain in eight small settlements. Their isolation is what attracted their ancestors who came to the region as escaped slaves. When they tried to return to the lowland following independence, they found there was no place for them in the new society, Estil said. So they returned to the mountains and cleared the land for farming, not realizing that without trees to slow its flow, the rain would erode their soil and flood the valleys below.

“The people living in the town don’t have a plan for the people living in the hill,” Estil said. “The people living in the hill, they are not going to have a plan for those people living in town.”

Heifer’s plan in 2002 was to partner with another



(Clockwise from top left) Inamisse Baptiste, 50, has nine children. She produces beans, cassava, sweet potatoes and okra on land she was able to buy with income from a cow she received in 2009.

Decan Cholaque, age 64, lives and farms in the Tri Trou community.

Francois Jean Renel received a chocolate brown cow from Heifer in 2008.

Haiti Country Director Hervil Cherubin visits with a farmer in Ivoire.

“[A **new home**] is a miracle from God. God gave that **miracle** to our family and it **changed our life.**” — **Ernilia Laurent**

group, OPD-8 (Peasant Organization for the Development of the 8th Section of Arcahaie), already engaged in teaching sustainable agriculture. Together they taught one settlement of 250 families how to build stone ledges that save the hilly terrain from further erosion and protect the land below from floods. They also encouraged the families to plant trees and discouraged them from burning to clear land.

Ernilia Laurent now feels “a gentle wind” blowing through the trees and sees more green in the landscape. In her garden a cup of seeds produces six or seven cups of beans instead of the two it used to yield, the difference between subsistence and savings, Heifer’s main goal.

Laurent mentioned that after attending workshops on gender and violence, the men who once beat their wives no longer do so. She also said the training helped women in the village feel more comfortable visiting the nearest market, a two-hour trek down the mountain.

“In the past they (people in the lowlands) used to call us ‘people from the mountain’ as a way to reject us,” Laurent said. “Now they don’t see the difference.”

Laurent hopes the improved agricultural yields will help her to afford an apartment in the lowland town. Then her three children can stay there during the week when the time comes for them to attend secondary school. Her oldest is only 6, her youngest just 7 months.

At 28 she has already learned not to hope for too much. She has not seen her husband since he went to work in the Dominican Republic over a year ago and won’t hazard a guess as to when he might return. While

she had long dreamed of a new home, she never believed she would actually have one.

But after the 2010 earthquake destroyed many of the earthen structures in the area, Heifer returned to fund the building of 100 new homes, 28 of which are complete. Laurent moved into her new home in July and turned her former home, a low thatch-roof structure lacking walls, into a kitchen.

“That is a miracle from God,” she said. “God gave that miracle to our family and it changed our life.”

She has gone from living in a structure no better than what would house an animal to a concrete block home with white embroidered curtains and space for a table. She has already chosen the table. Chairs will have to wait until there is more money.

Nearby, Ozana Charles sat in a chair between two houses, an old and a new. The old earthen structures have gaps and holes and lean to the side. The new ones are strong and straight and smooth-walled. But Charles can’t see this. She has been blind for 13 years. She doesn’t know how many years she has been alive, just that she was born during the term of President Elie Lescot in the 1940s. She said she senses a difference in the community.

“I have the feeling that the country is more beautiful because of the way people are talking about the environment now,” she said.

Heifer’s Cherubin sees the beauty as well, and not just in Ivoire. He sees it in the rare white sand beaches that haven’t been blanketed with litter, in the restaurants that offer seafood fresh from the ocean and in the efforts of health-conscious Haitians jogging on the beach.

It isn’t that he doesn’t see the heaps of refuse clogging the waterways or the motorcycles creating havoc on

Marie Jeanne Louissaint has a sturdy new home to replace her damaged thatch-roof house.





the roads, he just sees something else as well.

As a youth growing up in Haiti he was aware of the suffering around him and was not shy about advocating for change and bringing up issues not everyone wanted to hear.

Now he listens.

Horse Power

In a marginalized neighborhood near Les Cayes, the fishermen do the talking. Nelson Joseph sits in the shade of a tree repairing a net. He is 32 and a father of



In the coastal village of La Savane, near Les Cayes, a Heifer project provides boat motors to help fishermen increase their catch and preserve their energy.

three. He isn't sure how he learned to mend a net—it's just something he picked up growing up in La Savane, an impoverished fishing village on the outskirts of this southern city.

"When you have a car you learn to drive," he offered without glancing up from his work.

Here you learn to fish because "the sea is the only source of income for poor people," he said. Fellow fisherman Jean Claude Saintvil added that fishing is an occupation that does not require an education. Saintvil learned the craft as a boy, bailing water from his godfather's boat.

At one time the fishermen of La Savane could support their families fishing in the nearby bay. But overfishing and pollution have made it necessary to go farther out, a



(above) Heifer participants raise tilapia in Lake Peligre in the Tri Trou community.

(right) These fish farmers will sell their tilapia to a local hospital that uses the fish in its nutrition program.



difficult task in the beat-up crafts the men power by oar and wind. Emisio Joseph realized the lack of equipment was hindering the main occupation in his community and asked Heifer to fund his organization (Organization des Jeunes de la Savane des Cayes-OJSC) aimed at improving the situation.

The boats Heifer #1 and Heifer #2 breasted the waves setting out into the ocean powered by 15-horsepower Yamaha engines. On the water they sped past their counterparts, battered vessels with tattered sails.

“Before they went to fish and they were bringing back only two pounds, now they can bring 20 pounds,” Emisio Joseph said.

The increased yields allow them to plan for the future instead of just focusing on food for one day, a gift Heifer

“The **atmosphere** I see is **happier** than before because we can feel the **hope** of having a fixed source of **income**.” —Kenel Jean

provides worldwide. The fishermen will pass on this gift to their colleagues by putting 40 percent of their profits toward the building of another boat. The goal is to eventually have eight to 10 boats, each shared by four families. The dwellings in La Savane lack electricity, so Heifer purchased a generator to power a freezer to store the fish. The fishermen keep the generator in a church across the street from their group office, counting on thieves to be God fearing.

Saintvil is 60. Before he was given a spot on Heifer #2 he struggled to row his boat. When asked how Heifer #2 will change his life he offers an impish smile. “Seeing me in two years I will be younger because I will make money,” he said.

An Education

It is not just a mountain that cuts off the community of Ti Trou in the lower Central Plateau region of Haiti. There is also Lake Peligre, home to the Peligre hydroelectric dam. To reach most everything—from schools to health care facilities—one must cross the lake. A boat ride takes an hour and costs 200 gourdes (\$4.90). The expense prevented Elie Jean, 41, and his wife, Leanne Gabriel, also 41, from continuing past the first few years of school. When it comes to their four children, they struggle to pay 6,000 gourdes (\$146.88) a year to rent a place across the river where the children can stay during the school week, which doesn’t always leave enough for school fees.

“Sometimes they used to return them back home because we couldn’t pay,” Gabriel said.

Like most of the men in the area, Jean is a fisherman. At least he was until the government drained the lake to repair the generator in 2006 and failed to restock it. Jean attempted to support his family by harvesting beans and plantains. But after the earthquake, their meager supplies were stretched even thinner when family from Port-au-Prince moved in. The five family members have since left. The ulcers their 19-year-old son Kenel developed from not eating enough during that time remain.

In spring 2011, Heifer partnered with several organizations to supply Jean and 10 other fishermen in the community with 2,400 fingerlings and floating cages. Buyers for the fish have already been established, and if all goes as planned, Jean and his counterparts expect to receive 50,000 gourdes (\$1,223) each for their first harvest four months after they received the fingerlings. They will keep 30,000 gourdes (\$733) and put 20,000 gourdes (\$490) toward the purchase of another cage and fingerlings for another family until 26 families have cages and fish. Jean will put his money toward his children’s education.

“Our dream is to see one of our kids be like a doctor or agronomist,” he said.

“Even a priest,” added his wife.

“We don’t want them to stay here to fish ... we want them to go farther,” Jean said.

Kenel wants to be an agronomist and knows it is the fish that will get him there. One night he slept on the beach guarding the cages from thieves with his father, something the fishermen do nightly.

“It’s not fun,” Kenel said.

But the change in the two-room house since the fingerlings arrived has been enjoyable.

“The atmosphere I see is happier than before because we can feel the hope of having a fixed source of income,” he said.

A regular income means the family can set aside money for education so the next generation will have more options than the present one. And that is what pulled Cherubin back to Haiti—hope for the future and the youth of Haiti.

“They have suffered so much that many of them seem like they have given up on life,” said Cherubin. “I wanted to return to help with the process of rebuilding the country and (restore) hope for young Haitians.”

His favorite thing about working with Heifer is being able to help people help themselves.

“We don’t do things for them,” he explained. “We work alongside them to help them solve their problems.” ■



NOTES ON The Affairs of Man

By **Frank Bures**, *World Ark* contributor

Illustrations by **Robert Roth**

In a bookshop on Kenyatta Avenue, in the heart of downtown Nairobi, I was talking to an old woman named Patricia who was working there. I mentioned how much Nairobi had changed since the last time I visited, more than a decade ago. There were more cars now. More people. There were so many huge stores these days full of goods to buy.

"But the cost of living," she added.

"You mean the food prices?" I asked.

"Yes," she said. "That was when life began to change for us. The cost of living keeps going up. There are some people who can't even feed themselves. Can you imagine not being able to feed yourself?"

I nodded. "Yes," I said. "I can imagine."

It seemed like the right answer. But later, as I thought about it, I realized that in fact it is very hard to imagine. I can imagine it in my head, but I can't really imagine what that would *feel* like. Maybe the mind doesn't let one imagine those kinds of things. Maybe when your belly is full, the possibility simply vanishes. There is no way to know how you would react.

Later that day on a bus out of Nairobi, I looked out the window and saw some graffiti on a wall. It said, "WTF: Where's the Food?"

This was a question on many people's minds, since food prices started to rise back in 2006 and saw a huge spike in 2008, before relenting a little. Now food inflation in Kenya was rising again and the price of everything was going up. Sugar and flour had doubled. Meat had tripled. In the north there was a

drought and a famine where people were dying.

No one knows exactly why food prices have shot up so much in the last few years. Some have argued it's caused by commodity speculators. Others say it's decreasing productivity. And still others point to the new competition for land between food and biofuels.

Whatever the cause, the effect has been clear: higher prices in the markets and grocery stores. Traveling through East Africa, the subject came up frequently and without prompting—in the line in grocery stores, on the bus, in the street. Walking through Nairobi, I stopped at a little Indian shop called Ravi's Herbal House on Ngara Street and asked the owner if his prices had gone up.

"Oh yes!" Ravi said. "When I started in this business five years ago, that cooking oil was 150 shillings. Now it's 450. Three times! And people's salaries have not gone up three times. It is painful to watch. It is beyond the reach of the common man. I think after they get paid at the end of the month, they are eating well for maybe 10 days. But there are still 20 days left in the month."

"What do they do?" I asked.

"They pray to God. People here are not violent. In India, they will stand up. Here they do not stand up. But also, I think they rely too much on God. They say, *shauri ya mungu*. It's the affairs of God. When really it is the affairs of men."

In this part of the world, people have more
practice with things that are out of their hands.
Buses don't come. Equipment breaks down.
Power goes out. Appointments don't materialize.
Help, often, is not on the way.



Where the affairs of one end and the other begins is one of the big questions in life and how you live it. There is a phrase in Swahili that I have always liked but rarely use: *Mungu akipenda*. Roughly translated, it means, "God willing" or "if God likes it." To me it has always seemed to sum up the precariousness, the unknowability of the future. It suggests that anything could happen. The future will come, and we should both accept that and be

prepared for it. In other words, it's out of our hands.

In this part of the world, people have more practice with things that are out of their hands. Buses don't come. Equipment breaks down. Power goes out. Appointments don't materialize. Help, often, is not on the way.

Life, in other words, is hard, unforgiving. But then again, life has been hard for much of human history, and there must be a way

to keep that hardness from overwhelming everything. I don't mean that we should simply accept whatever comes our way. But at the same time, I think there is a graceful way to endure difficulty. That is something I have admired about the people I've met in Africa.

It was also something I admired about my Grandma. She called it sucking it up, and her generation knew more about it than we do. She lived through war and Depression, lost a child and a husband, and watched the world change beyond recognition. Still, she was always able to muster a wry chuckle. She had a kind of equanimity that let her move on, let go of the things beyond her grasp.

I suppose that is what Reinhold Niebuhr meant when he talked about being able to accept the things we can't change and change the things we can and the wisdom to know the difference. Yet we in the West are not trained to think that way. In our years of comfort, we have lost some skill in dealing with a world that is out of our control.

I was talking about these things with a woman in Kenya, who grew up there and is now a successful banker. The woman, Paula, was telling me how her mother could find humor in any situation, no matter how dire. One time, for example, her father made some bad investments and the family lost everything. When they were being evicted from their apartment, men came to throw their furniture out of the house, through the windows and doors. Meanwhile, the family stood out front and watched while their mother made jokes about their situation and

they all laughed till their stomachs hurt.

"I try to look at life myself like that sometimes," Paula told me. "Some things just happen and there is nothing you can do about it, so you might as well have a laugh."

I do not know what the balance is between the affairs of God and the affairs of man, between what you can change and what you can't, between what God likes and what I like, between fate and fatalism.

Maybe I won't ever find that perfect point of equanimity. But I'm sure there is a better place, somewhere between the two. In an era of constant crisis, with more and more things feeling out of my control, I have been thinking hard on this, trying to remember that even if nothing in this world is guaranteed, I should not let fear or sadness wash away laughter. I can always snatch some enjoyment from the jaws of despair.

Not far from the Indian shop, I stopped to buy a pineapple slice from a man selling them out of a rusty wheelbarrow. The smaller slice cost about 10 shillings, which was about 10 U.S. cents. We started talking, and he said his name was Stephen. I asked if the price had gone up.

"Yes," Stephen said, and pointed to the unsliced pineapples. "I was paying 40 shillings for these. Now I'm paying 100. The cost of life is up. Way up. It is very hard."

"*Mungu akipenda*," I said, "the price will come down."

"Yes."

"But for now, what will you do?"

"We will pray," he said, then took my hand and squeezed it hard.

Frank Bures is a Minneapolis-based writer whose stories have appeared in *Harper's*, *Esquire*, *Outside*, *Bicycling*, *Wired* and previous issues of *World Ark*.

REVIEW

The New Pangaea

Review by Austin Bailey, *World Ark* senior editor

You can subsist solely on veggies from your garden and eggs from your backyard chickens and still your bragging about eating local won't be completely true. That's OK, it's not your fault. Blame Christopher Columbus.

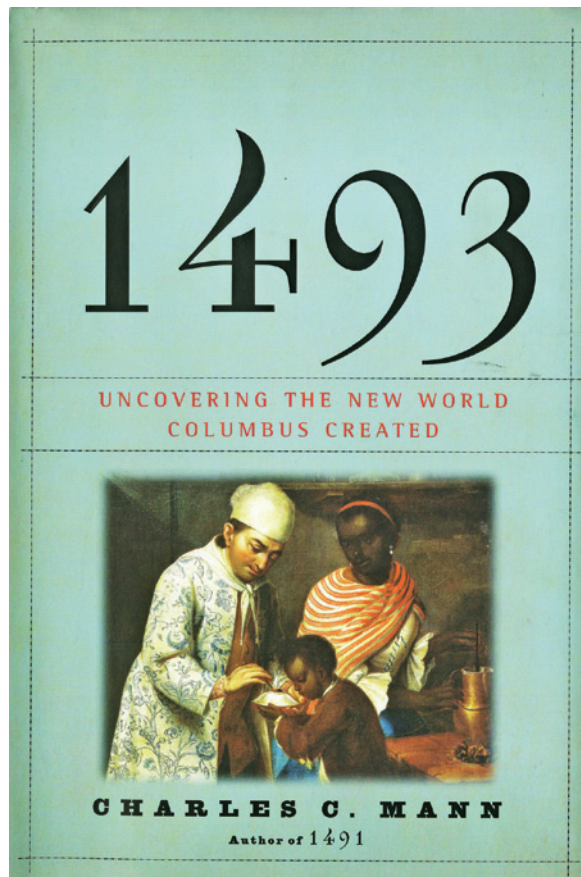
If it weren't for him and his fraternity of European globetrotters, the Irish would have no potatoes, Thai dishes wouldn't have enough spice to make your nose run and Italian grandmothers famous for their tomato sauce would have to find a different signature dish. That's because the diaspora Columbus and his brothers touched off with their exploration of the New World and beyond spread more than just people. Those boats floating back and forth across the oceans also carried previously homebound plants, animals and viruses that now grow and thrive across the globe.

In *1493: Uncovering the New World Columbus Created*, author and historian Christopher Mann looks at the ecological impact of the Columbian Exchange, this transfer of organisms great and small that "allowed Europeans to transform much of the Americas, Asia, and, to a lesser extent, Africa into ecological versions of Europe."

Opening up new continents to European colonization was the least of it, according to Mann. Explorers touched off a homogenization of the globe that hadn't been seen since Pangaea broke apart. In this hefty book he explores the reasons why many biologists argue that the Niña, the Pinta and the Santa Maria were the flagships of an entirely new biological era they call the Homogenocene.

Mann stumbled upon this theory after an heirloom tomato show, where he marveled at a Ukrainian Black from Tula. Eastern Europe seemed an unlikely origin for a fruit most often associated with Mexico and Italy, so off to the library he went. Research informed him tomatoes weren't born in Mexico after all, but can be traced back to wild, tiny and nearly inedible tomatoes that sprout in the Peruvian Andes. How those berry-sized fruits made their way to Mexico, and why and how early gardeners bred them to the plump, juicy orbs that are featured sliced, stewed, dried and stuffed in cuisines around the world today, was a question that turned out to require two decades of research and a dense 400-plus page explanation.

Beach reading this is not. Thick skeins of economics, geography and sociology are all woven into the story, and Mann explains how these forces combined with biology to shape the modern world. For example, he examines Jamestown and other colonial settlements as economic ventures whose success or failure were determined by the natural forces of disease, weather and availability of food. He considers how the introduction of American maize and sweet potatoes caused ecological and political mayhem



1493: Uncovering the New World Columbus Created

By Charles C. Mann
Alfred A. Knopf, 2011
Hardcover, \$30.50

in China that played a role in launching the communist system in place today. He also examines colonization, the slave trade and other factors that turned our planet into a huge melting pot with people of all skin tones and ethnicities making their homes in new places.

Luckily Mann's zeal for his own topic is infectious. *1493* is one of those books that will have readers popping their heads up from the pages to share choice tidbits of trivia, shoving the book across tables so other people can see the nifty maps and photos. Spring is still a couple of months away, so it's perfect weather for spreading this doorstep-sized book across your lap and reading your way through the last of the cold weather.

NEW AND NOTEWORTHY

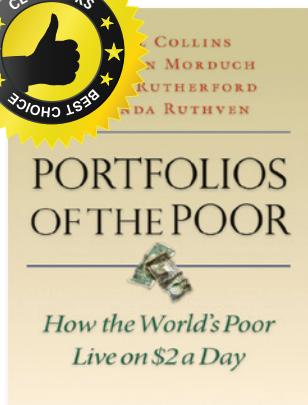


Fambul Tok: A Film About the Power of Forgiveness

This movie tells the stories of healing in post-conflict Sierra Leone as victims and perpetrators come together in traditional forgiveness ceremonies. By reviving the ancient practice of fambul tok (family talk), Sierra Leoneans are finding dignity, peace and strength. Available at www.fambultok.com.

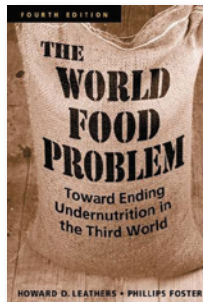
Portfolios of the Poor: How the World's Poor Live on \$2 a Day By Daryl Collins, Jonathan Morduch, Stuart Rutherford and Orlanda Ruthven

This book tackles the fundamental question of how the poor get through each day by peeking into the lives of 250 struggling families in Bangladesh, India and South Africa.



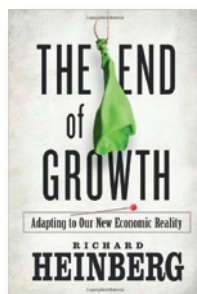
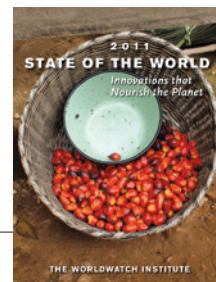
FIVE FAVORITES ON:

Global Food Systems



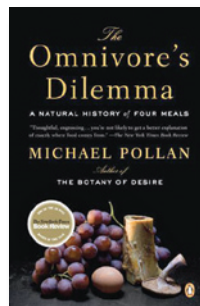
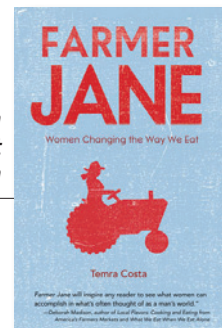
The World Food Problem: Toward Ending Undernutrition in the Third World By Howard D. Leathers and Phillips Foster

State of the World 2011: Nourishing the Planet By The Worldwatch Institute



The End of Growth: Adapting to Our New Economic Reality By Richard Heinberg

Farmer Jane: Women Changing the Way We Eat By Temra Costa



Omnivore's Dilemma: A Natural History of Four Meals By Michael Pollan

Dinner Decisions Can

By Elizabeth Bintliff, interim vice president for Africa, and Donna Stokes, *World Ark* managing editor

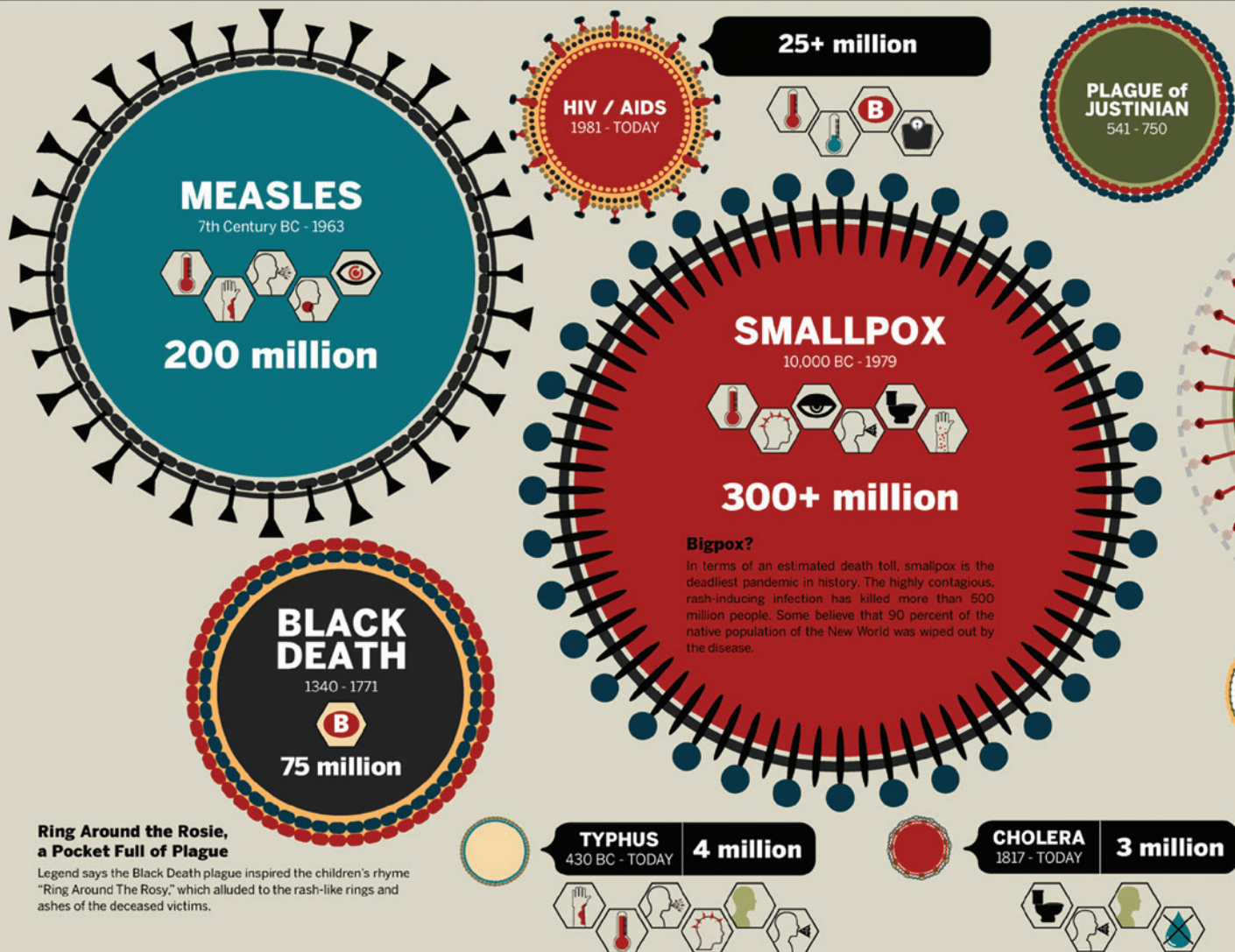
OUTBREAK

Deadliest Pandemics in History

Because a virus doesn't care about state lines or national borders, it can wipe out millions and span multiple continents rapidly. Here is a look at the infectious diseases the world has battled throughout history.

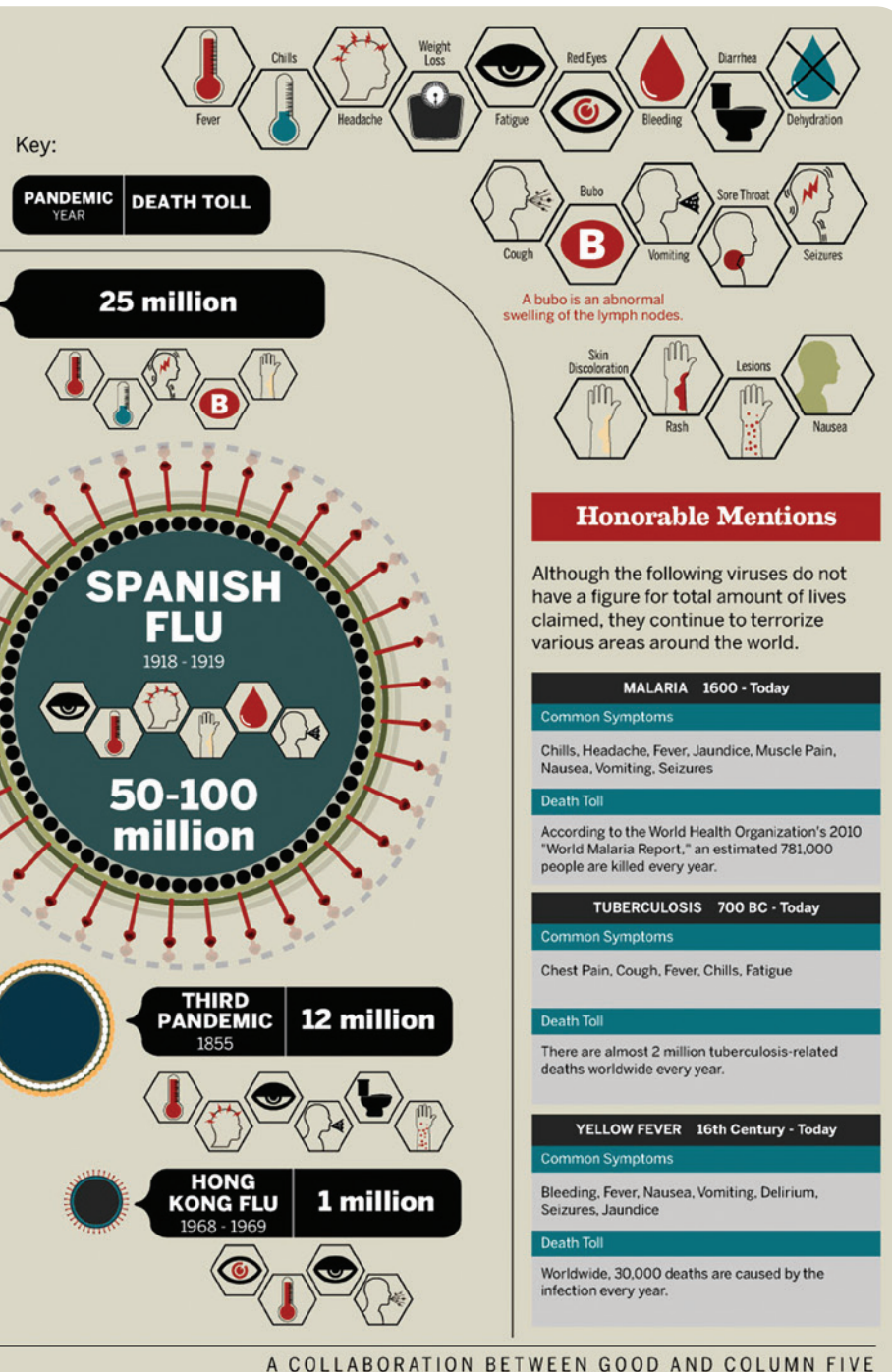
What is a Pandemic?

Derived from the Greek word *pandemos* meaning "pertaining to all people," a pandemic is a widespread disease that affects humans over a wide geographic area.



Sources: Mayo Clinic // Centers for Disease Control and Prevention // World Health Organization // New York Times // National Center for Biotechnology Information

Save—or Imperil—Us All



In Cameroon, those who butcher and eat bush meat to survive put millions of lives at risk of animal-to-human viral pandemics. Global Viral Forecasting and Heifer International team up to help rainforest communities explore healthier protein alternatives.

A woman in southern Cameroon walks to check a small-game trap deep in the forest. From dawn to dark each day she's busy taking care of her children and tending a vegetable plot, hauling water and gathering firewood, so she checks the trap just once every three or four days.

She drags a wild rodent from the trap with her bare hands, carries it home and butchers it. She's good with a knife, but it's not unlikely that she has a couple knicks on her hands or arms. The woman explains the process: She cuts open the carcass and first pulls out the maggots and entrails. She then places the meat in

"The meat she was preparing for a meal was already rotten," Saylor said. "I asked her about washing the blood from her hands with soap before cooking it. She answered **'No, I just put it in the pan and wipe off my hands** (on her clothes).'"

a pan in water and cooks it for the next family meal.

"As she was telling me this, I found it really disturbing, given the work we do," said Dr. Karen Saylor, medical anthropologist for Global Viral Forecasting (GVF), an independent California-based organization that has spent the last 10-plus years developing a global system to prevent pandemics. Saylor and her team monitor hunter-gatherer communities throughout Cameroon who rely on bush meat for sustenance in an effort to prevent the next deadly virus from jumping from infected wild game to humans.

"The meat she was preparing for a meal was already rotten," Saylor said. "I asked her about washing the blood from her hands with soap before cooking it. She answered 'No, I just put it in the pan and wipe off my hands (on her clothes).'"

Through the Healthy Hunter Program, GVF teaches people that handling wild meat may endanger not only them, but also potentially greater numbers of people in their community and throughout the world.

Cross-species disease transmission, or zoonosis, has already resulted in the global emergence of diseases that have killed millions of people, such as HIV/AIDS, Ebola, SARS and monkeypox. It's believed that the now eradicated smallpox virus was first transmitted to humans from rodents. Smallpox killed more than 300 million people in the 20th century alone. HIV, or human immunodeficiency virus, which likely emerged from monkeys infected with simian immunodeficiency virus, killed 1.8 million people worldwide in 2009 alone.

But even when they know the risks, for most people in this region it is not a matter of choice. As for the woman with the rodent meat, Saylor said, "It's the only food she had to feed her children."

That's where Heifer International comes in. In 2011, GVF and Heifer agreed to a partnership in the Dja Reserve rainforest of Cameroon. The five-year "Stem the Storm" project will reduce the dependence of 2,000 families on wildlife, often called bush meat, as a prima-

ry source of protein through the provision of livestock (small ruminants and poultry) and the domestication of some traditional protein sources (such as grasscutters/cane rats).

Heifer will also provide seeds for crops and training in agriculture and animal husbandry. Training in human nutrition, hygiene and health, especially disease transmission and prevention, are key elements of the joint project.

Through the application of Heifer's Passing on the Gift approach, families that receive initial placements of animals, seeds and training will agree to pass on resources of equal value to other participants.

Poverty is a widespread phenomenon in the South Province of Cameroon. Annual household income ranges from about \$140 to \$300, and with a dearth of opportunities, people depend on the forest for their livelihoods through agriculture, hunting, fishing and exploitation of the forest and mineral resources. This pilot project will work with farm families on the western side of the Dja Reserve, which is home to more than 35,000 people.

Heifer's partnership with GVF is not only a natural fit, it is essential. About 75 percent of emerging infectious diseases in humans are zoonotic, and the traditional approach to fighting infectious diseases has been to respond to pandemics after they have already spread. In recent years, the incidence of zoonosis has increased. As advances in travel and transportation increase mobility, the rate at which diseases spread rises correspondingly.

"The risk of the unthinkable happening is clearly present," said Pierre Ferrari, Heifer's president and CEO. "Heifer's community-based development model offers effective and lasting solutions to the root causes of behaviors that threaten us all. The intimate collaboration between the Baka and other indigenous communities, GVF and Heifer is critical to ensure an alignment of purpose, activities and solutions for this complex situation."

According to Dr. Nathan Wolfe, founder and CEO of Global Viral Forecasting, the key to weaning people off

bush meat lies in offering them an alternative source of meat protein as well as an alternative source of income.

"It is fairly rare to see agriculture in terms of livestock in this area," Wolfe said. "People farm, but it is only on a subsistence basis, just enough for them to live on. Since this is a forested area, it is a lot of work to clear a farm."

Providing a protein alternative isn't in GVF's area of expertise, Saylor said. "Heifer brings skill and expertise in figuring out the best nutrition solutions through community engagement."

The experimental design of the project, which GVF will lead, will include a case-control, longitudinal study comparing disease transmission between people who are predominantly wildlife hunters and consumers and those who are predominantly livestock producers and consumers to evaluate the relative risk of zoonotic disease transmission. The livestock will be tested as well, as part of the study.

Heifer will oversee the livelihoods component of the project, including the provision of livestock and training. The project will be implemented in collaboration with Cameroon government ministries. These will include community-based animal health providers, veterinarians and agricultural officers with training in agricultural economics, crops and animal production, sociology and agroforestry. The project will also establish marketing mechanisms to help farmers market their products.

A secondary objective of the project with Heifer is to reduce pressure on uncontrolled hunting and exploitation of the Dja Reserve rainforest, which is considered to have the world's second-largest biodiversity after the Amazon basin.

"The forests are overhunted," Saylor said. "The hunters are telling us that they're having to go much farther to find wild game."

For many indigenous people in the remote forests of Africa or the jungles of Asia, hunting is not a sport or

recreation as the Western world sees it. Rather, it is a way of life and often a matter of life and death. Just like mankind did thousands of years ago, hunting is the thing that men and women must do to feed their families.

"The thing to understand is that people are hunting anything they consider meat. If it moves and it's in the forest, they're going to shoot at it and eat it," Saylor said. "If you have a family of eight to feed and you see an animal that doesn't look great, maybe has some hair loss and is moving slowly, that won't stop someone from taking it. There's a good chance someone will pick it up and sell it or feed it to their family."

A crucial piece for both organizations is to listen to the communities and hear their needs and preferences. "What animals would they prefer to raise?" Saylor said. "What livestock is culturally appropriate and won't introduce additional risk of illness?"

From interactions with local indigenous people including the Baka pygmies who still hunt with spears and poison arrows, Saylor believes they'll welcome the project.

"It's exhausting, hunting," she said. "They go out into the

forest for hours, many times at night. It's dangerous. And they may come back with nothing, or with one small porcupine that doesn't begin to fill the need. For these people, it is absolutely not recreational. It's very dangerous, walking around forest with guns at night. Animals can be aggressive and there's a threat of attack.

"If you don't address the basic poverty issue, there's only so much you can do," she said. "When people don't have enough food to eat, then our health message is almost silly. Compare hand-washing instructions to watching your child go hungry. No parent is ever going to let that happen. So the choice is feeding them something that could make them sick.

"That's one of the reasons I'm so excited about this partnership," Saylor said. "It's a first step toward a larger solution." ■



Dr. Joseph Fair, field operations director for GVF, suits up to look for viruses that spread from animals to humans.

PHOTO COURTESY OF GVF

Wis. School District Lives Heifer Mission

Stories by Annie Bergman, *World Ark* senior writer

There may be one place in the world more “Heifer” than Heifer: The Osceola School District in Osceola, Wis.

For nearly 12 years, the district has raised money for hunger-related causes and has always included Heifer International. In the last year alone, the staff and students raised \$16,586.02, just a portion of the approximately \$40,000 they’ve put toward ending hunger.

It began when high school art teacher Peg Medcraft

asked students to create pottery bowls during the 2000-2001 school year. That year, 75 students made ceramic bowls representing all the empty bowls around the world, Medcraft said.

The class then decided to sell them for about \$10 apiece to raise money to help end hunger. They made \$1,000 and attracted the attention of educators in the district.

“The project has grown in the Osceola School District



Art teacher Peg Medcraft's students helped raise more than \$10,000 for Heifer by making and selling ceramic bowls like the one above.



Osceola Middle Schoolers display the amount raised for Heifer.

to become a community-wide event that focuses on human rights and global issues now called B.O.W.L. (Bringing Our World Life)," Medcraft said.

Children and teachers at each level are dedicated to learning and living Heifer's 12 Cornerstones and inspiring others to be more like founder Dan West. They also raise funds to provide livestock and training to families in need and to stock the shelves of their local food bank.

It's common to hear "Are you Heifer enough?" echoing down the hallways of the district's four schools, to see Dan West among students' lists of heroes, and to hear students recite the 12 Cornerstones in both English and Spanish.

For the 2010-2011 school year, the district had a number of initiatives for the B.O.W.L program.

At Osceola Elementary, classes created paintings and illustrations of the animals Heifer provides, designed pottery bowls and performed for an Empty Bowls fundraiser. Additionally, the school now weighs its food waste in the cafeteria. Teachers who visited Heifer Ranch in Perryville, Ark., brought that practice back with them, and now the school has a new lunch motto, "Take Only What You Will Eat."

Osceola Intermediate School participates in the B.O.W.L. program by incorporating Heifer's Read to Feed® program in classrooms. This year nearly 400 third- to fifth-graders read for a total of 208,109 minutes, enough to raise \$7,469.72.

"Not only has Heifer changed what and how I teach in my classroom, it has changed how I live my life," said fifth-grade teacher Abby Jensen. "Heifer is an organization empowering and educating people to live a sustain-

able life, and as a teacher is there any gift that's more powerful?"

Another middle school activity was "Give Up Day," in which students and their families are asked to sacrifice an extravagance for the day and instead donate that money to Heifer. Osceola Middle School student Rachel Swanson said Give Up Day was her favorite Heifer-related activity.

"I am so glad that I did this. My family gave up ordering pizza and bought one from the store, and I gave up my iPod. Instead of playing on it, I washed dishes and helped my dad, and he gave me some money to donate," Swanson said.

Osceola High School students take their love of Heifer to new levels. For three years, students from the B.O.W.L. Club have traveled biannually to the Heifer Ranch to partake in the four-night Global Passport program where they live in simulated poverty.

"Being involved in Heifer International, not just on my own but with a school-advised program, definitely has had a huge influence and helped me take my first steps to where I am now," said Claire Willett, a 2008 Osceola graduate. "If Heifer International had not been presented to me while still in high school, I think my life goals today would be something incredibly different, and although they would be equally important to me, it would be much less important to people I can help."

Another event saw juniors and seniors participate in a "Lockout Night" focusing on the millions of Internally Displaced People. Students spent the night on a local service project, playing a World Trade Game and writing to their elected officials about homelessness.

This year, more than \$10,500 came to Heifer International through the various efforts.

Osceola School Board President Timm Johnson said it is a district goal to go beyond the basics to provide students with an education that includes global issue awareness and service learning.

"We are very proud of not only the funds raised for Heifer International and for the local food shelf, but that our students have been involved with other local service projects as well," Johnson said. "Graduates from Osceola have gone on to start programs on college campuses they are attending, have traveled overseas and been involved with world hunger efforts and have carried a commitment to aid others less advantaged than themselves wherever they are."

Vacation Bible School No Vacation

For the children who attended the Pleasantville United Church of Christ vacation Bible school last summer, the week was an opportunity for them to put their faith into action.

Kathy Vitantonio, the church school coordinator at the Chalfont, Penn., congregation, formulated her plans for about a year to incorporate lessons on Heifer International into the church's vacation Bible school.

While she had been a Heifer donor for some time, she said the inspiration to include Heifer came after a contingent of youth from the church visited Overlook Farm in Rutland, Mass., in 2010.

"I love Heifer; I believe in Heifer," Vitantonio said. "A year ago when I was thinking what were we going to do [for vacation Bible school], I thought, 'Let's really get behind Heifer; let the congregation know we really want to do a big deal with them.'"

Vitantonio knew the children would connect with the organization's use of animals to help others.

"We had to find ways ourselves to raise funds," Vitantonio said. "I sat down with the associate pastor, director and former director. We had already had Heifer materials, so I told them I'd like to spend the whole summer building a Gift Ark, a \$5,000



A calf visits students at the vacation Bible school at Pleasantville United Church of Christ.

PHOTO BY KATHY VITANTONIO

donation of multiple pairs of animals to help families in need. Building the ark was the theme for summer church school," she said.

Vitantonio's first goal was to make sure the children knew about Heifer before vacation Bible school began in August of 2011. Teachers in the summer church school taught the children about Heifer's 12 Cornerstones by pairing each Cornerstone with a passage from the Bible, like the story of Ruth and Naomi for Gender and Family Focus.

A representative Gift Ark was posted, and the children learned all about how animals help others.

Finally, in August 2011, Pleasantville Church hosted more than 100 children and 60 volunteers for their annual vacation Bible school program.

Vitantonio said she wanted the children to gain a deeper appreciation of the ways in which Heifer helps people, animals and plants live in harmony. On each of the five days, the children learned a different Bible story, country and animal through skits, games, crafts, videos, drama and snacks.

It helped reinforce the idea of "love your neighbor," no matter if they are in Puerto Rico, South America, Africa, China or Mississippi, Vitantonio said. "It's important for kids if they can see through actions that their religious beliefs are helping someone else. It was incredible to watch what these kids did," she said. "One little girl went home and explained to her whole street about Heifer. Others talked to their parents, did chores at home; they actually bought animals at the price advertised in the catalog." Many of the children donated their allowances to the cause.

"It made such a difference that it was the kids propelling the fundraising. They really wanted us to succeed. It was exciting," Vitantonio said.

By the end of the week, the kids raised enough for their Gift Ark.

Student Elise Upright, age 9, was delighted in the achievement. "It was nice because we gave animals to little children and families that needed it. I learned that even a child can make a difference. All we have to do is try," she said.

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N01001RAB, Rabbit, \$7
N01800PIG, Pig, \$7
N01800COW, Cow, \$7
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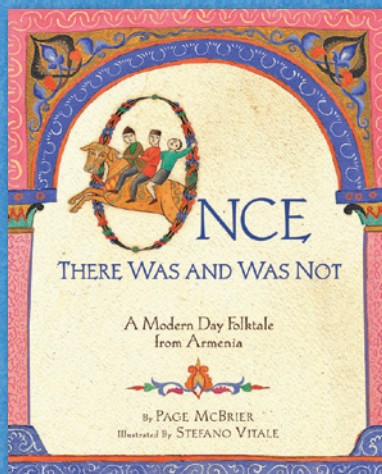
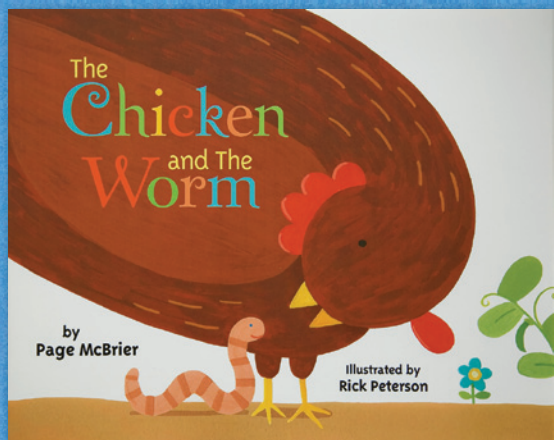


GLOBAL BARNYARD PLUSH ANIMALS

These stuffed animals aren't just cuddly; their custom hang tags explain the benefits they bring to impoverished families. Twelve inches tall.

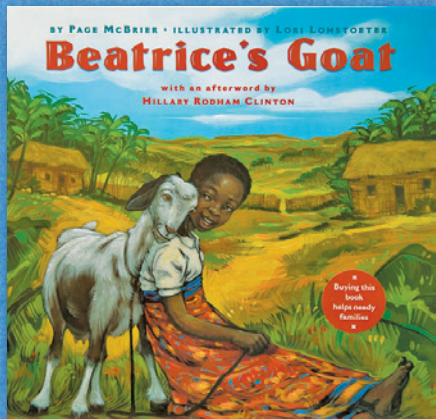
NPWROC, COW, \$15
NPWROG, GOAT, \$15
NPWROP, PIG, \$15
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The *New York Times* best-selling children's picture book about the true story of how one goat changed the life of a Ugandan girl. For 1st and 2nd grades.
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Follow a boy taking his first step into manhood while his village takes a step toward self-sufficiency. For 3rd and 4th grades.
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NLUGC0000 \$3 Cow
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HEIFER CHENILLE BALLCAP

Give a heads up on Heifer's mission wherever you go in this stylish baseball cap.

NCAPG5000 GREEN, \$12.00
NCAPB4000 BLUE, \$12.00

PASS ON THE GIFT SCARF

This 100% pima cotton scarf features Heifer's strategy of Pass on the Gift in 12 languages. 90 inches long, teal.

NA100600, \$9.99





HEIFER GROCERY BAG SET

Save the Earth one grocery bag at a time. This set of three reusable grocery bags fits all your groceries in one extra large thermal, one large and one medium grocery bag. With drawstring carrying case.
NM0701 ~~\$30~~ NOW \$15



MARKET TOTE

A heavy-duty, 100% cotton canvas bag. 14 x 17 x 13.
 Available in grape, charcoal, green and orange.

NM0602 Grape \$16
NM0601 Charcoal \$16
NM0603 Green \$16
NM0604 Orange \$16



HEIFER BUTTON

Wear your support with this 2 1/2 inch pin-back button.
NA0022 \$1

Please cut along dashed line

BILLING ADDRESS

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE _____ E-MAIL _____

SHIPPING ADDRESS

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE _____ E-MAIL _____

SHIPPING RATES

UNITED STATES

\$00.01 - \$20.00 \$5.50
 \$20.01 - \$30.00 \$7.00
 \$30.01 - \$50.00 \$8.00
 \$50.01 - \$80.00 \$10.00
 OVER \$80.00 \$14.00

* Sales Tax:

Add applicable sales tax for orders shipped to: AR 6%; CA 6%; GA 4%; IN 7%; MA 6.25%; MN 6.875%; PA 6%; VA 5%; WA 6.5%.

CANADA

Flat rate \$21

A portion of the proceeds received in connection with your purchase will support the entire mission of Heifer International.

Item #	Qty	Description	Color	Size	Price	Total

PRICES GOOD THROUGH JUNE 30, 2012

Subtotal

Shipping

Sales Tax*

TOTAL

PAYMENT METHODS

☐ CHECK ☐ VISA ☐ MASTERCARD
☐ DISCOVER ☐ AMERICAN EXPRESS

 CREDIT CARD NUMBER (ALL DIGITS, PLEASE)

EXP
 M M Y Y Y Y

SIGNATURE _____

WMB121C0000B2

To order, call (800) 422-0474 or mail Heifer International, P.O. Box 8058, Little Rock, AR 72203-8058

Create a better world one story at a time.



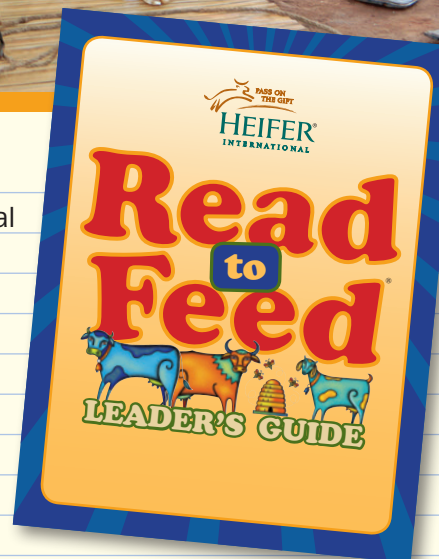
Foster a generation of globally conscious youth with a Read to Feed® program at your school or library. Help Heifer International assist millions of people around the world in feeding their families and reaching self-reliance through gifts of livestock and training.

Get started today! Visit the website and download Heifer International's Read to Feed program at www.heifer.org/readtofeed or call 1 (877) 275-READ to learn more.



Enrich the Read to Feed experience with Heifer's free standards-based Global Education Resource Kits.

Online resources available for grades Pre K-6.



February 2012



Learning Isn't Just for Kids

Heifer International has a long history of providing engaging educational opportunities for adults. Heifer U and Women's Lambing have been popular for 15 years, while our hands-on agriculture workshops continue to attract more and more interest. Participants from across the nation learn about hunger and poverty

and discover new and better ways to take action. Hosted at Heifer's learning centers, our programs provide a refreshing retreat in a beautiful, natural environment. Review upcoming programs on the next page, or go to www.heifer.org/getinvolved/adult-programs for more information.



Communities of Action Make a Difference

Want to foster a continued spirit of giving for your group or faith community? Whether you choose our popular Animal Crackers programs that engage your youngest members or *Feeding 5,000*, our new rotational program, we have lots of options. Go to www.heifer.org/getinvolved/congregation-resources to learn more or to download free copies!



Group Programs

Heifer's Learning Centers provide interactive programs and exhibits showcasing Heifer's model for sustainable development for schools, congregations, youth organizations, families and individuals. Programs for groups are offered throughout the year and range from a few hours up to five nights. Learn more at www.heifer.org/visit.

YOUTH PROGRAMS

DAY CAMP

Day Camp is packed with cultural experiences, farm chores and arts and crafts that explore hunger and poverty issues. (Ages 7-12)

Individual reservations:

Overlook Farm, April 16–20; June 18–22; June 25–29; July 9–13; July 16–20; July 23–27; July 30–August 3; August 6–10; August 13–17

GLOBAL GATEWAY

This 24-hour program offers participants a firsthand experience of hunger and poverty around the world through a night in our Global Village. (6th grade and older, plus chaperone)

Individual reservations:

Heifer Ranch, March 24–25

Group reservations offered at all locations except Heifer Village.

GLOBAL CHALLENGE

Global Challenge combines the Global Gateway experience with team-building activities. (6th grade and older, plus chaperone)

Individual reservations:

Heifer Ranch, March 30–April 1

Group reservations offered at Heifer Ranch.

GLOBAL PASSPORT

Participants provide for their group by tending gardens and livestock, buying supplies and cooking meals. Each night they

sleep in representative housing in our Global Village. (9th grade through college)

Group reservations only; offered at Heifer Ranch.

ALTERNATIVE BREAK

Spend your spring or fall break or a week of your summer experiencing life on a farm while learning how you can help end hunger and poverty. (6th grade to college, plus chaperone) Individual reservations available at Heifer Ranch, contact for available dates.

Group reservations available at Heifer Ranch and Overlook Farm, contact the appropriate center for available dates.

ADULT PROGRAMS

WOMEN'S LAMBING

Learn about Heifer's mission, observe the births of goats, sheep, swine, cattle and rabbits, participate in educational activities and do light farm chores.

Individual reservations:

Heifer Ranch, March 22–25; March 25–30; March 30–April 1

Overlook Farm, March 23–26; March 30–April 2; April 4–7; April 13–16

SPRING BEE WORKSHOP

Learn about basic bee biology, hive management and the equipment needed to build a beehive.

Individual Reservations:

Heifer Ranch, April 11–15

HEIFER'S FAIR SHARE MEAL

This unique program, soon to be available for communities across the country, includes a dining experience highlighting world hunger.

Individual Reservations:

Heifer Village, April 12

LIVESTOCK HEALTH CARE

Help us complete our livestock health checks while learning about the routine care of livestock, such as cattle, pigs, lambs, goats and chickens.

Individual Reservations:

Overlook Farm, April 19–22

VEGETABLE WORKSHOP

Learn about the basics of vegetable production, from seed selection to organic fertilizers to market.

Individual Reservations:

Heifer Ranch, May 6–10;

Overlook Farm, May 11–14

HEIFER U

Heifer U blends discussions and hands-on activities to further participants' understanding of various aspects of Heifer's work. Register online at www.heifer.org/heiferu or call (800) 422-1311.

HEIFER U: WOMEN IN A DEVELOPING WORLD

This program will delve deeper into Heifer's work promoting gender equity as not only a social justice issue but also as a practical tool of sustainable development.

Location/dates:

Hidden Villa, Los Altos Hills, Calif., March 15–18

HEIFER U FOR COLLEGE AND UNIVERSITY FACULTY AND STAFF

This program will feature Heifer programs for use on campus and opportunities for further faculty and student involvement with Heifer.

Location/dates:

Heifer Ranch, May 31–June 3

HEIFER U FOR EDUCATORS

Focus on education outreach programs that you can use to

motivate your classroom or group to contribute to sustainable solutions to hunger, poverty and environmental degradation.

Location / dates: Heifer Village and Heifer Ranch, July 18–22

In order to qualify as a candidate for consideration, all applicants must complete the Heifer U for Educators application. If accepted, they will receive a grant that pays for all program fees excluding travel.

Contact Information

To register or to view all of Heifer's educational offerings at each specific site, visit the web pages below.

HEIFER U

(800) 422-1311

heiferu@heifer.org

www.heifer.org/heiferu

HEIFER LEARNING CENTER AT HEIFER RANCH

Perryville, Ark.

(501) 889-5124

www.heifer.org/ranch

HEIFER LEARNING CENTER AT HEIFER VILLAGE

Little Rock, Ark.

(877) 870-2697

www.heifer.org/heifervillage

HEIFER LEARNING CENTER AT OVERLOOK FARM

Rutland, Mass.

(508) 886-2221

www.heifer.org/overlook

HEIFER GLOBAL VILLAGE AT HOWELL NATURE CENTER

Howell, Mich.

(517) 546-0249

www.heifer.org/howell

HEIFER GLOBAL VILLAGE AT SHEPHERD'S SPRING

Sharpsburg, Md.

(301) 223-8193

www.heifer.org/shepherd

FIRST PERSON

Steps to Self-Reliance



“This is the first time I have had the opportunity to save money and open a bank account.”

—JENE RENE MOSELUS

Jene Rene Moselus, 22, is one of 10 people in Fort Royal, Haiti, trained in animal draft power.

The 10 share in the ownership and benefits of two teams of oxen. Five months after he completed the training, Moselus had already earned 10,000 Haitian gourdes (\$248) using the animals to plow for his neighbors. With the extra income, he bought pepper seeds to plant in his garden and a calf he will later milk. He had enough left over to open his first bank account.

For more on Heifer projects in Haiti, see pages 22-31.

Photo by Geoff Oliver Bugbee

For those you care about most,
give to those who need the most care.



Heifer International offers unique and thoughtful gifts for anyone on your gift giving list. A goat, a flock of chicks or a water buffalo given in another's name will provide better nutrition and a source of income to help families around the world build sustainable livelihoods. Heifer offers free gift cards and e-cards describing the generous contribution you made.

Visit www.heifer.org/showyoucare to browse our unique catalog and give a gift with one simple click.



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USE YOUR CHANGE TO INVEST IN A LIFE



You can change a life for as little as \$10 a month. It's a gift that empowers Heifer with the necessary resources and tools to support the mission to end hunger and poverty in the world. A steady stream of support allows us to continue our work with confidence and enables us to act quickly should an emergency arise.

All you have to do is sign up and we'll take care of the rest. Heifer will make automatic monthly deductions, which you are free to stop or change at any time for any reason.

Become a friend of change,
**BECOME A FRIEND
OF HEIFER TODAY.**

Call (888) 5-HUNGER
or (888) 548-6437
www.heifer.org/monthly

Latifan Khatoon and her daughter Khosboonnissa
hold the family's goats at Koorganwa village in India.