

® THE MAGAZINE OF HEIFER INTERNATIONAL

HOLIDAY 2015 || HEIFER.ORG

worldark

HEIFER BANGLADESH

Dairying Greatly

INSIDE

THE MOST
IMPORTANT
GIFT CATALOG IN
THE WORLD

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in Tanzania

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WE'RE ALL FARMERS NOW

Good reading in town
and country



HEIFER®
INTERNATIONAL

Dear Fellow Activists,

As we approach the holiday season, let's reflect on the amazing impact Heifer International had on millions of lives over the past year. As usual, I have been around the world and then some, visiting the families that supporters like you have helped launch on a path to self-reliance.

MY TRAVELS IN 2015

- ▶ Arkansas Delta
- ▶ China
- ▶ Mexico
- ▶ Nepal
- ▶ Rwanda
- ▶ South Africa
- ▶ Thailand

In Guatemala, we are working with farmers like Rolando Yat Tut to keep pests away from the cardamom harvest and supplement family incomes with other high-value crops and livestock to close the gap between their meager incomes and a living income of around \$4,174 a year.

In Tanzania, Rahel Mhema and her husband, Steven Kipagatie, leveraged their 2010 gift of a cow and training to send their children to school, establish an orchard, buy more land and plant timber trees, as well as buy a motorcycle. **Where Mhema once earned around \$4 a month working at a tea factory, the family now earns more than \$180 a month selling extra milk.**

I'm thankful for support from Heifer friends and donors. At the same time, I am constantly impressed by the level of dedication Heifer farmers give toward improving their livelihoods.



Pierre Ferrari is welcomed by community members in the Nuwakot district of Nepal.

PHOTO BY ALINA KARKI

I hope you will continue to keep our families in your thoughts during this holiday season and that you might find an inspiring gift in the enclosed catalog.

Yours for a better world,



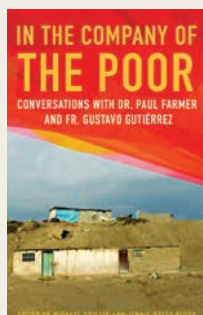
Pierre U. Ferrari

MY FAVORITE THINGS IN 2015



CORNERSTONES

Sharing and Caring Spirituality



BOOK

In the Company of the Poor by Paul Farmer and Gustavo Gutiérrez



GIFT

A Heifer goat: versatile, hardy, rapidly profitable



PAGE 29

THE MOST
IMPORTANT
GIFT CATALOG IN
THE WORLD

features



COVER

Mohammed Mizamur Rahman, 13, snuggles the animals at his home in Bangladesh's Boraigram subdistrict.

Top photo: Catalina Chub Caal, 34, and cousin Candelaria Sob Tut, 22, sort the good cardamom from the bad with 4-month-old Jonatan Caal Sub.

Cover and top photo by Dave Anderson

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House of Cardamom

Cardamom commands high prices, but spice farmers in Guatemala claim little of the profit. Pests compound the problem, lowering the quality and price of the crop. Heifer International is working with farmers to change all that.



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Dairying Greatly in Bangladesh

Heifer families are raising cows and goats to capitalize on a huge and growing market for milk and meat. By producing these products in country rather than importing them, Heifer farmers are boosting the economy on scales both large and small.



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The Road From Farm to Market

Heifer is working with Starbucks, the Gates Foundation and other partners to open new opportunities for Tanzanian dairy farmers to thrive.





NICE SHOT!

When I received our copy of the Fall 2015 *World Ark*, I had to sit down and smile at the beautiful picture of the lovely octogenarian Kushi Adhikari cuddling an orphaned goat. I was struck by the joy and love in her face.

More than 30 years ago, we donated a goat to Heifer. I would like to think our donated animal found such a loving owner.

Thank you, Lacey West, for capturing such an inspirational picture!

RUTH SEBER
Linfield, Pa.

OFF BALANCE

As a regular contributor to Heifer International, I support vigorously your approach to solving problems; however, I must express my disappointment with the one-sided tenor of the land grab articles on Pages 14-19 of your Fall 2015 edition. Even the illustrations are clearly biased.

It is my emphatic recommendation that Heifer

work to forge a balanced structure with other forward-looking organizations—corporations, etc.—that struggle, as does Heifer, to serve the needs of a growing population in a shrinking world.

Rather than drawing attention to the downside of larger (and not always better, to be sure) entities, let's work together to strengthen the benefits available through cooperation, coordination and consolidation.

WILLIAM ALDEN LEE
Doylestown, Pa.

NO EXCUSE

Surely the country that borders Ecuador to the north is ColOmbia, not ColUmbia. Editors involved with an international magazine should not be making this mistake. It doesn't inspire confidence in your professional abilities.

SHELLEY VANCE
Fairfax, Va.

Editor's Note: *A map on Page 33 misspelled the country of Colombia. We apologize for the embarrassing error.*

SWEET MEMORIES

I enjoyed reading the article on the stingless bees in Yucatan (*World Ark* Summer 2015). I worked for Pan American World Airways as a flight attendant, based in Miami, from 1969 to 1976. On flights to Merida we stayed on the ground at the airport for two hours before returning to Miami. I remember that the aircraft cleaners would come on board and sell us honey and tortillas. The honey was delicious and only cost

50 cents! It was packaged in old rum bottles with a cork. I saved one of those bottles for many years. I do not know if the honey was from the stingless bees or not. It is just a wonderful memory of that time in my life.

ANN BLUMENSAADT
Greenwich, Conn.



Congratulations to Danielle Schillereff, 13, from New Hampshire for winning this year's kid-friendly honor card art competition! Danielle received a Heifer gift from her aunt for her birthday. She drew the hands and animals to symbolize the giving spirit of our donors.

Q&A HOLIDAY

If you could add any animal to our gift catalog, which animal would you add?

We want to hear from you!

Please send your comments to worldark@list.heifer.org. Include your name, city, and a telephone number or email 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.



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Sons and daughters

JOIN THE CONVERSATION

Follow World Ark blog
on RSS and find Heifer
on Facebook, Twitter,
Instagram, Pinterest,
YouTube and Vimeo.



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Since 1944, Heifer has helped 22.6 million families, directly and indirectly, 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 pay-roll deduction by entering CFC #12079.

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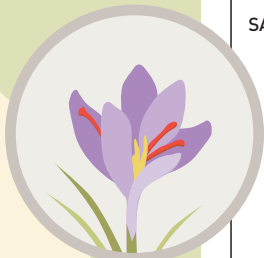
SPICE WORLD



The centuries-old spice trade boasts ties to vikings, queens, zombies and now **Heifer project participants**. Cardamom farmers in Guatemala are tapping into this international market that's born fortunes and shaped history.

SAFFRON

ORIGINALLY FROM GREECE



SAFFRON crocus threads

SAFFRON-BASED PAINT has been found in prehistoric cave paintings



Used in China and India as a fabric dye; **Monks' golden robes** got their traditional hue from **SAFFRON**



Cleopatra liked to take a **SAFFRON BATH** before receiving suitors



Some are trying to encourage **farmers in Afghanistan** to grow **SAFFRON**, hoping it can take the place of the opium trade



As the world's **most expensive spice**, **SAFFRON** is more expensive by weight than **gold**

VANILLA

ORIGINATED IN MEXICO



Spanish conquistador **Hernán Cortés** brought **VANILLA** to Europe in the 1520s

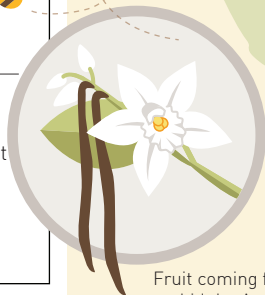
Vanilla grows naturally only in **Mesoamerica**, because its natural pollinator, the **MELIPONA BEECHEII**, is not found elsewhere



Today, **VANILLA** grows in abundance in the **West Indies**, where it must be pollinated by hand

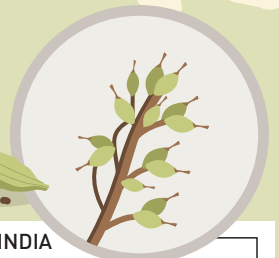


Guatemala leads the world in **CARDAMOM** production



Fruit coming from an orchid the Aztecs called the "**black flower**"

Seeds from the **CARDAMOM PLANT**



CARDAMOM

FIRST HARVESTED IN INDIA

Gives distinctive flavor to **CHAI TEA** and **GIN**; less commonly used in **aquavit** and **pickled fish**



Vikings first tasted it while raiding Constantinople 1,000 years ago
CARDAMOM remains **Scandinavia's favorite spice** to this day



Chewed like gum to **cure bad breath**



SALT

NOT ACTUALLY A SPICE, SALT IS TECHNICALLY A MINERAL

Early humans found salt by following animals to **SALT LICKS** or **BRINE SPRINGS**



The **Maasai** get **SALT** by drinking the blood of their livestock



In the **Vodou religion of Haiti**, it's believed that **zombies** can only be cured by eating **SALT**



SALT can **preserve food**... and other things
Egyptians used it to make **mummies**



An adult contains enough **SALT** to fill **3 or 4 salt shakers**





SPICE

A pungently **AROMATIC** SUBSTANCE from roots, stems, bark or seeds, used to flavor food or drink



HERB

LEAFY PARTS of a plant that add flavor and aroma to food or drink



MINERAL

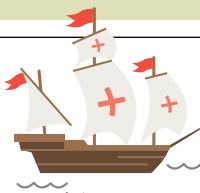
A naturally occurring, **INORGANIC**, SOLID SUBSTANCE

PEPPER

ORIGINALLY FROM INDIA

"From the beginning, what the world wanted from bloody mother India was daylight-clear.... They came for the hot stuff, just like any man calling on a tart."

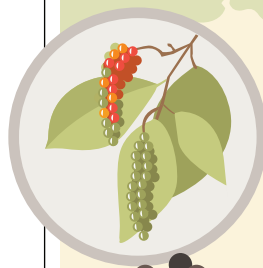
Salman Rushdie, *The Moor's Last Sigh*



Columbus brought **PEPPERCORNS** with him to communicate what he wanted to natives; He then mistook **CHILIES** for **PEPPER**, hence the misnomer



PEPPER was the Roman Empire's aspirin: a **cure** for aches and pains



PEPPERCORNS

PEPPER is the world's most popular spice



Iran is now the world's leading producer of **SAFFRON**

CARDAMOM was first harvested in **India**

TRUE CINNAMON comes from the inner bark of several trees from the **genus Cinnamomum**



The United States' **first millionaires** scored their fortunes in the **PEPPER TRADE**

Vietnam now leads the world in **PEPPER** production

"The shores of the island are full of it, and it is the best in all the Orient. When one is downwind of the island, one can still smell cinnamon eight leagues out to sea."

a captain of the Dutch East India Company



NUTMEG FRUIT

NUTMEG & MACE

ORIGINALLY FOUND ONLY ON INDONESIA'S **BANDA ISLANDS**



The Indonesian island richest in **NUTMEG**

A feud over **control of Run** led to an infamous trade:

The **Dutch** gave Manhattan to the English in exchange for control of Run and a **nutmeg monopoly**

Prices soared during the Middle Ages, when **NUTMEG** was rumored to fend off the **Black Death**



In large doses, **NUTMEG** induces **delirium and hallucinations** and is **fatal to dogs**



ORIGINALLY FROM **SRI LANKA**

CINNAMON

Most of what the world knows as **CINNAMON** is actually **cassia**, derived from the bark of closely related trees



"No respect!"

The Rodney Dangerfield of spices, **cassia** is sometimes called **BASTARD CINNAMON**

THE CINNAMON CHALLENGE

(starts making the rounds on the internet in 2001)



Swallow a spoonful of ground **CINNAMON**



In under **60** seconds



Without drinking anything



In 2012, American poison control centers received **more than 100 phone calls** as a result of the **CINNAMON CHALLENGE**



BIGSTOCK.COM

Spice up Your Holidays with Pomanders

Historically, pomander balls were worn by Europeans in the Middle Ages in hopes of warding off the black plague and other pestilence, and also to cover up the fact that pretty much everyone and everything smelled terrible back then.

Now we know that pomander balls aren't much good against the plague, but they're still fun and easy to put together. Plus, they make cheerful decorations that fill the house with a lovely aroma.

Making them is simple. Just poke holes into a firm orange with a toothpick, making any design that you want. Then push whole cloves into the holes, and watch your design come to life. If you want, you can make complementary patterns in the orange skin with the corner of a citrus zester, or roll your pomander in ground spices for extra fragrance.

Hang them with twine in a cool, dark place for about a week. Once they are dried, they are ready to display! You can hang them up, stack them as centerpieces, or even stick them in drawers to keep clothes fresh and nice-smelling.

A Tuber-ific Holiday Treat

Sweet potatoes are pretty good nestled beneath a fluffy covering of toasted marshmallows, but a more subtle treatment really lets the natural flavor of the potatoes shine. Heifer supporter Bente Humphrey of Orlando, Florida, has a light touch with the brown sugar but goes all in with real butter to make this award-winning soufflé.



Bente Humphrey

BENTE'S SWEET POTATO SOUFFLÉ

For the base:

- 3 cups cooked, mashed sweet potatoes
- 1 cup sugar
- ½ teaspoon salt
- 2 eggs
- ⅓ stick melted butter
- ½ cup milk
- 1 teaspoon vanilla

For the topping:

- ½ cup brown sugar
- ½ cup flour
- ½ cup chopped nuts
- 1 stick butter

Mix all base ingredients well and pour into a greased baking dish. Mix topping ingredients together in separate bowl. Spread over top of casserole, covering the entire dish. Bake at 350°F for 45 to 60 minutes.

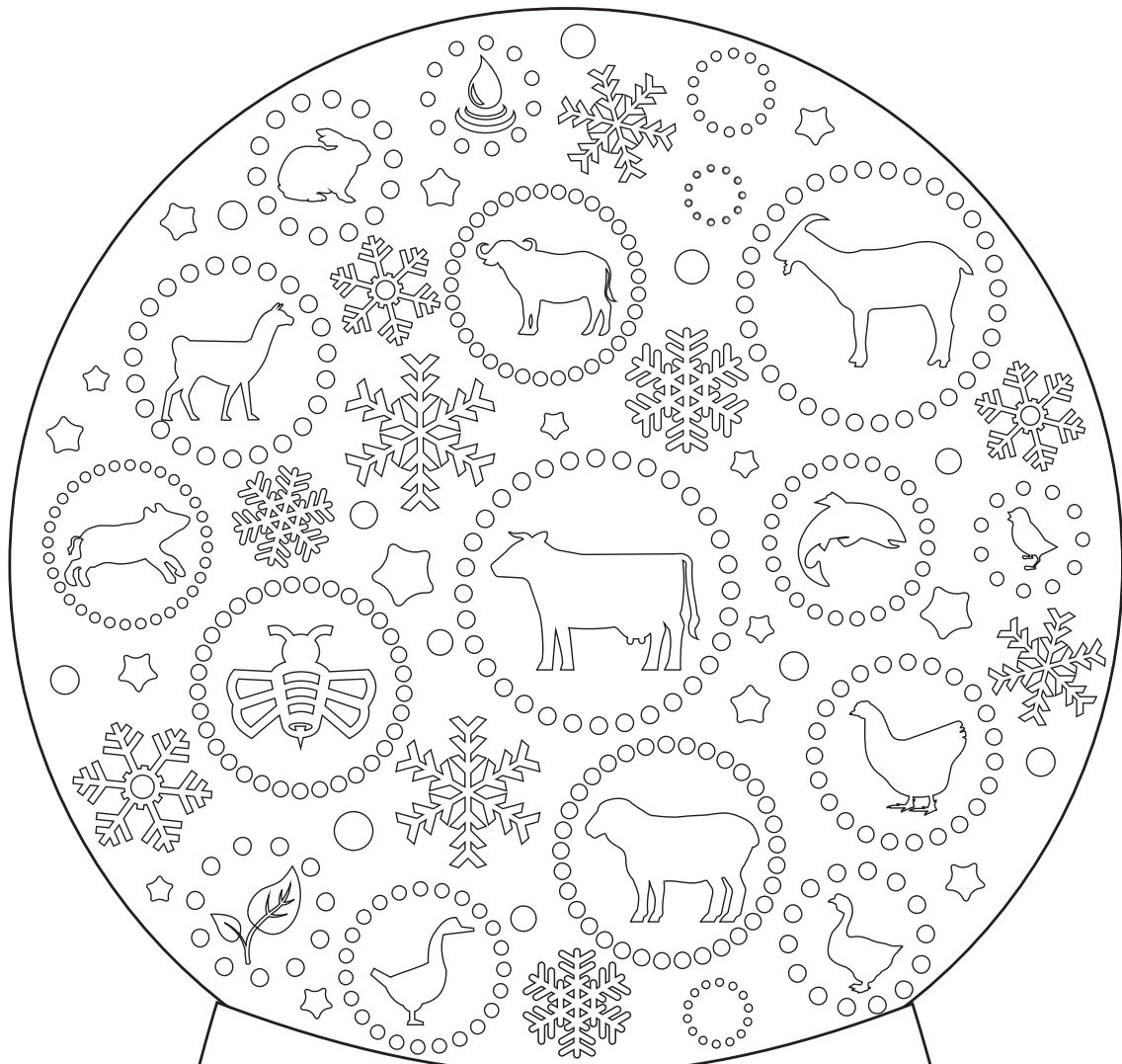


PHOTO BY AUSTIN BAILEY



Here We Go, A-Coloring!

Holiday stress? Erase it by busting out the colored pencils and getting to work. Coloring is increasingly popular among adults. Many find that the tactile experience helps them decompress. Not to mention, it's fun! We would love to see your masterpieces, so send photos of your color creations to worlddark@list.heifer.org.



LIVING GIFTS
THAT MEAN THE WORLD

WWW.HEIFER.ORG



Speaking with

Interview by Brooke Edwards, Heifer International writer

As president of ONE, Michael Elliott leads a chorus of 6 million voices united to help end extreme poverty, hunger and preventable disease, particularly in Africa. ONE does not ask for donations—they ask for your voice in speaking up for people who often go unheard.



PHOTO PROVIDED BY ONE

WORLD ARK: Tell me about ONE.

MICHAEL ELLIOTT: ONE is a global advocacy and campaigning organization working on issues of extreme poverty, preventable disease, hunger, nutrition and the like. Our mission is to be an advocacy organization that combats extreme poverty and all the things that drive it, which is why we do a lot of work in disease and hunger and nutrition, disease and transparency. We have our roots in the Drop the Debt movement of the 1990s (a campaign that called for cancellation of international debts owed by the world's poorest countries) and other manifestations of that. We took our present form 11 years ago, but we have antecedents that go back deeper than that. We encompass ONE, which is the advocacy and campaigning arm of the organization; also (RED), which is the cause consumerism operation; both of them, of course, brain children, at least in part, of Bono (activist, singer-songwriter and frontman for the rock band U2).

What pieces of ONE's work make you most proud?

I'm proud of the global effort to maintain global public health organizations at the forefront of everyone's thinking. The replenishment of funding for the Global Fund (an international financing organization that provides resources

to prevent and treat HIV/AIDS, tuberculosis and malaria) two years ago; replenishment of Gavi (a public-private global alliance that increases access to vaccines in poor countries) this year—those are massive global campaigns, in which everyone all over the organization played a part.

I was very proud of what everyone did in our classic inside-outside game. It's important to stress that. We work the inside game—we have real professional people doing government relations all over the world—and we bring 6 million voices to bear in the outside game to amplify their work. The inside-outside game is tremendously important. ONE has been instrumental in calling on governments to pledge billions of dollars in funding for Global Fund and Gavi, allowing these organizations to provide lifesaving care for millions of people around the world.

I've been very proud in the way we placed energy poverty on the agenda, particularly in the U.S., as a new area for advocacy. More than 620 million people in sub-Saharan Africa lack access to electricity. ONE has been working with the U.S. government to develop and pass a bill promoting reliable, affordable and sustainable electricity access for at least 50 million people by 2020. I'm very proud of everything our U.S. team does for that.

And I'm very proud of what our global



ONE Voice



ONE youth ambassadors at the G7 in Munich, Germany, telling leaders they want more than hot air in the fight against extreme poverty.

PHOTO PROVIDED BY ONE

team did last year. We took what is actually a problem we don't talk about: that agriculture isn't sexy. We all know that agriculture is the fastest way out of poverty that anyone has dreamt of, we all know what the figures are, we all know the proportion of African families that depend on agriculture. But we also know it's not that sexy. Everyone wants to leave the farm and go live in the city. So we did this campaign called Do Agric last year, which was global, working very closely with the African Union, and we did a fantastic

video with rock stars from all over Africa. It was brilliant. Then we brought them all here, to Washington, D.C., for the African Leaders' Summit in August. We took over the museum and did this fantastic concert and party, but with investment in agriculture as a very focused message. And I was very proud of that.

And I'm beyond proud that (RED), our cause consumerism arm, which Bono and Bobby Shriver and others dreamt up really only seven years ago, has already given more than \$300 million to the Global Fund.



Can you talk more about the inside game?

When people say to me, "What should we concentrate on? What should we not forget?" I always say, "Get your inside game ready." I can't say enough about our government relations here and in London, Brussels, Berlin and Johannesburg. The relationships they have, the top-level political relationships they have. The ability to get in the door of the key appropriations subcommittee person here or a commissioner in Brussels or a minister in London or Paris to really make the case with the real decision-makers about why a particular program should be so important and worth support. If we couldn't do that, we wouldn't be able to do what we do. God bless the 6 million members who are writing postcards and signing petitions and all that—we couldn't do it without them either. It's the combination of the two that's absolutely key.

What have been some lessons hard learned?

It's always important to make sure that you really see things through,

that you really finish something before you get on to the next. I think the other thing that's quite difficult is that we all have to recognize that the economy may be picking up again, but people have had a tough year, in this country and in lots of other donor countries, and we need to be very sensitive about how we talk to people when we're asking them to help people who are less fortunate. We can do it, there are ways to do it, but it behooves us to remember that a lot of people we're talking to have gone through tough times themselves.

As membership has grown to 6 million, have you seen ONE become more effective? What can you do with 6 million voices that you could not do with 1 million?

You get heard more. There are three consequences of having a great membership: weight, persuasion and place. Weight is simply that, when you've got 6 million people, rather than 2 million people or 1 million people, the petitions are going to be bigger, the noise you're going to make is going to be greater, the number of phone calls that are

made is going to be higher. The tidal wave is bigger. It's tremendously important for us to have.

Persuasion, by that I mean, the bigger your funnel at the top, the more people you will have down here, we call them catalysts, who really do the work, who get on the phone to their member of Congress, who show up at a diner for a lunch, wearing a ONE t-shirt, and say, "Madame Congresswoman, there's a line in the budget about this or that, and here's the reason why I expect you to defend it." The bigger the funnel at the top, the bigger number of catalysts, the real, real dedicated members you'll get at the bottom.

Geography is important, too, because as we have grown, we have been able to expand the number of places where we are able to perfect our inside-outside advocacy, and the real strength there has been that we've done enormous recruitment in Africa in the last few years. And, hey, presto, we find that when we go back to them and ask them to do things, they respond in exactly the same rates as people do here, and that is giving us an opportunity to focus, for example, advocacy attention on the African Union or an international body, and also on some campaigns we've done in individual African countries, like Tanzania. So it gives us an opportunity to do more.

As we continue to grow over the next five to 10 years, I very much hope that we'll be able to pull that off in more donor countries like Korea or Japan, where we already have members. In Brazil, in India, in places where there is a growing population of people, particularly young people, who think of themselves as globally engaged, we want to be the key advocacy organization they

A ONEderful Partnership

Heifer International and ONE started their partnership in 2013. Both organizations believe that agriculture and the education and empowerment of girls and women are key to successful global development.

Through the Limited Edition ONE Goat campaign, ONE and Heifer supporters raised funds to provide nearly 2,000 goats to help families move from poverty to prosperity.

The partnership provides an opportunity for members and supporters of both organizations to combine the policy and advocacy of ONE with the programmatic impact of Heifer International. You can still participate in the campaign. Just visit donations.heifer.org/one-goat



PHOTO BY PETER FIGETAKIS

think of when they think, "How can I press my own government to make sure that they contribute to solving global problems? The ONE Campaign are the people I'm going to look to, to help me do that."

You guys seem to have a really good handle on your audience and knowing what they want.

I think we have devoted a lot of time to thinking about how to combine policy, politics and pop culture so there are smart, lively videos; so that we use well-known spokespeople in the right way, so that we can really connect with people in a way that they remember—that has a certain kind of tactile quality, a visceral, whether it's music or video or something kind of catchy that really brings people in. We constantly have to refresh that and make sure you're right up to the minute, you're talking to the right people, using the right technologies. If last year it's Instagram, this year it's Snapchat, or whatever. So you can never rest on your laurels, because things will change.

For our World Ark readers, what is membership in ONE like? What should they expect if they join?

I think there's significant overlap between Heifer and ONE. You'll get asked to do a lot. You'll get emails from us, you'll get petitions to sign. We want people who join ONE to be engaged, we want them to be involved. We had 200 of our key members from around the U.S. in town, and we had hundreds of meetings on the Hill with lots of members of Congress, and a bunch of congressional stars showed up for a meeting with our people. So we want them to be busy. We want them to make the phone calls, sign the petitions, get the letters, talk to their neighbors, go to church on Sunday, and then have a coffee afterwards and tell people about why the issues that we work on are important. We want engaged members, we want involved members, we want members who are as outraged as we are by the essential injustice that so many people's life chances just depend solely on an accident of where they were born. We're here to do something about that, as far as we can. The sort of people

we want are the people who are as outraged as we are that that's the case.

Do you see a time when ONE will expand its efforts outside the African continent?

Our line is always that we're advocates of issues of extreme poverty and preventable disease, particularly in Africa. The reason that we say that is because Africa tends to be the toughest intervention. If you get tackling maternal mortality in Sierra Leone right, you'll figure it out in Laos or Guatemala or wherever it is. I think increasingly we will find ourselves talking about truly global issues and not just African ones. We know that extreme poverty is increasingly going to be concentrated in sub-Saharan Africa. That's true, over the next 20 or 30 years. But there are issues to do with women's empowerment, women's health, with economic growth, generally, that are not just African issues and which are really global issues. ■

.....
You can learn more at www.one.org.



HOUSE OF CARDAMOM



Manuel Pop Caal holds healthy cardamom seeds (right) and seeds affected by insects called thrips (left).

Cardamom farmers in Guatemala brave destructive pests, deadly snakes and predatory markets to grow and sell one of the world's most expensive spices. They often reap very little profit from their hard work, but Heifer is helping to change that.

By **JASON WOODS**

World Ark senior editor

Photos by **DAVE ANDERSON**



Everyone in the Sierra de las Minas depends on two crops, cardamom and coffee, to survive.

A **ITA VERAPAZ, GUATEMALA—** Near the end of the morning, Miguel Xo Pop walks alone, starting a lengthy descent from his home in the Sierra de las Minas mountain range. His view would be stunning—tall, wispy trees and dense foliage covering miles of undulant peaks ahead and behind—if not for the blanket of fog that covers everything in the cloud forest.

There's a good chance Xo wouldn't have noticed the view anyway since he's in a hurry; today, he has a ride to catch. After walking many miles, Xo will hop in a crowded truck on its way to another part of the country, where Xo will work on a melon farm. For the next

month, he will perform manual labor for 8 to 12 hours a day. The farm's owner pays him and the other workers 45 *quetzales* (\$5.89) for an 8-hour day, despite the fact that the Guatemalan minimum wage is 75 *quetzales* (\$9.82). Overtime nets 5 *quetzales* (\$0.65) for each hour.

This has become his routine: three times a year, in February, June and August, Xo spends a month working away from his home. Sometimes he finds himself on a melon farm, but he has also put in hours cultivating sugarcane, palm oil and bananas.

Back in the mountains, Xo farms his own plot of land. Everyone in the Sierra de las Minas depends on two crops, cardamom and coffee,



Miguel Xo Pop, in his home in the Sierra de las Minas mountains.



Because the cardamom and coffee crops aren't enough to support his family this year, Miguel Xo Pop makes the long journey to work on a melon farm.

to survive. Xo and his family are no different. Traditionally, the cloud forest's climate helps the two plants thrive, but in the past few years a pair of plagues cut cardamom prices in half and reduced coffee income to nothing.

Recently, Xo joined a Heifer International Guatemala project that will help him keep the pests away from his cardamom while adding more crops to his farm, but the project is still in its initial stages, gaining momentum. So for now, Xo spends a quarter of a year away from his wife and five kids to earn money. For the month, Xo left his family 700 *quetzales* (\$91.64) and 100 pounds of corn, which seems like a lot of corn until Xo explains that the family typically eats 300 pounds of corn monthly.

The money will be stretched to purchase beans, rice, soup, chili, salt and cal (calcium hydroxide, for the preparation of tortillas).

"It's hard to leave them because I don't know if they will be able to eat," Xo said. "It happens every time." On the days there isn't any food, Maria Juc Caal, Xo's wife, has to take out credit.

The concern goes both ways. While he's gone, Juc worries about Xo getting into an accident on the road. Xo's absence also increases her burden around the house.

Just before Xo walks through the clouds and down the mountain, his wife and his youngest child, 9-year-old Cecilia Carolina, give send-off hugs. It's not a teary goodbye, which is sad in its own right; the trips are normal now.



A cardamom plant
flowers toward the end
of the harvest season.



Manuel Pop Caal poses near his cardamom plants.



Tiny insects called thrips are crippling cardamom prices for Guatemalan farmers.



A man uses a mecapal to carry wood up the mountain.

TRIALS AND TRIBULATIONS

Xo's story is the story of most of the families in the mountains—the men leave for seasonal labor, and everyone else picks up the extra slack at home.

Manuel Pop Caal lives in the community of Los Angeles in the Sierra de las Minas. Income from selling cardamom and organic coffee used to cover most of his family's needs, with cardamom providing 60 percent and coffee the other 40 percent.

But over the last few years, a fungus called coffee rust reached epidemic levels in Central America, decimating harvests. Experts say the fungus may be benefitting from climate change and warmer temperatures in higher altitudes, where coffee grows best. Whatever the cause, Pop saw the fungus cut his typical harvest in half in 2014. This year, there will be no coffee harvest for Pop or anyone in this part of the cloud forest.

To make matters worse, the cardamom harvest is also under siege. Thrips, slender but destructive insects, intensified in the past several years. Thrips attack a cardamom plant starting at the flowers, scarring them in the process. The scarring then moves to the seed, the part of the plant that's harvested for profit. Unlike the fungus coffee rust, thrips don't

destroy a harvest. But the seeds are left visually unappealing and less aromatic, and buyers will only pay half of what they would for healthy cardamom.

So Pop supplements his family's income by working on a palm oil farm that's a 10-hour journey from his home.

"Palm oil work is harder (than cardamom)," Pop said. "I have to wake up at 3 a.m. for breakfast. It's a stricter work schedule." He added that it's hotter and more humid there, and his body, used to the cool temperatures of the cloud forest, struggles to acclimate.

That doesn't mean cardamom farming is easy. During the harvest season, the cardamom seeds are handpicked and sorted, packed in burlap sacks, then carried down the mountain to the edge of the nearest town, La Tinta, for sale. Farmers carry their produce on their backs using a *mecapal*, a sturdy piece of material that rests on the wearer's forehead on one end and cradles the bottom of the sack of cardamom on the other. Users, which include men, women and children, have to have strong shoulder, back and—especially—neck muscles.

"(You can carry) 175 pounds if you're really good," Pop said. In a day, he might have to haul his cardamom nearly 5 miles, or for about an hour and a half, to get to buyers.



Manuel Pop Caal examines his cardamom crop.

One of the frustrating truths about cardamom is that small-scale farmers struggle financially despite the commodity's status as the third most expensive spice in the world by weight, after saffron and vanilla.

In addition to the exhausting work, cardamom farmers face a fair amount of danger. Before the harvest, many cardamom growers on the mountain range invite a Mayan elder to perform *mayahac*, a ceremony asking Ajaw, the all-powerful creator of the universe, to bless the harvest. It is also common to ask Ajaw for protection, specifically from the *barba amarilla* ("yellow chin" in Spanish), perhaps the most feared snake in Latin America. After the harvest, cardamom farmers tend to their plants by pruning the dead leaves and removing accumulated detritus from the base of the shoots, and sometimes the aggressive and venomous pit viper, also known as the *fer-de-lance*, is waiting underneath. For this reason, no one in the Sierra de las Minas enjoys post-harvest chores.

"In other communities, people have died (from the snake's bite)," Pop said. "No one here has died yet."

GREEN GOLD

The trials of cardamom farming aren't limited to manual labor, plagues and snakes. One of the frustrating truths about cardamom is that small-scale farmers struggle financially despite the commodity's status as the third most expensive spice in the world by weight, after saffron and vanilla.

Originally from India, cardamom arrived in Guatemala in 1914 via German immigrants, and it adapted well to the environment. Today, Guatemala produces more cardamom than any other country, generating more than \$300 million a year. Locally, it's known as *oro verde*—green gold.

"Cardamom is a way for many people to get out of poverty or get richer," said Gerson Coy, Heifer Guatemala project coordinator for the northern region. "Except the producer."

On a market day, as many as 1,000 farmers like Xo and Pop carry their harvested pods from the mountains to a bridge that marks the outskirts of the town of La Tinta. Middlemen, known as *coyotes* in Spanish, weigh the bags of



Elvira Pec Beb, 28, with children Melida Meleida, 6, Joas Micalns, 3, and Ingrid Debora, 10.



It takes 50 hours to dry cardamom seeds in a dark, heated facility.



Cardamom affected by thrips (left) sells for half the price of healthy cardamom (right).

seeds using scales in their truck beds and pay the farmers in cash on the spot. Producers have little negotiating power, and often coyotes take advantage of that.

"In the market, intermediaries will lower the price (of cardamom), put the price however they want," said Elvira Pec Beb, a cardamom farmer from the Sierra de las Minas. If the price is really bad, Pec will sometimes skip the middlemen and sell directly to the next rung in the ladder, the dryer, for a better price—but that's a rarity since she has to find transportation for the half-hour trip by truck.

So normally, Pec and other farmers must sell to coyotes, who profit from selling the cardamom to drying facility managers for a higher price. Managers will buy healthy cardamom for 2 *quetzales* (\$0.26) per pound, dry the seeds in a dark, heated room over a 50-hour period, then send the cardamom to the owner, who most likely owns more than one drying facility. The dried cardamom is then sold for 7 *quetzales* (\$0.91) per pound to exporters who raise the price further when

selling to customers in India, the Middle East and other places where the spice is in high demand. Globally, the commodity sells for \$5 or \$6 per pound. By the time cardamom reaches stores in the United States, it can sell for at least five times that.

The whole process could leave producers feeling robbed. Sometimes, they are literally robbed. Rolando Yat Tut, like the other men on the mountain, leaves for seasonal labor. Last harvest, all his family's cardamom was cut when he returned.

"It happens when they see the cardamom is good," Yat said. "I don't know who did it. It happened between 3 and 4 p.m. I don't know exactly how much, maybe 40 or 50 pounds."

HEALTHIER HARVEST

The bright side is that Yat actually does have healthy cardamom, increasingly a rarity on the mountain range. With the help of Heifer Guatemala, Yat is lessening the impact thrips have on his plants. The approach starts



Glue traps have been effective for Rolando Yat Tut.

simply, with a yellow piece of plastic. The square, a trap suspended among Yat's cardamom plants, is dotted with thrips. As it turns out, the insects are attracted to certain colors—yellow especially—and when they land on the trap, glue keeps them from leaving. Combine that with biopesticide, derived from natural ingredients, and Yat's harvests are increasingly more productive.

"You can see the improvement," Yat said. Before, about 60 percent of his cardamom seeds were affected by thrips. In his first harvest after using the pest control methods, that number dropped to 40 percent. "Now it's even lower. Ninety percent is healthy, 10 percent is affected by thrips."

Yat is a member of the Association of Organic Producers for the Holistic Development of Polochi (APODIP), which began as an association of coffee farmers, but most of the members rely more heavily on cardamom. As coffee rust became more and more devastating, APODIP sought out a partnership with Heifer Guatemala to strengthen cardamom production and find complementary products for its farmers to cultivate.

According to the Heifer Guatemala's research, families in rural parts of the country need \$4,174 annually, on average, to cover basic needs of food, clothing, shelter, education and healthcare; however, most cardamom farming families only earn about one-fourth that. Heifer Guatemala's goal is to bridge that gap and help families move themselves into a place of resiliency.

WHAT IS CARDAMOM?



Cardamom is a high-priced spice, usually referred to as aromatic because of its strong, distinctive smell. Known as "the queen of spices," the seed has a complicated flavor—sometimes described as mint or menthol, sweet, spicy, eucalyptus, floral or citrus. The spice belongs to the ginger family, and its taste is just as intense.

The plant originated in southern India, and the biggest demand for the spice is found in Southeast Asia and the Middle East. Cardamom is also popular in Scandinavia, where the Vikings introduced it about 1,000 years ago.

Besides adding flavor to dishes, cardamom is used as a breath freshener and digestive aid.

PROBLEM SOLVING

The first step in the project is finding sustainable and inexpensive ways to ward off thrips. Although the pest control methods used so far are effective, the biopesticide, at \$10 per ounce, is too expensive for farmers to buy on their own. Heifer Guatemala is trying to find alternatives that farmers can afford or, ideally, make themselves.

To that end, “research, development and innovation” became Hernandez’s mantra for the project, and a disparate group of organizations were enlisted to help. Heifer Guatemala is working with Texas A&M University and Guatemala’s Universidad San Carlos to examine the pest control issue, as well as ways to reduce the excessive amount of firewood used by cardamom dryers.

Heifer Guatemala is also seeking out new ways to use and market cardamom. Already, the farmers are building relationships with The Doug Jeffords Co., a Tennessee-based spice vendor, and Kardamomuss, a fusion restaurant in Coban, Guatemala, that specializes in using cardamom in its dishes. The United States accounts for only 2 percent of the world’s cardamom use, and in Guatemala, the spice is almost never used. Hernandez would like to see both countries adopt more cardamom recipes, and Heifer Guatemala is working with its partners to see if cardamom products like iced tea or toothpaste could be viable in the marketplace.

Heifer Guatemala also hopes to find alternative sources of income so farmers can supplement the cardamom and coffee harvests. One of the first products introduced was honey. Although families in the Sierra de las Minas don’t traditionally consume honey, they can sell it for about 66 *quetzales*, (\$8.50) per liter in the towns below. With the support of Heifer Guatemala and its partners, some farmers are supplementing their income through the introduction of poultry and crops that grow complementarily with cardamom—black pepper, nutmeg, cinnamon, the native *chile cobanero* and the ghost pepper, known for its spiciness.

One of the biggest challenges, set for later stages of the project, is connecting farmers directly with domestic and international buyers so families don’t have to settle for the prices of the coyote monopolies.

“(This is a) way to sustain families, so they



Maria Juc Caal and her daughter Cecilia Carolina in their home.

can buy a vehicle, improve their homes,” said Marvin Lopez Garcia, manager of APODIP. “Right now, families are purely subsistence.”

COMING HOME

After four weeks of work on the melon farm, Miguel Xo Pop will return home with extra cash in his pocket to pay for some of his family’s expenses. But he will also return to a farm that shows more promise every month.

Not only has the health of the family’s cardamom improved with each harvest, but with help from Heifer, Xo introduced a series of new crops—cloves, peppers, cinnamon—into his fields. The cinnamon is particularly productive, and he would like to add more in the future, as well as a nursery. It’s his hope that these and other improvements will be the beginning of the end of his triennial trips away from his family.

In time, extra income from the project could help the family with more than just the necessities. Maria Juc Caal would like to keep her children in school to open opportunities later in life. Cecilia Carolina, in particular, wants to be a teacher when she grows up.

“I hope that my children have a better future than me,” Juc said. “I hope they don’t have to go through what we go through.” ■

CARDAMOM LINGO

Cereza (cherry)
cardamom seed, with the shell

Pergamino (parchment)
cardamom seed, with the shell, after it has been dried

Oro (gold)
cardamom seed, after the drying process and shell removal

SPICE BLENDS THAT GIVE BACK



McKinley Thomason (right) stands with Heifer volunteer promoter Filiberto Choc.



A couple of years ago, McKinley Thomason was searching for a way to use his Nashville-based spice business to make a positive impact. After hearing about Heifer International's burgeoning work with cardamom, he knew he had found his organization.

Shortly after contacting Heifer, Thomason's company, The Doug Jeffords Co., started donating 10 cents to Heifer Guatemala for every seasoning blend sold from their J.M. Thomason line. But Thomason's passion for Heifer's work in Guatemala moved him to do even more.

Thomason has been acting as a project adviser to Guatemalan farmers, sharing his market knowledge and technical expertise in the world of cardamom. He is also making connections and introducing Heifer Guatemala to other like-minded spice companies that could support this or other projects.

Starting last summer, the J.M. Thomason brand introduced three new spice blends—Gaucho Espresso, Parisian Pastry and Garam Masala. For each tin sold, 25 cents is donated to Heifer Guatemala. Additionally, all of the cardamom (Parisian Pastry, Garam Masala) and coffee (Gaucho Espresso) used in the blends are grown by farmers participating in the project and sold directly to Thomason's company. The direct relationship cuts out the coyotes and nets farmers a better price.

"I love what Heifer is doing to allow farmers to provide for themselves and have a livelihood," Thomason said. "(Heifer) gives them that chance."



All of the
J.M. Thomason spice blends
can be purchased
for \$8.99 at
[HTTP://JMTOMASON.COM](http://JMTOMASON.COM)
or select retail outlets in the South.

REPORTER'S NOTEBOOK



Almost no one in Guatemala uses cardamom for anything other than a source of income. Few of the farmers I talked to knew how cardamom was used. Most had tried the raw seed at least once. Rolando Yat Tut said, "It stings a little. It's a little strong."



Manuel Pop Caal told me he could carry 175 pounds of cardamom using a *mecapal*. When I asked him how much he thought I could carry, he looked me up and down, then said, "About 25 pounds." Dave Anderson (left), our photographer, managed 75 pounds when he gave it a try.

I heard about the *barba amarilla* snake (scientific name: *Bothrops atrox*) from most of the farmers I visited. One claimed the pit viper's bite could kill a person in 30 minutes. I couldn't find any evidence to support that specific claim, but you can see the myths that surrounds the feared reptile. And with good reason. The hemotoxic bite, which destroys blood cells and tissue, can certainly be fatal. Most venomous snake bites in Latin America are attributed to the *barba amarilla*.



Unlike coffee, cardamom's distinctive fragrance starts from the moment it emerges from the plant's flower. Everywhere I went, I could smell the cardamom fields before I could see them.

Cecilia Carolina Xo Juc wants to be a teacher when she grows up, but right now, her favorite thing in school is pretty much every 9-year-old's favorite thing. "I like recess the most," she said, though she was quick to add, "but I like all my classes."



At one facility in the Sierra de las Minas, the cardamom drying process involves heating a dark room filled with vats of cardamom seeds with a wood-fed stove at specific temperatures for a total of 50 hours. Eduardo Quej is the manager and only employee here, so he stays awake the entire time. His secret? An energy drink called Raptor.

There aren't many flat surfaces in the Sierra de las Minas, so level land is prime real estate. The flattest piece of land I came across in the mountains was used as a soccer field. The only problem was that one of the goals was placed at the edge of a steep drop-off, which meant that when the team attacking that goal scores, the ball careens down the mountain. I was told that when that happens, to add insult to injury, the defending goalie has to retrieve the ball. It usually takes about 10 minutes.





Renuka Khatun, 32, (center right) is cautiously optimistic about her family's future now that she's become part of a new Heifer program in Bangladesh.

DAIRYING GREATLY IN BANGLADESH

By Annie Bergman, *World Ark* contributor
Photos by Dave Anderson

NOTABARIA VILLAGE, Bangladesh—Renuka Khatun is guarded when it comes to sharing her dreams. She gazes into the distance with a set smile when asked about her future, gestures that suggest she's afraid to voice any hopes, even to herself.

Fifteen years ago, Khatun, 32, and her husband, Bablu Pramanik, 35, got an auspicious start to their marriage when a wealthy neighbor gifted them the use of two goats—a practice not uncommon here.

The couple steadily grew their herd and periodically sold the animals to buy a cow, ducks and chickens. Their small farm earned enough that Pramanik no longer had to work as a hired laborer. He bought a small motorcycle, which he converted to a taxi. They had a son, Mohammed Mizahur Rahman. Their foundation seemed solid.

"The days were good. We managed well," Khatun said.

But when Khatun suffered complications during the birth of their second child, Mohammed Robin, the



Robin, 3, cradles a chick. His mother sells eggs to supplement the family's income.

family sold nearly all they had to pay medical bills.

With most of the animals and vehicle gone, and with little land to work, Pramanik became a seasonal farm laborer once again.

His work was sporadic and dependent on harvests. He made 200 taka a day (\$2.50) on good days. When added to the 30 cents they could bring in from the sale of eggs each week, the couple made about \$840 a year.

It is her present reality that stops Khatun from imagining what could be for her family of four, or of thinking that her sons

could know a different kind of life.

"I can't think ahead too much," Khatun said.

Still, she is optimistic that working in a new Heifer project might help her see them through, she said.

After officially opening offices in Dhaka in 2012, Heifer Bangladesh, together with local partners, began work to implement new projects that provide microfinance loans to small-scale farmers to cover

the cost of a dairy- or meat-producing animal. The program initially focused on cattle, but will soon change to goats to meet local needs and market demands.

The approach was chosen for two reasons: first, microfinance programs are pervasive and successful in Bangladesh; and second, demand for both fresh meat and dairy is extremely high in the South Asian nation.

The new program aims to increase the incomes of at least 120,000 small-scale farmers, primarily in the northwestern region of the country, who make less than \$1,800 a year.

To start, farmers are brought together in self-help groups, where they undergo a series of trainings. The groups pool and save money—10 taka (12 cents) or a handful of uncooked rice per week—and also



learn about proper care for their animals. This provides the women a community and savings to fall back on should setbacks arise. They can also take loans from the group savings for group-approved activities.

To develop goat and beef production to meet the incredible demand in the country, Heifer Bangladesh is working to introduce appropriate breed selection methods and

improved fodder and forage production. It also supports other players in the value chain, training community animal health workers and ensuring farmers have access to markets.

But the program is not without its challenges. Bangladesh remains one of the least developed countries in Asia, with more than half of the people



Runa Laila, in green, is part of the new program. Her family chose to raise a dairy cow, as the need for fresh milk in their area is high. Her husband, Anwarul, owns a tea shop and plans to use the cow's milk for his customers.



Pani Mordi tends a small garden plot near her home in Bachondora village. Mordi has earned enough money from her involvement in a Heifer project that she now owns four cows along with goats, and pig.



Rubina Begum pumps water from a well on the property of Monira Begum, a Heifer participant who helped bring clean water to her community in Madhabpur.



The women in Madhabpur village owe much to Monira Begum, front. She helped bring a Heifer project to her area, and where they all struggled to save about 10 cents a week, they now have approximately \$1,000 in savings.

living below the international poverty line. A prevailing attitude in Khatun's region, too, is that the poor should remain poor.

In May of 2014, just three months after she began caring for the cow she received as part of the project, Khatun was proud to say that she knew she was giving her animals better care than in the past.

She was anxious about selling the cow in another three to four months' time and was expecting to make roughly a \$180 profit after repaying the loan equivalent to \$205 that she took to buy the cow.

And despite what she said about not thinking ahead, she admitted she was making plans for the money, with her children's education her top priority. Mizahur Rahman already talks about wanting to become a doctor.

"I want to invest in cattle. It's the promise of profit," Khatun said. ■

Goats and cows are providing new opportunities to thousands of small-scale farming families in northwestern Bangladesh.



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Challenge your group to spend one to five nights at Heifer Farm in Rutland, Massachusetts, or Heifer Ranch in Perryville, Arkansas. Overnight programs on our working farms provide immersive educational and teambuilding experiences that will inspire, challenge and engage groups to help us end hunger and poverty and to care for the Earth. Learn more at www.heifer.org/visit or by calling **855.3HEIFER**.



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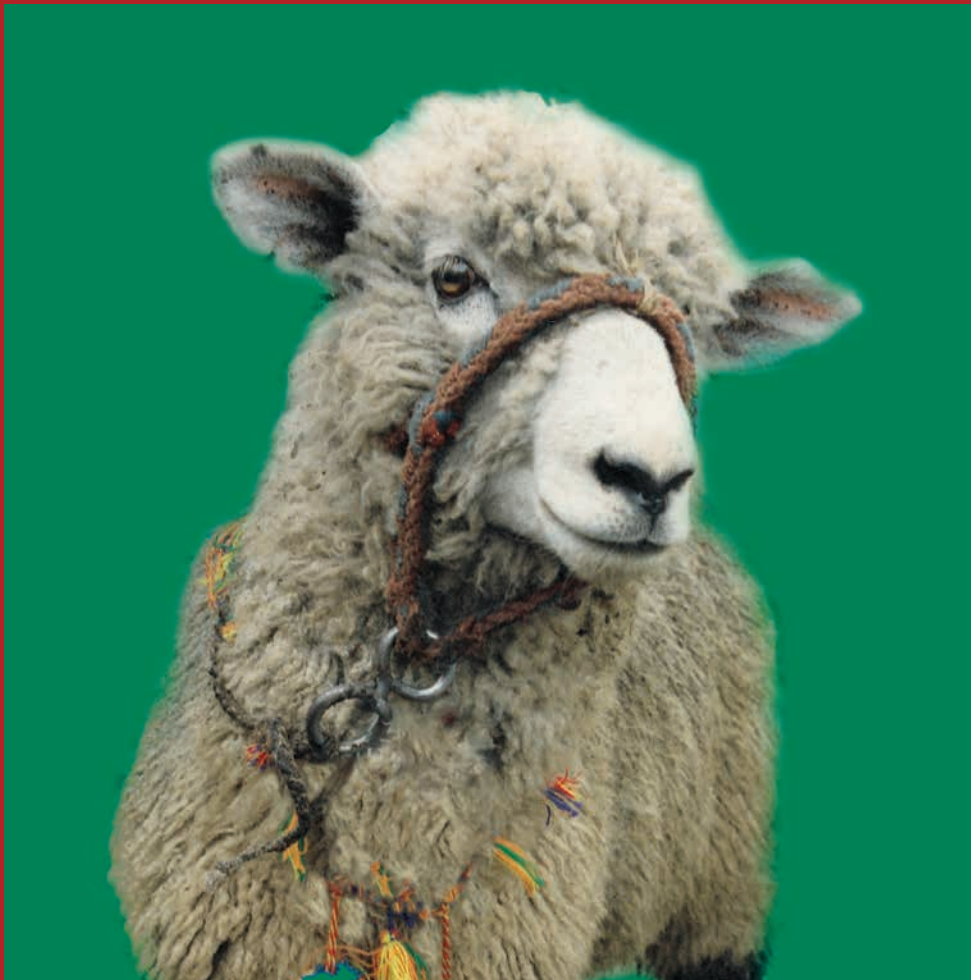
Heifer Farm: December 5, 6, 12 & 13 (10 a.m. - 4 p.m.)

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Special 2015
Holiday Edition

THE MOST IMPORTANT GIFT CATALOG IN THE WORLD



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Haushila Rana, from Nepal, with one of the goats her family received from Heifer supporters

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About Heifer International



Jairo Deras-Alvarado, Honduras

Since 1944, Heifer International has worked to bring help, healing and hope to millions of impoverished families worldwide. In just over 70 years, the total number of families assisted, directly and indirectly, is more than 22.6 million in more than 125 countries. In areas where hunger and despair once prevailed, Heifer programs have reinvigorated communities through livestock, training and Passing on the Gift.

Heifer International works in the areas of livestock and agriculture to develop programs that alleviate hunger and poverty. Our field staff is comprised of livestock specialists and our programs are considered among the most successful in the world.

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HEIFERS FOR THE HOLIDAYS



In Malawi, cousins Garfield Gwazantini (right) and Mizeki Rhodwell have plenty of fresh milk to drink thanks to the heifer their grandfather received from our donors.

What could be a better gift for someone you love this holiday season — another present that gathers dust on a shelf? Or a heifer and training in its care, purchased in honor of your special someone, that brings health and hope to a family in need?

A good dairy cow can produce up to four gallons of milk a day — enough for a family to drink and share with neighbors, and still have enough left over to sell.

Protein-rich milk can transform sick, malnourished children into healthy boys and girls. The sale of surplus milk provides income for school fees, medicine, clothing and home improvements.

And because a healthy cow can produce a calf every year, every gift will be passed on and eventually help an entire community move from poverty to self-reliance. Now that's a gift worth giving!

Gift of a Heifer: \$500
Share of a Heifer: \$50



Milk Menagerie: \$1,000
Share of a Milk Menagerie: \$100

The gift of a Milk Menagerie represents a quality-breed heifer, two goats and a water buffalo — four milk-producing animals that provide hardworking families with the resources to provide a better life for their children.

With training for recipient families, each animal in the Menagerie will produce gallon after gallon of wonderful, life-sustaining milk that can be sold or turned into cheese and yogurt for additional income.

Plus, each animal's offspring will multiply your impact even further through Passing on the Gift.

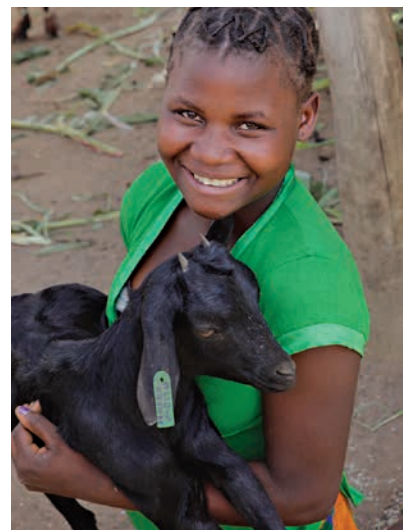
GIFT OF GOATS

The gift of a dairy goat is a lasting, meaningful way for you to help a little girl or boy on the other side of the world while sharing your caring spirit with those closest to your heart.

The gift of a dairy goat can supply a family with up to several quarts of nutritious milk a day. Extra milk can be sold or used to make cheese or yogurt. Families learn to use goat manure to fertilize gardens.

And because goats often have two or three kids a year, Heifer families can lift themselves out of poverty by starting small dairies that earn money for food, health care and education. What a wonderful way to honor someone special in your life this holiday season!

Gift of a Goat: \$120
Share of a Goat: \$10



CHRISTMAS CHICKS

Flock of Chicks: \$20

It's time to buy your child's favorite teacher a holiday present — but you suspect that Mrs. Lynley doesn't need another engraved Christmas tree ornament. How about the gift of chicks in Mrs. Lynley's name to wish her happy holidays and to thank her for giving your own “chickadee” the gift of guidance and wisdom throughout the school year?



In Armenia, Marietta Zakaryan launched an egg business that is thriving thanks to a helping hand from Heifer supporters. “At some point she became the most reliable supplier of eggs, so all the neighbors started buying from her,” says Marietta’s grandmother proudly.

Through your gift of a flock of chicks, families from Armenia to Zambia can enrich their inadequate diets with nourishing, life-sustaining eggs.

The protein in just one egg is a nutritious gift for a hungry child. Heifer helps many hungry families with a starter flock of 10 to 50 chicks.

And since a good hen can lay up to 200 eggs a year, there are plenty of eggs for families to eat, share or sell. Because chickens require little space and can thrive on readily available food scraps, families can make money from the birds without spending much. And chickens help control insects and fertilize gardens.



Flock of Hope: \$60

A Flock of Hope from Heifer International may include **chicks**, **ducklings** and/or **goslings** that will grow and give “by the dozen” as nutritious eggs are gathered each day.

A Flock of Hope is a remarkable gift that doesn't take a “nest egg” to give this holiday season — it just takes someone like you!

OPPORTUNITY FLOCKS

Flock of Ducks or Flock of Geese: \$20

For millions of children around the world, it is duck and geese eggs — not chicken eggs — that form the cornerstone of a healthy diet. By regularly selling duck and geese eggs, families can generate the steady income needed to purchase food, clothes, medicine and pay for school fees.

That's why we hope you'll put these fine feathered friends at the very top of your holiday shopping list this year.



Before receiving a gift of ducks from a Heifer supporter, Pham Thi Nguyen from Vietnam remembers, “In the past my children would be sick often.” Now she has a flock of more than 300 ducks and says, “We have more money to improve our house and send our children to school. Our children will have a better life.”

CALL TOLL-FREE 855.848.6437

LIGHT UP A LIFE ... WITH LLAMAS



Omar and the other children in his village now have a bright future in front of them thanks to the gift of llamas. Omar's mother says, "I can see that through Passing on the Gift my community is developing."

Giving the gift of a llama and training in its care offers a unique way to honor that someone on your holiday shopping list who seems to have simply everything.

At home in rough, mountainous areas of Latin America, llamas and their kin, the alpaca, are a blessing to families with limited resources.

They provide invaluable sources of transportation, income and wool, which is prized for making blankets, ponchos, carpet and rope. Plus, their padded hooves and unique grazing methods mean they live harmoniously in their fragile Andean environment and help our project families preserve their limited resources.

Gift of a Llama: \$150

Share of a Llama: \$20

SHEEP: SHEAR JOY

Warm in winter, cool in summer, waterproof and durable — wool is a valuable product that struggling families can use for clothing or sell for extra income. That is why your gift of a sheep and training in its care is such a wonderful way to share the warmth of the season with someone special in your life.

All over the world, Heifer partners are raising sheep to advance the cause against hunger and poverty. And since sheep often give birth to twins or triplets, when you give a gift of a Heifer International sheep, your support will impact many more families over years to come.

Gift of a Sheep: \$120

Share of a Sheep: \$10



Tening Thiaw and her father, Aliou, have a lot to smile about since receiving the gift of sheep. "It's thanks to the money I earned from these animals that I was able to get a water pipe right to my house," Aliou says gratefully.



Knitter's Gift Basket: \$480

Share of Knitter's Basket: \$48

Over the years, mom has knitted everything from warm wool sweaters to stylish mittens and scarves. Now you'd like to give her something just as meaningful in return.

This is just what you've been looking for!

Our Knitter's Basket includes four of our fuzzy friends that are keeping Heifer partner families warm all around the world. Your gift represents a llama, an alpaca, a sheep and an angora rabbit — four animals that provide families with ample wool and endless opportunities to build better lives.



Beekeeper families sell honey to provide children like little Jose Deras, from Honduras, with a better future.

THE HOLIDAY BUZZ ... ABOUT BEES

May we suggest surprising your friends, family and co-workers with the latest buzz: the gift of honeybees to help needy families around the world?

Your generous gift will help Heifer provide a family with bees, a box and hive, plus training in beekeeping.

Bees help families from Uganda to Haiti earn income through the sale of honey and beeswax. Plus, when placed strategically, beehives can as much as double some fruit and vegetable yields through natural pollination. In this way, a beehive can be a boost to a whole village.

Gift of Honeybees: \$30

HOLIDAY TREES SAVING LIVES, SAVING THE ENVIRONMENT

One of Heifer International's most important promises is to care for the Earth.

We believe that for development to be sustainable, we must help families raise their animals in harmony with nature. That's why in addition to livestock, Heifer provides families with trees.

Through training, families learn how to keep their small plots of land healthy and renew the soil for future generations by planting trees, using natural fertilizer and limiting grazing. So may we suggest adding the gift of a tree from Heifer to your holiday gift giving this season?

Tree Seedlings: \$60

**Share of
Tree Seedlings: \$10**

Read to Feed® is a reading incentive program that will foster in your children a love for reading and a passion to help others. Learn more at www.readtofeed.org.



Thanks to the cashew trees that Maria Elsa Castellanos Rios in Honduras received from Heifer supporters, she can sell nuts and earn a steady income. Now she can feed her two grandchildren and even send them to school!

CALL TOLL-FREE 855.848.6437

BOXES, BOWS AND BUFFALO

Send happy holiday greetings to a family in need with the gift of a water buffalo this season.

In poor communities, water buffalo from Heifer are providing draft power for planting rice and potatoes, milk for protein and manure for fertilizer and fuel. A farmer can plant four times more rice with a buffalo than by hand — generating added income to use for clothing, medicine, school and home improvements.

So your gift of a water buffalo and training in its care can lead a hungry family out of poverty and give them a chance for a bright future filled with hope and free from hunger.

Gift of a Water Buffalo: \$250
Share of a Water Buffalo: \$25



The Porjai children, Sunee, Suchart and Daaprasuk, enjoy caring for the water buffalo their family received thanks to generous Heifer supporters.



PIGS AS PRESENTS

Gift of a Pig: \$120
Share of a Pig: \$10

If you are looking for a gift that will leave your friends, family or co-workers squealing with delight this holiday season, look no further than the gift of a pig and training in its care from Heifer International.

Heifer animals are like “living savings accounts” for struggling families, and the pig may well be the most interest bearing.

Each gift provides a valuable source of protein, income from the sale of offspring and natural fertilizer to nourish crops and soil.

Pigs need little land and can thrive on crop and garden byproducts. And since a healthy sow can provide a family with up to 16 piglets a year, many more families will soon benefit as your gift is passed on.

With his family's future now secure, Teerawat Pitakprasi, from Thailand, decided to use his profits from selling pigs to start a school for at-risk youth. “Now that my life has improved, I want to encourage young people to improve their life,” said Teerawat.

Learn more about Heifer's educational programs that give teachers the resources to educate their students on hunger and poverty issues at www.heifer.org/educate.

www.heifer.org/catalog

STILL FISHING FOR THE PERFECT GIFT?

With well-stocked ponds of fingerlings and training in fish-farming techniques, families can quickly increase their daily nutrition and income. When Heifer fish farmers Pass on the Gift of fingerlings to others in their community, the impact of your support is multiplied even further.

So celebrate the holidays with the gift of fish from Heifer and give new meaning to the old saying, “Teach a man to fish and he will eat for a lifetime.”

3 Schools of Fish: \$300
Share of Fish: \$30



Nguyen Van Cuong, Vietnam



Enithe Luxius, from Haiti, is counting on her Heifer rabbits to help her family be more resilient in the event of extreme weather events.

WRAPPING PAPER, RIBBONS... AND RABBITS

Trio of Rabbits: \$60
Share of Rabbits: \$10

Giving the gift of a trio of rabbits from Heifer International for the holidays is a low-cost, high-yield gift that helps impoverished families increase their protein intake and income. Rabbits are easy to care for; they eat simple foods, such as carrot tops, sweet-potato vines and grasses. Rabbit manure can be applied directly on gardens without composting.

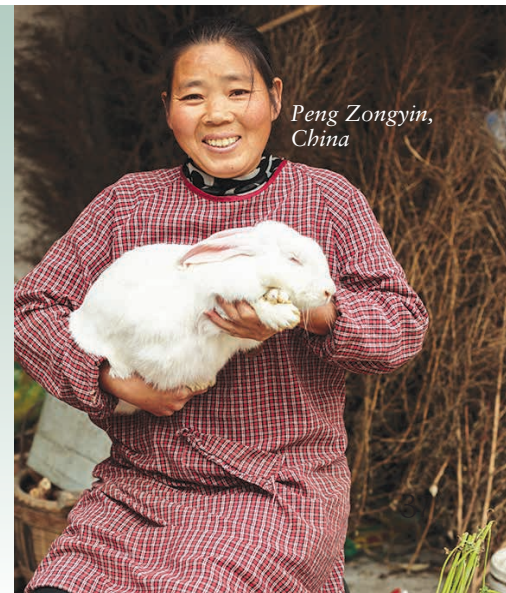
And because rabbits have so many offspring, the process of Passing on the Gift multiplies each gift quickly and helps many other impoverished families better their lives.

Hope Basket: \$50

What can be more hopeful to a struggling farmer than a gift of fast-multiplying livestock?

The Hope Basket, with chickens and rabbits, offers just that to Heifer's project participants.

Rabbits are easy to care for and reproduce quickly, allowing their owners to sell the offspring for extra income once they've fulfilled Heifer's Passing on the Gift promise. Chickens lay eggs and provide manure for vegetable gardens. Which is why this gift of hope goes on and on, lasting much longer and helping more families than the usual gift basket ever could.



Peng Zongyin,
China



Alex Weboya, Uganda

Millions of people around the world still lack access to clean drinking water. In some communities, water is scarce. In others, it is contaminated. Fortunately, Heifer has solutions to both problems.

Heifer helps many families install treadle pumps, practice water conservation and use organic fertilizers to protect drinking water to improve their health.

Gift of Clean Water: \$300

COOKING UP A HEALTHIER PLANET

For most families in the places where Heifer works, cooking usually requires gathering firewood by hand, and often leads to soil depletion and deforestation.

However a biogas stove runs off methane gas captured from animal waste. It burns cleanly, reliably and efficiently.

That's why you can reduce deforestation when you purchase a biogas stove for one of our project participant families. Or you can help a whole village by purchasing 20!



Ashu Gaga, China

Biogas Stoves for a Village: \$1,000

Gift of a Biogas Stove: \$50



In the impoverished communities where Heifer works, many of the homes lack running water and some families do not have a well nearby. Instead, they must spend each day carrying water. This is often a chore left to the children — especially girls — leaving no time for school. This is one burden we can easily lift by helping families and communities install irrigation pumps.

Irrigation Pumps: \$150

CHANGING THE WORLD TWO BY TWO

Gift Ark: \$5,000

**AN OPPORTUNITY FOR YOU, OR A GREAT
CHALLENGE FOR YOUR COMPANY, CIVIC GROUP,
CLUB OR CONGREGATION.**



2 Cows

To bring milk and income to a village in Honduras.



2 Sheep

To help families in China produce wool.



2 Oxen

To pull plows and carts in Uganda.



2 Water Buffalo

To help families in the Philippines increase rice production through animal draft power.



2 Pigs

To enable families in Senegal to attain greater self-reliance.



2 Beehives

To help families in Guatemala earn money through the sale of honey and beeswax.



2 Goats

To help families in Nicaragua provide milk for their children and earn extra income.



2 Donkeys

To supply animal draft power for farmers in Kenya.



2 Trios of Ducks

To help families in Bangladesh generate income through the sale of eggs and birds.



2 Trios of Rabbits

To provide food and income for families in Ghana.



2 Trios of Guinea Pigs

To help families in Ecuador add protein to their diets and increase income.



2 Flocks of Geese

To help families in Cambodia better their nutrition and income through the production of eggs and meat.



2 Flocks of Chicks

To help families in Zimbabwe improve nutrition and generate income through the sale of eggs.



2 Llamas

To improve livestock breeds in Peru and enhance wool production and income.



2 Schools of Fish

To help families in Vietnam earn income and improve nutrition through fish farming.

Double your impact.
Find out if your company will match your original Heifer gift at
www.heifer.org/matching.

To help the greatest number of families move toward self-reliance, Heifer does not use its limited resources to track individual animals from donation to distribution to specific families. Instead, your gift supports the entire Heifer mission. We use your gift where it can do the most good by combining it with the gifts of others to help transform entire communities. Heifer's unique community development model has assisted more than 22.6 million families directly and indirectly since 1944 — more than 114.9 million men, women and children. In fiscal year 2014, nearly 2 million families were assisted within the four program areas in which Heifer operates. Heifer International's mission is to end hunger and poverty while caring for the Earth. For more than 70 years, Heifer International has provided livestock and environmentally sound agricultural training to improve the lives of those who struggle daily for reliable sources of food and income. Heifer is currently working in more than 30 countries, including the United States, to help families and communities become self-reliant. Catalog photos by Amy Davenport, Bryan Clifton, Brigitte Lacombe, David Synder, Geoff Oliver Bugbee, Jake Lyell, Olivier Asselin and Russell Powell. Images and stories in this catalog represent the work of Heifer International from 2000 to present.

CALL TOLL-FREE 855.848.6437

GIVE A VISIONARY GIFT



Ana Lourdis Tejada-Furez, from Honduras, can follow her dreams and achieve her fullest potential thanks to the milk and income provided by the heifer her family received from visionary supporters like you.

Here's a tip for all you visionaries out there — celebrate the holidays this year by igniting a transformation!

This special gift is designed to affect change on a truly massive scale as you empower families, communities and even entire regions of the developing world. Each Gift of Transformation includes:

- Herds of heifers, llamas and goats
- Flocks of both sheep and chickens
- Pens of pigs
- Schools of fish
- And, of course, a gaggle of geese!

Plus, your investment will continue to grow for generations to come as families Pass on the Gift.

Nowhere else can you find a gift that will mean so much to so many!

Gift of Transformation: \$10,000

Share of Transformation: \$100

POOJA'S STORY ...

Just one little girl in a faraway land — is she worth saving?

Before a Heifer International project was started in Shitalpur, India, women seldom left the house and were never trained to do anything other than housework. In fact, Pooja's mother has said, "I didn't even know how to sign my name until Heifer taught me this."

Thanks to donations from all our supporters, Heifer provided Pooja's family with livestock and training that her parents could use to start a goat and chicken farm. Now there is enough income for Pooja to go to school — a chance her mother never had.

Send a Girl to School: \$275



Pooja Kumri, from Shitalpur, India, is the first girl in her family to be able to go to school.

GREAT GIFTS FOR WOMEN WORLDWIDE

Empower women!

This holiday season, we are proud to offer a gift unlike any other: The opportunity to empower women in the poorest region of India — a place where so many suffer from poor nutrition, low literacy rates, and severe discrimination.

We know these women can succeed. They just need someone like you to believe in them. So this year for the holidays, reach out to help a desperate mother in India who is fighting for her child's survival.

It's a gift that will change her life ... and yours!

THE 2015 WOMEN'S EMPOWERMENT GIFT SUPPORTS THE MAYURBHANJ SOCIO-ECONOMIC DEVELOPMENT PROJECT IN INDIA.



Savitri Devi, India

- Essential training in nutrition, hygiene, business planning, animal management
- Goats, seeds for food and fodder, basic farm equipment
- Access to clean water, improved sanitation, healthier cookstoves
- Three rounds of Passing on the Gift to multiply the impact of your gift

Gift of Women's Empowerment: \$25,000

Share of Women's Empowerment: \$100



Tanazios Manuel Tobias, Malawi

Joy to the World Gift Basket: \$1,500

Share of Joy to the World Gift Basket: \$150

The Joy to the World Gift Basket represents two sheep, four goats, one heifer and two llamas, which can provide:

- Soft wool, woven into a blanket to keep a baby girl warm
- Rich, sweet milk; the first a little boy has ever tasted
- Fertilizer for improving farms
- Stable income for food, clothing, medicine and school tuition

It's the gift that reminds us that there is no challenge too great for caring people to overcome together.

It's the gift of Joy to the World.

THE ROAD FROM FARM TO MARKET



Twice a day, Rahel Mhema bikes fresh milk to her group's milk collection center.



Steven Kipagatie and Rahel Mhema talk about their goal notebook.



By **JASON WOODS**, *World Ark* senior editor

Photos by **DAVE ANDERSON**

SOUTHERN HIGHLANDS, TANZANIA—A thin, pink notebook rests on the living room coffee table of Rahel Mhema and her husband, Steven Kipagatie, at their home in Ikando village. *Malengo*, “goals” in Swahili, is neatly written in capital letters at the top of the book’s cover.

Shortly after receiving a dairy cow from Heifer International Tanzania in 2010, the couple sat down to share their long-term dreams together, and they decided it was a good idea to write them down. Reading from the book, Kipagatie listed their goals: “Educate our children through high school and on to university; establish an orchard; buy more land for commercial timber; plant timber trees; buy a motorcycle.”

Five years later, Mhema, 40, and Kipagatie, 43, have achieved all of their goals and then some—they also started beekeeping, added goats and another cow, and have enough money to hire help for their farm.

When the two married 19 years ago, setting goals

like these seemed futile. Mhema supported both of them by sorting tea in a factory, where she might work a week with only a four-hour break every 24 hours or go two or three days without sleep. After seven years of this grueling work, Mhema left the factory, and the couple tried their hand at farming. But the farm never paid off by itself. Fortunately, the cow did.

It’s the classic Heifer story—and literally, a heifer story—the gift of a cow and training leads to a life that once seemed out of reach for a family of farmers. Milk money provides for the basics and allows Mhema and Kipagatie to invest in other profitable ventures while also saving for the future. The cow’s manure increases the quality and quantity of their crops. And all of that leads to checking off each of the aspirations listed in the pink *malengo* notebook.

But now Mhema and Kipagatie have a new goal. Through Heifer’s East Africa Dairy Development (EADD) program, Mhema and Kipagatie’s next step is to become entrepreneurs on a larger scale.



Guli Siwale sits with her grandchildren Kevin, 17, Guli, 15, and Gaby, 3.



A HEAVY HEART NO MORE

Guli Siwale, a 57-year-old coffee farmer in Shiwinga village, about 150 miles west of Ikando, thanks God for giving her the strength to survive this long. Soon, through a partnership between Heifer Tanzania and the Starbucks Foundation, Siwale expects the gift of a heifer to steady what has been a tumultuous life.

In 2005, Siwale lost her husband, Leyton, to AIDS. A few years ago, AIDS also took her only daughter, Ester, at the age of 30. Siwale lost a lot of weight due to her grief, and it still shows on her slender frame.

"This was a difficult time for me," Siwale said. "Words cannot express what I went through. (Ester and I) were very, very close."

Siwale was left to provide for three grandchildren in the wake of her daughter's death, and that is a daily struggle. Shortly before her husband died, Siwale found out she, too, was HIV-positive. Although government-provided pills greatly improve her health, she is sick more often than she should be, and that makes it more difficult to work her quarter acre of land, where she grows beans and maize for food and coffee for sale. She also has a couple of chickens and a pig she hopes to sell eventually, but



Guli Siwale stands in front of her coffee plants.

the sum of all her efforts often isn't enough, especially since her coffee plants are plagued by pests and inconsistent rains.

"On an average day, I need at least 5,000 shillings (\$2.46)," Siwale said. "But some days go by that I don't even have 100 shillings (\$0.05) on me. There are so many basic needs I still cannot meet."

Thieves have also targeted Siwale lately. "They've come to my house twice," she said. "The first time, they came and they stole coffee from my house. They've also come and taken beans that I've harvested. Once, they came and they beat me up."

But Siwale believes better days are ahead. After reporting the thefts, the crimes seem to have stopped. And soon, she will have a cow, materials for a cowshed and seeds for fodder from Heifer and Starbucks. The cow's manure should improve her coffee crop, and the milk will help meet

Siwale said the happiest moment of her life was when she was selected for the project. "My heart no longer feels heavy," she said.

her family's nutritional needs. She can sell the surplus milk, which is in high demand in the area, for around 1,000 shillings (\$0.45) a quart. Her long-term vision is setting up small businesses for her grandchildren.

The project is helping 5,000 small-scale coffee farmers like Siwale not only increase their income but also gain access to clean water and renewable energy sources.

Siwale said the happiest moment of her life was when she was selected for the project.

"My heart no longer feels heavy," she said.



Rahel Mhema milks one of her cows.

RIISING TO THE OCCASION

With a heifer and training, Siwale envisions her family's situation changing dramatically, like it did for Mhema and Kipagatie. The cow from the original Heifer project gave them food and money for the basics, and they began saving some money by selling surplus milk. But ultimately, on their own, they were limited in how much surplus they could sell on a daily basis.

In Tanzania, nearly 530 million gallons of milk are produced

annually, but only 2.5 percent of that ever reaches a formal market because most dairy farmers don't have enough volume to sell to milk factories, and even if they did, they have no way to get their milk there. The vast majority of the milk, about 90 percent, stays at home, feeding both families and calves. When dairy farmers do sell their milk, it is usually informally and in small amounts in their own communities, which accounts for 7.5 percent of milk produced annually.

If someone wants to buy fresh, local milk in Tanzania—and plenty of people do, with national demand growing yearly—it can be a challenge, especially in rural areas. In Siwale's village, for example, people who want to buy milk usually have to pre-order, then bike or even walk three miles to another village. But with Tanzanian processing plants currently using 34 percent of their storage capacity, the milk market is ready to expand if supply can catch up to demand.



Two calves that belong to Rahel Mhema and Steven Kipagatie.



Rahel Mhema strains her milk before delivering it to the collection center.

If someone wants to buy fresh, local milk in Tanzania—and plenty of people do, with national demand growing yearly—it can be a challenge, especially in rural areas.

Through the East Africa Dairy Development (EADD) program, which is funded largely by the Bill & Melinda Gates Foundation, Heifer and its partners are helping small-scale farmers fill the void in the Tanzanian dairy market. The project connects farmers like Mhema and Kipagatie who

have extra milk to sell with companies that buy milk in bulk. The East Africa Dairy Development program starts where the original Heifer project left off, grouping family farmers into cooperatives and connecting them with companies that can sell the milk in more far-reaching markets.

Small-scale farmers become part of a marketing chain, supplying fresh milk and reaping a good income in return.

"We used to farm for the sake of farming," Kipagatie said. "Now we are learning how to do it more commercially. EADD is a yeast for development."



During her twice daily ride, Rahel Mhema greets her neighbors.

BETTER TOGETHER

With the East Africa Dairy Development program, the first step is organizing farmers into groups, usually managed as cooperatives. As a group, farmers pool their milk to a volume large enough to sell to processing facilities, giving them more power to negotiate prices.

"We make decisions as a group, and we sell as a group," Kipagatie said. Camaraderie strengthens as farmers struggle and succeed together. Kipagatie added that the organization injects a friendly competitiveness to the mix, driving members to work harder. He also thinks people naturally

want to come together. "If you drink, you don't drink alone," he said. "I come from a family where my mom would brew local beer. When my father wanted to drink, he wouldn't drink it at home, he would go to the bar."

For the next step, cooperative members create milk collection centers; some can hold more than 2,500 gallons of milk a day. To get the milk to the collection centers, farmer organizations will sometimes buy a truck that makes the rounds in the group's community, usually an area of 25 miles, picking up milk cans.

Mhema lives about a mile away from the collection center for her

group, the Wawahanjo producer organization. So twice a day, she bikes down a dirt road, greeting neighbors as she passes, to drop off fresh milk. She enjoys the trip so much that she walks the route if time permits. When she arrives, group members measure the milk and test it to make sure it's fresh and of good quality. After milk from all the producers is collected, group members package it in milk cans and haul it to the main road to be picked up by the Njombe Milk Factory.

The Njombe Milk Factory is one of two large milk processors in Tanzania's Southern Highlands, and Heifer Tanzania and its partners



Rahel Mhema delivers her milk to the Wawahango dairy cooperative.



Milk cans are prepared for delivery via motorbike to the Njombe Milk Factory.

The East Africa Dairy Development project is a large endeavor with a lot of moving parts. Heifer International Tanzania is leading the project, but it also relies on its partners to provide specialized services like business management, feeding systems and breeding to budding dairy entrepreneurs.

EADD PARTNERS:

- ▶ International Livestock Research Institute
- ▶ Technoserve
- ▶ African Breeders Services
- ▶ World Agroforestry Centre
- ▶ Elanco
- ▶ Bill & Melinda Gates Foundation

have helped connect EADD dairy farmers to both. Njombe Milk Factory specializes in European-style cheeses—about 660 pounds produced daily—that are marketed to urban expatriates, although it does sell some milk and a yogurt that is popular locally. The company was founded by an Italian NGO about a decade ago, but as of last year, the board of directors is now composed of farmers and other locals, further empowering milk producers in the Southern Highlands.

Milk collection centers that allow for deliveries to companies like the Njombe Milk Factory

are the centerpieces of dairy production hubs that the East Africa Dairy Development program is helping farmers establish in their communities. These hubs are lucrative for more than just farmers: they also include businesses like feed stores, artificial insemination and breeding services, and financial lenders. These fully formed economic engines will churn on long after Heifer's work is finished.

Mhema and Kipagatie are new to the dairy development project, but they are seeing results from it and their previous work with Heifer. The tea factory where Mhema used to



Provolone cheese is aged at the Njombe Milk Factory.



Workers use milk from EADD participants for a variety of products at the Njombe Milk Factory.

work paid her 9,000 shillings (\$4) a month. Farming might have brought in an additional \$46 per month. But now, adding in milk sales from their Heifer cow, the family earns up to 400,000 shillings (\$184.20) per month.

As Siwale eagerly awaits her heifer, she is hopeful her journey will be similarly fruitful. When she looks to the future, she sees the project bringing success to her family, recompense for the hard work and pain they have endured.

"I will be able to lead a life that other people are leading," she said. ■

MEASURING SUCCESS

Starting in 2008, the first phase of the East Africa Dairy Development program (EADD) connected 203,778 small-scale farmers across Kenya, Rwanda and Uganda to a larger circle of institutions and services that give them the resources and infrastructure to earn a living raising cows and selling milk. This, in turn, allows them to educate their children, access healthcare and invest in their businesses.

For the initial five-year period, the project was responsible for: \$131 million earned in milk sales by farmers; 356 million liters (94 million gallons) of milk sold; \$11 million saved by farmers by 2013.

Now, EADD's second phase is extending the project by bringing an additional 136,000 farmer families into economic stability in Kenya, Tanzania and Uganda. The second phase focuses on four outcomes, listed on the right.



FARMER SUSTAINABILITY

Double farmers' income by increasing milk production per household to at least six liters (1.5 gallons) per day.



GENDER EQUITY

Increase the number of women supplying milk to the hub and with access and control of productive assets by 30 percent.



HUB SUSTAINABILITY

Create profitable, sustainable businesses and enhance services and tools to boost farmers' productivity and well-being.



REPLICATION

Refine and prove a model that can be replicated and scaled inside and outside the project, countries and region.

COFFEE & CREAM



Mtemi Miya manages the Starbucks Farmer Support Center in Tanzania.



Fresh milk will be strained, then taken to a chilling plant for storage and sale.

Heifer Tanzania and Starbucks Foundation are teaming up to improve the quality of life for coffee farmers in the country's Southern Highlands.

Project participants receive a cow and training to boost income and nutrition. The project also provides clean water and alternative energy sources like biogas, while also improving sanitation. The Starbucks Foundation donated \$750,000 toward the Heifer project as a part of its Origin Community Grant program. The company is also investing in the Southern Highlands through its Starbucks Farmer Support Center, one of six worldwide.

"(At) Starbucks, we believe in quality coffee and a better life for the community," said Mtemi Miya, Farmer Support Center manager and agronomist. "We work in a community as a whole because we believe that improving the community in one way or another also improves coffee production and quality. And at the end, we get good quality coffee, and the people live a better life."

Miya and the Farmer Support Center help farmers lower production costs, increase yields and quality, and reduce pests and disease.



Starbucks Foundation's donation to Heifer helps connect Tanzanian dairy farmers to markets.

"Heifer is one of the organizations that works very well with farmers," Miya said. "A cow, we believe, is a very good investment. We are looking forward to a long and continuous partnership with Heifer."



We're All Farmers Now

Magazines for the Agrarian in All of Us

Reviewed by Ragan Sutterfield, *World Ark* contributor

"Don't judge a book by its cover" is sound advice, but when it comes to magazines, the cover is key. For a form that speaks from its face rather than its spine, the cover is the first impression, the key to whether or not we should pick it up and read. The cover of a magazine sets the expectations with which we begin, so it is with the cover that we start our review and comparison of two very different farming magazines. While aimed at different audiences—one for the agrarian hipster set, the other for farmers hewing to traditional, low-tech methods—both have something to offer even the city slickers among us.

A recent cover of *Modern Farmer* features a duck set against a black background. Past issues follow a similar pattern with other animal close-ups. The design is sleek and modern, with a medallion offset in hunter orange with black letters asking, "What the Duck?" The fonts are no mere afterthought; they seem fussed over, and one has to wonder if fussy fonts are what you want from a publication ostensibly about farming. Of course, this isn't a professional journal on agriculture. With a three-word tagline—"Farm. Food. Life"—*Modern Farmer* lets readers know to expect more of a lifestyle magazine, something for those who dream of green pastures from their cubicle cloisters or barista job breaks, as well as a read for aesthetically astute agrarians with mud on their boots. That's not a knock against the magazine; in fact, it could be a plus for the many of us who aren't actually farmers but like to dream of greener pastures (or any pasture at all).

Farming Magazine, on the other hand, isn't so slick. Its covers feature farm scenes—barns and hayfields and hogs—all a little lower-res than the typical magazine rack standard. One could wonder if a lack of computers could be part of the simplicity of the layout, but it isn't. Sure, the editors are Amish, but *Farming Magazine* has a website (farmingmagazine.net) and an electronic version. The editors are Amish people who answer emails.

The tagline of the magazine is printed in large text: "People. Land. Community." The fonts are not fussy, and a design nerd might scoff. It advertises articles on hay cutting, grapevine pruning and living off the grid—realities its Amish editors know well. The presentation isn't slick, but neither is it campy. The text and images are functional, just what one might want from a magazine that is more message than medium.

Beyond the covers of both magazines is the content, which of course begs the question, why read farming magazines when most of us aren't farmers? The easiest answer is that we are all involved in agriculture. As Wendell Berry once wrote, "eating is an agricultural act," and as such it is important for all of us to not only have a better idea of where our food comes from, but also to learn a bit about how it was grown. It's great to eat a grass-fed steak from a farmer selling at a local market, but it is all the better to know the best kind of grass on which to finish a steer. In this regard, both magazines deliver in their different ways.

If *Farming Magazine* is the journal of the new agrarian revolution, *Modern Farmer* is its hobby farm cousin.

Farming Magazine is a magazine created by farmers, for farmers. For proof, look at the ads, which will steer you right should you be in search of a new cow teat ointment or horse-drawn implements. And while we are on advertising, we should mention that *Farming Magazine* has the strictest standards. Their advertising policy, printed in every issue, states clearly: "We reserve the right to reject any advertising deemed unsuitable for this magazine, such as alcohol, tobacco, and margarine." Only real butter here.

The content of *Farming Magazine* addresses the practical but is also reflective. There is a reader-submitted poetry section. The editorials in each quarterly issue



Modern Farmer
"Farm. Food. Life."
www.modernfarmer.com
\$7.99/issue; quarterly



Farming Magazine
"People. Land. Community."
www.farmingmagazine.net
\$5.00/issue; quarterly

VS

from Amish Bishop David Klein are filled with insight and agrarian wisdom, written with a tone that proves interesting for even those who have never pushed a plow into a furrow. Klein, whose family publishes the magazine, was featured in Barbara Kingsolver's *Animal, Vegetable, Miracle*, and he is deeply involved in contemporary agrarian conversations. He is a friend to people like Wendell Berry, and so this modest publication carries in its pages the work of some of the most important voices in agrarianism and local agriculture today, including Berry, Gene Logsdon and Courtney White. Local food enthusiasts would be remiss not to have this magazine delivered to their mailboxes.

Modern Farmer takes a different approach with its content, going rich in image and short on text. Those images are beautiful and as with the cover, the design is good. There are worse ways to spend one's time than flipping through beautiful photographs of farm fields and doe-eyed Jersey cows. As with *Farming Magazine*, the advertising is a good gauge of the intended audience. Where manure spreaders decked the pages of *Farming*,

there are advertisements in *Modern Farmer* for organic wines and Cliff Bars, though bush hogs make an appearance as well. While one might assume that the readers of *Farming Magazine* would have their pantries full of home-canned tomatoes, Eden Organic assumes that the readers of *Modern Farmer* are in the market for a store-bought tomato sauce. The article on "planned agricultural communities," a.k.a. agrarian suburbs, reflects nicely the ethos of the magazine. If *Farming Magazine* is the journal of the new agrarian revolution, *Modern Farmer* is its hobby farm cousin.

That said, the articles in *Modern Farmer* are colorfully written and hip to pop culture, broadening their appeal across rural and urban boundaries. Some pieces, such as a profile of biodynamic pioneer Alan Chadwick, would prove interesting to even the most seasoned agrarian. Even though the articles are addressed to novices and outsiders, some of the features on the how-tos of farming are also solid. If learning about a three-bin composter would be new to you and reading about hip chefs with a cause sounds appealing, then this is a magazine worth reading.



Whether a slick hipster or an Amish agrarian take appeals to you most, both of these magazines are a welcome offering for those who care about food, the people who grow it and the land from which it comes. It is time we all start learning more than just where our food comes from. It is time we begin to acknowledge that all of us are indeed in the agriculture business. With these two magazines on our coffee tables or our bedside rack, whether it is in Solgohachia, Arkansas, or Manhattan, New York, we can begin that work. ■



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JULIANNA REEVES

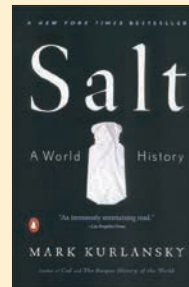
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Salt: A World History
By Mark Kurlansky



Cumin, Camels, and Caravans: A Spice Odyssey
By Gary Nabhan



The Taste of Conquest: The Rise and Fall of the Three Great Cities of Spice
By Michael Krondl



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Malawi in Snapshots

By Karen Walrond



PHOTOS BY KAREN WALDRON

Editor's note:

This spring, a team of bloggers and other social media influencers visited Malawi to learn about the work of ONE and Heifer International. Photographer and writer Karen Walrond shares some highlights of her trip.

My trip to Malawi with Heifer International and the ONE Campaign was the third such trip I had taken to Africa. I visited Kenya and Ethiopia before with the ONE Campaign and knew that I was in for hearing some hopeful stories: tales of clinics now better able to manage dispensing life-giving medications to their patients, farmers who better care for their livestock and families who can better care for their children because of the assistance of organizations like USAID and, of course, Heifer. So, in many ways, I was expecting the usual.

For the most part, I was right. We were treated to joy-filled stories of milk bulking stations saving many gallons of milk for sale, families who were able to finally send their children to school since their farms were thriving, and mothers who were getting good pre- and post-natal care for their babies. But while I knew



To see more photos and hear more stories about the bloggers' experiences in Malawi, check out Heather Barmore at No Pasa Nada (heatherbarmore.com/no-pasa-nada), Rachel Faucet at Handmade Charlotte (handmadecharlotte.com), Ana Flores at Latina Bloggers Connect (latinabloggersconnect.com), Jane Maynard at This Week for Dinner (thisweekfordinner.com), Meredith Walker at Amy Poehler's Smart Girls (amysmartgirls.com) and Wendi Aarons (wendiaarons.com).



we would receive a hospitable welcome, I wasn't prepared for the overwhelming sense of kindness and warmth that permeated the entire society. And it wasn't just a warmth reserved for strangers; it was evident in how they treated each other every day.

And my goodness, the color. And the joy. And the vibrance. And the potential. That's the word, really—more than anything else, the country feels on the verge of potential, for really wonderful, good things. When I was researching Malawi before I left, I learned that it is widely called "The Warm Heart of Africa." And yes, that's exactly how it feels. Like it's the quiet, beating heart of all that is good and kind about the continent. ■

Karen Walrond is the author of The Beauty of Different and blogs at chookooloonks.com.





Crystal's Ark

By Peggy Reiff Miller, *World Ark* contributor



Crystal Marrufo, with her son, Jose Rosales, and daughter, Amelia Marrufo, displays the Heifer calendar she uses to record how much money she puts into her Heifer Ark every day.



Crystal Marrufo makes snow cones at her church's annual carnival.

PHOTOS BY PEGGY REIFF MILLER

Just as Noah stepped out in faith to build his ark in the Biblical story, the decision that mother Crystal Marrufo made to raise money for a Heifer Gift Ark has been a leap of faith.

Soon after she and her children, Amelia and José, began attending the Goshen City (Indiana) Church of the Brethren in 2011, they fell in love with Heifer International and its mission during the church's annual Living Gift Market. "Ever since," Crystal said, "I've wished we could do something for Heifer."

This past December, Crystal picked up more information at the annual event and was told an Ark is \$5,000. She laughed at this seeming impossibility for a mother who struggles to pay her bills on a cook's wages and prorates her annual tax refund over the course of the year to cover her expenses. She sat around a table that Friday night joking with friends about buying an Ark. The next day she realized, "If I quit smoking, I could save \$2,000 in a year's time! If I can raise that much by myself, so can everyone else. Together we can buy an Ark!"

She and Amelia went to the grocery store that night and bought nicotine patches. To strengthen her resolve, Crystal asked for the rite of anointing the next morning at church and hasn't had a cigarette since.

Amelia, 15, and José, 14, are proud of their mother. Having started smoking at age 9, Crystal was a pack-a-day smoker, able to quit only the two years she was pregnant. Ever since Amelia could talk, she has pleaded with her mother to stop. "She's tried everything to quit before," Amelia said, "even hypnosis. But she couldn't." This time around, with Heifer in mind, success has come.

"In the beginning," Crystal said, "instead of going to the gas station every day and buying a pack of cigarettes, I would go to the church and donate the \$6 I'd have spent." With her habit under control, she started putting the money for the Ark in the church offering every two weeks, when she got paid. Her commitment inspired others in the congregation to join her efforts. By June 30, \$2,055.78 had been raised.

Unexpected benefits resulted for Crystal. "I used to get out of breath just walking up the ten steps to the church



office," she said. But less than three months into her project, she was running. "I mean, I had not run in forever! Quitting smoking lets me know that I can do anything."

With her newfound confidence, Crystal applied for a Habitat for Humanity house and was accepted into the program at the end of April. But Habitat's financial requirements slowed down her progress on the Ark. "I have to make monthly payments to Habitat until I have \$700," she said, "and payments totaling \$1,600 to another account that matches me 5-to-1. But I'm still going to raise the Ark. It will just take longer."

Crystal also had to pay off a lot of debt to qualify for Habitat. "I had to use my tax refund that I count on for my bills," she said. This created a dilemma. Her cigarette money was now going to her Habitat accounts, and her bill-paying fund was gone. Could she still continue giving to the Ark?

"I decided to take a leap of faith," she said, "and continue putting money aside, not knowing where it would come from. The same week I spent my tax

refund, without my having asked for it, my church offered to start paying me \$35 a week to cover expenses for volunteer cooking I'd been doing for their Wednesday night program. So there was my Heifer contribution!" At the end of June, Crystal received notice that she had qualified for rent assistance from the U.S. Department of Housing and Urban Development. "It will pay to the dollar what I'm short for my bills," she says.

Crystal is confident that she'll make her goal for a Habitat house and an Ark for Heifer. "Seeing how others are helping with the Ark motivates me to keep on. I'm excited!" she said, face aglow. "I can't wait to celebrate when we have our Ark." ■

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Peggy Reiff Miller is a historian and writer who is working on a book about Heifer's seagoing cowboys, the young people who took to the seas to deliver the first shipments of Heifer animals. Learn more about Reiff Miller and her work at peggyreiffmiller.com.

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PHOTO BY DAVE ANDERSON

“Our daughter always grumbled that we gave him more. It was the same for me growing up. I realize now that we did favor our son. The training changed that. Outside of our group there is still discrimination, but we now focus on both our children equally.”

Runa Laila, mother and self-help group member

Runa Laila joined a Heifer International self-help group in the village of West Balia in northwestern Bangladesh. Before, Laila’s daughter Shakila often got less to eat than her brother, Sakib. And while Shakila was in school, her parents weren’t convinced that giving her an education was a good idea. Now, Shakila is better fed, and her parents are more understanding about why their daughter used to complain.



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