

# WORLD

A Newsletter for Friends  
and Supporters of TechnoServe  
July 2015

## LETTER FROM THE PRESIDENT



The 2.3 billion people who live and work on small family farms are vital stewards of our natural resources. At the same time, these farmers are on the front lines of climate change — vulnerable to extreme events and unpredictable conditions that threaten their crops and their livelihoods. In this newsletter, you will read about some of the ways TechnoServe, along with our partners and you — our supporters — are helping farmers adapt to a rapidly changing planet. From a lush coffee farm in Honduras to a desert region in India, we're supporting sustainable initiatives that help farmers prepare for shocks and enhance food security. By adopting responsible farming practices, managing resources efficiently and building resilience to climate change, smallholders can create a more secure future for their families, their communities and the planet.

Will Warshauer  
President and CEO

## Climate Change and Agriculture

**70 percent**

more food will be needed by 2050 to feed a growing population, while yields may decrease by 10 percent due to climate change

**265 million**

people will face a 5 percent decrease in growing season in the next 40 years

**\$1 → \$7**

Every \$1 invested in climate adaptation initiatives is estimated to save up to \$7 in future relief costs



● NINFA LANZA (COFFEE FARMER, HONDURAS)

## A Pioneer in Sustainability

For Ninfa Lanza, coffee farming is a labor of love. Six days a week, she travels two hours to work her farm, Arca de Esperanza (Ark of Hope), in the highlands of El Paraíso, Honduras. In recent years, like many farmers in the region, Ninfa has had to battle the devastating fungus coffee leaf rust. Observing that healthier trees are more resistant to disease, she began learning about sustainable farming and decided to shift to organic coffee production. “Organic coffee harvest has many benefits,” she says. “The coffee is tastier, the plants live longer and it is better for health.”

In 2013, she joined TechnoServe's MAS project (or Sustainable Agricultural Improvement), which helps Honduran coffee and bean farmers improve their livelihoods. TechnoServe provided Ninfa with training in good agricultural practices, including how to improve the production of organic fertilizers on her farm. TechnoServe also connected Ninfa with exporter Beneficio Santa Rosa, allowing her to sell her harvest as specialty coffee for the first time and increase her income by 50 percent. Ninfa is looking forward to completing her organic certification process later this year, ensuring a more environmentally and economically sustainable future for her children and grandchildren.

# Sustainable Coffee in Central America

A few years ago, farmers across Central America started finding curious orange spots on the leaves of their coffee plants. This fungal infection, called coffee leaf rust, had become increasingly common due to changes in weather patterns, likely as a result of climate change. Ultimately, the epidemic would cost the region an estimated \$1 billion in lost income.

According to scientists, such events will only become more common in the future, with climate change increasing the frequency and severity of threats such as droughts, floods and crop diseases. Smallholder farmers are rarely equipped to handle such shocks.

New research and new approaches have the potential to empower farmers to be more resilient against the extreme events that threaten their crops. One project that is successfully demonstrating such approaches is the MAS project (or Sustainable Agricultural Improvement) in Honduras. Led by TechnoServe and supported by Food for Progress, a U.S. Department of Agriculture program, the project aims to raise the incomes of more than 6,000 coffee farmers.

## BEST PRACTICES

Closing the gap in knowledge and training is critical to protecting both smallholder incomes and the



TechnoServe is equipping farmers to deal with extreme events such as crop disease.

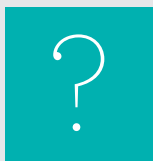
larger global food supply against climate-induced shocks. In the MAS project, we conducted extensive training on best practices for preventing leaf rust: tracking the plants for signs of the disease, regulating shade, weeding and pruning, and the responsible use of fertilizers and other inputs. The response has been tremendous, with 3,100 coffee farmers already using new agricultural techniques on 10,585 hectares of farmland, and 15 percent of these farmers receiving training on organic farming methods. To reinforce new knowledge, the project sends out text messages with tailored information about protecting coffee.

## BUILDING RESILIENCE

One of the best ways to raise the incomes of smallholder farmers is to link them to markets that pay a premium over the local commodity price. For the coffee farmers of Honduras, the specialty coffee market promises greater margins and higher incomes. We work closely with producer organizations, which group together smallholder coffee farmers, to

improve the quality of their harvests. Between the 2014 and 2015 harvests, the share of participating farmers' coffee beans which were rated as "superior" rose from 59 percent to 83 percent. As a result, farmers are taking home a larger share of the sale price. Those extra earnings allow them to invest in their farms and further protect against leaf rust. With training, access to credit and higher incomes, the percentage of farmers rehabilitating their farms has increased fivefold.

Building resilience among smallholder farmers is not just about protecting — and growing — their incomes. It's also about maintaining global food security in the face of an increasingly unpredictable environment. Many of these farmers are acutely aware of the risks posed by climate-related shocks, and eager to take steps to protect their farms and incomes. Combined with support from programs such as MAS, we have found that real progress is possible in the face of an intractable global challenge.



### DID YOU KNOW?

Climate-smart agriculture (CSA) is an integrative approach to addressing the

dual challenges of food security and climate change. CSA aims to sustainably increase productivity, build resilience to extreme weather, and reduce agriculture's impact on the environment.



# Updates: Our Impact Around the World

## INDIA



### DESERT INNOVATION

In the dry desert of India's Barmer district, farmers often experience severe crop loss due to drought. TechnoServe has partnered with Cairn India to raise the incomes of 10,000 households in the region by an average of 50 percent through better farming practices and natural resource management. We are helping farmers use water more efficiently by constructing large earthen embankments called *khadins*, which collect surface runoff during the rainy season. The harvested rainwater improves soil fertility and boosts agricultural output. The project also helps farmers extend their growing season and introduce new crops, such as cabbage and tomatoes, that fetch higher market prices.



Water management solutions in India



Puerto Varas, Chile



Mobile learning in Africa

## CHILE



### CATERING TO SUCCESS

Cristóbal Donoso launched his catering business in 2012 with a small food cart in Puerto Varas, a scenic tourist destination in Chile's Patagonia region. Last year, he entered TechnoServe's Potencia Patagonia project, which supports small and growing businesses in the region through e-learning, workshops and advisory support. Working with a TechnoServe business advisor, Cristóbal developed a plan to offer themed events in non-traditional locations such as sailboats and rural areas, and was awarded \$16,000 in seed capital from the Chilean government to expand his business. Cristóbal has increased his sales twelvefold since joining the project, and he is finally able to realize a lifelong dream: purchasing a home for his family.

## SUB-SAHARAN AFRICA



### MOBILE CLASSROOM

An innovative TechnoServe project is delivering targeted agricultural training to rural communities in Ghana and Kenya, helping to equip farmers for climate change and improve their incomes. The Mobile Training Unit (MTU) project deploys trucks with large LED screens to local villages

where farmers can see the application of sustainable land and farm management practices without the inconvenience of being away from their farms and families. As a novel attraction, the MTUs ensure high turnout, allowing TechnoServe to reach more than 33,000 farmers to date. Participating rice farmers in Ghana and dairy cooperatives in Kenya have doubled their profits.

## WATER WISE COFFEE



VICTOR BIRO

On Earth Day, TechnoServe and Water Wise Coffee unveiled a new campaign and asked for your help to clean up the rivers in Ethiopia's Sidama region. Thanks to your support, we have raised **\$20,880** to plant vetiver grass wetlands at coffee wet mills and prevent wastewater from flowing into the Kola river. Help us bring this sustainable solution to even more wet mills and communities in the region.

Every dollar donated, up to \$100,000, will be matched by our partners! Learn more and donate at [waterwisecoffee.com](http://waterwisecoffee.com).

# Our Supporters: Rick and Wendy Walleigh



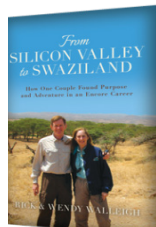
Rick and Wendy Walleigh are the authors of the new book *From Silicon Valley to Swaziland*, which chronicles their encore career in development work. In 2006, after long and successful careers in the high-technology industry, the couple joined TechnoServe as Volunteer Consultants and moved to Mbabane, Swaziland. The Walleighs then spent a year working with TechnoServe in Kenya before moving back to Los Altos, California.

**Q: Why did you make the jump from high-tech careers to international development?**

**A:** Wendy was the first to pursue an encore career because she got tired of repeatedly selling the latest tech product. When Rick decided to “commercially retire” (a term he invented), he went through an extended exploratory process and settled on helping the poor through economic development. That’s when Rick connected with TechnoServe, which had volunteer opportunities for both of us in Swaziland.

**Q: What do you think are the greatest challenges for people living in poverty?**

**A:** The vast majority of the world’s poor are smallholder farmers who generally grow just enough to eat or trade for their food. We believe that they truly want to better their lives, families and communities. But they



typically don’t have the knowledge, tools and guidance to do that on their own, nor access to markets or financial support. That is why TechnoServe’s approach of training in improved agricultural processes, creating cooperatives, providing access to markets and financing — in other words building sustainable market systems — is so effective.

**Q: Why did you decide to donate royalties from the book to TechnoServe?**

**A:** We strongly believe in the effectiveness of TechnoServe’s “business solutions to poverty” so we want to build awareness for the organization as well as provide additional revenue.

[You can purchase the book on Amazon.](#)

## Support TechnoServe Through Charitable Gift Annuities

A charitable gift annuity with TechnoServe can provide you with a regular income during your retirement years, while helping families in the developing world break the cycle of poverty.

You make a donation of cash or stocks to TechnoServe. In return, we pay you (or another beneficiary, if you choose) a fixed amount each year for the rest of your life. You may also receive an immediate income tax deduction. Please contact Daniel Kemp at 202-650-5720 for more information.

**DONATE**

To donate or learn about other ways to give, visit [technoserve.org/donatenow](http://technoserve.org/donatenow).

TechnoServe has earned a 4-star rating from Charity Navigator for nine consecutive years, placing it in the top 1 percent of all rated charities.



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Since its inception in 1968, TechnoServe’s work to create business solutions to poverty has benefited millions of people in more than 40 countries. TechnoServe is a private, nonsectarian, nonprofit organization, as defined by IRS code section 501(c)(3). TechnoServe is a member of Global Impact. Contributions to TechnoServe are tax deductible to the extent permitted by law.

