



ECHO *news*



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Letter from our Asia Global Director

We are delighted to begin sharing more voices from the field in our introductory greeting section. Through this, you will hear from our Regional Impact Center Directors working worldwide to bring about a Transformed World that Honors God! We hope you enjoy!



Abram J. Bicksler, Ph.D. President & CEO

Dear Friends,

Being based out of our ECHO Asia office in Thailand, I am continually blessed by the opportunity to rub shoulders with the men and women across our ECHO network, partners from NGOs, mission organizations, church associations, agricultural cooperatives, and of course, individual farmers themselves. While there are many lessons I have learned along the way, it is increasingly apparent to me that so many of our network partners possess an inspiring clarity of Christ's mandate to love God and love our neighbors.

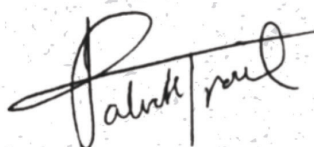
While many of us are tempted to separate our spiritual mandate to love God from meeting physical needs of the world around us, you will read in these stories an inspiring collection of men and women who have never considered anything less than a combination of the two.

Just like Christ who healed the sick and fed the hungry while pointing all to the Kingdom of God, so too have I seen pastors who promote agricultural options to feed undernourished congregants and technical experts who recognize the need for holistic approaches and transformed hearts. To so many in our network, these two approaches have always gone hand in hand.

Unfortunately, not all who recognize this always have access to the tools and resources needed to improve the lives of those around them, but since God always equips the called, we offer our gifts and talents in this way as an organization. By sharing practical agricultural options, technical resources, appropriate technologies, and seed varieties among a network of gospel-minded men and women, we are seeing the fruitful power of holistic ministry around the globe.

You can read these collections of stories and know we serve a network of people who reflect Christ in this inspiring way.

Warm regards,



Patrick Trail

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"Warrior Woman" Influences Toward Sustainable Practices



Strengthening the capacity of a diverse global network to defeat hunger and improve lives through sustainable food and agroecosystem strategies.



Cover Photo: Two farmers from the village of Koubri learned how to create neem oil from local seeds to create a biopesticide for their bean and peanut crops.

ECHO News is published quarterly by ECHO, Inc.

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November 9, 2023:
Joel and Carole Goldstein
visit the El Triunfo community
nine months after soil and
seed preparation season,
finding major shifts in
agricultural practices after
connecting El Triunfo with a
local agricultural university.

The Propagation of Knowledge

Taylor Fruetel | Storytelling Intern

Farmers in El Triunfo in Southern Honduras are now part of a program with La Universidad de Agricultura (UNAG) learning sustainable agricultural practices. Through a partnership with long-time donors of ECHO and missionaries in Honduras, Joel and Carole Goldstein helped connect professors to farmers and are now seeing yields to a labor of love for their friends from across the Caribbean.

When Joel and Carole Goldstein stepped into Josue Matutes's demonstration farm, they immediately saw the fruit of sustainable farming. Veggies sprouted through the dirt, and trees grew high into the bright blue sky of Catacamas, Honduras. Matutes, a professor of agroecology and rural development at a local Agricultural University, showed the Goldsteins how to maintain healthy soil and propagate seeds. Matutes, a professor of agroecology and rural development at a local Agricultural University, showed the Goldsteins how to maintain healthy soil and propagate seeds. They saw the same practices at the ECHO North American Impact Center, where they have toured twice.

Long-time donors of ECHO, the Goldsteins have centered their lives around service to others. Since 2014, they have served in missions to help fund students needing educational scholarships in El Triunfo, Honduras. El Triunfo is also known as the dry corridor; the area receives little rain and has high temperatures, stunting crop yields for farmers. The climate and unsustainable agriculture practices, such as burning crops and using synthetic fertilizers, increased poverty and lack of food security in El Triunfo. The Goldsteins wanted to find a way to

help the people they had fostered relationships with after years of serving in the area.

"We really wanted to get behind and be involved in the work of ECHO because of what you guys do and how you do it..." Joel Goldstein said, "...and these were like parallel passions that we didn't see how they could really kind of fit together."

"They are so proud of what they did. You could see how excited they were and how grateful they were," Joel Goldstein said. "I mean, we just wanted to cry."

During their second tour with ECHO in the Spring of 2022, the Goldsteins shared an idea to bridge the gap: send the few farmers they knew to ECHO North America to be trained in sustainable agriculture. However, the 3,000+ mile trip would require funding for the farmers to participate. ECHO reached out to give the Goldsteins contact information of Matutes, a professor of rural development, agronomy, and agroecology at the Universidad Nacional de Agricultura (UNAG) in Honduras, who also worked with ECHO, training farmers in Latin America since 2016.

The Goldsteins received a personal invitation from Matutes to visit UNAG. A trip to the opposite side of Honduras during their typical nine-day mission trip in October of 2022 didn't seem feasible at first. They decided to try.

Upon arrival, the Goldsteins were greeted by the University's hospitable staff. They were given tours and presentations by professors and the Dean on the sustainable agricultural practices taught at the University. Matutes teaches rural development, agroecology, organic agriculture, community development, and extension. The Goldsteins shared

their experiences in El Triunfo and the help that the area is seeking. UNAG set up a needs assessment for El Triunfo to see the level of interest people in the area had in sustainable agriculture education.

The Goldsteins returned to El Triunfo in February of 2023, during soil and seed preparation season, when the UNAG needs assessment and sustainability workshop was to take place.

"We didn't really know how extensive the need was," Joel Goldstein said. "Through help from people we work with there [we] got the word out."

Eighty people attended the first training workshop. From the swell of interest in learning sustainable farming, UNAG set up four additional trainings in rural communities of El Triunfo throughout 2023.

In November 2023, the Goldsteins traveled to El Triunfo for a follow-up of how far the program had come and witnessed the final training from UNAG. They saw a major shift in the community's agricultural practices. They were no longer burning crops but enhancing the soil. They tended their crops by creating organic fertilizer with common resources like Chaya. Most notably, the new farming practices had become a community effort that included women. Small gardens became not so small due to women collaborating and sharing seeds, which has



Today, one year after the first UNAG-led training, communities in El Triunfo are cultivating and caring for their lush gardens sustainably, passing down their new farming practices to the next generation through school gardens.

led to an immense collective pride in the people of El Triunfo for their sustainability and agriculture.

“They are so proud of what they did. You could see how excited they were and how grateful they were,” Joel Goldstein said. “I mean, we just wanted to cry.”

The Goldsteins recapped with the UNAG professors running the program. The team decided “we can’t stop now or it’s all gonna fall apart.” The program was committed to continuing help for five years. The end goal for the program coordinators is for farmers in El Triunfo to sell their overabundance of crops and share knowledge with neighbors to “propagate all that they have learned.”

According to Matutes, the head coordinator of the project, before the program launched in 2023, the people of El Triunfo did not have gardens. Now, they have orchards and manage them with organic fertilizer. By teaching them techniques from ECHO like establishing seed banks, increasing biodiversity within their orchards, and using Chaya for compost, the rural areas have flourished with lush gardens and helped to connect the community through sharing resources.

Along with some of their teachings, including how to prepare the soil, find resources for manure, and use native plants and organic fertilizers, the professors shared their passions for producing nutrient-dense food and creating synergy between the community and the ecosystem.

“We focus on creating systems where everyone is connected,” Matutes said, “We teach healthy soil, healthy plants, healthy humans.”

Now, those in El Triunfo can share their knowledge and get younger generations involved.

Matutes shares, “My favorite moments from teaching in El Triunfo are when people tell me their experiences and invite me to see their gardens and replicas of what was learned in training, and seeing the motivated boys and girls cultivating their school gardens.”



After learning the sustainable farming techniques of the program in El Triunfo, a student shows off her garden’s progress.



Planting Seeds

Ella Roberts | Storytelling Intern

ECHO's seeds have found their way into the Horn of Africa, where a couple has been serving for many years, fighting water scarcity.

In 2022, Susan Smith's garden saw its greatest yield to date, producing beets bigger than softballs, local mustard greens, tomatoes, eggplants, Swiss chard, and string beans, all sprouted from ECHO seeds given to her by a friend.

Of her 20 papaya trees, 15 produced green, yellowish, and orange sweet fruit. She had so many papayas she didn't know what to do with them, so she began giving them away. People came to her from around town to ask about her papaya trees.

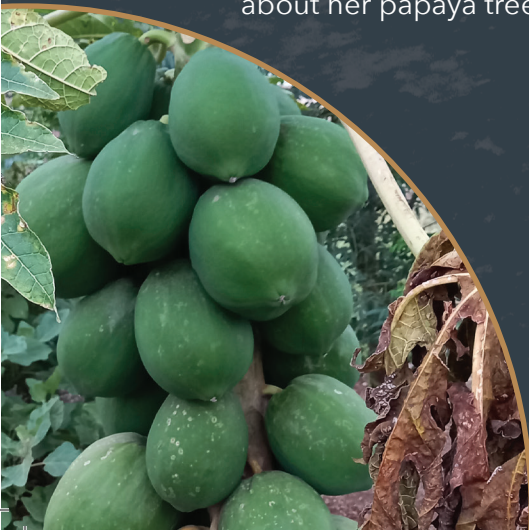
Water makes all the difference between a flourishing harvest and a failed one in the Horn of Africa. That year, there was more rain than usual, allowing Susan's garden to produce an abundance – enough to share with her community.

Susan and her husband, Robert, have served in East Africa for many years, focusing primarily on introducing drip irrigation and managing a women's cooperative where local women are taught how to sew.

Their area is experiencing the worst drought conditions in 40 years. As a result, shriveled

Left: Papayas are one of the few long-term crops Susan could continue to grow through the dry summer season in East Africa. She uses drip irrigation to supply water. Of her 20 trees, 15 produced fruit last year.

Top: ECHO's seeds will be planted in East Africa after the dry, hot summer. Thanks to a successful rainy season, Susan, a local ECHO missionary, had a flourishing harvest last year and could share plenty of her vegetables with locals.



crops, starving livestock, food shortages, and water insecurity have all become commonplace.

On top of this, Susan says, many people in the community are traditionally nomadic, so they don't have much experience with farming. As Susan grows her gardening knowledge in the unpredictable East African climate, she has welcomed her community to learn alongside her. Her flourishing experimental garden has become a place of education and collaboration, where her community can learn about drip irrigation, growing crops, composting, and saving seeds.

"I hope it can be encouraging to other people who are trying to experiment," she said. "I found several women gardeners



trying to garden for the first time in their life, so I've been trying to help them, but the major obstacle is water."

After seeing so much success with her sewing program in helping divorced or widowed women and young girls without fathers or education, she began to dream about using gardening toward the same ends.

"It would definitely help these households because a lot of women are a second wife, or they've divorced, and they struggle to make ends meet," she says.

"For parts of the year, we could produce our own food. We import almost everything from

outside. The only thing local we have is salt and fish from the sea, camel, and goat meat."

Every day, locals purchase papaya that has been imported from Ethiopia. If the community could learn methods for harvesting papaya, it could mean a brighter future for women and girls in her area. As the government continues to navigate better ways for people to store water, Susan dreams of equipping women with sustainable gardening techniques. But she won't let the water challenges stop her from sharing what she can for now and experimenting with what she has.

Susan regularly meets women who want to learn more about farming. Once she shares what she knows, she encourages them to pass that knowledge to someone else, calling it "domestic discipleship." Susan's successes in planting ECHO's seeds and using drip irrigation practices are beginning to take root in her East African community.

Left: Susan, an ECHO missionary serving in East Africa, has a big demonstration garden and loves to share seeds with others to promote healthy eating. She has also learned several tips from locals, like how eating raw okra can reduce arthritis symptoms.

Below: A vibrant plot of sunflowers greets visitors as they enter Susan's demonstration garden.



What's Happening at ECHO

ECHO North America hosted a Tropical Agriculture Development seminar focused on small container strategies for urban gardening.



North America



ECHO hosted a two-day Natural Dyeing Workshop on Jinda Charoenkul's agroforestry farm, allowing participants to learn traditional dyeing practices such as making dyes from mango leaves, lime, wood ash, rust, copper sulfate, and other natural elements.

Asia



North America

ECHO North America welcomed teachers from the Fort Myers community for a school garden leadership training.



North America

Above: Local Fort Myers teachers explore an ECHO greenhouse to learn about native plants that fit for school gardens.

Left: Teachers from a local Lee County school collaborate to create a vision for their school's future garden.



ECHO East Africa Impact Center co-hosted an impactful symposium in Malawi along with partner organization Canadian Foodgrains Bank. We are working together to enhance sustainable agriculture practices, uplift communities, and create a world where no one goes hungry.

Brothers and sisters from Liberia, Tanzania, Mozambique, Zambia, Zimbabwe, Rwanda, Malawi, and Sierra Leone joined forces to exchange practical technologies and strategies to combat hunger.

Top: Pictured are individuals from Zimbabwe, Malawi, Tanzania, and Liberia, highlighting the truly inclusive nature of the symposium.

Bottom: Trainers share their expertise during a breakout session introducing Anamed natural medicine.



Bonaventure Shirima expounds on the benefits of the green manure/ cover crops in one of the break out sessions.



Participants of the symposium learning how to use the bicycle vacuum pump for seed storage after the community seed bank presentation shared by Faith during the plenary.



Participant asking a question during the plenary session after the presentation.

Since the Symposium: Zimbabwe

Taylor Fruetel | Storytelling Intern

Victor Norest and Ronald Gondongwe use techniques from the 2023 symposium held at ECHO East African Impact Center to help educate students in Zimbabwe to create a better future for their community.

Victor Norest and Ronald Gondongwe, leaders of Bopoma Villages in Zimbabwe, received valuable insights from leaders of other organizations from surrounding countries about sustainable agriculture during the 2023 ECHO East African Impact Center symposium in Tanzania. Norest and Gondogwe spoke about issues they experienced and found they were not alone; many other organizations had experienced the same problems. Together they found new solutions and innovations to bring back to their communities.

Norest and Gondongwe work with Bopoma Villages to implement community gardens in Zimbabwe, equipping locals to manage the gardens through their own education program. The program has a capacity of 10-15 students and teaches them the basics of agroecology and sustainable farming techniques over a four-month semester.

According to Gondongwe, introducing nutritional gardens has lessened chronic diseases of the elderly and the sick since they now have access to a more nutritious diet and medicinal plants. Rainwater harvesting has dramatically increased the yields of crops since Norest and Gondongwe introduced the technology to the communities. This education is giving young people a life

path that leads them away from poverty and substance abuse, which are pervasive in their community.

“We train them with the appropriate technology to show them they have a future and they are a part of the community and they should contribute to the community in a positive way,” Norest said. “Helping the community at large... that is the stewardship we are trying to develop so that they will bring change into our communities.”

Norest and Gondongwe wanted to add more localized techniques to the program, so they toured ECHO’s East Africa Impact Center in Tanzania.



Students of the program in Zimbabwe gardening using sustainable techniques.

Below: Victor Norest, Ronald Gondongwe, and Phinos Manzuma attend the 2023 ECHO symposium.



“This work is serving God,” Gondongwe said. “It is fulfilling what He intends for us to do.”

The two spent nearly a month learning about ECHO’s sustainable practices specific to the climate of East Africa, including the use of tree nurseries, biofuel, green manure, cover crops, animal husbandry, and most importantly, community involvement.

“We have learned a lot from ECHO Tanzania,” Norest Said. “They were working with the community in finding solutions to give the appropriate technology to the environment and involvement of the community.”

Norest and Gondongwe attended an ECHO symposium in Tanzania with other leaders of sustainable agriculture organizations from Kenya, Rwanda, Tanzania, Uganda, and Zimbabwe. The groups traded sustainable

techniques and solutions they had found to similar problems. The groups shared devotional time and connected over their commonalities of work and desire to honor God’s Kingdom.

“This work is serving God,” Gondongwe said. “It is fulfilling what He intends for us to do.”

Norest and Gondongwe were able to learn from the groups and return home with new knowledge to share with their students.

Eager to teach new techniques, they began by implementing appropriate technology. They added a mobile chicken tractor coop, which allows chicken droppings to be used as fertilizer. It also helps lower the risk of diseases in the chickens.

They also added cover crops and green manure, which according to Norest, drastically increased the crop yields in a community they serve in Zimbabwe.

To further community outreach, Norest and Gondogwe began working with churches after seeing the unity of the staff at ECHO and their ministry.

Now, they continue graduating cohorts of students who help manage successful gardens in their communities. The students take their teachings to heart and dedicate their time to teaching others sustainable agriculture. One student has created standing gardens in a community of elderly women, teaching them how to propagate their seeds and grow nutritious food and medicinal plants to aid with pains and illnesses. Another student has

been running the community gardens that Bopoma put in place, producing large yields.

“We encourage the youths to help in community gardens because we want to show them that they belong and they can contribute,” Norest said. “It is not only about their development but also the community that is around benefiting from them.”

Norest and Gondogwe’s students build their own chicken tractor coop after learning the skills at the 2023 ECHO East African Impact Center symposium in Tanzania.





Broadcasting Sustainability

Amy Holmberg | Storytelling Intern

Tanzanian radio broadcast provides nationwide access to ECHO's sustainable agriculture education, allowing growers to learn about God while increasing their harvests.

A West African radio broadcast is connecting growers across Tanzania to ECHO's proven farming techniques. Spoken in Swahili and run by Charles Bonaventure and Venance Mollel, the bimonthly show airs on Radio Safina, a Christian radio channel that reaches listeners nationwide. The show began in 2014 to educate the community about the importance of sustainable farming and share a holistic gospel message.

Listeners are being taught many different farming strategies related to conservation agriculture, agroecology, energy conservation, and reducing food waste. The hosts also educate listeners on invasive species of pests and diseases.

"Through radio programming, we can share information, tips, and success stories related to sustainable agriculture," Bonaventure shares, "ultimately inspiring more people to make environmentally conscious food choices."

Radio technology has allowed ECHO to reach people quickly with farming techniques, and

at a much larger radius than in-person training ever could alone.

Listeners with questions can call or send messages to the hosts during and after each show. "We get at least seven responses as follow-up questions in the session and not less than 10 calls post-interview," says Bonaventure.

The radio program has received only positive feedback from those who listen. He said the show has even inspired many people to visit the ECHO demonstration plot and seed bank for further education.

"Radio programming can yield a variety of outcomes and impacts, both in terms of raising awareness and driving tangible behavior change within communities," Bonaventure says.

The radio broadcast continues to help growers across Tanzania produce in abundance as it openly shares the good news of the Gospel and how to glorify God through sustainable harvesting.

Prayer Needs

Severe Flooding in Thailand & Myanmar - Many people have lost their homes and even their loved ones in flashfloods. Crop losses, particularly rice, will be significant.

Hunger in Southern Africa - Some areas are experiencing their worst drought in 40 years.

Travel Safety - Staff are traveling to teach in South Sudan and Eswatini/Swaziland.

Hurricane Helene - Those in the U.S. affected by flooding from Hurricane Helene including families of some of our staff.

ECHO International Agriculture Conference - Pray for our attendees and techniques shared at the conference.

ECHO Team - We are adding key staff members in a short period of time, through our East Africa Team, South Asia Team, Central America Team, and Farmer-to-Farmer Program. Please pray for unity and flexibility during this time of growth.

We pray that God will be revealed to the many beneficiaries of ECHO worldwide. That Christ may be formed in us all. That we shall be lights shining brightly in a dark world.

“Warrior Woman” Influences Toward Sustainable Practices

**A Tanzanian woman leverages her influence to encourage her community
toward sustainable agricultural practices.**

In the heart of the Meru district of Tanzania, Elinuru, more commonly known as “Mama Shujaa” (meaning “warrior woman” in Swahili) stands as a beacon of resilience and sustainability, embodying the spirit of change within her community.

Mama Shujaa was introduced to ECHO years ago during a transformative training session on perennial vegetables. Inspired by the possibilities these resilient crops offered, she became a fervent advocate, transforming her garden into a living example of sustainable agriculture.

Mama Shujaa firmly believes in the transformative potential of youth. She advocates for integrating

environmental education into the school curriculum so the next generation will be empowered to confront climate change head-on. Her vision is simple yet profound: every child should learn not only how to grow a tree, but also how to tend to their own gardens at home.

Through these encounters, Mama Shujaa amplified her voice, advocating for sustainable practices and women’s empowerment in agriculture. As she aptly puts it, “The only way to make long-term changes is through education,” a philosophy that continues to guide her journey towards a greener, more sustainable future, for generations to come.

Sustainable practices aren't the only thing growing this season—grab some sustainably grown apples, mangoes, or coconuts to make a fresh and sweet seasonal treat!

Apple Butter Recipe

Boil until tender and mash:

6 cups apples (1500 ml) quartered (save peelings for Apple Jelly)
1-2 cups sugar, white or brown (250 - 500 ml)
2 teaspoons cinnamon (10 ml)
1 teaspoon cloves (5 ml)
1 tablespoon lemon juice (15 ml)
¼ cup older vinegar or vinegar (60 ml)

Stir together and bring to boil; cook on low heat until thick and shiny, stirring frequently, at least ½ hour. Long, slow cooking gives the rich “butter” flavor and blends spices.

Note: This recipe can be used with any tropical fruit such as papaya, cooking bananas, tecojotes, etc.

To Make Apple Jelly: Save peelings and cores from apples used for apple butter or apple pies. Cover with water and boil until tender. Do not cook more than 8 cups of juice (2000 ml) at once. Use a pan 4 times the volume of juice and sugar.

To Make Mango Butter: Substitute cooked mangoes for apples. Strain mangoes.

Coconut Butter (Vanuatu): Combine 6 coconuts, grated finely, and 6 cups boiling water (1500 ml). Squeeze through muslin or a strong net. Strain again and allow to set overnight. Then, put in a jar and churn as butter. Wash and salt to taste. Use to make pastry biscuits or in place of margarine or butter.



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UPCOMING EVENT

Collaborative Training Event: Faith & Farming!

We are excited to host this special event for community engagement workers next February.

By the end of the event, participants will:

- » Gain perspective on the relationship between faith and farming
- » Understand the implications of using sustainable agricultural practices
- » See a variety of farming techniques demonstrated at the ECHO Global Farm
- » Begin planning their next steps for incorporating their findings into their unique work and context



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