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Dear Friends,

I’m so excited that you have this issue of ECHO News in your hands! It is a “picture window” on how ECHO works. And, by God’s grace and goodness, it is a rich, extensive, and deeply encouraging view.

We all know that the problem of global hunger and malnutrition is massive, with an estimated 850 million men, women, and children tragically impacted. So ECHO works very strategically to tackle this massive challenge:

1. We pursue approaches that are reliable, sustainable, and make a lasting difference;
2. We directly equip women and men, who farm and garden, to do so much more effectively in order to increase both their food production and the nutritional benefits of what they produce; and,
3. We provide knowledge and training resources to partners who are positioned to spread beneficial plants, practices, and appropriate technologies to additional communities and networks.

The results are astounding! Independent assessments of ECHO’s work have concluded that over 1 million children, men, and women benefit from the spread of ECHO’s direct training each year. In addition, ECHO partners share knowledge and resources gained from ECHO with over 2 million women and men each year. And all around the world, this results in more people coming to know the life-giving grace of God.

This issue of ECHO News introduces you to some of the very special people, from around the world, with whom we are privileged to share Hope against Hunger. As you read their stories of engagement and impact, please join us in giving thanks to the God who invites us to work together to plant and water and is graciously faithful to “make the seed grow”!

By God’s grace,

David Erickson, President/CEO

P.S. I pray you see yourself pictured in this inspiring view into how ECHO works. Your prayers, volunteer support, and financial partnership make the “planting and watering” possible.

“The one who plants and the one who waters work together with the same purpose. And both will be rewarded for their own hard work. …But what’s important is that God makes the seed grow.”

1 Corinthians 3:8,7 NLT
Recently, there has been scarcity of biogas stoves in Tanzania. Biogas stoves use organic matter such as manure and kitchen scraps to produce gas for cooking and lighting and fertilizer for crops.

Searching for solutions to this problem, Lucy, Mechanical Engineering Lecturer at Arusha Technical College, developed a biogas stove using materials available in Tanzania.

ECHO has been working with Lucy, connecting her with biogas users for testing and feedback so that she can improve her technology.

Amazingly, Lucy's stove performed better than other stoves that have existed for many years. It is gas-efficient yet effective and farmers liked it. The burner of the stove is made of brass materials that provide durability so it will not be easily corroded by the biogas. Lucy is now thinking of ways she can expand her production so that she can make these stoves available to others.

**Tanzanian Innovator Improves Biogas Stove**
Sharing the Moringa Journey

By Noah Coleman, ECHO Intern

Rick and Jeri Kemmer’s journey with the moringa tree started in the year 2000 on an ECHO tour. Since then – with ECHO’s resources and partnership – their passion has equipped thousands across 23 countries to help the hungry. Noah Coleman shares his recent zoom conversation with Rick Kemmer about how ECHO has encouraged them along the way. Noah, a current ECHO Intern, previously studied moringa in East Africa for his master’s degree.

There’s a lot of good reasons to get out of bed in the morning. For Rick Kemmer, it’s global hunger and malnutrition. He gets out of bed knowing that his daily efforts are actively reducing nutritionally-preventable child-mortality around the world.

I grew up surrounded by hunger and malnutrition in rural Cameroon, Africa. Many of my childhood friends suffered from nutritionally-preventable diseases and were in desperate need of nutrients like iron, protein, and vitamins.

Rick’s journey towards combatting global hunger was circuitous. Raised in Allentown, PA, he spent 10 years in the restaurant industry, followed by a commercial/residential painting business, a photography business, and a life-changing missions trip to Haiti that eventually led him and his wife Jeri on a trajectory towards Tanzania.

“The Moringa tree that we’d just heard about at ECHO would grow here, and grow well. And it would address these things that they’re telling us are their biggest challenges.”

During a season of pre-Tanzania cross-cultural training in the fall of 2000, the Kemmers took a tour of the ECHO Global Farm in North Fort Myers, Florida, and encountered moringa. The far-reaching impact of this visit would only begin to take root in the coming months.

It was in Cameroon, as a young teenager, that I came across moringa. The stories I heard about it and other plants from ECHO network members ignited a curiosity in me about what God is doing to meet peoples’ needs and how He uses unnoticed plants and unlikely people to accomplish unbelievable things.

Upon arrival in Tanzania, Rick’s assignment was to implement small-scale economic development projects that would specifically address the challenges faced by bi-vocational pastors. These local pastors were having to choose between ministry and feeding and providing for their
families. While he was conducting interviews with local leaders and pastors with several other projects in mind, he said that he was beginning to see that “the moringa tree that we’d just heard about at ECHO would grow here, and grow well. And it would address these things that they’re telling us are their biggest challenges.”

Speaking of big challenges, not all of us are born with a green thumb. Rick shared, “You do understand that God invented humor? Right? ...Not only do we not have an agricultural background, between my wife and I, we can barely keep a houseplant alive... The only plants that live around us are the hardiest of plants... otherwise they die – but we can grow moringa! Which is a testimony that moringa is easy to grow. Even total amateurs can grow moringa.”

In Tanzania, Rick saw that this often overlooked moringa tree could help secure access to nutritious food, provide a reliable source of clean drinking water, aid in environmental preservation, retain groundwater, and provide a source of income for smallholder farming families and local entrepreneurs. Not only that, but people were hungry for the training. “Whenever we taught people about moringa, it just seemed to explode,” Rick said. “It was like we were able to put in 5 minutes worth of effort and got an hours’ worth of result!”

Yet, he continued with his other economic development initiatives and started promoting and distributing moringa as a side-project, recognizing that before moringa could actually take off as a commodity in a given area, there would need to be a significant amount of knowledge and experience growing and using it.

In 2007, upon returning to the United States, Rick and his wife Jeri refused to move-on from addressing the needs of others around the world. They founded Strong Harvest International to empower developing-world families with knowledge on growing and using moringa for improved health, increased family income, and environmental care.

Strong Harvest collaborates with local leaders and organizations in Nicaragua, Togo, and Tanzania to consider what role moringa could play in their communities. Once local people have decided that moringa is a good fit, Strong Harvest teams up with schools, women’s groups, churches, and local governments to provide in-depth training, follow-up visits, and long-term training.

As I continued to chat with Rick, I began to see more vividly the effects of Strong Harvest’s focus on relationships and collaboration.
Moringa oleifera

Moringa is the most popular seed requested from ECHO’s Seed Bank, and has been studied and shared throughout ECHO’s network since 1981!

Moringa belongs to the Moringaceae family which contains 13 other known species. A drought-tolerant, fast-growing perennial tree, moringa may also be grown intensively like an annual leafy vegetable. Native to India, moringa for centuries has demonstrated remarkable nutritional and medicinal benefits such that it is now grown throughout the tropics and subtropics. In many developing contexts, moringa is becoming increasingly common particularly because of its multiple uses as an incredibly nutritious food, a water-purifying agent, and as a source of additional family income.

In 2017, Strong Harvest hosted two seminars at ECHO’s Impact Center in Arusha. Rick enthusiastically described how ECHO’s network connections broadened the reach of the seminars, “Because of ECHO we were able to bring this knowledge to a much larger area of East Africa than was our circle of influence.”

Throughout 2020 and into 2021, Strong Harvest Field Representatives are contacting the hundreds of Peer Educators that have been trained over the years and are encouraging them to share about moringa – especially now while people are focusing on health – and to find out what effects the training has had on their communities. The reports have been astounding: “improved eyesight”, “reduced diabetes issues”, “reduced high blood pressure” “general health”, “general wellbeing”, “energy”, “anemia disappearing”, “kids not getting sick”, “we don’t go to the clinic any more”, “we don’t get sick anymore”.

I have heard people talk about “Zoom fatigue” from being on extended conference calls, but seeing God provide for those we serve through partner organizations and the incredible moringa tree was inspiring. If there’s an opposite of Zoom fatigue – that’s what I had.

Through Rick and Jeri Kemmer, knowledge of the moringa tree is spreading and improving thousands of lives. They represent just one spark of an idea that has grown into a roaring flame through the last 40 years of ECHO’s mission.
Assisting the COVID-19 Unemployed

**Working to equip their local community to feed itself during this extended period of unemployment for so many, ECHO’s East Africa Team has already trained more than 1,000 women and youth.**

The economy in Arusha, Tanzania, is based heavily on tourism. Once a vibrant base camp for hikes of Mount Kilimanjaro or the starting point for trips into the Serengeti National Park, the town, like so many others around the world, has been reeling with closures due to COVID-19. Mountain paths, safari trucks, lodges, and preserves have now been almost completely empty for a year – as a result, families who work in these industries are unemployed.

As the COVID shutdowns occurred, ECHO’s East Africa team began focusing training on the recently unemployed who were beginning to experience great hardship. As time went on, more and more people reached out for training and the demand grew.

**THE CHALLENGE**

Arusha city has over 450,000 citizens whose average income is less than $2.25 dollars per day and 60% of the population is under 25 years of age. Urban Arushans have access to carbohydrate-rich maize, rice, and sweet potatoes but limited access to nutrient dense foods rich in proteins and vitamins. More than 30% of children under 5 years old are stunted and nearly 60% suffer from anemia. And yet, food prices are increasing as a result of the pandemic.

**HOW ARE WE HELPING**

The perennial vegetables ECHO promotes are high in protein, vitamins and minerals – essential for building strong immune systems and avoiding chronic illnesses.

Focusing on Arusha, ECHO has been training groups of women and youth. Training women affects the entire household, while equipping young people engages this large population with meaningful, productive work.

**Over the last eight months, the ECHO East Africa team has equipped over a thousand people with nutrition and vegetable trainings.**

**WHAT’S NEXT IN 2021**

Continuing these trainings, we are now broadening the scope to include more staff within the health professions. Rather than treating the symptoms, these community leaders can share preventative skills that will build the community’s health from the ground up.

There are still a large number of groups which are requesting this training. ECHO will continue these trainings on two levels – a more concentrated training for health and community development professionals, and continued trainings for women and youth.

After all, there IS hope against hunger! 🌿

The nutritious leafy green chaya grows as a bush and is perfect for small urban spaces where these nutrients are desperately needed.
An recent interactive zoom discussion equipped the staff of a partner organization, DCA Cambodia, and seven farmer leaders about Seed Saving. This mentoring is the first of at least two Zoom meetings, a follow-up of the virtual training held December 2020 from ECHO Asia.

Mothers at a local pediatric surgery and recovery center recently learned about simple techniques to dry and preserve local fruit and vegetable products. Entire families will benefit from improved nutrition.
Training Neighbors

Kioho Luc from Kamiakoro shows the improvement in his corn field after applying the techniques that he learned from ECHO. Of the original 159 people trained in Kamiakoro, they have shared what they learned with more than 1,500 others.

On-Farm Biochar Production

Program Manager Toh talks visitors through biochar production at the ECHO Asia Small Farm Resource Center.

Gardening and Entrepreneurship

ECHO equipped 500 young people in effective gardening and production for market in a partnership project within Burkina Faso. Villagers can now produce value-added products for sale in their own communities.
Imagine a scene of controlled chaos, whereby a group of men and women, young and old, are huddled around a table jostling for position, eager to grab what lies before them. Only no one is angry, everyone seems to be smiling, and the valuable commodity before the crowd is something so simple. No one is handing out cash despite what it may seem, nor food, nor donation; this is an exchange of seed! This is the scene of an ECHO Seed Swap, one of many hosted across different sites in Myanmar in recent years.

Across Myanmar, hundreds of packets of seeds have exchanged hands through these events over the last 5 years, some from the ECHO Asia Seed Bank, others from ECHO’s partner seed banks across the country, and many more from the hands of farmers themselves – a combination of underutilized crop varieties, improved cultivars, and hard-to-find species. With the many seeds exchanged, so too have been the techniques and practices passed on, typically through the training workshops preceding these seed swaps.

In the past 5 years, ECHO has been on the ground to train and pass on seed in Shan State, Sagaing State, Kachin State, Mandalay, the Irrawaddy Delta region, and the city of Yangon, places that are not easy to access, nor popular to go. These on-site events are in addition to the many partners that were able to travel and train with the team in Thailand at the ECHO Asia Small Farm Resource Center.

Now, in the midst of a military coup, with borders closed and civil unrest unfolding, there is hope in knowing that so many seeds were exchanged. Seeds that will continue to produce in places where trainings have ceased, seeds that will multiply in locations where visiting our partners is no longer possible. There is hope in knowing that we were able to plant seeds, of many different types, into the lives of people that now so desperately need them.

Seed Banks Established and Staff Trained

Not only have seeds been swapped and exchanged, and passed on from the ECHO Asia Seed Bank, partners are building self-sustaining seed banks. In recent years, several ‘Community Seed Banks’ have been developed, through

Left: Bundles of seeds and chaya cuttings will be multiplied to benefit surrounding communities. Opposite: Seed swaps in Myanmar equip partners to share seed diversity even when borders are closed.
In Their Own Words:

Patrick Iradukunda

My name is Patrick Iradukunda. I am from Rwanda, a student in university studying Agroforestry. My motivation for life is to see a transformed society, I want to be an agent of change that I want to see in my community.

ECHO has impacted my life and my attitude towards agriculture. *Now I fully understand that there is a great purpose of God to use agriculture and people involved in farming to change the world, to conserve the environment, to eradicate hunger, and to create sustainable livelihoods.*

In the time I spent at ECHO, I was able to put my hands on work, in different areas like: tree nurseries, vegetable gardening, different kinds of manure preparation, and organic pesticides ideas.

It is a life changing experience to work with the staff in East Africa.

Though I was an intern, they were all available for me and fellow interns to learn from them. It inspired me to go back and do the same.

Now I have managed to plant trees around my father’s farm, and construct a kitchen garden for my former school. I have shared with three farmers about vegetable gardening, and we did the practice together. I am forever grateful.

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Please join us in prayer for those facing civil unrest in Myanmar as we continue to encourage, train, and equip vulnerable families.

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technical support from ECHO Asia teams, and personnel training through a Seed Bank Manager Internship program in Thailand.

“Now several surrounding communities can benefit from a supply of locally propagated seed varieties...”

Thaung Maggie, a recent ECHO Asia Seed Bank Manager Intern, has already returned to Myanmar to serve as Seed Bank Manager for the Lisu Baptist Theological Seminary and is hosting seed saving training events for her local community. Now several surrounding communities can benefit from a supply of locally propagated seed varieties, a valuable resource in a country living with so much uncertainty.

It is hard to see the current challenges that our partners are facing daily in Myanmar, but we are grateful for the many opportunities we had to go and support them when we could. We pray now that all of those seeds may be planted, watered, and multiplied for God’s glory, and to the benefit of those that need them.

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Time on their hands, a mission on their hearts

By Zach Walker

More than 800 volunteers lend their time and effort in Florida every year to help further ECHO’s mission, and half of them are retired. They could be golfing, reading, or working in a woodshop, but instead they choose ECHO.

Silence engulfed the shop. No whirs of the band saw or whines of the drill press. No shuffling of sneakers across the concrete floor thick with sawdust. No shouts for an extra screw or fine-grit sandpaper.

But from behind the white door marked “Office” came a murmur. Inside sat two men, Mike and Roger, wearing neon green “VOLUNTEER” shirts and talking about the next task.

Break time was almost over.

Volunteers provide essential support to ECHO’s mission by completing tasks around campus like maintenance, office work, and leading tours. They graciously donate their time to support work that changes lives and, in turn, improves their own.

“Volunteering adds a lot of meaning to your life,” volunteer Mike Wright said. “Doing things for yourself doesn’t give the same intrinsic value.”

Roger Ruth, 82, and Mike Wright, 67, drilled holes into outside walls of the Price Center to hang metal shutters in case of a hurricane. Armed with a power drill, Ruth explained the necessity of his project.

Without the shutters, 150-mile-per-hour winds could shatter the windows and destroy the inside of the building. As he spoke, he made sure to watch for fire ants that crawled near the base of his ladder, a task he’s mastered after seven years at ECHO.

Back at the retirement community where they live, they could be walking waterfront trails, working out in the wellness center, or building tables and sculptures of fish in the woodshop. But they choose to spend their time at ECHO.

A part of every volunteer’s orientation experience, tours provide an opportunity to learn about the mission they are helping to further. When Wright finished his first tour of ECHO, he drove home and convinced his wife to visit.
Chances are that Wright’s tour guide was a volunteer as well. Someone like Doug Keno, a docent who has been giving time to ECHO for the past nine years.

Keno began at ECHO fixing farm equipment and changing light bulbs once per week before signing up for docent training. Once certified, he started leading three to five tours each week, a frequency he still maintains.

Keno makes sure that, like him, everybody learns. When he was recruited to ECHO by the late docent, Dr. Vic, he learned more about agriculture than he thought he had room for, having grown up on a farm in Wisconsin.

He saw ECHO as a reality check, an experience that made him aware of what he has and what others don’t. And he wants everyone to feel the same feeling.

After every tour, he asks his guests to do him a favor. Tell someone about ECHO.

“I want to convince people to volunteer at ECHO, donate to ECHO,” Keno said. “Because there are a lot of people struggling who need help.”

Before new volunteers even come on a tour, they are introduced to ECHO by brochures or flyers or postcards. That’s thanks to advancement volunteers like Lala Lindsey.

Lindsey, 88, volunteers regularly in the public relations department. She folds brochures, cuts postcards, and organizes materials that promote ECHO’s mission.

“ECHO opened up my mind to what’s going on in different areas,” Lindsey said. “I appreciate that we are teaching people to grow their own food.”

Alongside her office work, she organizes books in the library and prepares salads for special events. Sometimes she even gets to gather fresh produce right from the gardens.

Volunteers keep ECHO functioning. They install shutters and lead tours and fold brochures with no monetary compensation. Their generosity allows donor funds to be funneled directly into ECHO’s research, agriculture, and mission.

While ECHO gives to the world, volunteers give to ECHO.

“They are a vital part of our mission,” Volunteer Coordinator Libby Arcia said. “They strengthen the ECHO effect and we are so grateful for their service!”

During COVID, our volunteer program in Florida was temporarily suspended, leaving a great feeling of loss around the ECHO Global Farm. As wisdom and guidelines were followed, we slowly began hosting volunteers again in late 2020. Our Volunteer Appreciation Luncheon, held on March 25, 2021, was held to honor ALL of our volunteers that help support ECHO’s mission worldwide!

Pictured left, Dr. Michael and Dalila Read pause for a photo op at the luncheon.
My name is Michelle Boutell, and I started my Monsoon Internship at ECHO in March 2020. I’m originally from the San Francisco Bay area, and had just graduated from UC Davis a week prior with a degree in International Agricultural Development when I started interning at ECHO. God used my studies and former positions to confirm my interest in providing easily accessible agricultural information to small-scale farming communities, and I was led to apply to the internship.

I’ve been so grateful to work outdoors with plants this past year while our world was sheltering in place. It was a strange time to start a new position, but learning how to grow food for local communities, teach others about agriculture, and answer network questions has been a fun, growth-filled experience. I feel as though I’m learning as much about honoring others and God through how I work as about agriculture (and I’ve been learning a lot about agriculture!).

These days, I’m excited about my projects related to the postharvest preservation of high-value crops. I’ve loved being able to deeply study topics and communicate them to other interns and our network. Finding out that reading and synthesizing information is a crucial part of agricultural development has been a huge part of my ECHO internship.

Later this year, I’ll be moving to Japan to work with a mission organization in Kyoto. I’m excited to see how God will use everything I’ve learned here, from the interpersonal to the botanical. To Him be all the honor and glory forever. 😊
Extraordinary Plants: Quinoa

The quinoa grain was an important part of the Incan Empire, which extended over much of the Andes Mountains.

Quinoa grain is toasted, ground into flour, or boiled and eaten like rice. Quinoa leaves can be eaten as a green vegetable, fresh or cooked, and all parts of the plant – leaves, stalks, and grain – can be used as an animal feed.

Quinoa is known for its tolerance of poor conditions such as high elevation, poorly drained soils, cold regions, and drought. Once harvested, seedheads are winnowed to remove the husk and dried. Quinoa is an exceptionally nutritious and balanced food containing protein, fat, oil, and starch.

Try it yourself:

1 part uncooked quinoa
2 parts water
Salt, to taste

Rinse the quinoa: Pour the quinoa into a strainer and rinse well. Drain.

Combine the rinsed quinoa and water in a pan. Bring the mixture to a boil over medium-high heat, then decrease to a gentle simmer.

Cook until the quinoa has absorbed all of the water, about 10 to 20 minutes.

Remove the pot from heat, cover, and let the quinoa steam for 5 minutes.

Remove the lid and fluff the quinoa with a fork. Season with salt.

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Tax Season 2021
What’s new for retirees?

Whew! There’s a lot to keep track of when it comes to changing tax laws amid COVID stimulus packages. This year we even have an extra month for the last-minute dash to dig out the paperwork for our taxes – the IRS extended the filing deadline for 2020 taxes to May 15.

There are also important tax changes for 2021 impacting retirees – changes that could increase your tax burden if you don’t take advantage of some smart tax-saving strategies.

Last year, the CARES Act temporarily suspended required minimum distributions (RMDs) for IRA and retirement plans. However, the one-year hiatus on required withdrawals is over.

The RMD is back for 2021. This means some seniors may face higher tax payments to the IRS. Why? The money they’re required to take from their retirement accounts once they reach 72 (or 70 ½ if you reached 70 ½ before January 1, 2020) counts as taxable income.

Plan for your 2021 RMD - put it toward a good cause while giving yourself the gift of a tax break!

A qualified charitable distribution (QCD) can be used to satisfy all or part of the required minimum distribution from an IRA. What’s the tax benefit? The funds don’t count as income.

This is a smart way for seniors who are taking advantage of the standard deduction to still get a taxable benefit from their charitable giving.

“For those of us who qualify to make QCDs, they’re as close to a free tax lunch as you can get these days,” wrote business journalist Allan Sloan in a column for the Washington Post.

If you are a retiree who is subject to RMDs, and have a passion for helping the hungry, don’t miss out on a great strategy to reduce your income tax. Call Amy Wiggins at (239) 567-3341 or email awiggins@echonet.org for more information.
Boosting Incomes in West Africa

The population of Burkina Faso is growing, putting increasing pressure on the country’s limited arable land. Agriculture, the backbone of Burkina Faso’s economy, continues to show potential as a strong way to sustain a family’s livelihood.

ECHO recently partnered with local NGO Job Booster to provide trainings for 564 people under the age of 35 in market gardening techniques and entrepreneurship to improve their gardening production. Each training lasted 10 days.

Abigaelle Kini was one of the women trained. She and her husband have a small plot of land that they were farming, but they never quite knew how to make it successful.

Ms. Kini shared, “As a housewife I had never learned about gardening. I managed to plant the vegetables, but it didn’t work because worms would attack my plants. After the training with ECHO, I learned how to make good natural products to eradicate the worms from my garden. My husband and I work together in the garden and often our young children help us. We are teaching them little by little all that we have learned.”

Techniques such as 21-day compost provide trainees with skills to increase their agricultural production with low-cost inputs.