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Recently I was asked how I can deal with seeing so much poverty and suffering during my travels to some of the poorest places on earth. Honesty, it is a struggle. I can either be consumed by the suffering to the point of dysfunction or block off my heart to the point of becoming hardened to the pain and poverty.

Over and over I ask myself – am I doing everything that I am called to do? As the leader of ECHO I also ask, “How about ECHO? Is ECHO engaging in practical and significant ways that make a difference… a real difference… to those who are suffering and impoverished?”

Over and over, I am drawn back to ECHO’s Strategic Plan. This isn’t a document that sits on my shelf gathering dust. This Plan was birthed in prayer to answer the question: “What does ECHO need to be doing to make the greatest difference possible in the lives of small-scale farmers and their families?” As we continually remind ourselves, what we do is NOT about ECHO; all that we do MUST be about changing the lives of the poor, helping them reach their God-given potential.

It is amazing to track the impact ECHO interns have had on the world. We have been able to follow all but two of over 200 interns that have trained at ECHO. They have gone out to use the skills they learned and continually connect with ECHO for new options. Here are some of their stories:

Mike came to ECHO from Canada and after his internship and a few months in Haiti, moved to Cambodia. Mike spent several years in Cambodia working in agriculture and various other community development activities. At times he even went above and beyond the normal role of a “missionary” when he negotiated with the Khmer Rouge for the release of missionaries being held in western Cambodia. Mike moved on from Cambodia and is still using his agricultural training and giftedness in Laos as he stays connected to the ECHO network, changing lives with the skills and training he received as an intern, and still receives, from ECHO.

Beth was an intern in the late eighties, taking her training to work first in Haiti for two years and then to Belize and Guatemala before going to work in southeastern Africa. After three years of training Mozambicans in agriculture and mentoring others in community development, agriculture, and appropriate technologies, Beth began conducting agriculture training courses in Asia, Africa, and Latin America. Beth continues to provide training in methods for helping small-scale farmers build their capacity to produce food, even on occasion consulting for UN agencies. She has been using her ECHO training to impact lives around the world for over 20 years.

Holly was one of the quietest people I had ever met when she first came to ECHO several years ago. I wondered how God would use someone who didn’t seem capable of greeting a stranger, much less training them to grow better crops. However, Holly took her ECHO training and moved to Cambodia where she has been training women in how to grow crops and then use those crops to create a business that is even exporting their product to the USA. Holly remains connected to ECHO, visiting us when she is in the States and continues to access ECHO as a resource for her work.

If you ever wonder whether ECHO is making a difference in the world, I can assure you, even if you look at just one aspect of ECHO’s ministry, our internship program, we can show you how the ECHO Effect reverberates around the world changing lives.
Mysore Raspberry

The Mysore Raspberry is a large shrub. The two to four inch leaves are dark green above and white on the underside. The fruit turns from red to purple and black when ripe. Clusters, though thorny, can contain more than a dozen ripe, pleasant black raspberry fruits.

One of a few raspberries that will grow at low elevations in the tropics, the fruit is among the over 200 species of edible Rubus found worldwide. Fruits can be used wherever raspberries or blackberries are needed.

For more information or to purchase your own, visit ECHO’s nursery.
Stories like these above were repeated over and over again as delegates from ECHO’s West Africa Forum excitedly took notes, eagerly asked questions and pursued all educational opportunities available at the conference. It was obvious that they were wanting to learn so desperately because it was going to improve their lives and the lives of the people in their community. Most people in attendance were not interested because the topics were new or clever, but because they could be life-changing!
During the opening session of the forum there was a moment when the various delegates from different countries around Africa were asked to stand up and represent their country. Delegates stood from Ivory Coast, Benin, and Senegal. There were delegates from as far away as Cameroon and The Central African Republic. A large contingent stood to represent Burkina Faso, of course. There were Peace Corps volunteers from Senegal, Gambia, Ghana, and beyond. Delegates stood to represent Mali, Nigeria, Niger and Liberia. There was truly a broad West African representation in attendance. Later, when returning delegates were asked to stand, about one third of those in attendance stood up. Then, a full two thirds of the group stood as first time delegates. Not only were all of the countries in the region represented, but many of the delegates were totally new to the forum, and ECHO. This is certainly an indication that the word has spread of the value and importance of this gathering. Follow up after this forum is being focused through engagement with our networking website ECHOcommunity.org
“Thanks to ECHO my poverty has finally left me,” Josué Baya declared. He could hardly contain his joy, as he spoke following the 2nd West Africa Networking Forum.

When asked about his progress this year in comparison to last year, he proudly shared that his papaya trees started producing fruit at only 50 cm in height. In fact, people stop by his garden all the time and ask what kind of magic he is using to make things grow. “Mulching, composting and occasionally adding fertilizer” is his response. He shared that he has now created a small nursery and since 2011 has produced 200 mango trees, 100 baobab trees, 100 guava trees, numerous lime trees, and a few banana trees, which he sells in the surrounding community. He has also produced cabbages and eggplant.

He asked if he could share how much he has actually made in 2011-12, reminding us that 2012 was not yet finished at the time. We were all struck by his organization and meticulous record-keeping (in spite of his limited education) as he searched through his notebook. He finally declared that it was “429,320 CFA” (roughly $ 860) that he has gained from his gardening efforts – no small thing for a rural subsistence farmer. He went on to explain that to date he has trained 155 individuals (and has registered all their names and contacts in his notebook) and was also invited to a nearby Bible School to teach pastors-in-training.

This year, in addition to his staple crops of corn, millet, sorghum and peanuts, he also grew some rice, which he said is doing very well. The 2012 Forum reinforced the training he received at the 2010 Forum and also helped him discover what he was doing wrong with his bio-gas digester. Evidently he overfilled his barrel with water/manure. He was so was excited to get home and put this new knowledge to use.

ECHO exists to equip people with agricultural resources and skills to reduce hunger and improve the lives of the poor. Josué is just one living example of this and a great reminder that our mission is making a difference to some of the most vulnerable people living in some of the remotest areas of the world. What an amazing ministry God has given all of us!
ECHO staff members gathered in prayer in the new entrance to the ECHO Global Farm.

New tables for plants in our Retail Nursery were constructed with volunteer labor by the NOMADS!

TAD 1 classes are now being offered four times per year at ECHO’s Florida campus. TAD 2 classes are also being offered twice. Shown at left are the participants of the May 2012 TAD class.

Visiting Missionary!

Missionary in Residence and past ECHO Intern Heidi Renkema spends time in the Semi Arid region.

Tropical Agriculture Development
Peckham Learning Center

ECHO’s new Peckham Learning Center (PLC) has been dedicated in honor of George and Lollie Peckham and their commitment to the Lord, service to others and passion for life-long learning. The PLC will serve as a training tool for those working globally to alleviate hunger through sustainable agriculture solutions.

ECHO’s newest interns

Introducing the newest ECHO interns: Aimee Wegescheide and James Lee.

Welcome Back Event

ECHO has welcomed back seasonal volunteers with three kickoff events introducing everyone to the new tour path! To volunteer, contact Coordinator Nichole Wyns at nwyns@echonet.org or 239-567-3314.
Walk for THAILAND

It started over 18 years ago. Rick and Ellen Burnette and their family accepted God's call for their life to travel to Thailand and work among the poor through agriculture. In June 2013, Rick and Ellen Burnette will return to the US from Thailand where they have lived and worked since 1994, continuing involvement with ECHO at the Global Farm in Fort Myers, Florida.

Prior to this move, Rick, ECHO Network member Bunsak Tongdee and ECHO Asia intern Kimberly Duncan completed a 100-mile journey over six days, departing from Chiang Mai on Sunday, December 9 and arriving at the ECHO Asia Seed Bank in the Mae Ai district on Friday, December 14.

The purpose of the walk was to raise awareness for the efforts of ECHO Asia to alleviate hunger and poverty around the world. Though we could not all participate in the walk in Thailand, many here at ECHO Florida were moved to partner with them. On January 26th, ECHO staff and volunteers walked 10 miles through the ECHO Global Farm in Florida, raising funds and awareness for ECHO's Asia initiatives.

The current population of the Greater Mekong Subregion (GMS) of 275 million that ECHO Asia serves is forecast to reach 315 million by 2025 and exceed 340 million by 2050. Although levels of nutrition have improved since 1990, undernourishment remains widespread in all countries in the GMS. The 2008 Global Hunger Index considers hunger levels to be ‘moderate’ in Thailand, ‘serious’ in Vietnam and Myanmar, and ‘alarming’ in Lao PDR and Cambodia. Based solely on population growth, food demand will rise by at least 25% by 2050 (Source: Rethinking Agriculture in the Greater Mekong Subregion. 2010. IWMI and World Fish Center). Hunger challenges in the remainder of tropical Asia - South Asia and parts of Indonesia in particular - remain even more serious.

Your partnership with ECHO can help reduce hunger and improve lives, especially in Southeast Asia. To contribute to ECHO Asia initiatives visit echonet.org, click donate now and designate your gift to ECHO Asia.
A funny thing happens when you volunteer -- lives are changed, whether you know it or not. Quite simply, there is a chain reaction happening that we don't really think about. When you share about your experience volunteering, others take notice. Others want to have that kind of experience. So the next time your friends look at their schedule, they'll look for similar opportunities, even if it's just a single day of volunteering. And they'll pass that story along, and so on and so forth.

Somewhere along that line, somebody is going to be deeply touched by their volunteer experience. So touched, in fact, that they will realize they've found their life's calling. They will raise money to make a difference, or move to another country to work to change the world.

Darren Thomas is an FGCU student pursuing a degree in Public Relations. During his colloquium class, he was introduced to ECHO's volunteer opportunities. "I chose to volunteer at ECHO not only because of their mission, but also because of my first experience there," he wrote. "On that first visit, I had very little knowledge about what ECHO was about, but was impressed by the volunteer tour guide, the people on staff at ECHO, and the work that was so evident on their farm."

"I believe my volunteering at ECHO definitely makes an impact by moving the organization closer to accomplishing their mission. At one point in time I remember helping mail over 3000 letters to ECHO's donors. Without volunteers to help with this task, it could have taken a week of staff time to assemble. This mailing raised thousands of dollars to improve the lives of the poor. God gets the glory for that."

For many of us there comes a point in life, when you take pause, look around and realize we have it pretty good. It's that moment when you discover that no matter how many points the Dow has dropped, or how high gas prices have become, we still live like kings and queens compared to a lot of people in the world. Then comes the wave of compassion and inspiration that moves a person to say: "I want to do something. I, (insert full name here), want to make a difference."

This is probably the biggest step: realizing that we can, even should, make a difference. But then, after that beautiful, humbling moment of self-realization where we decide YES (I am going to change the world!), comes the more complicated and often de-motivating, "how."

Volunteering is a broad term. It can mean anything from picking up trash, to serving bread at a soup kitchen, to serving on the front lines for a country you love. You don't have to go anywhere to do it, the opportunities are endless. At ECHO, volunteers pull weeds and paint walls. They enter addresses into the computer and serve as our Board of Directors. They allow ECHO to exist, working everyday to reduce hunger and improve the lives of the poor.

If we think of small change occurring because a single butterfly flaps its wings, a single act of volunteering is a tree full of sparrows, hundreds of them lifting off at the same moment. Lives are changed when you volunteer.
One of the goals of ECHO’s research in South Africa is to look at ways to boost food production with the practice of intercropping (growing together) a cereal grain crop, like sorghum, with bean crops. We have been intercropping sorghum with legumes planted in rows of “zai” pits.

Why grow beans? Being legumes, bean crops can improve soils by converting nitrogen from the air into forms that crops can use. The crops we are working with are quite tolerant of dry conditions and produce vines that cover the ground, protecting it from the intense, tropical sun and creating an environment in which soil microorganisms can thrive. Moreover, the legumes provide the farmer with a harvest of dried, edible beans.

What are zai holes? The zai system originated in West Africa as a way to cope with drought and hard, encrusted soil. Drought-tolerant grain crops such as sorghum or millet are planted in pits about 30 centimeters (12 inches) wide and 15 centimeters (6 inches) deep. With the excavated soil thrown to the downhill side, the pits act as tiny water catchment basins, making maximum use of what little rainfall is received. Several handfuls of manure are traditionally placed in each pit, concentrating nutrients near the crop roots.

Have we seen any benefits? The results we have so far are from year one of a sorghum/legume intercropping strategy within the zai system. Most of the legumes we have tried have grown very well, but cowpea produced the most dried beans. It increased total grain production from 400 kilograms per hectare with sorghum alone to about 1400 kilograms per hectare when grown together with sorghum. It also increased soil nitrogen as well as nitrogen taken up by the sorghum plants. All of this is very encouraging from the perspective of the smallholder farmer, because it means they have a way to improve their soils while greatly increasing food production.

![Graph showing total harvest of sorghum grain and dried beans with sorghum grown in a zai pit system with or without manure and legume cover crops.](image-url)
We were 70 miles east of Havana, Cuba, in a small town, at a house that functioned as both house and church. Juan (not his real name) was the pastor and had paid a heavy price for his faith over the years. But times are changing and not only can he lead his church freely, but the church was able to acquire land for agriculture. However, simply having land does not equal a bountiful crop -- especially when for the past 54 years land use in Cuba has focused on communal farming systems with a division of labor. Skills that had once been common in Cuba were now almost nonexistent. I shared with Juan about SRI rice production techniques and Foundations For Farming (FFF) methods for growing maize, and the success we were seeing in crop yields from these methods. As I spoke, his face began to glow! That same look was captured in words by a leader from another church organization as we met in Havana. “I cannot believe that all of these things are known and already available to us in Spanish from ECHO! When are you coming back? We need ECHO to help our people make the land produce the food and income that we know it can produce.”

Cuba is the largest Caribbean island, between the Caribbean Sea and the North Atlantic Ocean. It lies 90 miles south of Key West, between the Cayman Islands and the Bahamas. Cuba is an amazing and fascinating country, rich in culture but has faced challenges in agricultural production. That is, until now.

The potential in Cuba’s agricultural development is visible in every verdant roadside and green valley! There is amazing room for growth. The challenge is that private agriculture has not been practiced in the recent past and most traditional knowledge has been lost. A leader from another church organization in Cuba told us, “My father used to have a garden by our house when I was a boy and my brother and I would have to water it every evening. But that was over 50 years ago. Now, none of us knows how to garden. That knowledge has been lost. Can you please come back and teach us?”

The government has recently changed the policies making land available to churches to practice agriculture. The churches are now looking for training on how to best use the land. This is a perfect time for ECHO to engage the church and the people of Cuba with the unique set of materials and skills that God has given us. We have already been invited to add a day of ECHO training to meetings being planned throughout the country.

I was greatly humbled by the village pastors and the desire that they had for the information that we, here at ECHO, see every day. The hunger for ways to improve production and for the very things that ECHO specializes in, is way beyond what I had expected. They need SRI, FFF, Bio-sand filters, all the information we have on Moringa, and the list goes on! They are also very interested in the intercropping that Roland Bunch, a network member who spoke at the East Africa Networking Forum, has shown so much success with in Latin America. What is well known throughout much of Latin America is brand new here and the doors are opening like never before in the last 54 years since the Revolution.”

With our first Caribbean Conference scheduled for October 28th this year in the Dominican Republic, we are excited to find better ways to meet the increasing needs of the Caribbean region, to assist those in Latin America and to continue our work among the poor in Haiti. Thank you for your help in making it possible.
Hi, my name is Charles Anderas. I was chosen to write this edition of Intern Spotlight because I’m ECHO’s 200th intern. Some people call me “The Chosen One,” but I prefer Chuck.

Before coming to ECHO, I had very little experience in agriculture. My first introduction to some of the practices and crops that ECHO promotes came three years ago when I met an ECHO network member in Rwanda. I saw the radically increased yields in her Foundations for Farming demonstration and the incredible nutrition of moringa, and I could not stop thinking about the possibilities it presented for eradicating poverty and malnutrition. I came to ECHO as a student a year later and became even more convinced of the crucial importance of agriculture in ministering to the poor around the world.

During my first few months at ECHO, I’ve often felt like I did when I was 18 years old and I went to live with family in Peru. They didn’t speak any English and I didn’t speak much Spanish, so I had to learn quickly! Agriculture seems like a totally different language at times, but living at ECHO is like a full-immersion language course! With ECHO’s wonderful balance of hands-on learning and time in the classroom, plus the guidance of ECHO staff and my fellow interns, I feel like I’ve grown by leaps and bounds. I’m still on a very steep part of the learning curve, but there’s no better place to learn about agriculture and service than at ECHO.

After my time at ECHO I hope to take my training as the mountain intern to the Peruvian Andes. I’m excited to see the ways that God will shape me and prepare me for the mission and the work that He has in store for me, wherever it may end up being. I think it is a great grace that God allows us to be part of His mission on earth. I’m grateful to be a part of it here at ECHO and for the ways that God is preparing me for future work in the body of Christ. We serve a beautiful God!
Underwrite the cost for a Missionary or Development worker for only $25.

Chaya

Chaya *Cnidoscolus aconitifolius*, also known as tree spinach, is an extremely nutritious plant. Its leaves are very high in protein, calcium, iron, carotene, and vitamins A, B and C. The leaves, however, contain hydrocyanic glycosides and cannot be eaten raw; they must be boiled or fried for at least five minutes to eliminate the danger.

The chaya plant becomes an attractive large shrub but in the tropics it may grow as a small tree. Stem cuttings are the main way to propagate chaya. ECHO distributes cuttings overseas to those that request them; because of the plant’s drought tolerance, cuttings survive well in the mail, even after weeks in transport.

Stop by ECHO’s tropical fruit nursery to get your own chaya plant! The nursery is open Monday-Friday 9:00am-5:00pm and Saturday 9:00am-4:00pm.

Peanut Butter Chaya

This dish is a reliable favorite among ECHO interns and staff, definitely an ECHO farm staple.

1-2 mixing bowls of fresh chaya leaves
2-3 tablespoons garlic, chopped
2-3 indian firecracker peppers, chopped
1 cup of peanut butter
3 tablespoons soy sauce

Strip chaya leaves from stems and add leaves to a pot of boiling water. Boil for approximately 10 minutes. Pour the water off the leaves and chop them into smaller pieces.

Add oil to a hot frying pan. Add garlic and pepper, then turn heat down to medium. Saute for about five minutes. Once the garlic begins to brown, add cooked chaya. As the flavors meld, add soy sauce and peanut butter and stir. Sprinkle black pepper to taste.

What can you do with $25? Two tickets to a movie? A dinner out? Even fast food meals add up quickly these days! ECHOcommunity.org is our website that provides resources, networking opportunities and facilitates communication throughout ECHO’s members. To provide the services we provide to our ECHOcommunity.org members (missionaries, Peace Corps workers and development workers) it costs us roughly $300 per year, or $25 per month. Inside this edition of ECHO News you will notice a “Sponsorship Card” this card enables you to increase the power of your gift by underwriting the cost for a missionary, development worker or Peace Corps worker to access ECHO services.

When this sponsorship campaign first started, we had 1,200 network members to support as an organization. Today that number is over 3,100! That is an increase of $570,000 over what it was just a year ago. With over 177 countries accessing ECHO services each year, 115 of them doing so on a monthly basis, your support is greatly needed.

Please take a few days and pray about this opportunity. If you have the means and feel led to support ECHO by providing $25 per month, or a one-time gift of $300, it would go a long way in ensuring that we can continue to provide the information, training, support and resources that can change the lives of the poor.
Save the Date!

For information on any of these events, please visit www.echonet.org or call 239.543.3246

**ECHo’s Taste the World event**
February 23rd, 2013
Bell Tower Shops, Fort Myers

**Farm Day**
March 16th, 2013
ECHo’s Global Farm

**ECHo Volunteer Appreciate Banquet**
March 25th, 2013
ECHo’s Pavilion

**Tropical Ag Development Workshop**
April 15th-19th, 2013
ECHo’s Peckham Learning Center

**Health, Agriculture, Culture and Community Workshop**
April 29th- May 3rd, 2013
ECHo’s Peckham Learning Center