



echo® news

Hope Against Hunger | volume 45 | issue 1



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David Erickson, President/CEO

***"When we get together, I want to encourage you in your faith,
but I also want to be encouraged by yours."
Romans 1:12***

Dear Friends,

Togetherness...partnership....mutuality. These were the words that went through my mind as I previewed this issue of *ECHO News*. Nearly every story reflects the reality that the work and witness of ECHO has a built-in *mutuality* – **a mutuality that confers strength, hope, and impact**. There is little of true significance that we can do on our own. But together with others, by the grace and goodness of God, we can accomplish much and be greatly encouraged.

Whether we are equipping doctors and nurses in Tanzanian clinics, training development workers to produce biosand water filtration systems for refugees from Myanmar, facilitating the multiplication of healthy dairy goats in East African villages, training future pastors and spouses in theologically-grounded agriculture in West Africa, or empowering Florida Interns for service, *mutuality* is at the heart of our engagement.

This is why our Mission Statement reads: "ECHO exists to follow Jesus by reducing hunger and improving lives worldwide through **partnerships**..." And this is why we are grateful to the Lord for you – and for missionaries, Peace Corps Volunteers, pastors, and development workers in over 190 countries – with whom we can join to share *Hope Against Hunger*. We can't do it alone...**but together great things are possible!**

With thanksgiving,

David Erickson, President/CEO

P.S. We want you to know that your prayers, notes, and support of ECHO's mission encourage us. And our hope is that these stories of engagement and impact will bless and encourage YOU!



ECHO exists to follow Jesus by reducing hunger and improving lives worldwide through partnerships that equip people with agricultural resources and skills.



Cover photo: John Mollel and Diana Alex, ECHO East Africa interns, collaborated with ECHO trainers to teach community members how to construct rocket stoves out of low-cost bricks they could make themselves.

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edited by Danielle Flood

Please share your comments about ECHO News. Write: 17391 Durrance Road, North Fort Myers, Florida, 33917, e-mail: info@echonet.org, or call: 239-543-3246.

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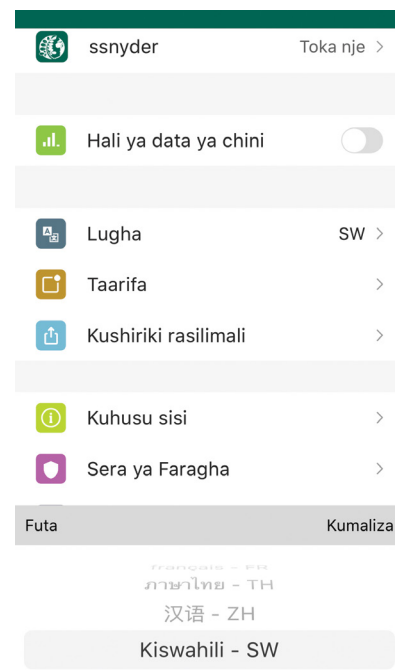
ECHOcommunity Mobile App Now Available in 11 Languages

The ECHOcommunity Mobile App allows missionaries and development workers to download agricultural resources when the internet is available and then use and share those resources when in remote locations.

We are excited to announce that the App is now available in 11 languages – English, French, Spanish, Swahili, Thai, Haitian Creole, Vietnamese, Burmese, Central Khmer, Indonesian, and Chinese.

More valuable resources are being added each day. Please share this free resource with anyone you know who could benefit.

Find out more about the ECHOcommunity Mobile App by visiting <http://edn.link/ema>





Simple Solution, Life-Changing Result

"You trained us well and now we are blessing many people near the Myanmar border!"

While Thailand is a peaceful country, neighboring regions have been challenged by civil war and violence. Internally displaced people live in long-term camps without access to many basic sanitation options. The ECHO Asia team realized that one of the most effective ways they could serve those struggling with contaminated drinking water was to teach and multiply the knowledge of simple biosand water filters.

Still limited by COVID protocols, the ECHO Asia team conducted a workshop that taught the principles and practices that participants would need to know to build their own 300-liter affordable biosand water filters. While the technology is the mechanism, the real impact is evident in the lives of the people. Shortly after the training concluded, ECHO Asia trainers received an email with a simple message: "You trained us well and now we are blessing many people near the Myanmar border!"

One man, trained at ECHO's small farm resource center in Chiang Mai, returned home and gathered men from his village. Together they constructed a 300-liter water filtration system from locally-available resources and installed it in a few days. **Through their work, a brand-new biosand water filter is providing clean water to a rural village in northern Thailand for villagers and refugees alike.**

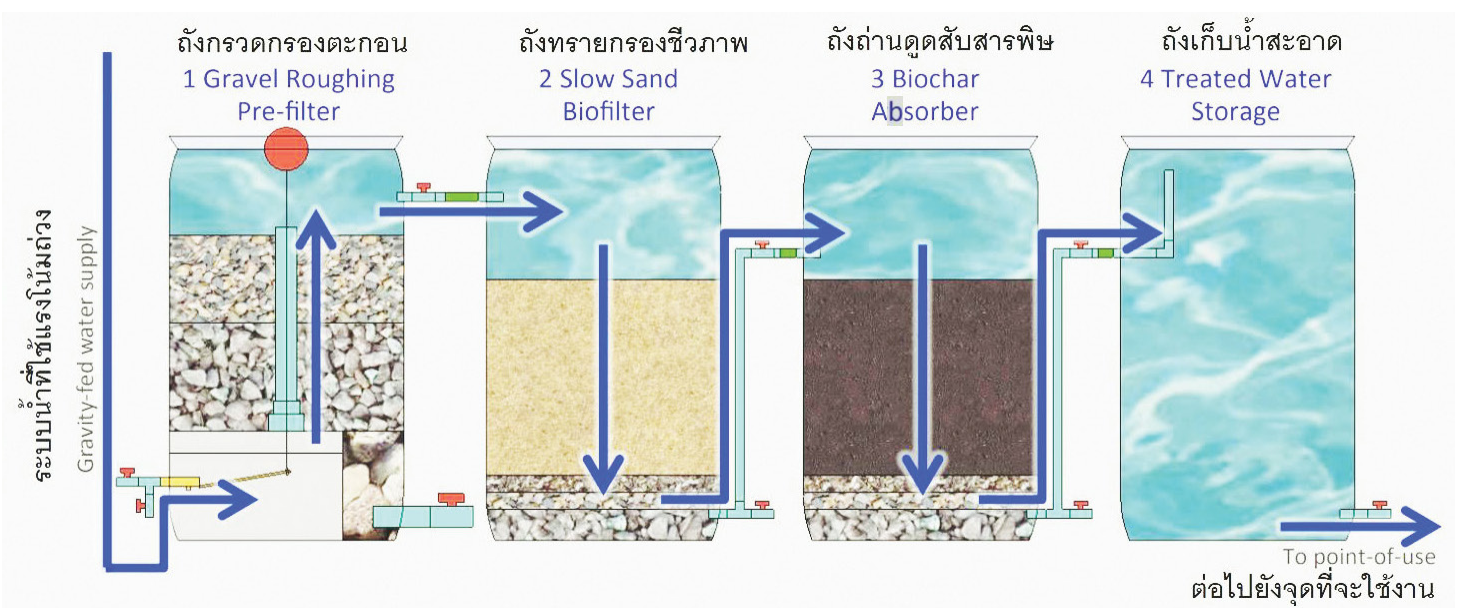
This is the power of the ECHO effect. Your support helps to multiply one training into many other trainings – as those we train share what they learned – many more people benefit. 🌍

Opposite: Village volunteers in Northern Thailand work together to construct a 300-liter biosand water filter – a process that they learned to build from ECHO.

Right: 1. From learning to doing, ECHO trainers use hands-on learning strategies to teach the theory and practice of constructing a biosand water filter. 2. Then trainees are able to construct their own filter to serve their entire village, including refugees from neighboring Myanmar who are fleeing violence.



Below: Training resources in multiple languages equip trainees with resources to both learn and share what they have learned with others.





Integrated Pest Management

Stopping Food Losses Before They Start

Small-scale farmers face several hurdles that make it difficult for them to control agricultural pests. Some farmers who have fields that are far from their home may only travel to the field for important management activities such as planting, weeding, and harvesting. Climate change, the introduction of new pests, and several other factors have increased pest pressures in the tropics, where food insecurity is already a major concern. Pests contribute greatly to crop loss, and farmers in resource-limited regions experience some of the most significant effects (Chakraborty and Newton, 2011).

Integrated pest management is an approach to managing pests that combines many unique intervention strategies. To continuously improve pest management, farmers need to keep learning about pests, observing their habits and behaviors, implementing control methods, and evaluating the effectiveness of pest control interventions.

In *ECHO Development Notes 151-154*, simple and practical integrated pest management strategies are front and center. The series is available in English, Spanish, French, and Haitian Creole, and has also been added to a knowledge bank for Haitian farmers through an ECHO partner organization Agri-plus.

After a training in Burkina Faso, one family was able to eradicate worms from their plants by making a neem leaf spray. These resources are already leading to healthier plants and more tomatoes. "It's amazing," said ECHO staff member Biba Sanou. "There was a great harvest."

For farming families around the world, pest management stops food losses before they start, and makes the difference in their nutrition and their annual income. When pests are managed well, families thrive! 🌍

Joy in the Village

Goat "Passing on" Ceremony

Excitement was stirring in the East African village of Lemanyata. The ceremony would be happening in a few hours, and three farmers were filled with hope. Today was their day to receive a dairy goat from their neighbors. There would be no money changing hands, but it wasn't free. These farmers had attended trainings, visited other farmers, constructed goat sheds, and prepared fodder plots. They were ready.

At the "Passing On" ceremony, villagers who once received dairy goats were given the opportunity to pass on a 4-month-old goat to new farmers. This next group of goat recipients also committed to pass on an offspring to another family.



On the day of the ceremony, Jackson Ngaya was there to pass on one of his goats. He lives in the village where he is a leader of a group of small-scale farmers who depend on livestock and crop farming. However, they experienced low production capacity, challenges of low revenue, and diseases of their animals. Jackson worked hard yet couldn't get ahead. Still, he believed in a better future.

"As a result of the milk goat, we can eat better at home, we can send our children to school, and provide the family with other necessities"

An early recipient of a dairy goat through the project, Jackson was trained on dairy goat management including disease control and treatment, feeding, and breeding. Through this knowledge, Jackson successfully led his group to complete sheds, fodder plots, and all the steps to receive dairy goats in 2018. As part of the requirements of the project, they had agreed to pass on first female offspring. With a hope for income and food security, they were proud to have healthy goats to share.

Jackson is a determined man and sees a bright future. He says, "As a result of the milk goat, we can eat better at home, we can send our children to school, and provide the family with other necessities which prior to the project, we barely could afford. We have gained confidence, and know we can achieve even more. We are ready to keep dairy cattle, and hope from the project to learn more on sustainable farming." 🌍



Right: Project Coordinator Simon Sandilen, Jackson Ngaya, and a goat recipient during the ceremony at Lemanyata village.

what's happening



Healthy harvests in West Africa! Trainee Aminata shows off her corn harvest after implementing what she learned from an ECHO trainer who came to her village.

#echofightshunger



Follow us on Instagram for pictures of ECHO's work all around the world. #echofightshunger

Right Place, Right Time

Ms. Johana was at the clinic for her son when she joined an ECHO perennial vegetable training happening at the clinic. She says, "Now I am getting vegetables for my family. I have been able to teach 12 of my neighbors and have distributed chaya cuttings and Moringa seeds to them." The ECHO cuttings are thriving in her home garden, pictured here.



Training in Action



This snapshot is from our recent Biosand Water Filtration Workshop! We are excited to equip trainees to establish easy-to-construct water filters in communities that need clean water across Asia!

g at ECHO



Seed-saving Workshop

It all starts with a seed... but someone has to save those seeds! At our recent Seed Saving Fundamentals Workshop in Chiang Mai, we shared appropriate seed saving techniques for missionaries, farmers, and community leaders wanting to do it themselves!

Farmer Field School Visits



In-field training is key within a Farmer Field School. East Africa Interns receive valuable training in how to support agricultural extension.



Lead Farmers Spread Knowledge



In villages in West Africa, training teams partner with lead farmers to spread the word about proven techniques. Trainings in Dienkiena and Dio shared how to make liquid fertilizer and biothermal compost at the household level.

Local Dedication to Global Impact

By Makenzi Johnson

For 18 years, Bob Hargrave worked as the coordinator of agricultural consulting at ECHO Florida, working to answer the many questions that are submitted by farmers all around the world. Through the years, his advice and expertise have truly had a global impact.

From behind the computer screen on his desk in Fort Myers, Florida, Bob Hargrave's work has traveled to places far beyond the sunshine state – his impact reaches around the world.

"One of our goals is to validate the information we give, making sure that the information we share has been thoroughly tested," Hargrave said about answering online questions.

For the last 18 years, Hargrave worked as the coordinator of agricultural consulting at ECHO's Global Research and Demonstration Farm in Florida. He answers questions submitted to ECHOcommunity, an online resource that connects those on the front lines with various free resources. Missionaries and farmers all over the world can ask questions and receive answers from Hargrave and other agricultural consultants. A part of this work includes testing out possible techniques and ideas for farmers and missionaries.

"Frankly in the best of all possible worlds, at some point there wouldn't be a need for ECHO because everybody would have enough food to eat."

The questions submitted can range from what types of seeds a farmer could plant in a certain geographical area to asking about irrigation methods or even helping someone who forgot their login information to access the free ECHOcommunity resources.

"Sometimes I just consider myself customer service," Hargrave said with a chuckle.

The reality of this is that Hargrave is much more than just 'customer service' for ECHO. Farmers all around the world benefit from the advice and expertise he has given.

For example, a farmer in Burundi didn't want to burn his crops at the end of the harvest season and was worried the neighbor's fires would spread onto his own fields. He reached out to ECHOcommunity asking if there was anything he could do. Hargrave and the other researchers provided a solution – plant a barrier of trees that are less susceptible to burning.

When Bob, and his wife Ellen, first joined ECHO in 2003, he was responding to questions by snail mail. That turned into phone calls and email until eventually online forums. Now, on the ECHOcommunity website, there is a place where people can submit questions and receive immediate responses from both





Left: Bob Hargrave and team meet to discuss the week's questions from missionaries and development workers around the world. Above: Bob Hargrave worked in Kenya for 18 years before using his knowledge and experience to support ECHO's global work for another 18 years.

ECHO staff and others doing similar work in diverse contexts all around the world.

"Bob has been a big part of the transition from letters in the mail all the way to digitally delivered resources. He's been here all the time and has kept the one-on-one connections, making sure things get done by people, together," Nate Flood, ICT manager at ECHO Florida, said.

After graduating college and spending six years in the Navy, Hargrave began working as an agricultural consultant in Kenya. While preparing to go overseas, a missionary from Haiti told Hargrave about ECHO's resources and that he "needed to get on this mailing list." During the 18 years he served in Kenya, he sent his own questions to ECHO until becoming the one to answer them.

"As far as work goes, Bob is very serious about what he does," Flood said. "He cares deeply for

the members of ECHOcommunity and works hard to make sure that each person who reaches out to ECHO gets a personal response."

After 18 years working as an agricultural consultant in Kenya and 18 years working at ECHO, Bob retired at the end of 2021.

From Guatemala to Myanmar, the lives of small-scale farmers across the globe have been impacted by the answers Bob provided to their agricultural questions. As he and Ellen prepare for this next stage in their lives, their hopes for the future of ECHO remain optimistic about connecting and helping more people than ever before.

Hargrave shared passionately, "Frankly in the best of all possible worlds, at some point, there wouldn't be a need for ECHO because everybody would have enough food to eat." 🌱

Believing in the ECHO Effect

Kirk and Jan Gulledge believe in keeping their eyes open to the needs God shows them.

By Makenzi Johnson

The stories are what have kept Kirk and Jan Gulledge connected to ECHO for decades.

"I love reading about how lives are being changed," Jan said.

The Gulledges found ECHO after doing short-term missionary work overseas in the 1980s. Kirk wanted to know more about agriculture in Central America, so he did some research and stumbled upon ECHO. He wrote inquiry letters to ECHO staff to learn more about what they did. This was just the beginning of his passion and interest.

Kirk and Jan first visited ECHO's Global Demonstration and Research Farm in 1996 after they moved to Florida. The farm was small back then, but they were very impressed by the tour. Right away, they wanted to know more and get involved.

"We became interested more and more about what ECHO was doing globally," said Kirk.

The Gulledges had no agricultural experience, but Kirk explains, "We could see the potential impact that ECHO could make and that made a lot of difference to us."



Kirk got an even deeper look into the work ECHO was doing by serving on the Board of Directors for ten years, beginning in 1999. He saw examples of how techniques taught by ECHO, like seed saving or various agricultural methods, change the lives of farming families.

Jan is just as passionate about the mission and heart of ECHO's work. Her face lights up and you can hear the excitement in her voice when she talks about ECHO.

"It's all about that old saying, give a man a fish and he'll eat for a day, but teach a man to fish and he can eat for a lifetime. We feel like ECHO is doing that in a very good way," Jan said.

People taught by ECHO share what they learn with others, spreading new information, techniques, or methods. The lives of small-scale farmers all over the world are positively impacted by this chain reaction that starts with ECHO. The Gulledges saw this and wanted to support the multiplying impact.

"We like the idea that we can make a difference by supporting an organization that is training people and spreading that information," Jan said.

The Gulledges carefully consider how they can maximize their contribution. With a background in business, Kirk recognizes the value of faithful, sustaining support so they decided to become monthly donors. They also say that giving to ECHO helps them stay focused on what matters as followers of Christ.

"This keeps us aware that the rest of the world really is in a different situation than we are. This helps us to keep focusing on what is important," Kirk said.

After years of supporting ECHO's mission, the Gulledges decided to establish a charitable gift annuity with ECHO. This type of gift provides the Gulledges with a fixed-rate payout during their lifetime. After their passing, the remaining balance will help ECHO to continue providing lasting hunger solutions.

"We wanted some additional income, but at the same time, wanted to benefit ECHO," Jan said.

The Gulledges have continued to keep their eyes and hearts open to how God is leading them to multiply their impact.

Reading through a newsletter last winter, they saw that ECHO Asia was hoping to convert a covered parking area into a multi-purpose



training space and needed to install additional restroom facilities for staff and guests.

"The potential of converting an existing space for dual use really caught our eye," Kirk said. "We wanted to help make that possible for trainings at ECHO Asia."

In June, ECHO Asia held its first training in the new space, hosting a team that serves vulnerable children and underdeveloped communities for a one-day 'On-Farm Feeds Training Workshop'. The staff sent pictures and described how even with a monsoonal downpour that day, the team was able to lecture with powerpoint presentations and make on-farm pig and chicken feeds all in the space – without getting wet!

That's a pretty remarkable story – one that started with the Gulledge's watchful and thoughtful eyes toward how they can continue the ECHO effect. 🌱

"This keeps us aware that the rest of the world really is in a different situation than we are. This helps us to keep focus on what is important."

Opposite: Kirk and Jan Gulledge in their living room. Above: Two members of the ECHO Asia training team share a seminar to equip attendees to make "on-farm feeds" which are cheaper for families than commercial feeds. The training space was made possible for use through a generous gift by the Gulledges.

Intern Spotlight

Seth Mayo

I'm Seth Mayo, from Berryville, Virginia, and I work currently as the Lowlands Intern. I graduated from Wheaton College in May 2021, and after a

"My dream is to work with their ministry on the 70-acre farm, while also taking part in the house church planting network that exists within the community"

whirlwind of rich goodbyes, moving boxes, and mile markers, I received a warm (some might even say sweltering) welcome down here at ECHO Florida. After graduating with a B.S. in Biology, and a brief stint working for a hydroponic farm, I was excited to pursue the intern program here as I sought to marry the pursuits of biology and ministry.

I am glad to say that during my past few months here I have begun to see the many ways that research, resilience, and relationships between people and their environment exhibit the convictions and beliefs

of a community. I appreciate more and more the important niche that ECHO fills within the ecology of global development, and Jesus has been patient in showing me the need for deeply Christian influence within all areas of international development.

I am grateful to be a part of this organization and am learning to continuously ask Jesus to continue his creation in and around us, as we actively seek to be a participant in the creative work of farming and development. One of the biggest takeaways from my time thus far has been the importance of curiosity as it pertains to community development, regenerative agriculture, and knowledge dissemination.

After my internship concludes, I am hoping to work with the ministry REAP Granada in Granada, Nicaragua. **My dream is to work with their ministry on the 70 acre fruit farm that is on their property, while also taking part in the house church planting network that exists within the community.** However, as I bring my time at ECHO Florida to a close, I hope to be as present as possible, soaking up the last few months with the beautiful community that is tucked away in southwest Florida. 🌿



Seth Mayo, Lowlands Intern



Extraordinary Plants: Canistel

Looking for a unique tropical fruit tree? The canistel is aptly called the egg-fruit for the fruit's color and texture which are similar to the yolk of a hard-boiled egg.

The canistel, *Pouteria campechiana*, is a member of the Sapote family that also includes the sapodilla. Its cultivation has not spread far beyond its native region of Central America, despite its beauty and distinctive fruit.

This species grows to a height of 15 to 25 feet and has a dense, striking canopy of evergreen leaves. It is tolerant to poor soil conditions and grows easily in well-drained sandy soils. Trees bear between November and March, which is perfect timing for winter residents!

Though most often noted for its interesting appearance, the egg-fruit has an excellent sweet flavor. It can be eaten fresh or used to flavor custards, milkshakes, ice cream, and breads. Fruits are ready to pick when the outer skin begins to turn from green to yellow or yellow-orange. Fruits will ripen off the tree and can be eaten when they become soft, usually just a few days after picking.

Canistel Ice Cream

from *Know and Enjoy Tropical Fruit* by James Darley

2/3 cup canistel	1/4 cup cold water
4 tsp. gelatin	1/4 cup sugar
1/2 cup hot water	1 cup whipped cream

Mash canistel pulp until smooth, then add sugar and mix well. Soak gelatin in cold water then dissolve by adding hot water. Add gelatine to fruit. Fold in whipped cream. Pour into a mold and freeze. 🌱

Today's Decisions are Tomorrow's Legacy

BEQUEST. IT SEEMS SO FORMAL.

Actually, a bequest can be a simple planned gift that anyone can make through their will or trust. A charitable bequest is a distribution from your estate to any charity that you choose. You can leave a specific amount to charity, or leave a demonstrative bequest to family members with the remainder going to charity.

DO YOU HAVE AN ESTATE?

Your estate is the sum of your assets, including property you own, insurance policies, retirement accounts, cash on hand, etc. Some people have large estates, but even people who don't consider themselves wealthy often have the resources to make a charitable bequest.

Here's some general bequest language to get you thinking, but we always recommend consulting a legal advisor before making any planned gift.

"I give, devise, and bequeath to ECHO, Inc., North Fort Myers, Florida, ____% of my estate or the sum of \$____, for the benefit of ECHO's mission and general purposes."

THE EASIEST WAY TO GIVE

If you don't keep your checkbook quite as handy as you used to, or you don't want to spend money buying stamps or envelopes, you can enroll in ECHO's online recurring gift program. It's the most convenient way to support ECHO's mission.

You can schedule your donation to debit monthly, quarterly, or annually from your checking account, savings account, or credit card and know that even without licking a stamp you can keep ECHO's mission strong throughout the year. 🌱

Visit <http://echonet.org/give/give-monthly/> to set up your gift today!

For more information, call Chris at 239.567.3319.



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In Their Own Words: *Nutrition as Medicine*

Equipping healthcare workers multiplies the number of people who receive knowledge on healthy perennial vegetables for years to come. At Olmoti Health Center, patients and doctors alike enjoy chaya dishes.

“My name is Dr. David Meshack Mungure, a medical doctor of Olmoti Health Center in Arusha. I have been working in this health center for the past three years. At follow-up visits, we regularly see people suffering from malnutrition, stunting, and anemia. We often advise them to eat more vegetables and fruits as part of their daily diet, but it is very expensive.

Recently, the ECHO team hosted a training for our patients on perennial vegetables. They shared how to grow and how to prepare them to be a part of their diets in order to improve

their nutritional status. There was also a special training day for doctors and nurses so we can motivate those who attend clinics to produce vegetables to improve their nutrition. Participants were excited to prepare and taste vegetables such as chaya. We all enjoyed their deliciousness!

We are very grateful to ECHO East Africa for providing a training that is very useful in supporting the health sector and community livelihoods. 🌱

