



Trees That Feed Foundation

Annual Report 2022-23



PLANTING FRUIT TREES TO FEED PEOPLE, CREATE JOBS AND BENEFIT THE ENVIRONMENT



Supporting Agribusiness

Breadfruit and other fruit are wonder foods, but the fresh fruit are seasonal and have a relatively short shelf life. Preserving the fruit means year-round nutrition. *Trees That Feed Foundation* donates or subsidizes food processing equipment to encourage agribusinesses. We help to select the right equipment for the production capacity desired. Other equipment may include freezer, packaging equipment, nutrition labels, quality testing, and sales and marketing support. And we help with business planning.

Food slicers, shredders	Mandoline slicer 	Nemco manual slicer 	Robot Coupe food processor 
	Pleasant Hill manual grinder 	Wondermill 	Penagos 5 HP flour mill 
	JUA Dehytray 	TTFF solar dryer 	Penagos propane dehydrator 

We want to see agribusinesses succeed!

Letter from Co-founder Mike McLaughlin



Hello friends,

For a change of pace this year, you'll hear from me instead of my wife Mary McLaughlin, co-founder.

As many of you know, the early idea for *Trees That Feed* came out of Mary's concern for the environment. She wanted to plant trees. I suggested fruit trees for their multiple benefits. That was fifteen years ago.

We engaged an attorney, formed a corporation, then applied for and gained tax exemption from the US government. Mary and I identified a supplier for breadfruit trees in quantity, we put in some seed money (pun intended!) and commenced operations.

There were a few skeptics initially. Some folks thought the work was unnecessary or that other organizations were already doing it. We went ahead anyway! One by one, as the results and thank you letters came in, the skeptics have turned into supporters! From an initial delivery of just 72 trees to Jamaica in 2009, we've expanded into more than 20 countries and over 300,000 trees provided to individual farmers and various groups. That has happened thanks to support from you!

Mary works directly with hundreds of farmers, dozens of organizations, and is the true visionary amongst us. She handles the phone, email and social media seven days a week. She sees what is possible, and makes it happen. For me, I also work similarly with many individuals and organizations but also focus on fundraising efforts and administration. Operationally, we work with quite a number of dedicated people whether paid or volunteer, as well as other mission-based organizations. Over the years we've encountered hard working, sincere people, in every country. Our faith in the goodness of human nature is reinforced every day.

Mary and I feel young and we enjoy good health (touch wood!). We have the passion and energy, and a bit more wisdom, to continue our work even more effectively going forward. Our continuing programs include tree planting, encouraging entrepreneurs into agribusinesses, school feeding programs, and training and education. This is all with the intent of keeping the trees alive into fruiting maturity. And gaining food sovereignty in developing countries. Our aim is a permanent, sustainable solution. Fruit trees are a terrific investment and a hedge against the risks of climate change.

So that's some brief back story of how *Trees That Feed Foundation* keeps going. Thanks to you for your continued support and trust and confidence. Feel free to write or email us any time with your suggestions. We're always learning.

A handwritten signature in blue ink that reads "Mike". The signature is written in a cursive, slightly stylized font. Below the signature is a horizontal blue line.

Mike McLaughlin

Co-founder, *Trees That Feed Foundation*

Adapting To Climate Change



The daily news can be scary. We're burning fossil fuels. We're driving gas powered vehicles, heating our homes with natural gas, even still using energy generated in coal-fired power plants. Carbon dioxide and methane are present in the atmosphere at

historic highs. Droughts, floods, storms all threaten lives, property and food supplies.

Yes, there's hope in alternative sources of energy. According to the BP Statistical Review of World Energy 2022, wind and solar reached a 10.2% share of power generation in 2021.

Still, climate change continues. We can't stop it overnight. **But we can adapt!** Fruit trees, and particularly breadfruit trees, have superpowers that are moving us in the right direction.

A study¹ published in the last year by Northwestern University proved that breadfruit is climate-resilient! *You will read more about the results and see a map on page 13.*

Our partners report on their breadfruit trees' survival against changing weather. After Hurricane Fiona hit her agroforest in Puerto Rico last year, **Marisol Villalobos'** mature breadfruit trees dropped their fruit but withstood the wind, bending with it. *You will note another mention of Marisol and her agribusiness, Amasar, on page 8.*

Breadfruit trees capture 1.3 tons of carbon² over their 50-to-100-year lifespan. As our friends at Hawaii 'Ulu Cooperative report, "The production of mass-consumed staples like rice, for instance, fill our atmosphere with greenhouse gases.

'Ulu (breadfruit) trees are different because they capture carbon dioxide from the atmosphere while also supporting soil carbon sequestration." Another study³ published in 2022 says, "As global temperatures continue to rise in response to anthropogenic greenhouse gas emissions, it is likely that the areas of Florida where breadfruit is currently being grown will become even more suitable to this "ultra-tropical" crop." Led in part by TTFF collaborator **Dr. Russell Fielding**, it goes on to say that it

is also likely that more areas in Florida and perhaps even in other U.S. states will become suitable for breadfruit.

The same principle applies 5,000 miles away. The Northwestern study we mentioned, led in part by **Dr. Nyree Zerega**, TTFF board member, tells us that significant portions of sub-Saharan Africa show room for expansion of breadfruit cultivation over the next several decades. Our work in Africa is continually developing, *as you will read on page 10.*

An aspect of fruit trees that we may take for granted is their ability to lower surface temperatures by providing shade and through evapotranspiration. The EPA reports that shaded surfaces can be 20-45 degrees Fahrenheit cooler than peak temperatures of unshaded materials.

When we grow our fruit trees in agroforests, they can provide a suitable living environment for the crops that grow underneath.

For these reasons and more, *Trees That Feed Foundation* continues to plant fruit trees, especially breadfruit. And we encourage agroforestry (or "intercropping") to further diversify farms and forests, to adapt to changing climate conditions.

When you plant a breadfruit tree, you are creating food security despite a changing climate.



With your support, we can help the world stave off hunger while adapting to climate change.

1 Lucy Yang, Nyree Zerega, Anastasia Montgomery, Daniel E. Horton (2022): Potential of Breadfruit Cultivation to Contribute to Climate-resilient Low Latitude Food Systems, PLOS Climate. 2 *Trees That Feed*. 3 Russell Fielding & Jorge Julian Zaldivar (2022): No Longer "Confined to the Lower Keys of Florida": Mainland United States Cultivation of Breadfruit (*Artocarpus altilis*) in a Changing Climate, *Annals of the American Association of Geographers*.

Working with Governments Toward Food Security

In August, we wrote to 22 governments in the Caribbean, gently reminding them of their vulnerability to climate change. We urged them to adapt and build food sovereignty. We mentioned our successful track record and offered to help with planting of fruit trees. We got several enthusiastic expressions of interest!



In **Trinidad & Tobago**, TTFE is working closely with **Barry Lovelace**, Chairman of the Board of Directors of the new Tobago Reforestation and Watershed Rehabilitation Program and its island-wide Tobago Breadfruit Initiative. The government envisions a time when every household in Tobago has access to breadfruit, not only for food security, jobs, and to benefit the environment, but for additional benefits like animal feed, fabric, latex, and even insect repellent.



During Mary and Mike's trip to **Barbados**, which you will read about on page 9, Mike met with **Dr. Kevin Greenidge**, economist, advisor to the Prime Minister. With great enthusiasm, Dr. Greenidge informed the Prime Minister, **Madame Mia Mottley**, and **Hon. Indar Weir**, Minister of Agriculture, about the power and possibility of breadfruit. Breadfruit fits perfectly into the Barbados Economic Recovery and Transformation initiative. We had a planning meeting in December to kick off the project, and we will be shipping them 2,000 breadfruit trees.



While TTFE has been working in **Jamaica** since our inception, now we have forged a relationship with the nation's Forestry Department. Working with **Ainsley A. Henry, JP**, CEO & Conservator of Forests, **Jerome Smith**, Principal Director of the Forest Operation Division, and their team has been energizing. TTFE donated 8,000 fruit trees in support of the National Tree Planting Initiative (NTPI), part of the Government of Jamaica's thrust to plant Three Million Trees

in Three Years. TTFE also donated 2,500 of our educational activity books called *Plant a Tree and Good Things Happen* for schoolchildren.



TTFE's activity in the **Bahamas** is longstanding and ever evolving. **Iram Lewis**, a Member of Parliament (MP) for Central Grand Bahama planted TTFE trees in community gardens and distributed them to farmers. Now he is planning his own nursery. In Abaco, **Josefina Curry** of the Department of Agriculture and Food organized volunteers to plant and monitor fruit trees too. And in January 2023, we met with the First Lady of the Bahamas, **Madame Ann Marie Davis**, who is both passionate and knowledgeable about the value of breadfruit. She has big plans, and we're happy to assist!



In **Montserrat**, TTFE has been in talks with the **Honorable Crenston C. Buffonge**, Minister of Agriculture, Lands, Housing, and the Environment. We have decided to start by planting 40 assorted fruit trees on the small island, and teaching propagation so they can become fully self-sufficient.

Trees That Feed Foundation is pleased and honored to be working with Governments. They are a strong communication pipeline to their citizens and typically have the resources to make larger projects successful. And TTFE has the credibility, knowledge and experience to add value. Projects like these build awareness, stimulate agribusinesses, improve nutrition, and greatly improve the likelihood of adapting to climate change. Thanks to all of you who enable us to do this work.

Tobago's Chief Secretary Mr. Farley Augustine participates in the Tobago Breadfruit Initiative



Farmer George Johnson with Iram Lewis, Bahamian Parliamentarian, and his daughter

Success Amidst the Haitian Crises

Poverty, malnutrition, and crime have reached extreme levels in Haiti. We've even heard the terrible word "famine." Fortunately Haitian friends of *TFFF* work mostly within their community thereby avoiding treacherous travel to the cities. Our many amazing partners are not only withstanding the crises, but helping their communities thrive despite them.

"Safety is a daily battle," said **Maxwell Marcelin** of Port au Prince, Haiti. To avoid gangs, he drove overnight on back roads to deliver a generator to *TFFF* partner **Charlotin Frednaud** in Northeast Haiti. Charlotin is expanding operations at his own expense, with the help of an interest-free loan from *TFFF*. We've done this before and he has always repaid promptly and in full.

In each community, it's a virtuous circle of economic sustainability – trees to food, with jobs all along the way.

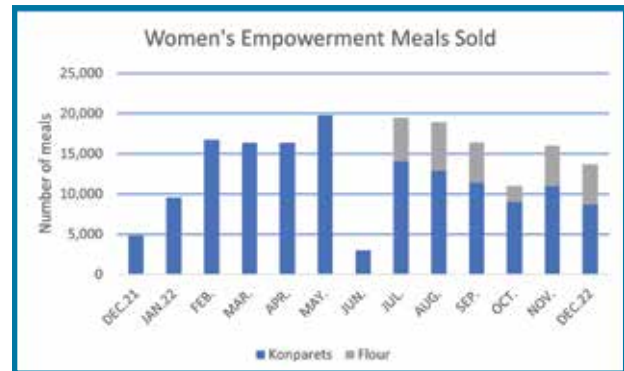
Other pockets of opportunity like this exist in communities throughout the country, for example in Southwest Haiti. Here, you will remember that *TFFF* partnered with Jeremie Breadfruit Flour and Nursery (JBFN) and Haitian Connection. We started a Women's Empowerment Program in December of 2021.

In the program, *TFFF* provided initial support in the form of free breadfruit products - konparets - for up to 30 women for 4 weeks, plus training material and guidance. Then, participants bought and sold on their own account.

We regularly analyzed the meticulous records kept by **Pierre-Moise Louis**, who led the program and

owns JBFN. From the chart below you'll see that the women grew their sales over time, doubling or tripling their usual income.

Following the success of the pilot program, we've added a new group of women every 3 months. After more than a year's experience, we conducted an independent review of our 109 participants. We got great feedback.



According to one participant, "My advice for the program is that we find the possibility to help a lot more communities find the riches that we have discovered here." Nearly ALL gave similar advice – to expand the program so other women can benefit! And their customers love the konparets!

You can find results and more information on our website under Programs/Agribusiness.

TFFF is working with additional NGOs to recreate the Women's Empowerment Program. We're happy to assist any others who have reliable in-country partners and the desire to help lift women out of poverty.



Pierre-Moise Louis of Jeremie Breadfruit Flour and Nursery (in green shirt) with vendors in the Women's Empowerment Program

Jamaica Visit

When Co-founders Mike and Mary McLaughlin travel on *TFFF* business, they have three goals in mind. They create and foster relationships with partners, observe and collect data for accountability to our donors, and spread their enthusiasm about our mission. Here's a recap of their whirlwind Jamaica trip last June.

First came the annual conference of the Society of Economic Botanists (SEB) at the University of West Indies' Mona campus, where approximately 250 experts in the field gathered. Mike presented his 2019-2020 breadfruit yield study. **Diane Ragone, PhD**, who has been working with *TFFF* for a decade, was honored as SEB's Ethnobotanist of the Year.

John Rashford, PhD, SEB's 2019 Ethnobotanist of the Year, then led a select group through the historic botanic gardens of Jamaica. At the Botanical Garden in Bath, parish of St. Thomas, they saw breadfruit trees that are direct descendants of the trees delivered in 1793 from Tahiti by Captain Bligh!



Mike helps plant a mango tree at Christel House with Patti Price, Executive Director of Buddhist Global Relief

The group also visited **Mr. Alfred McLean's** nursery. One of *TFFF's* major vendors, he propagates thousands of breadfruit tree saplings by root culture for local distribution.

In Kingston, they visited Christel House, a school to which we deliver food regularly. With them were **Joseph Johnson**, our Jamaica representative, as well as

Patti Price, Executive Director of Buddhist Global Relief, a generous supporter of *TFFF*, and **Margaret Bernal**, another friend of *TFFF*.

Next, Mary and Mike visited **Jean-Marie Spratt's** farm, a model of agroforestry, also called intercropping. Agroforests are resilient in the face of climate change, as different trees and plants thrive under different conditions. Mike geotagged her breadfruit trees for ongoing monitoring. They're already now five years old and 12-feet tall!



Jean-Marie Spratt's farm is a model of agroforestry

They stopped at Eltham Gardens, Joseph Johnson's nursery, and were treated to a master class by **Rakel**, one of Jamaica's most accomplished experts in plant grafting. Later, they visited **Karlene Johnson's** bakery, Something Country. She bakes and distributes her breadfruit bullas (biscuits) to schools on behalf of *TFFF*.

Mary visited Shavout Farms, our largest producer of breadfruit flour led by **Richard Harris**. They also met with **Ainsley Henry**, head of Jamaica's Forestry Department; **Rita Hilton**, leading exporter of fruit from Jamaica to the US and Canada; **Rosalea Hamilton**, head of Cariphil Alliance; and a group from Brooklyn's New Testament Temple Church of God.

Yet another highlight of the trip was their visit to Sydney Pagon STEM Academy, where work on a processing plant is underway. The plant features eight solar dryers designed by *TFFF*, and a Penagos mill supplied by *TFFF*. This project will not only help to feed students but also will generate revenue for the school from food sales.

Mary and Mike returned home filled with gratitude for *TFFF's* Jamaican partners – and for our supporters around the world who help us accomplish so much in that country and beyond.

TTFF Global Recognition

In 2022, *Trees That Feed Foundation's* important work was publicly lauded by organizations in Chicago, Jamaica, the Caribbean, and Tanzania.

Crain's Chicago Business named *TTFF* Co-Founders Mary and Mike McLaughlin "Notable Leaders in Sustainability!"

The honor is bestowed upon individuals in Chicagoland who have made a measurable environmental impact in the past year.

Mary and Mike were recognized for planting 61,381 trees in 2021. And not just any trees. They choose the types that capture the most carbon. A single breadfruit tree, for example, absorbs approximately 1.3 tons of carbon, effectively combatting climate change.



We heard from so many of you after this was announced. Thank you. Your encouragement means the world to us!

The Forestry Department of Jamaica recognized *Trees That Feed Foundation* at their annual conference, celebrating the work we do as their "Forest Hero – Non-Governmental Organization." You read about our work with them on page 5.

The Caribbean Philanthropic Alliance bestowed the "Woman & Earth Award" upon Mary McLaughlin. They said it was "in recognition and appreciation for her many valiant and selfless contributions toward sustainability, education, and empowering women in the Caribbean; serving as the Breadfruit Ambassador to the World; and planting fruit-bearing trees to feed people, create jobs, and benefit the environment."



(L to R) *The Forestry Department's* Jerome Smith presented a *Forest Hero* award to *TTFF* board member Nicola Barrett and representative Joseph Johnson in Jamaica

Women Against Poverty presented a Certificate of Appreciation to *Trees That Feed Foundation*. They said it was "in recognition of your contributions and continued work as a guardian in strengthening our families and communities." They continued, "Your dedicated efforts are greatly appreciated. We value what you have been doing for women in Tanzania. Thank you!"

TTFF passes on all these accolades to our supporters, who make the work possible.

TTFF partners are doing well too!



Puerto Rico's **Amasar, LLC**, founded by Marisol Villalobos and **Jesus Martes**, won a globally recognized SOFI Award from the Specialty Food Association. Their Breadfruit Pancake and Waffle Mix was named Best New Product in the Breakfast Category!



Todd Manley's Mutiny Island Vodka, based on St. Croix, was awarded a Gold Medal for the Vodka Class in the San Francisco World Spirits Competition for 2022! This is the first ever vodka distilled from breadfruit.

Barbados Visit

Now that COVID is mostly behind us, travel activities for *Trees That Feed* are happening again. In December Mike and Mary went to Barbados. One important aspect of this trip was ascertaining just how much breadfruit trees and awareness of their benefits has spread since *TTFF* began work there.



Some of the first breadfruit trees TTFF planted in Barbados, growing alongside the main highway

As they traveled around the island making visits, Mary and Mike saw what thousands of commuters see every day. Along the main north-south highway is a row of breadfruit trees, some of our first *TTFF* trees donated to Barbados. Thanks go to volunteer **Barney Gibbs** with the assistance of groups like the Boy Scouts, for the actual planting. Not only do these trees offer beauty, but they also represent the hope for and possibility of food security and a sustainable future.

Another welcome sight was a bus stop promoting fruit tree planting and *Trees That Feed*—a donation from Barney Gibbs. One more project powered by Barney is the Barbados Trailway. With construction underway, it is a multi-use heritage trail replacing the train tracks that once



A bus stop promoting our mission donated by Barney Gibbs of Adopt-a-Stop

carried sugar cane across the island. This trailway is a refuge for cyclists and other nature lovers who will be able to pick fruit as they go, thanks to the trees being planted along the trail.

Mary and Mike were excited to see that almost every restaurant they visited had at least one breadfruit item on its menu. One restaurant replaced its imported potato dishes with breadfruit. There were offerings like mashed breadfruit, chips, fries, and gnocchi. One chef likes breadfruit so much that he got a breadfruit tattoo! This change in culinary norms results in increased income for farmers growing breadfruit trees.

Another partner they visited was **Courtney Mills**, founder of Ulu Foods. She is an American mom living in Barbados who saw the health of her children improve when they ate more breadfruit. Some of the best crackers we have ever tasted come from her breadfruit factory. It is important to Courtney, as it is to us, that she purchases the breadfruit from local farmers. She plans to make her products available in the United States next summer.



Mary McLaughlin with new TTFF partners at Walkers Reserve

Mary and Mike also met with a new partner, Walkers Institute for Regenerative Research, Education and Design (WIRRED). Walkers Reserve includes a sand pit mine that is now being transformed into an ecological environmental center. Their work with regenerative agriculture is phenomenal, and we look forward to planting many trees with them!

As you've read on page 5, *TTFF* met with Barbados government leaders and discussed planting of thousands of fruit trees. Those plans will be finalized in 2023.

The impact of *TTFF's* work is immense, and it was a joy for Mary and Mike to see it firsthand and thank our partners in person.

Activity in Africa

TTFF started our work in the Caribbean and Central America but now we're doing much more. We're planting thousands of fruit trees in Africa. We can expand geographically because we have trustworthy, reliable partners in these locations. And, of course, because we have the support of generous friends.



In the central region of **Ghana**, 1,000 breadfruit trees bore plentiful fruit in December. Thanks is due to **Kwesi Aloysius Agwani, PhD**, and his team, as well the late **Mr. Robert Hammond** and his family's nonprofit organization, Breadfruit Line. In 2018, the group distributed the trees to 50 farmers, conducted a training seminar, and monitored trees over the years. The fruit was enjoyed by the farmers' families and sold at farmer's markets.

In Ghana's northern region, **Mary Johnson** of Regenerative Farms collaborated with the Centre for Sustainable Communities, giving more than thirty women and nine men an introduction to Syntropic Agroforestry. Participants each left with a breadfruit tree for their agroforestry plots.

TTFF is working with both Dr. Agwani and Ms. Johnson to bring more breadfruit to the country.



In **Uganda**, *TTFF* is developing a hub in Jinja. Our longtime partner **Nick DeKoning** is there, as is a new partner, **Henry Chu** of Bright Hope. Both also work with us in Kenya. Another new friend in Jinja, **Michael Keigwin** of Uganda Conservation Foundation, helped us plant 2,000 trees – mainly jackfruit, guava, and mango – in the national parks. Up next for him is breadfruit. *TTFF* has planted 500 trees with **Luuk Eikmans** of Coop Africa, again in Jinja. He's even building one of our Hybrid Solar Dehydrators, which you saw a photo of on page 2.

We saw the fruits of our partners' labor once more when we received photos from Uganda of freshly roasted breadfruit that came from a load of 750 trees distributed to farmers three years ago in Kenya, Tanzania, and Uganda. The success of this project was due to intricate planning and determined partners including Mr. DeKoning, as well as *TTFF* board member emeritus **Joseph Matara** and his team at The GRACE Project.



In **Kenya**, this year we planted 210 fruit trees with Bright Hope. They are located inland, while Mr. DeKoning and Mr. Matara are on the coast. In June, we sent 500 breadfruit trees to Mr. DeKoning in Kenya. Our schoolbook *Plant a Tree and Good Things Happen* is being reviewed by the Ministry of Education, for potential use in schools throughout the country.



In **Nigeria**, we engaged in new projects thanks to the support of **Doug Kinney**, a cherished friend and mentor of *TTFF* since our inception, and a member of his family. A new partner, **Omobola Eko**, a young climate activist and self-proclaimed "forestpreneur," who runs the Urban Tree Revival Institute, took the lead of the initiative in March. She distributed 200 Soursop and Bell Apple trees to 100 schools in Lagos State as part of an International Day of Forests. Following that, her group, with the support again of Mr. Kinney and family, helped students plant 300 breadfruit trees in their schoolyards.

We also have plans in 2023 in Tanzania, and requests for help continue to come in from Africa and around the world!

As you can see, *TTFF* partners continue to accumulate in Africa, as do the awareness and popularity of breadfruit. The more people know, the more trees they grow.

A student planting a breadfruit tree at her school in Nigeria



Training in syntropic agriculture, courtesy of Center for Sustainable Communities, Ghana

TFFF's Element of Education

Education is a vital part of our work at *Trees That Feed Foundation*. We teach children, parents, farmers, chefs, political and religious leaders, and the public, about the benefits of fruit trees.

For the Kids

Just as fruit trees grow and help our world, so do kids! We continue to get them started early with our educational activity book that teaches the value of fruit trees. It contains 40 pages of short lessons and images to color, with editions in nine languages! *TFFF* distributes them to schools and orphanages along with a teacher's guide. Four versions of *Plant a Tree and Good Things Happen* are available to you on Amazon! For each coloring book purchased through Amazon at \$6.00, we will send a book to a student in Jamaica or Haiti.



A student in Roatan, Honduras with the Spanish version of TFFF's educational activity book

For Farmers

Farming is challenging work, what with the vagaries of the weather, labor, markets and more. Farmers sometimes are hesitant to try new techniques that seem risky. However, we think it's important to introduce to farmers new ways of maximizing the benefits of fruit trees. *TFFF* held 20 seminars in 2022 with local partners in Haiti and Jamaica, led by trusted partners Pierre-Moise Louis, Joseph Johnson, **Charlotin Frednaud**, and **Karen Nicolas** of The Haiti Tree Project.

In Florida, **Ken Banks, PhD, PE**, a *TFFF* board member, held a grafting workshop in October for farmers visiting from Abaco in the Bahamas. They are still rebuilding after Hurricane Dorian hit their farms in 2019. Ken taught them how to start from scratch – or literally, from scions (branch cuttings ready to be grafted).

They returned to Abaco motivated to grow fruit trees and replenish their farms.

TFFF also offers print and video resources to farmers everywhere. We recently compiled a protocol for planting trees that details spacing for various scenarios, hole size, water, shade, and more. We have heard that farmers like to watch the short videos on their phones. We cover topics like pruning, marcotting, grafting and more.

For Professional (and Amateur) Chefs

TFFF gathers, experiments with, and shares recipes with breadfruit as an ingredient. We promote chefs who are already using breadfruit, whether fresh or flour, and we introduce it to those who aren't. We also partner with business owners who sell breadfruit products online or in stores. The more demand there is for breadfruit, the more trees are planted, and the more benefits are reaped.

For Governments

On page 5, you read about the governmental agencies with which we forged partnerships and built upon existing relationships in 2022. Working with governments allows us to amplify our reach. Leaders of many countries want to do something about food security, and when they hear about our solution, they jump at the chance to make real change.

For NGOs

TFFF loves to see other NGOs replicate our model. We often work behind-the-scenes as advisors. We don't care who gets the credit.

TreesThatFeed.org

We aim to make our website a valuable resource! We share everything we know. One thing you will find there is our collection of relevant academic papers pertaining to breadfruit, agroforestry and related fields. We want to share knowledge that may help adapt to climate change and economic forces. Our mission talks about feeding people, creating jobs, and benefiting the environment. Sometimes we forget to mention education. Education is integrated into all our work.

Dateline 2022

January	<ul style="list-style-type: none">– 150 breadfruit trees to Nigeria– 100 coloring books printed in Jamaica for Source Farm– Participants of first Women’s Empowerment Program in Haiti began to buy their own product– Mary and Mike visited Costa Rican partners
February	<ul style="list-style-type: none">– 500 breadfruit trees sent to Honduras– 3,800 breadfruit trees sent to Uganda between February and May– 4,774 breadfruit trees planted in Haiti between February and December
March	<ul style="list-style-type: none">– Mary honored by Caribbean Philanthropic Alliance as first recipient of Women & Earth Award– Tobago Reforestation and Watershed Rehabilitation Program launched
April	<ul style="list-style-type: none">– 216 breadfruit trees couriered to Guinea– Second cohort of Haiti’s Women’s Empowerment Program began– Coloring books shipped to Roatan, Honduras– 500 breadfruit trees couriered to Uganda by Kathy Johnson
May	<ul style="list-style-type: none">– Board meeting
June	<ul style="list-style-type: none">– Mike and Mary named Notable Leaders in Sustainability by <i>Crain’s</i>– Factory equipment shipped to UWEPO Limited in Uganda– 500 breadfruit trees to Kenya– Mary and Mike visited Jamaica, met with many of our partners (see page 7)
July	<ul style="list-style-type: none">– Construction of solar dehydrator begins at Cycling Out of Poverty in Uganda– Solar dryer and equipment sent to The Haiti Tree Project– 120 breadfruit trees sent to Puerto Rico– 576 breadfruit trees sent to Belize– Third cohort of Haiti’s Women’s Empowerment Program began
August	<ul style="list-style-type: none">– 500 breadfruit trees to Costa Rica– 720 breadfruit trees to the Bahamas– First contact with Caribbean governments
September	<ul style="list-style-type: none">– 1,120 coloring books printed in Barbados for WIRRED
October	<ul style="list-style-type: none">– Caribbean Tree Planting Project event chaired by Mary– Grafting workshop by Ken Banks in Florida for farmers from Abaco– Fourth cohort of Haiti’s Women’s Empowerment Program began– Board Meeting
November	<ul style="list-style-type: none">– Generator successfully trucked to Charlotin Frednaud in Haiti– 8,000 fruit trees donated to the Forestry Department of Jamaica– 2,500 coloring books supplied to the Forestry Department of Jamaica– 300 fruit trees planted with The Haiti Tree Project
December	<ul style="list-style-type: none">– TTFE named Forest Hero by Jamaica’s Forestry Department– Mike and Mary visited new and longstanding partners in Barbados (see page 9)
Every month	<ul style="list-style-type: none">– 25,204 breadfruit trees planted in Jamaica between January and December– Thousands of breadfruit-based meals delivered to schools and orphanages in Jamaica and Haiti– Training for tree care, breadfruit cooking, tree tracking, business practices and more

I think the work you are doing is the most important and valuable thing any human could be doing right now, between the climate crisis and the need for food.

JULIA STEELE, BALI

We have been very blessed to receive regularly your blessings through breadfruit flour, a very good way to increase vitamins and proteins in our children. Thanks ever so much for your support.

PASTOR DANIEL PAUL
NORD EST HAITI LUTHERAN MISSION,
HOUSE OF THE LAMBS OF GOD ORPHANAGE
OUANAMINTE, HAITI

Once upon a time, we only knew breadfruit for boiling and roasting. Thanks to you, we now have a choice of bullas made from breadfruit, which has amazed our children. Once again, thank you!

ROMAINE, FOOD VENDOR
WOMEN’S EMPOWERMENT PROGRAM
JAMAICA

It's Science: Breadfruit for the Future

According to a 2022 United Nations report, the world is moving further away from its goal of ending hunger, food insecurity and malnutrition. It said that as many as 828 million people were affected by hunger in 2021 – 46 million people more from a year earlier and 150 million more from 2019.

Here's the good news. We can adapt! A scientific study carried out by experts at Northwestern University suggests that breadfruit is capable of coming to the rescue. Among the authors is *Trees That Feed Foundation* board member Dr. Nyree Zerega.

"Breadfruit trees can live for decades and provide a large amount of fruits each year. In some cultures, there is a tradition to plant a breadfruit tree when a child is born to ensure the child will have food for the rest of their life," said Zerega, the director of the Program in Plant Biology and Conservation, which is a partnership between Northwestern and the Chicago Botanic Garden.

Just as parents plan for their children's future, so must governments. *TFFF* urges them to take heed of reports like these and make long-term plans accordingly. You read about our efforts to assist Caribbean governments along this pathway to progress on page 5.

We're also encouraging the use of intercropping, also known as agroforestry, specifically syntropic

agriculture. These methods can restore deforested land and combat climate change. One approach is called "chop-and-drop." As trees are pruned, the chopped "trash" falls on the ground and serves as mulch. Mulch is one ideal way to retain moisture in the soil to nourish trees and plants, instead of evaporating. The decaying vegetable matter also adds nutrition to the soil.

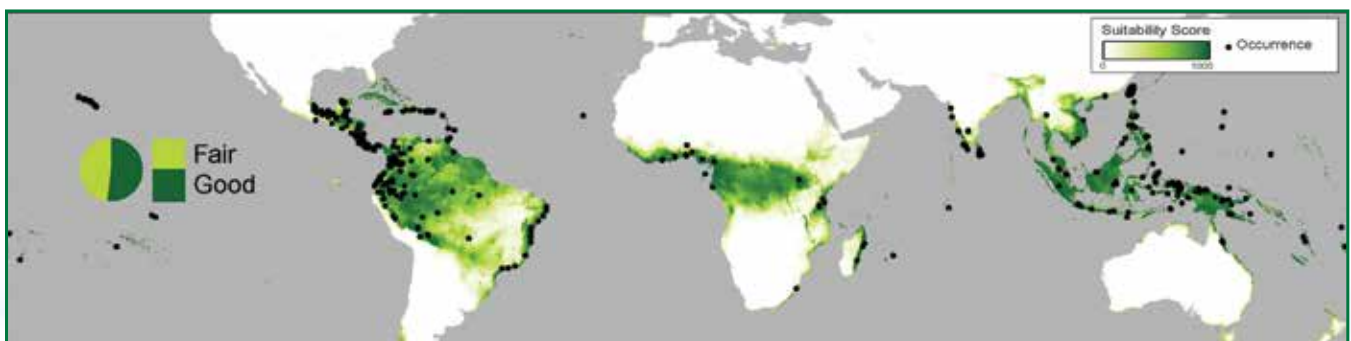
Many staple crops, like soy, corn, and rice, are grown in a monoculture setting. Monocultures tend to be climate specific not resilient, and are at risk of disease. Breadfruit can co-exist with other intercropped plants, for example providing shade for coffee plants. Beyond the Caribbean and Latin America, the Northwestern researchers pointed out Africa. (On page 10, we told you about our expansion there.)



Agroforestry or Intercropping: Growing breadfruit and bananas side by side

After Zerega and her co-authors studied the climate conditions required to cultivate breadfruit, they examined six model projections of how the climate will change in the future and where breadfruit trees will still grow. New areas will become suitable for breadfruit, while currently suitable areas are likely to shrink.

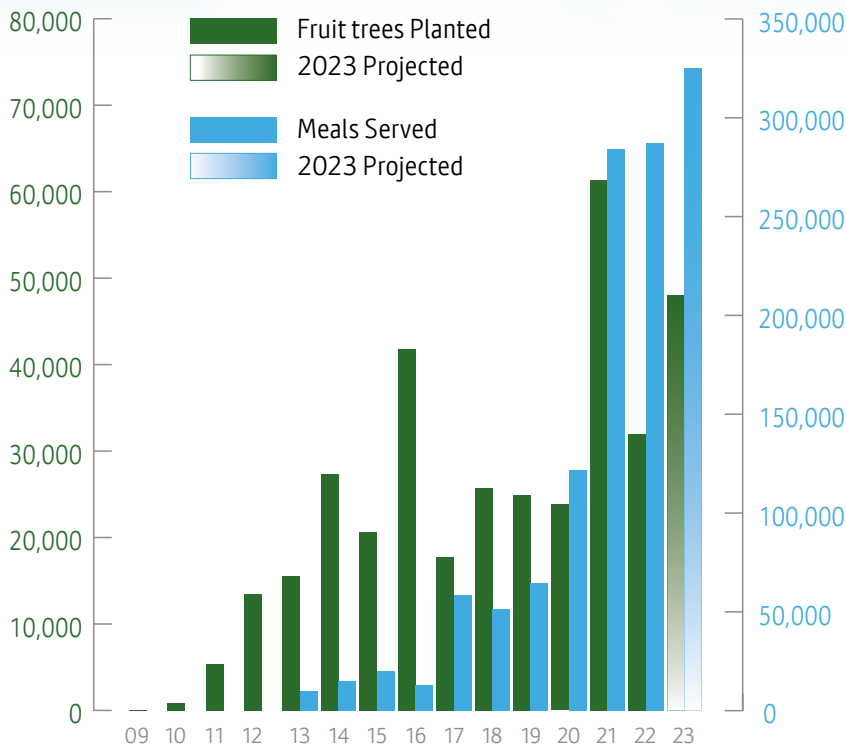
We follow the science. This study, *Potential of breadfruit cultivation to contribute to climate-resilient low latitude food systems*, was published by PLOS Climate on August 17, 2022. You can find this and other relevant academic papers at TreesThatFeed.org under Education.



Range of current breadfruit suitability in the global tropics and subtropics

Financials

Fruit Trees Planted and Meals Served (2023 Projected)



	2022	2021
Contributions	\$507,406	\$438,914
Fruit Trees	\$207,710	\$167,191
Equipment	\$59,491	\$20,565
Education and Training	\$14,669	\$984
Food Products	\$60,146	\$72,274
Administrative	\$44,155	\$27,750
Surplus (Deficit)	\$121,235	\$150,151
Expense Ratio	8.7%	6.3%
Net Assets	\$598,713	\$477,478

1. Financials are consistent with 2021 audit report. 2. Our policy is to hold net assets equal to approximately one year of contributions as a reserve against economic fluctuation.

Our supporters are our lifeblood. Here are just a few:

Ajana Foundation

Buddhist Global Relief

Ceres Trust

Change Happens Foundation

Doug and Liz Kinney

Dr. Scholl Foundation

James Williams Fox

Jonas Philanthropies

Linda Haas

Mary Vihon

Mrs. Cyrus B. Sweet, III

National Tropical Botanical Garden

OneAmerica Foundation

S. Michael and Mary McLaughlin

South Church

Susan Friedenberg

Terry McLaughlin

W.L. Lyons Brown Foundation

Also thanks to more than 250 individual donors not mentioned above. You all give us the support needed to carry out our mission.

Heartiest congratulations!
Your work is changing the world one day at a time. I am very proud to be a part of your support team.

JOSEPH JOHNSON

ELTHAM GARDENS PLANT NURSERY
ST. ANN, JAMAICA

Thank You!

To our donors, thank you! Just like the trees we plant, your money bears fruits, including self-reliance, dignity, prosperity, and hope. You are helping others change their own lives.

Thanks also to our volunteers and partner organizations in 20 countries. You are our boots on the ground and our cherished collaborators. The value of your passion and efforts cannot be quantified.

Without you, TTFF wouldn't exist. We could not alleviate hunger, boost employment, and benefit the environment.

With you, our work will continue to multiply. Please be part of our journey in 2023!

- Visit our website at www.treesthatfeed.org.
- Donate (See details below.)
- Sign up for our e-newsletter.
- Connect with us on Facebook, Instagram, and LinkedIn.
- Volunteer in one of our country locations.
- Tell your friends about us.
- Email us at info@treesthatfeed.org.
- Phone or WhatsApp us at +1.312.933.0241 or +1.312.315.0955.

Some specific examples of how we put your dollars to use are:

- **\$15** provides a fruit tree that can feed a family for decades. This includes the cost of high-quality fruit saplings, shipping and delivery, planting and care until the trees get established.
- **\$150** funds a cooking school in Haiti. Our Haitian supporters provide breadfruit flour and demonstrate creative recipes to encourage variety and quality in nutrition.
- **\$180** supplies coloring books, colored pencils, accessories, and a teacher's manual for young children in schoolrooms.
- **\$300** pays for 100 pounds of breadfruit flour, the basic ingredient in over 3,000 meals.
- **\$2,500** funds a hybrid solar dryer, an essential part of our Factory in a Box kit.

Of course we appreciate donations of any amount!

Donate online at: **www.treesthatfeed.org/donate**

Mail a check to: **Trees That Feed Foundation
1200 Hill Road, Winnetka, IL 60093**



Trees That Feed
welcomes **Nicola Barrett**
to our governing
Board of Directors.

We met Nicola over 20 years ago at a meeting of the Actuaries Club of New York. Mike McLaughlin, our co-founder, was immediately impressed with her energy, optimism, and engaging personality. She is from Jamaica but now lives in New Jersey with her husband and son in college.

Professionally trained as an actuary, Nicola has many years of experience building complex financial models. She also brings a sensitivity to the needs of those less fortunate, especially with her volunteer work in diversity, equity, and inclusion initiatives.

We also say goodbye to Joseph Matara, who resigned from our board to pursue other commitments. Joe has made significant contributions to our mission. We thank him and wish him well.

**Thanks to
all our donors.
Your support
makes our work
possible!**

Breadfruit ... Not just for roasting anymore!



More and more breadfruit products are coming available online and in local stores. Diverse breadfruit-based recipes are being served up by professional chefs, in home kitchens and cookbooks. Demand is growing across the world for this wonderful food!



Trees That Feed Foundation
Planting Fruit Trees to Feed People, Create Jobs and Benefit the Environment

Trees That Feed Foundation 1200 Hill Road, Winnetka, IL 60093 www.treesthatfeed.org

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