

The background of the cover features a wide-angle photograph of a tropical sunset. The sky is filled with warm orange and yellow hues, with scattered clouds catching the light. In the foreground, there's a dirt path or road that leads into a dense green landscape of trees and bushes. The overall atmosphere is peaceful and natural.

2020

SUSTAINABILITY REPORT



CONTENTS

EXECUTIVE SUMMARY	3
INTRODUCTION	4
ENVIRONMENTAL SUSTAINABILITY	6
SOCIAL SUSTAINABILITY	12
GOVERNANCE AND VALUES	18
THE FUTURE	22

USGS Topo Map. Agricultural land in St. Lucie County, Florida.



Pongamia orchard, FL. 2020. Paul Marcellini.



May 2020

MILLIONS OF TREES TO FEED BILLIONS OF PEOPLE.

Pongamia orchard, Oahu, HI. 2016. Eric Sterman.

Dear Friends,

I've spent most of my career in agribusiness. Ten years ago, I founded TerViva to expand the pongamia tree industry from its Ayurvedic, reforestation history into mainstream agriculture.

Starting in 2012, I began to work with Florida citrus growers to determine if pongamia could become an alternative commercial crop for the half-million citrus acres that had been abandoned due to citrus greening. After six years of trial plantings, we successfully demonstrated to leading citrus growers that pongamia grows incredibly well on their land and that the beans can be processed into organic, non-GMO protein and vegetable oil.

We are now expanding to thousands of acres of plantings in Florida and sourcing certified organic and fair trade pongamia beans from existing reforestation projects in India. In 2020, TerViva was named a Thrive Top 50 Agriculture Startup and was featured in Forwarding Food's Foodtech 500.

I love working with farmers. I've been privileged in the last decade to plant test acreage of pongamia with farmer communities in Arizona, California, Hawaii, New Mexico, and Texas, before focusing my attention on the distressed citrus growing regions of Florida. I've traveled across countless nameless roads in India and Australia, where the pongamia tree is native, talking to families who have used the pongamia tree's beans for medicinal purposes for generations. As an agtech CEO, I've done the normal things: raise four rounds of equity capital, grow our team to 80 people, and participate in interviews with The Wall Street Journal, Forbes, Food Navigator and more. My heart and mind always remain with farmers. They are the stewards of our food system and, given the tools and technologies, they will continue to responsibly provide for our expanding food needs.

With our pongamia food and genetics platform, we provide struggling farmers the ability to deliver food ingredients that are healthy and nutritious, good for the environment and socially responsible. As we mark our 10th anniversary as a company, I'm excited for you to learn about how we make a difference, working hand in hand with our farming partners.

Sincerely,



Naveen Sikka
Founder & CEO



Andhra Pradesh, India. 2020. Ian Schiller



WE COMMIT TO PRODUCE A CARBON-NEGATIVE INGREDIENT IN THE NEXT TWO YEARS.



Pongamia oil and flour, 2020.
Nathan Chan.



EXECUTIVE SUMMARY

Taking care of our planet has always been important to us. To mark our 10th anniversary, this Sustainability Report highlights our priorities, goals and our partnership with stakeholders who work with us to achieve a more sustainable future.

We are a food ingredients company that produces plant protein and vegetable oil from an ancient Asian legume tree called pongamia. The beans from the pongamia tree contain plant protein and vegetable oil that are nutritious and functionally comparable or better than alternatives such as soy, palm and yellow pea. Our pongamia plant protein and vegetable oil will be carbon-negative, meaning that our pongamia trees sequester more carbon than the beans will produce in emissions from field to plate.

Ten years ago, we set out with a bold vision: to commercialize a new tree crop that could help address how we feed and power the planet. In the years since, we laid the groundwork to prove the viability of pongamia trees as a platform to produce carbon-negative protein and oil. Our mission today is as bold as ever: plant millions of trees to feed billions of people.

For thousands of years, pongamia has been used for Ayurvedic, medicinal, energy and farming applications. After a decade of research and innovation, we became the first company to cultivate pongamia in a modern agricultural system and make pongamia's protein and oil yields accessible for food ingredients. We currently work with farmers who are reforesting distressed or degraded agriculture land with pongamia trees in Florida and India, where the trees produce five to ten times more beans per acre than in-region soybean acres.

As we produce the first-ever pongamia food ingredients at-scale, we will differentiate ourselves not only by the novelty, relevance, and quality of our products, but also by the superior sustainability of pongamia and our supply chain operations. Pongamia is an ideal source of sustainable plant protein and oil to meet the resource challenges and climate change impacts that will define the decades ahead. Pongamia trees are resilient, contribute to soil health, and grow sustainably on degraded farmland. Our innovations and patents make it possible to select for bean-producing trees that are high-yield and to access the nutritious protein and oil found in those beans. Our pongamia bean supply

chain is world-class in its low-carbon intensity and cost competitiveness compared to oilseed crops most commonly used today.

Pongamia protein, flour, and oil will soon be found in a diverse assortment of consumer packaged goods categories ranging from ready-to-drink beverages, baked goods, snacks, sauces, and plant-based alternatives that meet the demands of consumers and food producers that value sustainability. Sustainability has been at the core of our work since the very beginning. We measure the impact and value of our sustainability in three areas:

1. Environmental Sustainability

Conventional agriculture contributes a quarter of all global greenhouse gas emissions. Our regenerative agriculture practices flip this dynamic.

We commit to produce a carbon-negative food ingredient in the next two years. We will conduct life cycle assessments of all products starting with food ingredients to ensure the highest standards of sustainability.

2. Social Sustainability

We create long-term social value and benefits for all of our stakeholders around the world. At the core of our social sustainability strategy is the idea that the economic value we create is shared and equitable. We bound pay for our highest and lowest-paid employees at a ratio of 15:1.

We guarantee offtake for our farmers at fair prices for their harvests and commit to paying our Indian smallholder farmers at least a 10% premium over government-mandated prices.

3. Corporate Governance

Two principles that help guide us to achieve a resilient business are diversity and transparency.

Our company builds resilience through its diverse composition: from our people and partners through to our trees, growing geographies and products. Open collaboration and transparency enables us and our stakeholders to share value and hold one another responsible for the commitments we make.

INTRODUCTION

Ten years ago, we set out to grow the world's most sustainable, carbon-negative source of vegetable oil and plant protein.

We planted and cultivated acres of pongamia for the first time, learned how to grow and harvest it as a tree crop, and developed nutritious food ingredients from its abundant yields.

Today, we are readying the world's first-ever pongamia food ingredients to enter the market.



***First ever
pongamia food
ingredients.***

Our innovations have earned the highest recognitions and awards from across the agriculture, food and technology sectors, but it is our next chapter that will have the greatest impact.

Our mission is to plant millions of trees to feed billions of people. We expect unprecedented challenges due to climate change that will threaten the world's ability to sustainably grow food and responsibly feed the planet. But together with our core partners in food and agriculture, we have the opportunity to ensure a more sustainable future.

Sustainability typically focuses on accounting for and mitigating the negative externalities created by people. At TerViva, we go far beyond that. Sustainability is fundamentally about creating long-term, durable value for all of our stakeholders. That is why we collaborate openly to create shared, equitable value and address environmental, economic, and social challenges that affect all of us.

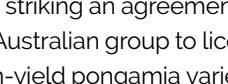
2018

TerViva's scientists demonstrate that pongamia beans can be processed at commercial scale into edible grade protein products for both humans and animals.



2010

After striking an agreement with an Australian group to license high-yield pongamia varieties, TerViva incorporated in May 2010. Using tree genetics from Australia, TerViva plants test acreage of pongamia in California, Texas, Arizona and New Mexico over the next two years.



2013

TerViva wins a \$1 million grant from the Elemental Excelerator and the Office of Naval Research to plant a commercial scale pongamia orchard in Hawaii.



2016

In Florida, TerViva demonstrates that pongamia trees can be mechanically harvested using nut crop shaking equipment from California.

2019

TerViva develops the first-ever method to refine crude pongamia oil into food-grade vegetable oil. TerViva closes a \$20M Series D equity financing and scales up tree nursery operations to provide Florida growers with 250,000 trees per year.



2012

TerViva signs two agreements in Florida to plant test acres with citrus growers who seek an alternative crop. Over the next few years, several additional Florida growers sign test planting agreements for 100 total acres.



2014

In Florida and Hawaii, the test acreage starts to flower and produce beans.

2017

Four citrus growers in Florida sign contracts to plant 1,000 total acres from 2018-2020. TerViva closes an \$11M Series C equity financing.

ENVIRONMENTAL SUSTAINABILITY

Pongamia orchard at sunset, FL. 2020. Paul Marcellini.



The 21st century will be largely defined by how the world responds to climate change.

We face an estimated increase of 2°C across the globe and are failing to meaningfully shrink our carbon footprint. A growing, more prosperous human population places an increased burden on the natural world to produce more energy and food, often at the expense of our planet.

“Seeing the dramatic decline of citrus due to citrus greening made it clear to me and Evans Properties that we needed to find an alternative crop. Pongamia has unique advantages that make it more sustainable — environmentally, economically, and socially — than any other crop we’ve tried in Florida.”

Ron Edwards

Chairman, Board of Directors, TerViva
CEO, Evans Properties



Formerly COO of Tropicana, Edwards has founded multiple successful food and beverage businesses, including SoBe beverages, which was sold to Pepsico in 2000, and Blue Buffalo Company, which was recently sold to General Mills.

Global food production contributes a quarter of all greenhouse gas (GHG) emissions¹. As human population growth continues and overall wealth increases, our reliance on climate-disruptive livestock, soybean, and palm oil is poised to increase significantly. Even if we can squeeze marginal gains out of existing farmland, adopt best agriculture practices, and shift diets to less carbon-intensive alternatives, conventional agriculture risks adding substantial greenhouse gases through its inputs, cultivation, harvest, and transport.

Our regenerative agriculture practices flip this dynamic. Pongamia trees are a permanent crop that can maximize and restore the productivity of degraded agricultural lands. Pongamia's natural adaptations to a harsh, monsoonal climate – pest resistance, drought and salt tolerance, and nitrogen fixation – reduce the need for inputs like pesticides and fertilizers that can negatively impact water quality and biodiversity. Embracing pongamia as a new food source can reverse some of humanity's most harmful environmental impacts by avoiding deforestation, sequestering carbon, and producing cleaner water, healthier soils and more biodiverse ecosystems. Pongamia can feed the world and take care of the planet at the same time.

CARBON NEGATIVE FOOD

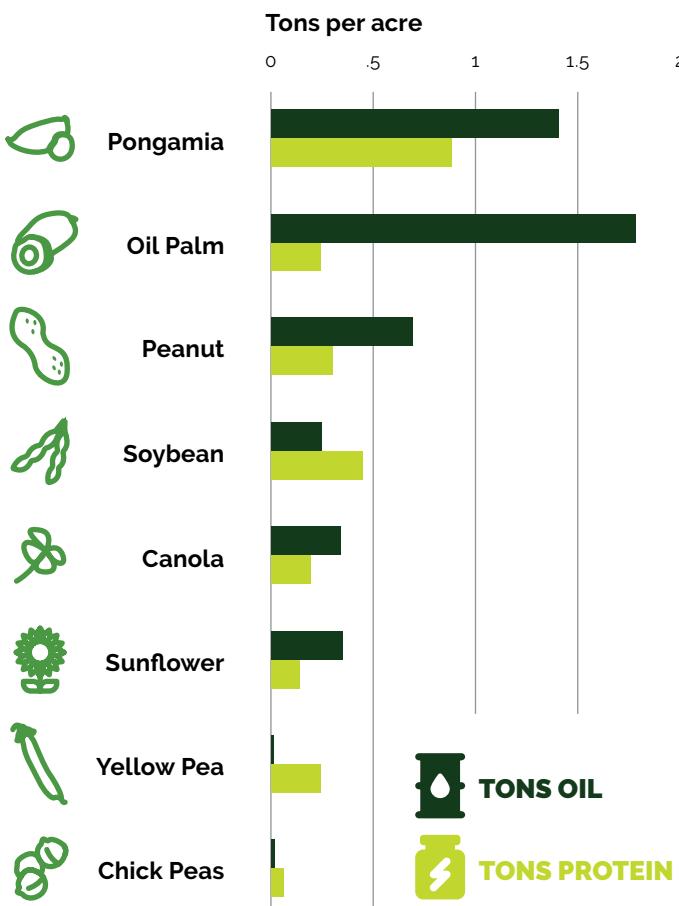
Producing carbon-negative food — food that sequesters more carbon than is emitted during production — is a difficult task, but we firmly believe that we can accomplish it if we continue to harness the unique properties of the pongamia tree, implement regenerative agricultural practices, and improve production on degraded agricultural lands.

Our pongamia trees are 3-5x more productive than soybeans when grown with regenerative practices, even on degraded agricultural lands. Over the course of its 30-year lifetime, a single acre of a pongamia orchard can sequester up to 115 tons of carbon per acre².

Growers can easily and cheaply adopt sustainable and regenerative practices because of pongamia's natural pest resistance and nitrogen fixation. Pongamia naturally sequesters carbon above and belowground over its lifetime. It is a permanent crop and thus reduces soil disturbance to further increase both soil carbon and health.

Land use is one of the biggest issues that agriculture faces. Deforestation is a major contributor to agriculture's carbon footprint and also results in the loss of biodiversity. Pongamia produces protein and oil that is substitutable for soybean and oil palm, crops often linked to deforestation. By growing pongamia only on degraded agricultural land, we offer a more sustainable, deforestation-free alternative.

COMPARISON OF OIL AND PROTEIN YIELDS



Source: FAOSTAT, RSPO

REGENERATIVE AGRICULTURE IS...



a system of growing food that reverses climate change by revitalizing natural ecosystems and agricultural lands.

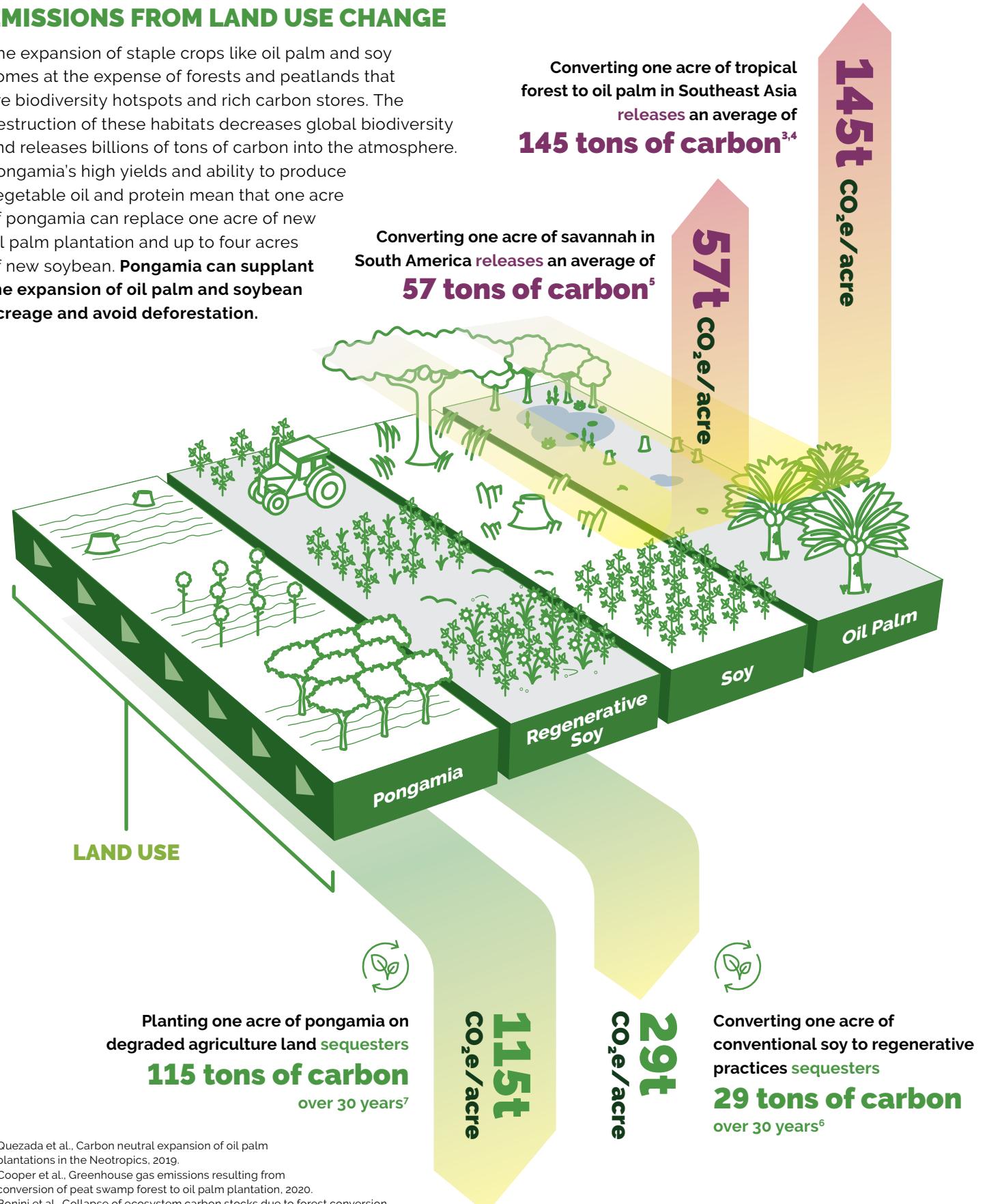
Regenerative agriculture practices improve water quality and soil biodiversity, which leads to increased biodiversity in fields and adjacent landscapes, and healthy soils capable of producing high quality, nutrient dense food.

PONGAMIA IS NATURALLY



EMISSIONS FROM LAND USE CHANGE

The expansion of staple crops like oil palm and soy comes at the expense of forests and peatlands that are biodiversity hotspots and rich carbon stores. The destruction of these habitats decreases global biodiversity and releases billions of tons of carbon into the atmosphere. Pongamia's high yields and ability to produce vegetable oil and protein mean that one acre of pongamia can replace one acre of new oil palm plantation and up to four acres of new soybean. Pongamia can supplant the expansion of oil palm and soybean acreage and avoid deforestation.



³. Quezada et al., Carbon neutral expansion of oil palm plantations in the Neotropics, 2019.

⁴. Cooper et al., Greenhouse gas emissions resulting from conversion of peat swamp forest to oil palm plantation, 2020.

⁵. Bonini et al., Collapse of ecosystem carbon stocks due to forest conversion to soybean plantations at the Amazon-Cerrado transition, 2018.

⁶. Rodale Institute, Regenerative Organic Agriculture and Climate Change, 2014.

⁷. CarbonCo, 2019.

LIFE CYCLE ASSESSMENTS

A key part of our commitment to creating carbon-negative food is conducting life cycle assessments of all the products we produce to understand the impacts and carbon intensity of our operations. We have already completed an LCA for pongamia based renewable diesel which has a much lower carbon intensity than other feedstocks like soy and corn. Given this, we expect that the carbon intensity of our pongamia-based food products will be much lower than crops like soy, palm, canola and others as we finalize our manufacturing processes.



SUSTAINABLE DEVELOPMENT GOALS **15 LIFE ON LAND**

Pongamia produces more food per acre than commonly used oilseed crops to feed the world's rising population. Increasing the production of pongamia on degraded agriculture lands can prevent deforestation and habitat destruction in biodiversity hotspots like the rainforests of Southeast Asia and the Cerrado of South America. Protecting natural forest resources and reforesting degraded land with productive food staples contribute substantially to SDG 15, Life on Land.

RENEWABLE DIESEL FEEDSTOCK CASE STUDY

PONGAMIA TREES



5-7t
CO₂e/acre/yr

FARMING



12.9g
CO₂e/MJ

TRANSPORT



1g
CO₂e/MJ

PROCESSING



1.4g
CO₂e/MJ

MANUFACTURING



5.7g
CO₂e/MJ

Renewable Diesel Feedstock

Used Cooking Oil

19 - 24

Pongamia Oil

21

Corn Oil

34

Tallow

36

Soy Oil

57

Carbon Intensity CO₂e/MJ

Source: 3rd Party GREET Model.

GOALS & COMMITMENTS

□ Conduct life cycle assessments of all products

□ Commit to producing a carbon-negative food ingredient by 2022

SOCIAL SUSTAINABILITY



Planting pongamia orchard, FL, 2020. Paul Marcellini.

The economic value we create is shared and equitable.

Our positive impacts go beyond environmental sustainability. We commit to create long-term social value and benefits for all of our stakeholders.

OUR EMPLOYEES

Shared and equitable value starts with employee compensation: every TerViva employee in our offices, laboratories, nurseries, fields and processing facilities, regardless of title or department, has full health benefits, equity in the company, paid time off, access to retirement savings, and a living wage. We raise the standards for compensation and benefits of agricultural workers and provide tools for empowerment in our company and society. To measure our commitment to equitable compensation in our organization we commit to maintaining a wage ratio of 15:1, so that the ratio of highest salary to lowest salary will not exceed a ratio of fifteen-to-one. We lead by example and cultivate a culture of inclusivity, collegiality, curiosity and ownership.



OUR GROWERS

In Florida, we partner with growers who have local experience growing citrus that span generations of families and hard work. Florida citrus is a \$9 billion dollar industry, but it has been strongly impacted by disease and unprecedented storms in the last 15 years that have made growing citrus increasingly unprofitable. Citrus canker, first discovered in Florida in 1910, has been a problem for growers since the mid-1990's, but the disease spread beyond any ability to be controlled in 2005 when Florida was hit by 3 hurricanes. More recently, a new disease, citrus greening, has spread throughout the state killing off hundreds of thousands of acres and driving up production costs.

At its peak, there were nearly 900,000 acres of citrus in the state — today there is less than half of that, with more groves being taken out of production every year. In the last 15 years, the industry lost 34,000 jobs and shuttered over 70% of its fruit packing and juice factories^{8,9}.

The void left behind by the contraction of the citrus industry has given us the unique opportunity to work with a diverse and sophisticated set of agricultural professionals, from growers to nursery managers to researchers, towards a common goal: revitalize Florida's agricultural industry. We are incredibly fortunate and grateful to have the opportunity to work with our Florida partners who bring invaluable expertise and breadth of knowledge to our mission.

Our first cohort of growers took the first step towards forming a new agricultural industry that can help replace some of the economic activity lost from citrus. When we bring fallow land back into production, it provides direct economic benefits to growers at more than a thousand dollars per acre per year at peak production and builds a new foundation for the next generation of Florida growers.

We ensure our growers get fair compensation for their work beyond the payment for the crop harvested from their fields. Cultivating pongamia has net positive effects through ecosystem services resulting in carbon sequestration, cleaner water, and more biodiverse and resilient habitats. Our commitment extends to developing markets for growers to receive compensation for these ecosystem services too.

As we grow the pongamia industry in Florida, those economic benefits expand beyond the grower as new nurseries are built to grow trees, and harvesting and processing facilities are developed to offtake and process pongamia into a suite of products.

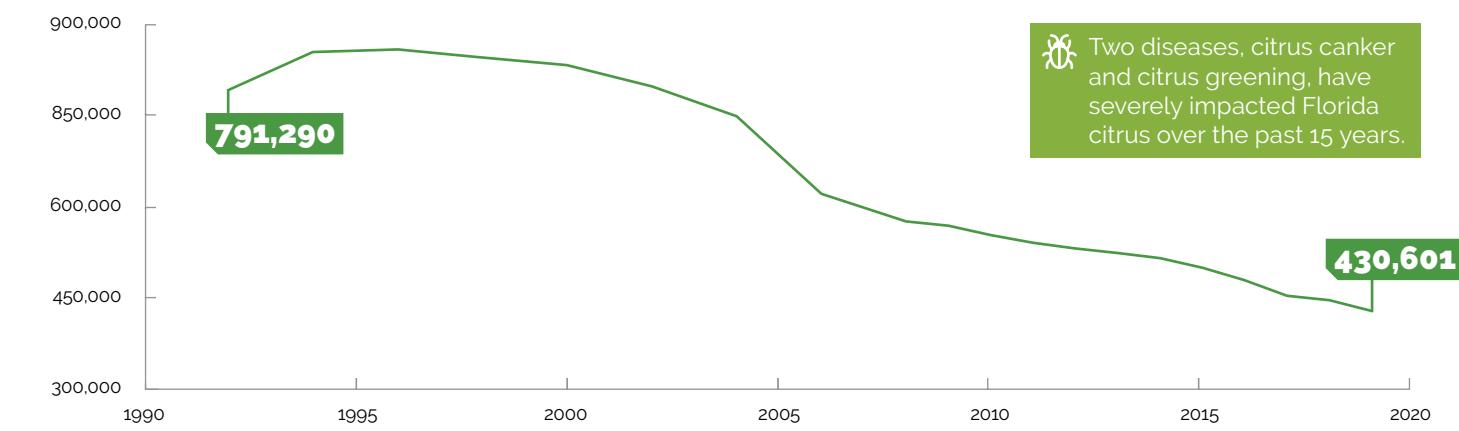
“Farmers, by their nature, are all-in on sustainability issues. The opportunity to reforest Florida’s once-enormous citrus industry with a sustainable, alternative tree is important. We have to get trees in the ground.”

Dan Richey
President & CEO,
Riverfront Packing Company

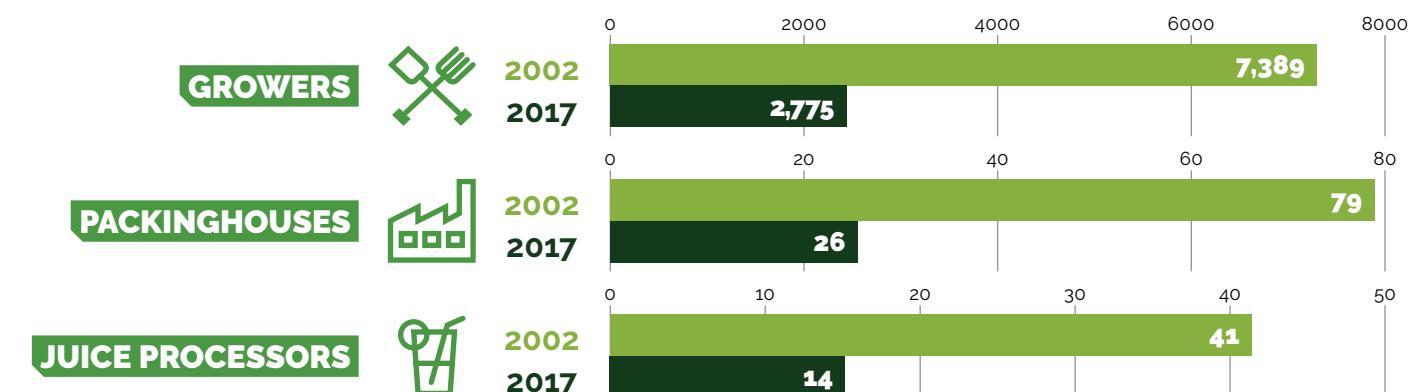


Richey began working for his family's packinghouse shortly after he graduated from college and has since served as chairman of the Florida Citrus Commission, president of the Florida Citrus Packers, chairman and president of the Indian River Citrus League and secretary-treasurer of the Citrus Administrative Committee.

FLORIDA CITRUS ACREAGE (1992-2019)



Two diseases, citrus canker and citrus greening, have severely impacted Florida citrus over the past 15 years.



8 USDA-NASS, Census of agriculture, 2017.

9. Singerman et al., The profitability of new citrus plantings in Florida in the era of HLB, 2018



OUR GLOBAL SUPPLY CHAIN

TerViva's growth will be largely concentrated in the subtropics, close to much of the world's forecasted population growth and developing countries. Poorer communities in these countries, and particularly smallholder farmers, are disproportionately impacted by the effects of climate change. We are committed to developing and providing real value to the communities we work in by promoting fair labor practices, paying a living wage, helping to create social mobility, and engaging communities to build resilient economies through sustainable agricultural practices and diversification of incomes.

We are partnering with rural and tribal communities in India to build the world's first wild harvest organic and Fair for Life pongamia supply chain. India is Pongamia's native home and has a long history of wild-harvest and use by rural communities as a source of income. The Indian government has worked to support the development of these communities by mandating a minimum floor price for goods like pongamia. Unfortunately, these prices are not strictly enforced and rural communities are often exploited and paid 40% below the mandated price and at times not compensated at all.

To empower communities in India, we work with them to develop harvesting practices that abide by organic and fair-trade certifications so that sustainable downstream products secure a premium price. We pay them a premium above the government-mandated price because these communities deserve to be fairly compensated for the work they do.

"Street and village trees in India produce millions of tons of pongamia beans annually that currently go unused. We partner with local farmers to establish a secure, socially responsible and transparent supply chain of pongamia beans consistent with TerViva's values."

Jayadev Panda
Commercialization Manager,
TerViva



Panda has nearly three decades experience developing agroforestry models for procurement of minor and major forest produces throughout India.

SUSTAINABLE DEVELOPMENT GOALS **2 ZERO HUNGER**

In India, millions of pongamia trees grow wild and are harvested for low-value, non-food uses. Our breakthrough to turn inedible, raw pongamia beans into healthy, edible protein and oil gives us the opportunity to bring to market a brand new, sustainable, and abundant supply chain of plant protein and vegetable oil to support UN SDG 2, Zero Hunger.

GOALS & COMMITMENTS

- **Maintain a wage ratio of 15:1**
- **Pay Indian smallholders at least 10% premium over the government-mandated price**

GOVERNANCE AND VALUES

Pongamia nursery, FL. 2019. TerViva.



Trust and traceability in our food supply chains is paramount in the wake of the coronavirus pandemic.

Responsible governance calls for the delivery of healthy, sustainable foods at a fair price. Pongamia's environmental durability and abundant yields of nutritious beans make it uniquely suited to meet these needs.

Whether it's the climate — a once in a century drought, an unexpected freeze, a devastating hurricane — or a global pandemic that upends the way we live our daily lives, we persist and thrive because we are resilient. A company builds resilience through its operational transparency and diverse makeup. Starting with our board of directors and investors and through to our field experts, we are proud to have a diverse team of professionals who share in the company's accomplishments and goals.



Governance focuses on the mechanisms and processes that govern how an organization is controlled and operated, and how decisions are made, particularly with respect to fiduciary duties. Further, it provides a set of rules and policies that create a framework to operate the business responsibly with respect to all stakeholders. We commit to robust corporate governance as a critical part of our sustainability platform.

Our commitment to diversity starts with our workforce — we cultivate a group of individuals from diverse backgrounds with diverse thoughts and opinions because it results in better decision making and better performance. Our commitment to diversity extends beyond our workforce to touch all parts of our business. Working across three continents with a diverse set of products gives us optionality, redundancy, and resilience in the value we can create and capture. Pongamia's heterogeneous and diverse genetics make domestication challenging, but also provide an opportunity to breed and develop new cultivars that are well-suited for ever-changing environmental and social needs. All of this diversity found throughout our company leads to increased value, durability, and resilience.

We thrive through open, honest connection. This connection supports a virtuous cycle of success, with our partners, and among and between all of our stakeholders. We are building a fully traceable global supply chain for all of our operations in order to be transparent with our customers and partners

about where our products come from and the impacts, positive and negative, that they have. Full transparency builds trust between us and our partners, but it also gives us more awareness and visibility into our supply chain allowing us to recognize and respond more quickly to potential problems. Transparency enables us and our stakeholders to hold one another responsible for the commitments we make.

"A sustainable business requires resilience. In the ten years that we have existed, we have become deeply aware that we cannot always control the things that happen to us, but we can control how we respond."

Maggie Kavalaris
Founder, Chief Legal Officer &
Board Member, TerViva



Kavalaris has been a corporate and intellectual property attorney for the past 30 years across a variety of venture financings, mergers and acquisitions and public offerings.

THE VALUES THAT GUIDE OUR ORGANIZATION



DIVERSITY



TRANSPARENCY

GOALS & COMMITMENTS

- Create a policy framework to measure and set targets for organizational diversity by 2021
- 100% of pongamia beans procured fully traceable back to origin by 2022

THE FUTURE

COVID-19 has accelerated an already burgeoning trend of consumer awareness on the traceability and sustainability of the food we grow and feed our families.

We are moving quickly to commercialize the first pongamia-based food products and to scale our supply chain to meet current and future market demands.



TerViva will launch the world's first carbon-negative protein and oil ingredients at scale.

During the past 10 years, TerViva has transformed from an eight person team to an 80-person company, with leading experts in agronomy, horticulture, plant science, food technology and nutrition. To date, we have planted over 100,000 pongamia trees. In the next year we will more than double that, and working with our local partners and growers over the next 10 years, we expect to plant millions more.

The next phase of our work will see the launch of the world's first carbon-negative protein and oil ingredients at scale. To achieve this, we are building a traceable supply chain of wild-harvest, organic pongamia beans beginning in Andhra Pradesh and Odisha in India, where pongamia trees are widespread. As we develop our India supply chain, we will employ a greater number of local farmers, family businesses and agricultural cooperatives to create a thriving pongamia economy that will benefit the region.

We look forward to introducing pongamia-based foods into the market. At the same time, we look to new areas of growth, such as Queensland, Australia, where we have already begun to work with landowners and a government supportive of new sources of sustainable agriculture to meet their resource needs.

We are proud of what we have achieved during our first ten years and are grateful to everyone who has made our success possible. We welcome new partners who share our values to join us as we work to transform how we feed the world.

We look forward to working together to ensure a better future for our planet.

2025 MILESTONES



50,000 tons of carbon sequestered



25,000 acres of pongamia planted



30,000 tons of Fair for Life, organic pongamia sourced



\$100,000,000 in product sales



Produce carbon negative plant protein and vegetable oil products



New pongamia orchard, FL. 2020. Paul Marcellini.



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