



**ethos**  
FARM  
PROJECT  
LONG VALLEY, NJ

The Many,  
Many Children  
of Ethos Farm Project

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Not many years ago, epidemics of chronic disease nearly brought the American healthcare system and the nation to its knees. There was such a high prevalence of chronic disease in America, that by the time the 2020-2022 COVID-19 Pandemic came and went, over a million had been lost and the economy - in shambles. But the sickness was not just confined to the people and economy. The planet was sick, too...there were mass coral reef die-offs, melting polar ice caps, forests set ablaze, pesticides raining down from the sky and mounting species extinctions. In 2019, the EAT Lancet Commission Report - in the first comprehensive analysis of its kind, identified the human appetite for the western diet (also known as the Standard

American Diet, or SAD) as a primary cause of all this misery. In essence, man had poisoned himself with food, and in the process, turned Mother Earth into a giant industrialized food factory.

From this crucible of despair rose the Ethos Farm Project (EFP), founded in 2011 on an ancient preserved New Jersey farm by physician Ron Weiss. "I was afraid that by the time our children grew to be my age, the planet would no longer be livable, and there would be nothing for them to eat." At the same time, Dr. Weiss had become increasingly frustrated professionally. As a primary care doctor, he saw the growing toll chronic diseases like diabetes, cancer, and heart disease were having on his patients. "I knew all this suffering was coming from the food they were eating. And the food was coming from a corrupted food system that had no regard for the health of human beings or the planet." The good doctor, now 88 years old, was 49 when he sold off his busy medical practice and all his assets. He traded them in for the broken-down, 342 acre farm in Long Valley, NJ, much to the consternation of his family, community and colleagues. His reply .... "New Jersey is a forgotten resource with the richest soil in the country. It is the perfect place to regenerate the soil, create a workable organic farm based healthcare model and build as a blueprint for others to follow and begin to heal healthcare of people and the planet.

EFP's work was guided by the Hippocratic teaching that food is the most powerful instrument of healing. In implementing the EAT Lancet Commission's recommendations, EFP played a foundational role in regenerating the state of NJ, transforming it into the healthiest, most vibrant state in America. But this healing effect did not stop at the Delaware River. EFP's Collaboration with [like-minded visionaries in the Mid-Atlantic region \(see collaborative proposal in attachment\)](#), helped to create vibrant regenerative food systems that took root on the east coast, spread across the nation, and the world. This is how it happened...

2020 was a watershed year in NJ's transformation. A new American president was elected to office who heard the earth's screams for help and appointed his new female vice president as planetary steward. Her top priority? Protect the mothership. "Before we took office I was researching environmental issues when I came across the [Rights of Nature model](#). It proposed that human rights are subsidiary to the rights of nature, and economic rights are subsidiary to the rights of human beings. I was so inspired when I read that - everything suddenly clicked for me. I went to my desk, took a pencil and piece of paper and wrote this down: "All of us have as our primary stakeholder, the environment and its natural systems upon which all life depends." I knew exactly what I had to do," said the Vice-President. She continued, "On inauguration day, when I took the oath of office for vice president, I placed my hand on my family bible, and I heard the ghost of Rachel Carson whisper in my ear...I never looked back." With her agenda in hand and [bipartisan support](#) in Congress, she dedicated herself to [re-strengthening](#) Carson's

legacy - the EPA. The [Toxic Substance Control Act \(TSCA\)](#) was expanded, tightly regulating the production of all chemicals suspected of being hazardous to human and environmental health. As it turned out, she found her wingman in a NJ Senator. It was discovered that NJ's drinking water was [highly contaminated](#) with PFAS, an endocrine-disrupting, carcinogenic industrial "forever" pollutant. PFAS had infiltrated the food supply too, especially [animal-sourced foods](#). Even though PFAS had been [linked](#) to the development of obesity, diabetes, cancer and infertility, it and many other toxic agents remained unregulated by the EPA. "Although our state has suffered its share of seemingly intractable environmental challenges, New Jerseyans have always overcome them with relentless determination. With that same Jersey grit, I led the charge with the VP to reinvigorate the EPA, regulate these terrible poisons and clean up our environment. I consider empowering the EPA and the [2019 Climate Stewardship Act](#), the greatest achievements of my political career," the NJ Senator proudly stated. Now 81, and retired from the senate since 2032, the former Senator remains an advocate for the broad adoption of plant-based diets; he has worked tirelessly with NJ's underserved urban communities, and has been a major force in inspiring New Jerseyans, Americans and people the world over, to shift their eating habits. "I realized I could have a more profound impact on people's lives by just getting them to change what was on the end of their forks, more than I could as a senator, or even president." The Senator, who has been eating a plant-based diet since his college football days, said he feels just as good today at 81 as he did at 21, "I love the work I do today, and intend to do it for as many years as God Allows me."

As the VP retooled the EPA, she also led the United States' effort to rejoin the Paris Climate Treaty. The U.S. became the global leader in GHG emissions reduction and carbon sequestration with the help of Ethos Farm Project.

By 2020, New Jersey had become especially vulnerable to climate change. The state's average temperature had already [increased](#) by 1.7°C (3°F) since the beginning of the 20th century. New Jersey's sea level rise over the previous century was [twice that](#) of the global average, posing an [imminent threat](#) to our beloved seashore.

"A powerful response to climate change was needed, with the adoption of shovel-ready solutions," Dr. Weiss said. On April 22, 2020 - fittingly the 50th anniversary of Earth Day, EFP's Ethos Farm Ecosystem and Carbon Trial (EFECT) (see EFECT in attachment) initiative was begun. With research partners Rodale Institute and Rutgers University, 200 baseline soil core samples were collected from the last 100 acres of Ethos Farm's remaining conventional corn/soybean cropland. The land was then planted in native warm season grasses (WSG). Analysis of EFECT's serial soil samplings over the years has demonstrated that WSG, with roots reaching 3 meters deep into the soil, restore soil health. "The restoration of soil health as demonstrated by EFECT, has been a major factor in allowing NJ farmers and farmers all over the world to [adapt to](#)

extreme weather.” said Rodale senior soil scientist Yichao Rui, PhD. At the same time, EFECT data show that large amounts of atmospheric CO2 have been absorbed and held in the soil.

Long Valley farmer Tom Moke, 67, is owner of Golden Grains, LLC. He started out 35 years ago conventionally farming GMO corn and soybean. In 2019, he was the last tenant farmer to plant these crops on the 100 acre EFECT parcel before it was restored with WSG. “All I ever wanted was to be a New Jersey farmer, but it was really tough in the beginning. I didn’t have access to the thousands of acres of land needed to turn a profit growing these commodity crops. I was farming 500 acres of conventional corn and soy and couldn’t make a living,” said Mr. Moke. But in 2020, Tom Moke changed course. With guidance from EFP, [River Valley CommuniDty Grains](#) and agronomist Elizabeth Dyck, he planted an acre and a half in EFP’s certified organic field - two buckwheat smother crops to beat back weeds, then winter wheat. Upon harvesting the wheat, River Valley bought the grain from Mr. Moke, stored and processed it, then sold it to its network of wholesale and retail customers. From then on, every year Mr. Moke would increase the acreage of his organic grain production, as he found it very profitable. “I’ve made a nice living all these years because local demand is so high for my grains. My family’s been traditional farmers in this valley for 135 years. EFP gave me a new start,” said Mr. Moke with a smile.

Twenty years ago, Mr. Moke converted a portion of the EFECT WSG planting to regenerative grains. EFECT data demonstrate that even under food production, the former WSG land continues to sequester carbon, as anticipated by [Rodale’s scientific work](#). Rodale Chief Scientist Drew Smith commented, “Over 30 years, EFECT has demonstrated that a working agricultural soil has enormous capacity to sequester atmospheric carbon. EFECT has also served as a model to protect water resources, restore native habitat, build biodiversity and revive degraded soils.”

EFECT was fully funded by a combination of private and NRCS soil health demonstration trial grants, the latter made possible by Senator Booker’s [2019 Climate Stewardship Act](#). In 2030, the NRCS adopted EFECT as a conservation model, using it to restore millions of acres of soy/corn farmland across the nation through its grant programs.

But private investment played even a bigger role in the mass restoration of America’s farmland. In the early days there was a such a lack of robust carbon sequestration data from working farms, that growing numbers of scientists started to question the [developing carbon market goldrush](#). EFECT’s data played an important role in helping to establish the efficacy of WSG and regenerative farming for carbon sequestration, and was instrumental in helping [Indigo Ag’s Terraton Initiative](#) , [Ecosystem Services Market Consortium](#) and [Nori](#) establish sound, lucrative carbon markets for farmers. Today farmer Scott Clucas, the largest grain farmer in NJ, grows on 5000 acres, many of them rescued from suburban development by the

orchestrated and combined efforts of [New Jersey Conservation Foundation](#), [Iroquois Valley Farmland REIT](#) and [NJ's Farmland Preservation Program](#). He hasn't made a chemical application in years. He gets a premium for his regeneratively grown, low arsenic New Jersey rice - [yes, New Jersey rice!](#) At the same time he makes a tidy sum for sequestering carbon while growing it. Carbon sequestration in regeneratively managed agricultural lands has been the single most important factor in bringing about the beginning of global cooling.

In 2022, after being presented with EFP's 2050 Vision, the environmentally progressive NJ Governor was motivated to adopt even more aggressive goals of bringing NJ to carbon neutrality - by 2035 instead of 2050. "The teamwork of NJ Governor and legislators years ago during that time of crisis, remains proof that political will is a renewable resource," Dr. Weiss said. The former Goldman Sachs executive worked with a consortium of investment and philanthropic organizations including his [old company](#), [BlackRock](#), the [Gates Foundation](#), and [Bezos Earth Fund](#) to invest in accelerating the deployment and expansion of the NJ's [offshore wind project](#) as well as the installation of solar panels, [Tesla solar roofs](#) and [Powerwall energy storage systems](#) all over the state. Next, NJ lawmakers expanded the popular state farmland preservation program & granted property tax exemption to all working farmlands maintaining organic regenerative certification, [introduced by Rodale](#) in 2018.

Thanks to strong [legislative support of food waste recycling](#) mandating an initial 50% reduction in food waste by 2030, a large stream of food waste was captured. This spurred on the development of [bioplastics](#) manufacturing in NJ, which finally brought the disquieting issue of single-use plastics pollution to an end. Facilities all over the state were created to compost food waste with leaves from the state's many urban and suburban shade trees. High-quality, finished compost was returned to the land. Life was breathed into New Jersey's storied, albeit worn-out soils. But the finishing touch to restoring the soil, Dr Weiss attributed to the [Johnson-Su Bioreactor](#). "The Bioreactor is an inexpensive and easy to build a composting unit. It creates a highly prized, fungal-rich compost material. We use it to inoculate seed before planting. Introduction of these fungal microbes into the soil are essential for "managing the underground economy," as Ethos' old friend, [Michael Phillips](#) once put it," Dr Weiss added. EFP, in cooperation with the state ag department, held Bioreactor workshops on the farm, teaching farmers and promoting the construction of these units. "Today, every farm in NJ has a Bioreactor, just as sure as it has a barn," said Dr. Weiss.

And now the land was ready to restore the people's health...

But first the people had to change their dietary habits. "The COVID-19 pandemic did have a silver lining... it provided [a teachable moment](#) to everyone, especially the many people with [chronic disease](#)," said Dr. Weiss. He continued, "But because most people were in the dark

regarding evidence-based nutrition, and the great quantities of fat, sugar and salt in the SAD were highly addictive, New Jerseyans still needed a lot of help to shift their food preferences. EFP provided this help by helping to pioneer the field of lifestyle medicine.

Because many of the people were sick and regularly visited doctors for medical treatment, and because patients generally respect the advice of physicians, the doctor's visit proved to be a golden opportunity to impact dietary change. As part of EFP, Dr Weiss' farm-based medical practice, Ethos Primary Care took full advantage of that opportunity. Asha Gala, 85, founded the practice with Dr. Weiss and was its first Lifestyle Clinical Director. She still takes care of patients with Dr Weiss at Ethos, with her team of board-certified health coaches, and supports the physicians' work. "A key aspect of lifestyle medicine is that it meets patients where they are and through coaching techniques, strives to effect change in an individual's behaviors. It is the most powerful way to prevent and reverse chronic disease," explained Ms. Gala.

But there was another unmet need; Physicians were not being taught nutrition in medical school. To help create a new generation of lifestyle medicine physicians, the Ethos' Lifestyle Medicine Rotation was created and approved in 2017 as part of the elective curriculum of Rutgers New Jersey Medical School. The rotation, in collaboration with Rutgers NJ Medical School (NJMS), has trained hundreds of primary care doctors in lifestyle medicine. Most of these doctors have returned to NJ to practice thanks to the fully funded and expanded [NJ Primary Care Loan Redemption Program](#). Dr Saul Bautista, 60, is one of them. He is Director of the Rutgers NJMS Lifestyle Medicine Clinic in Newark, the city in which he was born and raised. He is also on the board of directors of the [American College of Lifestyle Medicine](#). Thirty five years ago as a medical student in Newark, he founded the Rutgers NJMS Lifestyle Medicine Interest Group. "I was the first medical student to attend Ethos' Lifestyle Medicine Rotation. Everyday I would take a drive from the inner city to this beautiful farm in the country filled with birdsong. This is where I learned about health's connection to the natural world." To Dr. Bautista, the rotation was the best part of his medical education, inspiring him to go into the field of primary care lifestyle medicine. He takes care of many pediatric patients in the Newark clinic. Years ago, Dr Bautista developed a springtime tradition - giving each child a pack of seeds; He helps the kids plant the seeds in the clinic's garden out back. Some of those kids have grown up to be medical students at his alma mater and other top medical schools across the country and the world. Many of these institutions have adopted EFP's medical education model.

EFP's [Farm Days](#) events served as a model for educating and motivating the general public to adopt a plant-based lifestyle. The Farm Days, which feature world renowned speakers and thought leaders, farm tours, food- growing and preparation demonstrations, giant community pot-luck meals, wonderful music and entertainment, are particularly effective in demonstrating

to the state's diverse populace, how accessible and joyful a plant-based lifestyle really is. Ben Walmer, 76, architect and gourmet chef, is the founder of Highlands Dinner Club (HDC). Years ago, he attended a giant communal meal at a Farm Days event. "I was really impressed with how culturally diverse and flavorful whole food plant based dishes could be. And the best part, I could eat as much as I wanted, but still leave the table feeling light and energetic. I was sold." Ben's experience led him to collaborate with EFP; Every month HDC stages very popular "field to fork" gourmet plant based dinners utilizing the just-picked produce grown by EFP farmers. The dinners are held in EFP's beautiful 18th century stone barn. Ben used his architectural skills to help restore this historic building.

It wasn't long before word of the EFP Farm Days spread across the state. The Farm Days events served as a model for other regenerative farms to gather community on the farm, including today's huge festivals that have become cultural touchstones in the Garden State.

Finally, the federal government stepped up to the plate, no pun intended. Subsidies for commodity crops - sacred cow of the agriculture industry, lost broad-based support in Congress during the third decade of this century and were finally repealed in the 2028 Farm Bill. How was this seemingly impossible feat accomplished?

First, it is important to understand some background information on the USDA and Farm Bill, an enormously complicated omnibus package passed every 5 years by Congress. The Farm Bill, administered by the USDA, once governed an array of agricultural and food programs including environmental conservation (NRCS), social justice and nutrition programs (SNAP, WIC and NSLP). The USDA was also given the responsibility of determining the nation's nutrition guidelines. The primary agenda of the USDA however, had always been advocacy for farmers and the farming industry. As USDA farming policies developed over the twentieth century to support chemical-based conventional and industrialized practices, there emerged a glaring conflict of interest; These policies promoted the production and consumption of food that was deleterious to human health, social well-being and the environment, [despite USDA claims to the contrary](#) . .

Even though farmers represented <2% of the U.S. population, for years farm-state legislators exerted outsized influence on the inclusion of commodity crop subsidies in the Farm Bill. They did this by garnering support for the Farm Bill from urban legislators, to whom SNAP, WIC and School Lunch programs were important, as well as legislators who valued conservation. The beginning of the end for commodity crop subsidies started in 2023 when Dr Walter Willett of the Harvard School of Public Health appeared before Congress. He recommended that, for the sake of the nation's health, the responsibility for creating the nation's nutrition guidelines be removed from the industry- influenced USDA and placed under the Centers for Disease Control

and Prevention (CDC). In the past 25 years, the CDC's evidence-grounded, plant-based nutrition recommendations have served as a light, guiding Americans on the road from sickness to health. The next year, SNAP, WIC and NSLP programs were transferred to the Department of Health and Human Services with the stipulation that HHS apply the CDC's nutrition guidelines in administering these programs. This ensured the health of our society's most vulnerable members.

When it came to our environment, commodity crop subsidies were [so harmful](#) for a number of reasons. The subsidies discouraged crop rotations, paying farmers to grow monocultures of corn, soybean and wheat. Subsidies also encouraged overproduction by enticing farmers to put highly erodible marginal agricultural lands, wetlands and forests into production. These lower quality lands also required excessive amounts of chemical fertilizers and biocides to produce a crop, which led to increased environmental contamination. The last nail was hammered into the coffin of crop subsidies with the transfer of the NRCS to the Environmental Protection Agency

Once SNAP, WIC, NSLP and NRCS were removed from the USDA's purview, the Farm Bill became solely focused on agricultural production. Commodity crop subsidies lost the critical support of urban and environmentally minded legislators and were finally repealed in the 2028 Farm Bill.

Then, came a highly symbolic and moving, fiscally ingenious maneuver. With the stroke of a pen, Congress took the billions of dollars spent annually on commodity crop subsidies to grow the commodity crops that sickened us, and used the money to heal people and communities. Congress dedicated these funds to a massive expansion of the USDA dollar matching pilot program [Market Match](#), subsidizing the purchase of fresh fruits and vegetables to restore the health of SNAP and WIC recipients. Market Match afforded a ROI of \$3.61 in healthcare savings and local economic development for every \$1 spent on produce subsidies. A portion of the former crop subsidies was also redirected to provide healthy plant based meals to school children through the NSLP, using the [Fresh Fruit and Vegetable Program](#) as a springboard; This, together with the replication of the [Princeton School Garden Cooperative](#) educational model in school districts across the state, had a significant impact on helping to reduce NJ's childhood obesity rate.

To top it off, the forward-thinking NJ governor put in place a directive that all school boards and state agencies preferentially purchase certified regenerative food produced in the Garden State. They are also required to provide the evidence based nutrition guidelines from the CDC to school districts to be used and taught in schools and to state agencies which in turn educate



the public, build programs that support the mission and supply it to the dietitians that determine menus in state institutions like prisons, colleges, etc.

These actions created a huge demand for locally grown food, which in turn helped to encourage the rise of a new generation of farmers in the state. Over the years, these concerted efforts enabled New Jersey to not only become self-reliant in feeding her people but transformed her into a major food exporter for the New York City and Philadelphia markets; New Jersey's food insecurity is no more. Today, New Jersey's food culture is regeneratively-produced, plant based and local. Thirty years ago, Medicaid expenditures made up the largest portion of the state budget. The billions of dollars NJ used to spend annually on Medicaid recipients to sustain them in states of chronic illness, today goes to make them well by giving them access to good food. Today, New Jerseyans have one of the lowest rates of chronic disease in the world, with a higher life expectancy than Japan.

Not surprisingly, perhaps the most powerful influence on transforming New Jerseyans' diets came from their deep spiritual connection . Andrew Chignell, Professor of Philosophy and Religion at Princeton University, explained, "In the Abrahamic religions, humans were given the caretaker's responsibility of G-d's creation. In non-western religions, there has always been an emphasis on the continuity, rather than the division, between humans and other forms of life - including animals and plants." With Professor Chignell's guidance, the first EFP Theological Stewardship Summit was held in 2021, and annually ever since. Religious leaders of all faiths from NJ and beyond assemble at Ethos Farm every year to be educated regarding the impact of SAD on the earth. The leaders are then able to inspire their congregants on the basis of theological beliefs of stewardship and oneness. "This has had an unexpectedly powerful effect on transforming the people's dietary habits," commented Professor Chignell.

Looking back, it is important to remember that even though the eater is the driver of a food system, the eater is always dependent on the grower. Without many small scale, regenerative farmers, the high quality of life New Jerseyans now enjoy would have never come to be. Thirty years ago during the COVID 19 pandemic, when we were struggling to find staple food items like beans and grains on supermarket shelves, it was difficult to imagine who in NJ would grow the food required to feed millions of people and make them healthy, let alone where it would be grown. The ultimate secret to NJ's success lay in ensuring economically successful outcomes for our farmers, creating more farmers and giving them access to land.

To start, the labor intensive nature of small scale farming needed to be addressed, head-on. Dr. Sara Zayed, 55, originally studied information technology at Rutgers but decided to change course early on. She decided she wanted to be a healer, so she sought out EFP in 2018, where she began training to be a lifestyle medicine physician. EFP exposed her to the challenges of the

food system. With her IT background, she led the formation of the EFP Tech Consortium - a collaborative effort of IT specialists, engineers, farmers and investors. The goal of the Tech Consortium: to develop technologically advanced, yet affordable, labor-saving devices, like [weeding robots](#), and put them in the hands of small regenerative farmers. “As a primary care lifestyle physician, I know how important access is to local, regeneratively grown, whole plant foods for my patients’ health. I’m so glad I had the opportunity all those years back, to have played an important role in making sure our farmers could provide this essential nutrition for my patients.”

EFP [Young Farmers Incubator Program](#) (YFIP) (17) was created in 2017 to meet NJ’s demand for more farmers.

For the past 25 years, YFIP has partnered with the Anti-Poverty Network of NJ (APN) to provide disadvantaged urban youth with the opportunity to be New Jersey farmers. YFIP participants start early - as children reared in the [NJMS Green Club](#) gardening program. The Green Club was founded 35 years ago by NJMS students to combat food insecurity in Newark by helping residents to grow healthy whole plant foods in community gardens. Upon high school graduation, the kids who are most passionate about gardening and have the desire to be farmers are encouraged to apply for YFIP. Once accepted into YFIP, EFP provides each participant with on-farm housing, mentorship from a veteran regenerative farmer and a stipend provided by APN. During the two year YFIP training period, participants are taught the essentials of regenerative food production. In the second year they are guided on forming their own LLCs. Upon graduation from the program, participants are offered acreage at Ethos Farm, where they have the opportunity to be an independent grower/owner in the EFP Farmer’s Cooperative, a finely orchestrated collaborative of nearly 200 farmers. The Cooperative, which today grows a dizzying variety of high nutrient whole plant food crops year-round on nearly a thousand acres, sells its output at the beautiful flagship, Co-op-owned 30,000 square foot on-site farm store, as well as farm stores in Newark, Paterson, Elizabeth and Jersey City. A sister farmer-owned co-operative grows on a combined 2000 acres in Mansfield Twp and Vineland, and operates farm stores in Trenton, Camden and Atlantic City. Farmer Nora Pugliese, EFP’s beloved farm manager emeritus, originally designed YFIP and at 90 years of age, still participates in teaching the young farmers. “When she steps onto that growing field, all the young farmers instinctively flock over and surround her, like children under the boughs of some ancient matriarch,” said Dr. Weiss. “It is especially meaningful for me to have raised a new generation of New Jersey farmers who have good land to grow on and take care of, and are compensated fairly for all their hard work,” said Ms. Pugliese.

YFIP has been a major force in the transformation of New Jersey's cities. It has fostered upward mobility for disadvantaged urban youth while at the same time providing a source of healthy food that extinguished these former food deserts.

Lastly, it is the NJ Lawn to Farm Program (LFP) - an idea born out of EFP's 2050 Food Systems Vision, that solved one of NJ's most vexing food system issues. With the help of Iroquois Valley Farmland REIT as funding partners, LFP made it possible for young farmers who could otherwise have not afforded farmland or a nice home in NJ, to have both! LFP made it possible for young farmers to purchase high-end exurban homes on 3-5 acre lots - the same ones built long ago on NJ's prime farmland, spurring the development of small, hyperlocal neighborhood farms throughout the state. These little farms have really become the living embodiment of the Garden State.

## **NEXT PAGE ILLUSTRATION ...**

### **Ethos and the Rights of Nature**

Using the Rights of Nature model as a meta-system foundation, the Ethos Farm Project stakeholders are arranged radially to express the flow of interconnections that impact eaters, our prime stakeholders, as well as the most consequential system of systems - the environment.

