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The Biggest Little Farm's Apricot Lane Farms: The Blueprint for Sustainable Agriculture?

With world hunger on the rise and the population rapidly increasing, we must find a way to feed and sustain the projected global population of 10 billion by 2050. Which means, food production must increase by 56% in crop calories (Ranganathan, et al.). On top of that, in the face of accelerating climate change, biodiversity loss, and water scarcity, we cannot simply continue to expand agricultural land to produce more crops. Such is because the conversion of natural ecosystems for crop production or pastures for grazing livestock has been the leading cause of habitat loss. In fact, a 2020 study published in *Nature Sustainability* projected that "nearly 90% of the world's birds, amphibians and mammals will lose habitat to farm expansions by 2050" (Molidor). In addition, the expansion of agricultural land increases greenhouse gas emissions. Thus, if we wish to both feed the world and solve climate change, global agriculture must produce more without further ecological damage. So, we not only need to produce over 50 percent more food by 2050, but also reduce our greenhouse gas emissions from agriculture by two-thirds (Gustin). Despite this, many argue that conventional monoculture operations are the only way to feed the world. However, this is a lie created by the government's historical love affair with Big Ag. Instead, its quite the contrary. While we have enough food to feed the world, nearly 800 million people are still chronically undernourished due to the production of cheap cereal crops predominantly for livestock that increased the number of added sugars, added fats, and processed foods in people's diets and decreased the amount of nutrition (Food Print). In

actuality, most of the world's food is produced by small and medium-scale farms. So, rather than continuing this unsuccessful and unsustainable trend, we must transition to small-scale regenerative agriculture that both feeds the planet and preserves nature. Regenerative agriculture is an umbrella term for farming and grazing practices that emphasizes the importance of soil health and topsoil regeneration, biodiversity, improving the water cycle, enhancing ecosystem services, carbon sequestration, and working in harmony with nature to combat climate change and grow nutritious foods in a closed-loop system. The film *The Biggest Little Farm (2019)* demonstrates a case study for the successes and failures of regenerative farming. This paper will first discuss the content of the film and its Earth Day special, then unpack specific techniques that the farm uses from a tour of the farm, and end by considering the barriers and solutions to transitioning to regenerative agriculture to prove that regenerative agriculture is a feasible practice that can feed the world.

The Film: *The Biggest Little Farm* and *The Biggest Little Farm: The Return*

The Biggest Little Farm (2019) is an environmental documentary that follows the eight-year journey of John and Molly Chester after they transition their lives from the city to a neglected 234-acre farm with a dream to farm in harmony with nature. When the Chesters first arrive on their new land, Apricot Lane Farms, they are greeted with a desolate landscape. The old irrigation pond was dried up, an abandoned beehive was a bee graveyard, and the soil was dry and void of life. "It didn't quite have an abundant feeling of life, yet not much around here does. We're surrounded by these large-scale monoculture-type farms. To our north, the ruins of the largest indoor egg operation in the world … to our west, miles of red raspberries growing under plastic hoop houses … and the farm we're on followed a similar monocrop type approach" (00:11:20). For the last 50 years, the land had been farmed "extractively" by planting the same

crop over and over, depleting the soil. Rather than following in the footsteps on the neighbors by exploiting the land and returning nothing back to it, the Chesters wished to revitalize it by reintroducing nutrients and vital microorganisms back to the soil as well as bringing biodiversity back to the land. To do so, Molly hired a consultant for traditional farming, Alan York, a world-renowned expert in traditional farming practices. According to Alan, "the objective is to emulate how natural ecosystem work. They regulate themselves through diversity. So, you don't get epidemics of pests and disease" (00:14:27). And to accomplish this goal, Alan wished to get rid of things that should have never been planted, monoculture crops, to introduce the potential of diversity. They ripped out 55 acres of old trees, created compost piles, restored an old irrigation pond, fixed over 5 miles of irrigation, built a state-of-the-art worm composting facility, planted trees, seeded cover crop, dug culverts to prevent runoff, turned a horse arena into a market garden, planted dozens of types of native plants, and much more. Alan claimed that all these methods intertwined would bring the soil back to life, summon wildlife, and provide harmony. Along with this long list of regenerative techniques, John and Molly introduced a variety of animals to graze the pastures including cows, sheep, pigs, chickens, ducks, a horse, and free-range guinea fowl. Unlike conventional farming methods, their contribution of meat was secondary. Each animal had a purpose, more than simply being raised for meat, to help build the soil. "Their poop is our gold. It's as valuable as a crop, and now you can build compost that is of very high quality. The animals, compost, and cover crops all share the same goal. To bring our soil back to life. Infusing it with a host of beneficial microorganisms" (00:21:08). Alan believed that "you need animals for a farm to be healthy" (00:22:40). And without the interworking web of animals, compost, and cover crops to create microorganisms, this way of farming wouldn't work. But Molly and John admit that this effort to regenerate the soil drained their first year's

budget in six months, without even planting a single crop. These massive input costs and lack of subsidies explain why many farmers haven't made the change to regenerative practices.

Despite this, by the second year, Molly and John began to see their investments pay off. First, Molly and Alan had the daunting task of planting a 20-acre orchard. "I only suggested three fruit tree varieties." But Alan said they needed more, so they settled on "75 different varieties of stone fruit. Plums, peaches, nectarines, cherries, apricots … diversify, diversify, diversify. That's the link to the whole thing" (00:23:48). And this diversity led to success. "The fruit basket. It's an important orchard because of the rare and unique varieties. And that's what's gonna give us an edge at the market" (00:40:55). What's more, Molly and John's diverse variety of heritage hen breeds, create a diverse rainbow of colors inside each carton. And according to *The Apricot Lane Farms Cookbook,* "our customers covet them for their gorgeous, varied appearances as much as for their outstanding flavor and texture!" (Chester). "They line up at stores waiting for our delivery. 50 dozen sell out in less than an hour. Literally fighting over them. We're on to something" (00:27:08). This was the Chesters' first big breakthrough, and the profits all had to do with regenerative farming's emphasis on biodiversity. "We're farming over 200 different things, and Alan claims that all of this diversity will somehow lead to simplicity. The flywheel is being built, so now it becomes self-perpetuating and self-regulating" (00:27:38). And thus, regenerative farming would "eventually feel like surfing" (00:15:14). However, the Chesters discovered that it wasn't that simple. In addition to these massive financial costs, farming with nature can introduce a host of problems. Then again, each of these problems came with a nature-based solution. For example, when the Chesters planted cover crops to rebuild their soil, they realized that it required more labor to mow them. "But Alan quickly shifted our lens calling it a problem with an opportunity. That cover crop is food for our sheep. And then the X

factor. As they trample the grass, they leave behind their droppings and urine," once again increasing the health of the soil (00:28:38). First, the sheep trample the grass, which helps produce humus, or soil organic matter, that sequesters water and carbon. And on top of that, their fecal matter acts as a fertilizer for the soil, boosting its nutrient content. Furthermore, as their farm's native plants and pocket habitats welcomed wildlife back to the land, intermixing among their animals, complications and quandaries arose when attempting to balance the demands of the farm with that of the wildlife. Because, as John explains, "every step we [took] to improve our land seem[ed] to just create the perfect habitat for the next pest" (00:43:15). For instance, when the Chesters grew cover crop to increase soil health and fix nitrogen, they discovered that a variety of "pests," such as snails, thrive in it. And these snails love eating citrus leaves, which directly impedes the citrus tree's ability to produce fruit. Their team quickly discovered that there were way too many snails to remove by hand, and they couldn't use pesticides, so they needed to find the snail's predator. And with the irrigation pond full of algae, John had to figure out what to do with 100 ducks. "I think I've figured out what ducks love more than ponds" (00:50:25). As stated in The *Biggest Little Farm: The Return,* "In just one season, our ducks ate over 96,000 snails. Turning the snails into nitrogen-rich duck poop, fertilizing our trees and our cover crops. Which we then grazed with our sheep, adding yet another layer of fertility to regenerate our soils" (00:07:09). They don't eliminate them all but help keep the snail population to a healthy level of coexistence. So, with every new problem, the Chesters learned to sit back and observe to uncover the problem's adversary. More cows and sheep grazing the pastures meant more manure. And to the fly, this is food for their babies, maggots. But "maggots are just more food, for chickens … this reduced the fly population to a manageable level of coexistence" (00:51:53). And this is exactly the mission of regenerative farming. Contrary to conventional

agriculture, regenerative farming does not aim to completely decimate “pest” populations. Instead, it recognizes that every animal is an important player in an ecosystem’s balance. And like livestock, every wild animal has a purpose to contribute. “The solutions to our problems began to appear within the diversity that we had created” (00:06:13). Two of the biggest obstacles for the Chesters were the gophers and the coyotes. The gophers ate the roots of the fruit trees, and the coyotes ate the chickens and ducks. “All pests, even gophers, have a beneficial role. For one, they aerate our soils, but too many gophers, and the problems start” (1:13:30). They just had to figure out what beneficial role each played and harness it. Luckily, once the farm’s diversity grew, the food web began to emerge. They discovered that they could use their guardian dogs to protect the chickens, which made the coyotes focus on hunting gophers. On top of that, the Chesters constructed owl boxes to encourage owls, another predator of the gopher, to reside there. “This year we counted 87 barn owls. Eating an estimated 15,000 gophers. And it didn’t stop there. A whole host of specialized players arrived to do their part. Hawks attacked from above. And from below, gopher snakes, weasels, and badgers. And along with the coyotes, even the guardian dogs became hunters too” (1:16:50). And it wasn’t just the gophers. This web of life created a dance between predators and prey: the starlings eating the fruit and the hawks eating the starlings, the aphids eating the plants and the ladybugs eating the aphids, and on and on. This diversity created a natural equilibrium. “And if the whole thing from the beginning was to live in harmony with nature, well, we made it this far with a comfortable level of disharmony. The ecosystem of our entire planet works the same way” (1:28:05). And because of the health of their soil and the diversity of their land, the Chesters proved to have a greater payoff in the long run. Specifically, during year five the farm experienced “18 inches of rain. All around us on other farms topsoil was washing out to the sea. But not here. We were able to sequester over 100

million gallons of water" (1:02:06). Their soil stayed because of their cover crops which acted as a water sink, soaking up all the rain like a sponge. And what their crops didn't use, went back into their aquifer, replenishing their water supply. So, by practicing regenerative agriculture, their farm had greater resilience to extreme climate events, saving them money (and water) in the long-term. Moreover, on year eight, the Chesters sold over 500,000 pounds of food. Why? "The quality of the food we eat starts with the soil it was grown in, or even raised on … everything you're seeing out here came from the work that we did to rebuild our soil. And when you're focused on the soil, you're growing food in a way that would maximize nutrient-density. So, it actually becomes the most delicious food that you can possibly eat" (00:8:19). Thus, by creating this film, the Chesters prove that regenerative farming is not only possible, but it can be profitable as well.

The Tour: Apricot Lane Farms

Along with the film itself, I was fortuitous enough to get the chance to tour Apricot Lane Farms and meet John and Molly during a Q&A. This opportunity allowed me to take a closer look at the farm's techniques by seeing them firsthand. On my train ride from Santa Barbara to Moorpark (the city in which the farm resides), I witnessed the countless monoculture operations that John describes in the film. Miles and miles of the same crop grew under plastic hoop houses. And as we drove through the farms in Moorpark, we passed countless orchards growing the same fruit. But when we turned into the driveway of Apricot Lane Farms, the stark difference was astonishing. Different varieties of avocado trees lined the dirt road, and adjacent to them were rows of lemon trees with lemons so giant and plentiful. It indeed felt like it was straight out of a children's storybook. The tour began in the Market Garden. The tour guides Noel, Jill, and Sarah describe the Chesters' regenerative farming practices as "Biomimicry," because they mimic what happens naturally in nature. And the Market Garden does this by acting as a Certified Wildlife

Habitat, attracting pollinators with its native plants alongside its 160-plus crops. Along with being a wildlife habitat, the Market Garden aides pollinators such as European honeybees, hummingbirds, and butterflies by allowing plants that are usually grown for other uses to mature and flower and be harvested as edible flowers. As depicted in their cookbook, some of these include okra, chives, cilantro, arugula, and radish. The Market Garden also utilizes regenerative techniques like crop rotation, growing heirloom fruits and vegetables, intercropping, and cover crops to promote soil health and genetic diversity. On our way to the second stop on the tour, we passed through "GuacamoWay" one of the many avocado orchards on the farm with a total of 5,425 avocado trees and 15 different varieties. Strolling through, I could hear the loud buzzing sounds of cicadas and see the lush cover crop growing in between the trees, making it feel like a natural landscape. Originally, Apricot Lane Farms only grew the commercialized Hass cultivars. But John and Molly wished to diversify, creating the "Avocado Conservation Project." This project allows them to protect rare varieties of avocados like Hellen, GEM, Nabal, Sharwil, and many more, each with their own unique look, texture, and flavor. According to *The Apricot Lane Farms Cookbook*, due to the popularity of the Hass cultivar, cultivar diversity has diminished greatly. And as more land is being cleared, heritage and wild cultivars are at risk of becoming extinct. By growing older cultivars, the Chesters can preserve those varieties while also improving the cross-pollination process that helps them fruit. Additionally, each cultivar has a different growing season, which allows the Chesters to produce avocados year-round.

The second stop on the tour was at the Farm Fertility and Vermicompost Center. While only mentioned briefly in the film, this is really the heart of the operation. When the Chesters first arrived, the soil was compact, which led to an anaerobic environment and prevented roots from penetrating the soil. It was John and Molly's mission to bring the soil back to life. And as

one of the principle three pillars of regenerative agriculture, along with animals and cover crop, compost is vital to bringing aeration, water, and fertility back to the soil. So, by taking organic material from their agricultural discards, the Chesters can reuse it to create compost. Compost is another form of "biomimicry" as it emulates the naturally decaying process in nature. Specifically, tour guide Noel compared compost to the leaves, twigs, and any dead material on the forest floor that gets broken down by microbes and small insects like worms or pill bugs into organic matter, cycling nutrients back into the soil. Apricot Lane Farms tries to facilitate this natural process through four methods of creating compost. The first method is window composting. Windrow composting consists of creating long rows or "windrows" of organic matter that are turned and watered regularly. The farm harvests around 800 tons of windrow compost and applies 3 tons per acre annually which directly adds organic matter to the soil and allows for a much higher water-holding capacity. And "every 1% increase in organic matter results in as much as 25,000 gallons of available soil water per acre" (USDA Forest Service). The second method is hot composting in stalls or piles, which is like windrow composting, but instead on long rows, the compost is in tall piles that use heat and microbes to break down organic material. The third method is vermicomposting through a 40-foot Sonoma Valley Worm Farm "VermiComposter CF" that automatically separates the worms from their excretions. Apricot Lane Farms started with around 8,000 Red Wiggler worms and now has more than 250,000 worms that help mimic that natural soil-building process. To do so, this process requires a balance of water, air, earth, and fire. Water and air are essential to provide an aerobic environment for the worms, ear, carbon acts as the earth which is the feedstock for the microbes and worms, and nitrogen acts as the fire as it helps metabolize protein to create heat. The worms then turn food scraps, animal manure, and woody material into worm-poop compost that the

farm describes as “black gold.” This microbe-rich vermicompost then goes into the fourth method of composting, compost “tea” which puts the “black gold” into giant aeration tanks that “brews” it into tea. By brewing the microbes in an aquatic environment, they can quintuple in size, allowing it to be applied all over the farm as a foliar spray. Thus, combining these four methods allows Apricot Lane Farms to maximize the amount of organic matter that is in their soil across all 234 acres.

The next stop on the tour was at the restored irrigation pond. When John and Molly first bought Apricot Lane Farms, they brought in a native plant expert to see how many native plants were already established. At the time, there were only 60 native plant species on the farm, but over the past decade the farm’s habitat restoration team has increased the diversity to over 250 species that are native to California and endemic to Ventura County by building up little pockets of native habitat around the farm. And similar to how Southern California has created wildlife corridors to help animals safely travel from one wildlife hotspot to the next amongst urban development, Apricot Lane Farms has developed a patchwork system of native habitats to facilitate wildlife migration. And the farm now has over 24 acres woven throughout the land that’s dedicated to restored native habitat. And at the centerpiece of this endeavor is the pond which attracts a variety of pollinators and bird species. While this restoration doesn’t directly produce harvestable food, tour guide Sarah explained that “having this habitat and encouraging the native wildlife does actually help [their] farming efforts.” For instance, “there are over 1,600 types of bees that are native to California.” Unlike the European Honeybee, native bees work harder and work longer hours which helps pollinate crops more effectively. On top of that, “Apricot Lane Farms is home to over 110 types of birds.” So, when the farm was experiencing a katydid outbreak and they were decimating the citrus crops, the birds were able to wipe out the

katydids due to the farm's habitats and established native bird populations. And now, they impact less than 1% of their crops annually. Moreover, the farm has seen cranes nest at the pond annually. And the cranes will fly to nearby pastures, dive their heads into gopher holes, pluck them out, and eat them. So, by providing native habitat for a diverse variety of species, these animals are all able to "play a role in helping to regulate an opportunistic form of coexistence" (Apricot Lane Farms). And just by having native habitat, wildlife is helping manage the pests more effectively and affordably. Specifically, during the Q&A, Molly and John explained that they were spending about $100,000 a year on three guys to trap gophers on the property, and the most they caught in a year was 9,000. But while they were doing that, they set up perches and barn owl boxes to encourage the hawks' and owls' residency. And by around year five, they conducted a study that counted around 90 barn owls. The study discovered that, based on their diet, they ate a minimum of 35,000 gophers. Thus, $2,500 in barn owl boxes plus a little patience was worth $350,000. This monetary value can be calculated for any predator, as they can be way more cost effective than any trap or pesticide.

The fourth stop on the farm tour was at the "Fruit Basket," a 20-acre orchard that currently houses 65 different varieties of fruit trees. Within the Fruit Basket we saw two mobile chicken coops that each house 250-300 laying hens. A tractor or farm vehicle will hitch up to the coops and pull them, which allows the farm to seamlessly integrate chickens into their rotational grazing system. The grazing system begins with the cow herd. The cows bite, fertilize, trample, and move in an organized manner which mimics the relationship between grazing ruminants and wild predators. This rotational grazing style prevents overgrazing, enhances grass regrowth, and builds humus through the trampling of the grass. Then, the chickens follow behind the cows, acting like a cleanup crew. They eat the fly larvae (maggots) in cow poop which not only adds

protein to their diet, but it also helps breakdown and scatter the fertilizer for quicker absorption into the soil. Lastly, the chicken's own nitrogen-rich poop helps further fertilize the soil. Thus, this "carefully choreographed dance" creates healthy chickens with a protein-rich foraging diet, fertile soil, and a manageable fly population for the cows. A similar grazing dance is performed between the sheep and the ducks in the lemon orchard. Furthermore, the diverse flock contains 14 different heritage breeds. While the film does mention how the wide range of breeds and diverse diets help produce a jewel box of nutrient-dense eggs, having genetic diversity also helps create a heightened immunity to diseases and health issues. Because when one breed may be susceptible to a disease, others may be more resistant to it, which will slow down the spread and allow time for the other hens' immune defenses to build. And if the disease did spread, it would only impact a small percentage of the population. The same sentiment follows when growing fruit trees. According to the tour guide, The Fruit Basket consists of a citrus section containing Lemons, Limes, Oranges, Grapefruits, and Mandarins; a stone fruit section holding Peaches, Plums, Apricots, Nectarines, and hybrid varieties, like Pluots, Pluaries, Nectaplums, and Apriums; a section of Apples and Pears; and a Mediterranean section including Figs, Persimmons, Pomegranates, and Olives. This high level of diversity creates a strong immune system for the farm. If Apricot Lane Farms only grew apricots and some of the trees got Shot Hole disease, it could wipe out every tree and disrupt their revenue stream. But since they have different varieties of fruit next to each other, it ensures that a disease from one type of tree won't spread to the tree next to it. What's more, because they have so many varieties of fruit, like the avocado, they are able to harvest all year round. Thus, biodiversity coupled with experimentation is the solution to many problems, which allows Apricot Lane Farms to continue to profit while monoculture farms struggle.

Barriers and Solutions: How to Scale Regenerative Agriculture

While wide-scale regenerative agriculture is certainly possible, there are many barriers that farmers face like governmental policies and lack of funding that prevent them from making such a drastic transition. As stated by John Chester in the Q&A, large scale agriculture and commodity crops are subsidized to the tens of billions. There is a lot of money that goes into "how many different ways can they make corn into something you'll buy." This overwhelming financial backing of Big Ag and underwhelming lack of support of regenerative agriculture impedes the possibility of a wide-scale and just transition in our current society. So, what are some strategies to start this domino effect that will lead the government to reform conventional agriculture subsidies and instead fund regenerative practices? First, I would like to prove that regenerative agriculture can feed the world and profit with evidence beyond the case study of Apricot Lane Farms. Firstly, according to John regenerative agriculture is absolutely scalable, but it depends on "our understanding of what that means when we talk about scalability. Because if your idea of scalability is that John and Molly go out and buy 15,000 acres, and try to do *this* on 15,000 acres, every square inch, that's not actually sustainable." Instead, "a decentralized food system is more sustainable and more scalable, meaning, you want small farms. 70% of the food that we eat on this planet is grown on farms that are 25 acres or less... there is this notion that has been put into your head that large-scale agriculture is what's feeding the planet," but "it's actually going to be a more of a regenerative mindset that pulls us through the next 100 years." Additionally,

a study conducted on small-scale organic farming (OF) argues that "because food shortage in rural areas is usually the result of crop failures in monoculture systems, OF advocates multi-culture and which consequently decreases the risk of crop failure and food insecurity" (Jouzi, et al.). So, because most small-scale farms grow a diverse variety of crops, they are more resilient to diseases. The study also found that "with regard to nutrient deficiencies, due to the multi-culture nature of OF, the dietary diversity of subsistence farmers also increases along with food access" (Jouzi, et al). Thus, while genetic diversity can enhance food security, crop diversity can provide a more varied diet. And these diets also tend to be more nutrient-dense. "Relative to conventional farming, regenerative practices based on Conservation Agriculture produced crops with higher levels of phytochemicals, vitamins, and minerals … most notably, soil health appears to influence phytochemical levels in crops" (Montgomery, Et al). It's clear that regenerative agriculture can feed the world, and do so more effectively than conventional agriculture, but is it profitable? While there are short-term costs to transitioning to regenerative agriculture, studies show that long-term profits outcompete conventional agriculture. According to a study comparing the relative effects of regenerative and conventional corn production systems, "regenerative fields had 29% lower grain production but 78% higher profits over traditional corn production systems. Profit was positively correlated with particulate organic matter of the soil, not yield" (LaCanne and Lundgren). The study concluded that by promoting soil health and biodiversity, regenerative agriculture "required fewer costly inputs like insecticides and fertilizers," and soil organic matter was a greater driver of profitability than yields because "regenerative farms marketed their products differently or had a diversified income stream from a single field" (LaCanne and Lundgren). So, despite producing fewer yields in some cases, regenerative corn fields managed to generate nearly twice the profit of conventionally managed

corn fields. This is due to a diminished reliance on external inputs (i.e., herbicides, fertilizers, and irrigation) which led to cost savings as well as diversified crops and livestock production that added additional revenue stream.

Based on long-term financial benefits of regenerative agriculture, the two main barriers for adopting regenerative agriculture are the input costs and lack of education. But without subsidies, education needs to be the primary focus so we can inform the farmers, stakeholders, and politicians at the frontlines who will be able to encourage the subsidization of regenerative farming. This is because the majority of those with influence are unaware of what regenerative agriculture is since the term wasn't coined until the 1980s. And as John discloses in the Q&A, "organic started in the late 60s and there are still people that, in fairness, don't understand what it is. And I'd imagine that there is a few here that really don't know that organic doesn't actually mean biodiversity and doesn't actually require soil health." If most people don't understand organic agriculture, how are we supposed to expect them to understand and transition to regenerative agriculture? According to a paper written by Professor Liz Carlisle, educational "outreach efforts should include a local perspective and peer-to-peer insight and should engage not just farmers but also agribusiness networks that provide farmers inputs and technical assistance as well as local governments, water agencies, and watershed organizations." One strategy to educate these important players is through a Farmer-to-Farmer program. Specifically, the bipartisan Farmer-to-Farmer Education Act wishes to support mentorship networks. These networks will help overcome the adoption barriers by having someone with firsthand experience share their knowledge of the practice. This is similar to how Alan York passed on his regenerative techniques to John and Molly. Another educational tactic is agritourism. Many farms like Apricot Lane Farms implement agritourism as a form of education. One survey

conducted by Professor Shermain Hardesty found that 57.5% of the 164 respondents conducted Agritourism to provide education on agriculture for others. Agritourism is a great way to educate others while also providing an additional source of revenue for regenerative farmers. There are minimal studies around the success of agritourism geared towards farmers, stakeholders, and politicians, but based on agritourism's popularity, it could be a great strategy to educate influential members.

Conclusion

Based on my close analysis of the regenerative strategies in the film *The Biggest Little Farm* as a case study, my tour of Apricot Lane Farms, and in depth look at the barriers and solutions to adopting regenerative agriculture at large, it is evident that regenerative agriculture can feed the world and profit from it. Due to high soil erosion rates and biodiversity loss, conventional agriculture does not offer a long-term solution to the world's food crisis. In fact, industrial monoculture reduces food security because it is not resilient against diseases, and it leaves future generations to barren, un-farmable land, stripped of nutrients due to extractive mass production. Regenerative agriculture, on the other hand, provides disease resilience from genetic diversity and nutrient-dense crops that can increase food security. Additionally, regenerative agriculture is more profitable in the long run because it saves water, prevents diseases, provides unique and desirable varieties, and reduces expenses from traps, pesticides, herbicides, and fertilizers. But without subsidies we cannot have a just transition. So, we must facilitate the education of influential farmers, stakeholders, and politicians through farmer-to-farmer programs and agritourism.

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