

Families on Costa Rica's Osa Peninsula learn to regenerate a critical lifeline lost to the pandemic.

After the tourism industry collapsed under COVID restrictions, the Corcovado Foundation initiated a basic regenerative agriculture program for hard hit families who lost their livelihood. Now those seeds are growing, and families, tourism, and wildlife are the center of it all.

In early 2020, the economic lifeline for just over 1000 residents of Drake Bay acutely dried up. Across this small coastal district on Costa Rica's Osa Peninsula, COVID-19 lockdowns had shuttered the tourism industry, leaving hotels empty and unemployed residents wondering how to put food on their tables. And when people can't rely on tourism-generated wages to buy food, they are forced to find alternatives.

Living on the edge of the rainforest, those alternatives are often illegal and damaging. None have good outcomes for local wildlife. Poaching for the exotic pet trade, subsistence hunting for meat, scavenging endangered turtle nests and selling eggs quickly decimate populations of the very wildlife tourists pay to see.

The other alternatives are equally destructive to the fragile rainforest biosystems of the Osa. Gold mining and logging of rare, valuable trees are amongst the most damaging to habitats, short-term and long term. Unchecked, this combination is a death knell for local biodiversity. Long term considerations of ecosystem health tend to take a step back when people focus on survival.

Alejandra Monge, executive director of Corcovado Foundation, a regional non-profit environmental advocacy group that started in Drake Bay in 1989, knew that effective help needed to be swift, flexible, and pragmatic. As a concept, regenerative agriculture fit as a solution. It utilizes scientific and traditional knowledge to improve soil fertility, retain carbon dioxide in the soil and moisture, and reduce the ecological damage inherent in widespread routine use of modern fertilizers. The question was—would people be willing to try a new way to support themselves and trust the foundation's teams to help them learn?

Corcovado Foundation (CF) has been working on the Osa Peninsula focusing on environmental education for children, sea turtle conservation, and support for sustainable tourism and community development. Over the years, CF built robust and wide community connections throughout the area. Now, CF was able to leverage those relationships to pivot on the spot, learning where the greatest need was and how to help. And the critical need was to teach people to feed themselves instead of hunting and poaching.

The goal was to help with as many struggling families as possible across the Drake area, Las Planes, Progreso, Los Angeles and Rancho Quemado. The plan was to introduce them to regenerative agriculture on a scale small enough to be manageable, yet effective enough to feed them while the country, and their families, waited out the pandemic so Costa Rica could reopen for tourism. The hope was to see these new skills extended beyond their own tables that they might supply produce for the hotels and tour operators, thereby restoring an even more robust and sustainable lifeline.

In June 2020, CF helped 53 families get started with regenerative agriculture. Most participants have been women with children wanting to provide for their families. Others wanted to increase self-sufficiency, whether or not another income earner was present. The family farms and plots comprise about 210 acres of land.

Why Regenerative Agriculture is an Essential Sustainability Practice

Examples of regenerative methods include creating and using compost, increasing biodiversity through planting cover plants, and harvesting water by building mini trenches that retain rain streams long enough to be absorbed into the soil. When properly utilized, these methods allow farmers to stop or significantly reduce reliance on chemical fertilizers, thus eliminating the risk of excess fertilizer pollution and runoff – a matter of increasing concern due to such runoff ending up in coastal waters. There, it feeds temporary algae blooms, whose decomposition sucks oxygen out of the rest of coastal life, creating so-called “death zones”.

Naturally, specific details of regenerative agriculture practices may vary greatly between climates and regions. To ensure that specific practices utilized were most appropriate for Osa Peninsula, Corcovado Foundation partnered with Roberto Cubero an agricultural engineer. Over 18 months, he has provided training to both the families and CF employees, enabling the latter to continue delivering this model and providing ongoing support as needed to participants.

How the Corcovado Foundation Made it Work

Educational workshops are something many non-profits do as a practical and accessible way to share important knowledge. What is rarely known, is how many people go on to actually apply or use the knowledge they receive and therefore, what impact those workshops truly have. In this case, CF went much farther than workshops: Not only did CF provide training, equipment, materials, and seeds – they literally got their hands dirty, with employees and volunteers helping families to set up productive gardens and orchards.

Furthermore, since the initial setup in 2020, CF employees have been returning to many of the families involved at least once a year, to both evaluate the results and to provide additional support as needed. The information collected for evaluation included the diversity and amount of harvested produce and the land area involved and protected. Alejandra Monge expressed hope that eventually, CF may be able to quantify achieved carbon reductions as well.

Regenerating Lives and Livelihoods the Osa

As of April 2022, CF teams have visited 36 families. From these visits, we know that at least half of the original 53 participating families continue to benefit from the program. The crops produced include papaya, squash, basil, spinach, dill, and garlic, and several local native crops. Of those, basil and spinach especially show intriguing commercial potential due to interest from hotels.

Other local crops include papa chiricana, a tuber vegetable, and chicasquil, also known as “tree spinach”, a fast-growing shrub that is resistant to pests and disease. According to Alejandra Monge, “These crops generated extra interest among the participants due to their incredible nutritious value, the ease of growing them and a sense of shared pride in re-discovering local traditions.” Chicasquil, for example, is a nutritious powerhouse of leafy greens used in a traditional Costa Rican recipe called *picadillo de chicasquil*. Yet for decades, it has been primarily used as a living fence in Costa Rica, its dietary properties and cooking knowledge forgotten.

In addition to literal sustenance, the project helped nurture a sense of connection between the participants, volunteers. Environmentalist Walder Blankistan is a volunteer in the CF sustainable development and climate action program, who had been involved in environmental studies in Netherlands prior to volunteering in Costa Rica. “It was really cool to be able to get to know people from around here through volunteer work, it was a unique experience” said Walder. He also noted the way one “...only needs to look around in the jungle...” for dry leaves and branches to add to compost, thereby increasing soil fertility. It was a personal discovery leading to a changed relationship with the jungle that he hopes to carry forward in his environmental career.

Leticia Pérez, a participant, talked about learning more than the skills of making compost or maintaining a vegetable garden thanks to the project. She shared the excitement of going from never really caring about plants to realizing “...that every plant has its own way of growing and its own place”.

The Next Steps: Toward Commercial Partnerships

This year, CF is looking to expand its regenerative agriculture projects. The plan is to provide additional training so that families could expand their farming operations and build relationships with the tourism industry, supplying it with fresh local produce at competitive prices. Of the original 53 families, approximately 19-20 have expressed interest in participating and are excitedly waiting for training to begin.

Some of the families already started selling their harvest at local festivals in 2021, including a market organized by the foundation to promote regenerative agriculture and the value of native seeds.. To Alejandra, such stories reflect her hopes for the future, where participants move beyond subsistence farming into commercially viable agriculture that helps their families build reliable economic prosperity.

“With travel and tourism beginning to bounce back, the hotels and restaurants are re-opening,” said Alejandra, “They need to source their food somewhere. Why not locally?”

To help the Corcovado Foundation with this program and other initiatives to protect biodiversity on the Osa Peninsula and in other fragile areas of Costa Rica, visit www.corcovadofoundation.org for more information