

Using Agroforestry to Save the Planet

Source: foodtank.com

Published: May 1, 2016



[Sarah Small](#)

Agroforestry—the use of trees in farming—benefits both farmers and the environment.

According to a recent [report](#) by Biodiversity International, the Center for International Forestry Research, the World Agroforestry Centre, and Charles Sturt University, forests contribute to the livelihoods of more than 1.6 billion people. Yet, 30 percent of the world’s forests are used primarily for the production of wood products.

Agroforestry is defined as the integration of trees and shrubs into crop and animal farming systems. These practices can help landowners diversify products and create social, economic, and environmental benefits.

Trees and forests provide more than just food—they can enhance soils, protect biodiversity, preserve precious water supplies, and even help reduce the impacts of climate change.

According to the World Agroforestry Centre, agroforestry is [uniquely suited](#) to address the need to grow more food and biomass for fuel while sustainably managing agricultural landscapes for the critical ecosystem services they provide.

Agroforestry efforts [in Niger](#), for example, have resulted in 200 million trees being planted on over 5 million hectares of farmland. This has impacted an estimated 2.5 million people by improving soil, increasing yields, and creating resilience against climate change.

This week, Food Tank is highlighting 16 organizations and projects that are using agroforestry principles to bring benefits to farmers, communities, and the environment.

The [Bangor Forest Garden](#) project, located in North West Wales, was created in 1998 to showcase forest gardening as an agroforestry solution to sustainable living. The volunteer-run project has become a popular demonstration site and an effective educational and research resource for Bangor University and the surrounding community.

The [Center for International Forestry Research](#) (CIFOR) addresses the problem of deforestation, which affects the livelihood of a quarter of the global population and endangers biodiversity. CIFOR works with communities in developing countries to help promote sustainability in the use and management of their forests.

[Community Forests International](#) started working in 2007 to help stop deforestation and improve food security on the island of Pemba, off the Tanzanian coast. Since then, Community Forests International has helped Pemban communities plant over one million trees, build [agroforestry systems](#) to provide fruit and timber, and restore forest ecosystems.

In 1984, [Ernst Götsch](#), an agroecologist originally from Switzerland, settled on a farm in southern Bahia, Brazil. Using techniques that mimic the natural regeneration of forests, he has since restored over 450 hectares of land that were previously rendered unproductive due to years of intensive agricultural practices.

Inspired by Götsch's principles, [Fazenda da Toca](#) is an organic, agroecological family farm in São Paulo, Brazil. Agroforestry techniques are applied throughout the farm, which covers the equivalent of 2,130 football fields. At the onsite educational center, Instituto Toca, students and community members learn about the farm's agroecological techniques—which include planting corn with beans and apples with cherries to restore degraded soils, produce high yields, and eliminate the use of chemical pesticides.

For additional information on Ernst Götsch's approach to agroforestry and for a closer look at Fazenda da Toca, we recommend Agenda Gotsch's latest short film, [Life in Syntropy](#).

In an effort to restore both local ecosystems and local economies, [Green World Campaign](#) works with grassroots partners throughout the tropics to turn degraded land green again. Their work, which centers around tree planting, has transformed communities in Kenya, Mexico, Ethiopia, India, and the Philippines.

[Groundswell International](#) is a bottom-up partnership of civil society organizations focused on agroecological farming practices such as agroforestry, crop rotation, and intercropping. Groundswell taps into the wisdom and expertise of farmers to create programs with lasting change throughout the Global South.

[Hacienda Pinzacuá](#) is a family farm in the Valle de Cauca region of Colombia using agroforestry techniques to keep their farm healthy and sustainable. Irene Montes Londoño, whose father started the farm, says the farm is “more competitive and less vulnerable to extreme weather events because the system allows soil to retain water for longer periods and has created a microclimate that protects soil from drought. We are resilient.”

In Morocco, the [High Atlas Foundation](#) has planted more than one million fruit-bearing trees, benefiting local communities. It is estimated that this project has helped as many as 50,000 Moroccans increase their incomes and improve food security through the sale of fruit trees.

[La Bergerie de Villarceaux](#) is an organic, experimental farm in northern France. Since 2011, Olivier Ranke and his team have planted hundreds of trees throughout the farmland. Their efforts mirror a larger land movement in France which, in recent years, has seen a resurgence in agroforestry practices. The farm also serves as a gathering spot for other organizations working toward sustainable development in the region.

An initiative of The International Center, [The New Forests Project](#) (NFP) supports community efforts in sustainable agriculture, reforestation, and natural resource preservation. Recognizing the numerous benefits of agroforestry—soil restoration, carbon sequestration, and increased farm productivity—the organization keeps the practice central to its work. Over the years, NFP has distributed tree seeds and provided technical assistance, education, and equipment to support reforestation efforts in 4,500 communities in over 120 countries.

[The Sahelian Areas Development Fund Programme](#) (FODESA), launched by the International Fund for Agricultural Development, created a parkland agroforestry initiative in partnership with the World Agroforestry Centre that grows native trees alongside staple food crops, such as millet and sorghum. The initiative promotes soil fertility and water conservation while increasing access to native tree species that provide food, medicine, fuel, and building materials to locals. FODESA has also established village nurseries that aim to cultivate more drought-resistant native species to address deforestation in Mali.

Timberland and the [Smallholder Farmers Alliance](#) made a [pledge](#) to plant five million trees in Haiti after the country was struck by a magnitude 7.0 earthquake in 2010, using a community-based agroforestry model. The model was designed to increase tree cover, soil quality, and crop yields while also offering participants educational training, business skills, and entrepreneurial opportunities for the long-term economic sustainability of the program. Margaret Morey-Reuner, Director of Strategic Partnerships at Timberland, said “once the farmers experienced success in the form of increased crop yields that led to increased income, they were able to afford things like school tuition for their children and animals for their farms.”

[Trees for the Future](#) has planted 128 million trees around the world since 1989. Through integrating farming, animals, people, and trees, the project has improved soil quality, increased crop yields, and boosted the standard of living for families in Africa, Asia, and Latin America. [Trees.org](#), an initiative of Trees for the Future, educates farmers on the importance of planting trees alongside food crops and provides technical assistance as families transition their

land into productive “Forest Gardens.” They currently have 14 “Forest Garden Programs” underway in sub-Saharan Africa and planted more than four million trees on Earth Day 2016.

The [World Agroforestry Centre](#), part of the CGIAR Consortium, works in Cameroon, China, India, Indonesia, Kenya, and Peru. The Centre helps smallholder farmers increase use of trees on their land in order to improve food security, nutrition, income, health, and environmental sustainability. Their research also includes working toward a more productive, diversified, integrated, and intensified agroforestry system that will benefit smallholder households.

With an emphasis on sustainable land management, [Vi Agroforestry](#) partners with smallholder farm families and farmer organizations in the Lake Victoria region of East Africa. Since its inception in 1983, the organization has planted over 100 million trees and thereby improved the livelihoods of 1.8 million people.
