

The Role of Farmers in Concurrently Delivering Agroecosystem Services and Food and Nutrition Security

Farmers from Chile, Ireland, Costa Rica, the Philippines, and the U.S. recently shared how they deliver food and nutrition security while enhancing the environment during the [Committee on World Food Security \(CFS 50\)](#) meeting in Rome. The virtual side event held Oct. 10, 2022, was organized by Solutions from the Land, the Global Alliance for Climate-Smart Agriculture, the Global Farmer Network, and ASEAN Climate Resilience Network.

Each of the five farmers manage a circular system, meaning they use and reuse farm products (such as manure, straw, cover crops, recycled water, biogas and seed production) that retain value to the operation as substitutes for production inputs or as additional marketable goods and services. Retained value is key farm profitability, to the improved use of farm-ecosystem resources, and to reducing waste.

The panel included:

- **Thomas Duffy, from Ireland.** Duffy is transitioning to a multispecies forage mix for grazing his 100-cow dairy herd. By increasing biodiversity on his farm, he has been able to decrease use of synthetic nitrogen and increase soil health.
- **Nicolás Arriagada Méndez, from Chile.** Méndez grows organic vegetables, fruits, cereal grains, mushrooms and medicinal plants, and raises bees and other livestock. Waste from produce feeds livestock while livestock waste (i.e., manure) fertilizes his crops. He also minimizes waste by turning fresh produce into value-added products, such as dried vegetable flours.
- **Antonio Equipado, from the Philippines.** Equipado's community works together to produce organic rice seed, which they sell and cultivate themselves. They also raise fish in the rice paddies, which adds fertility and a marketable protein.
- **María Eugenia Ramírez, from Costa Rica.** Ramírez grows organic coffee beans for niche export markets and raises chickens, pigs, and dairy goats. Waste from coffee production and from animals is composted and turned into fertilizer.

The panel was moderated by **Lois Wright Morton, a U.S. farmer**, who grows blueberries, asparagus and red raspberries. She partners with her brother, who raises cattle, to acquire excess straw and manure that adds fertility to her soil.

During the discussion, farmers and attendees participated in two polls:

In the first (multiple choice), 92% of respondents said farmers in their country would describe their occupation as producing “food, forestry, fish, aquatic and/or agricultural products,” while 17% would describe themselves as producing “food and healthy soil, water, and ... a variety of ecosystem services that benefit my farm and my community.”

The second poll (single choice), asked “Who are you most likely to look to for new ideas and farming practices?” The top answer, with 60%, was “other farmers.” The second-most-popular source of education was Extension/government technical advisors (20%), followed by the internet/digital sources (13%) and ag technical advisors from industry (7%).

A [recording of this event](#) is available on the [GACSA YouTube channel](#).