

Growers try carbon farming to help combat climate change

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(5 of 8) At Richard's Grove and Saralee's Vineyard, from left, Jimmy Emmons, Zwide Jere, Jocelyn Bridson and moderator Renata Brillinger took in a symposium on climate smart Agriculture as part of the Global Climate Action Summit, Tuesday, Sept. 11, 2018 at La Crema Estate in Windsor. (Kent Porter / Press Democrat) 2016

The world's farmers must feed a human population that will reach 10 billion in the next three decades, but they also may be asked to help combat climate change by putting more carbon into the soil than they take out of it.

As an example, Jackson Family Wines is running a five-year experiment to try to increase the carbon held in its soils at a Russian River vineyard and a group of advocates of climate-smart farming toured the area on Tuesday. The Jackson winery, the county's largest vintner, and the Sonoma Resource Conservation District received a \$100,000 state grant to conduct the research on a 22-acre section of vineyard, said Julien Gervreau, the company's director of sustainability.

The company "wanted to participate in research to determine whether a working vineyard can in fact serve as an active carbon sink" to absorb carbon dioxide from the atmosphere, said Katie Jackson, a vice president of Jackson Family Wines and daughter of founder Jess Jackson.

Jackson spoke briefly Tuesday to the farm and conservation leaders who visited the Sonoma County vineyard as a prelude to the three-day Global Climate Action Summit, a major gathering co-hosted by Gov. Jerry Brown that begins today in San Francisco.

Karen Ross, California's secretary for the Department of Food and Agriculture, said farmers can address climate change by producing smaller amounts of greenhouse gases, but also through practices known as carbon farming or "sequestration." The terms basically involve agricultural practices that remove carbon dioxide from the atmosphere and hold it in the soil.

"We are in fact a key part of the solutions," Ross told the gathering of nearly 100 farmers, nonprofit leaders, policy makers and environmentalists gathered at La Crema Estate at Saralee's Vineyard in the Russian River Valley, a Jackson-owned property.

The invitation-only gathering here was one of many smaller events held in conjunction with the global summit, which runs through Friday at the Moscone Center. With the governor as a co-chair, the summit's 4,000 attendees are expected to include former Vice President Al Gore, astronaut Mae Jemison, actor Alex Baldwin, Paris Mayor Anne Hidalgo and Starbucks CEO Kevin Johnson.

The local event Tuesday included diverse sponsors such as the Almond Board of California and the Environmental Defense Fund, the state tourism agency Visit California and the Nature Conservancy. Inside Saralee's sleek conference building, where entire wall sections can tilt up to offer unobstructed views of the parklike setting, panels of speakers outlined both environmental challenges and opportunities facing the world and its farms.

Ross said a third of the world's cropland already has been degraded by poor farming practices. She also suggested that feeding the nations will become more difficult because of changing weather patterns, with 45 percent of the world's population by 2050 predicted to live in countries with chronic water shortages.

Farmers from Sonoma County and outside California shared their efforts to put more carbon into their soils.



(6 of 8) Reflections from Richard's Grove and Saralee's Vineyard, frame, from left, Jimmy Emmons, Zwide Jere, Jocelyn Bridson and moderator Renata Brillinger during the first part of a symposium on climate smart Agriculture as part of the Global Climate Action Summit, Tuesday, Sept. 11, 2018 at La Crema Estate in Windsor. (Kent Porter / Press Democrat) 2016

“That’s what we’re lacking across the whole world that we’ve destroyed,” said Jimmy Emmons, a farmer and rancher from Leedey, Oklahoma.

The nation’s croplands have lost about half of the carbon they once held, said Emmons, a board member of the Berryton, Kansas, group No Till on the Plains and a self-described “recovering tillage addict.”

Traditional farm cultivation practices result in soil erosion, loss of carbon and a related drop in the soil’s ability to hold moisture, said Emmons, who farms 2,000 acres of wheat and other crops and ranches 5,000 acres for cattle. When done right, no-till farming can help capture carbon dioxide in the soil.

Sonoma County's wine sector has for years worked to bolster its image for environmentally friendly practices. Grape growers here have declared they want the county to become the nation's first wine region certified as "100 percent sustainable" by 2019.

The newer practices include planting cover crops between the vines. Constellation Brands is doing so in the majority of vineyards it controls, said Mike Stutler, a senior viticulturist for the company that attended Tuesday's gathering.

For Jackson Wines, which harvests 14,000 acres of coastal vineyards in California and Oregon, a key question is whether vineyards can be used to store more carbon.

Katie Jackson said early research on other agricultural land suggests that "the soils beneath our feet can literally hold the key to help stemming the tide of climate change."

If carbon sequestration lives up to its potential, Gervreau, the Jackson winery's sustainability director, said farmers one day might be paid for practices that measurably place more carbon into the soil.

Speakers acknowledged that farmers around the world need to be educated on the benefits of newer practices that can improve their crops as well as the environment.

Zwide Jere, a co-founder of Total Landcare in Lilongwe, Malawi, Africa, said his organization works with about 100,000 small farmers a year in four African countries. He has learned that farmers are open to new practices if they will lower costs or increase production.

"Change will only take place if it's better than what you're doing currently," Jere said.

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