

Research focuses on climate adaptation

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Emission reductions seen as secondary to other research

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DAVIS, Calif. -- Studies on agriculture's role in climate change should focus less on reducing the sector's emissions and more on how farmers will adapt to coming changes, researchers say.

"The more perspectives we bring to the table, the better the solutions will be," said state Agriculture Secretary Karen Ross, who spoke March 31 to the University of California-Davis conference, which was organized by the California Climate and Agriculture Network.

In the coming decades, farmers could experience such impacts as a reduction of chilling hours for fruit trees or a shift in water availability.

UC-Davis Professor Bryan Weare said current models indicate that in 50 years, spring runoff will occur nearly a month earlier than it does now.

Speakers said that reducing greenhouse-gas emissions from agriculture is less important than finding ways of adapting farm practices to maintain production. Researchers say agriculture produces a small fraction of the state's emissions.

"The reality is there are much greater greenhouse gas emissions from urbanized land," said Louise Jackson, an agricultural ecologist at UC-Davis.

There's also the opportunity for agriculture to create emissions credits, which a number of industries will need once California's cap and trade system is implemented next year. Cap and trade is the centerpiece of Assembly Bill 32, the Global Warming Solutions Act, which the Legislature approved in 2006.

Farms and ranches have the ability to sequester carbon in soil. That could generate emissions credits that industries would use to help meet emissions caps.

"Keeping land in agriculture can be a key strategy for complying with AB32," Jackson said.

Dairies, which have begun to adopt methane-digestion technology to create electricity, will soon take some

of the biggest steps, said Charles Benbrook, chief scientist at The Organic Center of Boulder, Colo.

“I think the dairy sector is where the action is going to be in the next five to 10 years in terms of climate change adaptation,” Benbrook said.

Also March 31, the CCAN released a report stating research on climate adaptation and carbon sequestration is lacking. Years of budget cuts have rendered California’s assistance and incentive programs “woefully inadequate to meet the complex challenges of climate change,” CCAN’s report stated.

The report recommended spending a portion of public cap and trade revenue on research, technical assistance and incentives for adopting new cultivation techniques.