Keynote Presentation

Daniel Dooley, University of California

Sustainability in agriculture should be viewed not as an isolated niche but on a higher plane and in a global context.

"I'm troubled by the notion that sustainability applies only to alternative and small agriculture," said Dan Dooley, vice president of the Division of Agriculture and Natural Resources at the University of California. "Sustainability applies to all of agriculture, and we ought to think about it in that context.

"As we look to the future, we see a very diverse range of food production systems as being important to the future of food," he added. "It's critical to the necessary biodiversity in California."

Dooley, delivering the keynote address during the Western SARE California Subregional Conference in Visalia, cited what he sees as the key issues facing agriculture: food safety, accessibility to energy, ensuring growth and jobs and adaptation to climate change.

Agriculture, he emphasized, is extremely vulnerable to climate change.

"High temperatures will reduce yields of desirable crops and cause weed and pest proliferation," said Dooley. "Changes in precipitation patterns will increase the likelihood of short-run crop failures and long-range production declines."

Climate change, he said, will have the greatest impact on areas that are the least food secure, and South Asia will be particularly hard hit. In developing countries, half the

people receive their livelihood from agriculture, and calorie production will decline throughout the developing world.

Despite the hardships climate change will impose on food production worldwide, Dooley said it also creates opportunities for U.S. agriculture.

“Enhanced food security and climate change adaptation go hand in hand,” he said, noting that U.S. agriculture is capable of developing the technology to sustainably produce more on less.
Dooley said sustainable food systems recognize the multi-functionality of agriculture, which can simultaneously meet development and sustainability goals while increasing agricultural production.

“We need to get rid of the either/or idea,” he said. “We need to improve productivity using technology and science and decrease impacts on the environment.”

He also sees more potential for urban agriculture, noting that the more we can keep people connected to how food is grown, the better.

Dooley cited what he sees as agricultural stakeholder priorities in California:

- Competition for water and water-use efficiency
- Farmland preservation
- Viability of small- and mid-size farming operations
- Climate change
- Public understanding of challenges to sustainable food and agriculture systems

“We should think of sustainability not as a problem but as a dynamic system that can solve our problems. There are a variety of opportunities that people should think about. We should refuse to be defined by the past. We need to embrace change and diversity and welcome opportunities and challenges,” said Dooley.

“We in agriculture need to look at what people are demanding and how we can meet that demand. I’m very excited about the future of agriculture. I’m optimistic about California agriculture. At the university, it’s our job to help you respond to the opportunities.”

(View video of Daniel Dooley’s presentation.)