

## Iowa Forum Addresses Role Ag Can Play In Dealing with Changing Climate

More than 80 farmers, academics and members of the agriculture supply chain in Iowa Nov. 25 learned they all can make valuable contributions to efforts to stem the extreme climate variability that is taking a brutal toll on growers in the state.

With <u>an encompassing agenda</u>, a <u>forum</u> co-sponsored by <u>Solutions from the Land</u> (SfL) and <u>Iowa State University's College of Agriculture and Life Sciences</u> prompted the assertion that a balance must be found among the various aspects of Iowa agriculture, with the goal ultimately being to provide nutritious food, clean energy, and ecosystem services such as water filtration and carbon sequestration - all while maintaining profitability.

The forum was held by a special, self-directed Work Group, composed of Iowa agricultural thought leaders and value chain partners who are heading up an Iowa Smart Agriculture Initiative.

Serving as co-chairs of the Work Group is Iowa corn and soybean producer Ray Gaesser, a past chairman and president of the American Soybean Association; and Dan Robison, Dean of Iowa State's College of Agriculture and Life Science, and a co-chair of the Iowa Conservation Infrastructure Initiative.

The co-chairs and their work group members said the forum Monday was an initial step in exploring and assessing the impacts that extreme weather events and changing climatic conditions are having and are expected to have on the state's number one industry.

Epic flooding this spring caused more than \$2 billion in damage and in Iowa and delayed the planting of the 2019 corn and soybean crop. Coupled with a wet and late harvest, this year's weather-related calamities represented the latest real-world example of the "new normal" that is occurring, many forum attendees agreed.

As highlighted by the members of the science panel that opened the forum, the increasing frequency of erratic, extreme-weather events and climate variation pose unprecedented risks to the sustainability of Iowa agriculture, as well as numerous challenges to sustaining and enhancing crop productivity, livestock health, and the economic vitality of rural communities.

Fred Yoder, chair of the North America Climate Smart Agriculture Alliance and an SfL co-chair, said climate challenge goals cannot be met without technology and innovation.

He cited the three pillars to climate smart agriculture: 1) Adaptation and resiliency, 2) productivity, and 3) greenhouse gas reduction, noting that the first and second pillars lead to the third.

Yoder admitted that agriculture and science may not have all the answers today, "but we have some of the answers...We need tools in the toolbox to build resilience and mitigate climate impacts...We need farmer leaders to integrate all of this into the system." He added that farmers learn from other farmers, and farmers from Iowa will lead the effort to meet the climate challenge.

But the SfL leader also warned that it is critical that agriculture assert its leadership position now - taking an active role in decisions being made at all policy levels, including federal, state and local - or risk losing a place at the table to interests that won't necessarily represent the ag sector's positions.

"If agriculture doesn't lead, others will," Yoder said.

Jerry Hatfield, director of the USDA National Laboratory for Agriculture and the Environment, was among speakers who urged in-the-field measures from growers, noting that farmers must enhance their soils.

"The path will be complex," he said, noting the potential for debate over whether the climate goals can best be accomplished be through economic incentives or through top-down regulation.

"We know what we need to get done," Hatfield asserted. While scientists are accused of espousing "doom and gloom," he says there is strong awareness that "opportunities exist to build a new ag system to capture environmental value."

The USDA scientist said that to live with climate variation, growers must build resilience to yield variation, and plan for both production and ecosystem services.

"This is how we need to be thinking about the new economy of agriculture," Hatfield said.

Dr. Mike Castellano, a professor of soil science at Iowa State, said it is "critical that we link this (climate smart) science to the people and the operations on the ground," and invites farmers to lead on the actions that are needed.

Also addressing the forum were representatives of Gov. Kim Reynolds, U.S. Sens. Chuck Grassley and Joni Ernst, and Rep. Cindy Axne.

A recap of the forum can be downloaded **HERE**.

FOR MORE INFORMATION: <u>Dr. Kendall Lamkey</u>, professor and chair of the Iowa State University Department of Agronomy or <u>Ernie Shea</u>, Solutions from the Land 410-952-0123.