TRANSCRIPT
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How can we increase the sustainability and resilience of corn-based cropping systems? What can be done to help farmers address risks associated with highly variable and unpredictable weather and long term changing climate conditions? These are the questions the USDA's Sustainable Corn project is trying to answer.

Corn is the major cereal crop of U.S. agriculture. Eighty-eight million acres were planted in 2013 producing the highest ever total crop at 13.9 billion bushels and valued at $63 billion. 70-80 percent of corn production occurs in the Upper Midwest. The US exports 20 percent of the corn crop. In 2013, soybean, part of the corn rotation, was planted on 76 million acres with a total production at 3.3 billion bushels valued at $41 billion.

When it comes to corn-based cropping systems, creating a resilient response to excess rainfall and droughts and an increasingly highly variable climate is critical, if we are to sustain yields and protect soil and water resources. Yields are affected by temperatures and seasonal timing of drought and excess water. Bushels per acre peaked in 2009 with corn at 164.7 average bu/ac and soybean at 44 average bu/ac. The drought of 2012 dropped yields to 123.4 average bu/ac for corn and 40 bu/ac for soybean. We have come a long way from 1901 when the corn crop averaged 18.2 bu/ac and soybeans 11 bu/ac. But we cannot afford to rest on past and current success. While feeding the world we must also protect and conserve our soil and water assets here in the Upper Midwest.

There are increasing signs that cropping systems of corn-corn or corn-soybean rotation do not have a light environmental footprint. Hypoxic conditions in the Gulf of Mexico point to nitrogen, phosphorous and soil losses from our fields and farms. Soil erosion from single high precipitation events is taking away valuable soil needed to grow future crops.

The agricultural ecosystem in which we grow corn-based crops is a complex set of many interacting systems. These include carbon, nitrogen, and water cycles overlaid with the many decisions farmers make as they manage the land.

Today in Ames, Iowa, the Sustainable Corn Project and the 25 x'25 Alliance are co-hosting a conference for Corn Belt farmers and crop advisors to highlight some of the research and preliminary findings from our Sustainable Corn Project team. This conference is an opportunity for our team's scientists, and farmers, crop advisors, leaders of farm organizations, and industries investing in agricultural technologies to listen and learn from each other. We have more than 120 members of the Sustainable Corn team here, representing 10 of the upper Midwest land grant universities and USDA Agricultural Research Service at Columbus Ohio.

Over the next three days:

- Participants will learn more about how variable climate affects the corn-soybean rotation and some strategies for adapting to changing weather and climate conditions.

- About 35 Sustainable Corn graduate students, the next generation of scientists, will host a number of young people planning on becoming the next generation of farmers.
- On Thursday, the 25x'25 Alliance will lead off with their recommendations for climate adaption followed by industry's cutting edge technologies and a panel of speakers on developing a sustainable value chain.
- Two national leaders from the corn growers association and the United Soybean Board will close our conference with their views of the future and how to get to long term sustainability and resilience.

I'm looking forward to the next three days as we talk together about how to build more resilient and sustainable corn-based systems.

If you're just hearing about our project and our conference for the first time today, please take some time to learn more. Our website is www.sustainablecorn.org.

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