

5 Questions We Want to Answer on World Food Day

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In 1865, when the new global agribusiness company Cargill [was founded](#) in the tiny town of Conover, Iowa, not far from the birthplace of Nobel Peace Prize Laureate and World Food Prize founder Dr. Norman E. Borlaug, the world looked vastly different. There were only about 1.3 billion people on our planet, the first land grant agricultural research university was yet to open and agricultural innovation centered largely around John Deere's steel plow.

Now, 150 years later, the global landscape has never looked so complex; population surges, a rapidly changing climate and a new set of no less than 17 Sustainable Development Goals will shape the decisions we must make as a global community to ensure a nutritious and sustainable food supply. This World Food Day, at the [annual Borlaug Dialogue](#) we will convene some of the world's leading minds in the fight against hunger, to find ways forward to sustainably and nutritiously feed the 9 billion people who will inhabit our planet by 2050. We are pleased that Cargill Chairman and CEO David MacLennan will be delivering a major address at our World Food Prize Symposium looking back over the past century and a half and looking ahead to 2050.

Our other discussions at the Borlaug Dialogue will also center on five key themes:

What is big data going to do for our food supply?

The fast and accurate digital technology we have at our disposal today, combined with vital inputs such as improved seeds and fertilizers that have bolstered our food supply throughout the last century, can make farming so targeted and precise, that our precious resources such as land and water can be used in the most efficient way possible. “Big data” is on the brink of revolutionizing agriculture, and we will be discussing this potential with some of the private sector innovators that will be leading the way.

How can we get more women into careers in STEM?

If there is one thing we know, it is that science holds a host of solutions to food security issues. But we are missing a great deal of talent in the pool of scientists that are working on these breakthroughs. Among college graduates who receive bachelor’s degrees in science, women range from 41 percent in the US to 25 percent in Japan and the Netherlands. In the UK, US, and Germany, fewer than one in five engineers are women and in Africa only [one in four](#) agricultural researchers is female. We have an extraordinary array of 18 women scientists, policy leaders, educators and farmers participating in the Borlaug Dialogue, who will be sharing their views on the importance of educating girls in developing countries, and how we can get more women to lend their talents to this vital research area everywhere.

What has the International Year of Soils unearthed?

For too many years, we have treated soil like dirt. The International Year of Soils has

shone a spotlight on this crucial natural resource, and uncovered a range of food security benefits that can be won through improved soil management. In particular, we have learned how Africa's soils need urgent attention. As the [recent Montpellier Panel report](#) highlighted, up to 65 percent of Africa's arable land is degraded, affecting an estimated 180 million people across the continent who already suffer disproportionately from hunger. Howard G. Buffet, chairman of the Howard Buffet Foundation, and Sir Gordon Conway, chair of the Montpellier Panel will lead a session to discuss how this critical issue can be tackled.

Has West Africa recovered from Ebola?

Exactly one year ago, the Ebola virus ravaged three West African nations, bringing with it terrible consequences for food security and nutrition in the region. As the president of IFAD, Kanayo Nwazne [told us at last year's Borlaug Dialogue](#), in Guinea, Liberia, and Sierra Leone farmers left their fields to rot as they stayed home in fear. In Sierra Leone, up to 40 percent of farms were abandoned in the worst-affected areas. One year later, how are these countries recovering? What has the international effort to support the road to recovery entailed? We will be joined by the former Liberian Minister for Agriculture, Her Excellency Florence Chenoweth, and the special adviser to the president of Sierra Leone, 2004 World Food Prize Laureate Monty Jones, to discuss how the emergency was handled and what still needs to be done.

How will we monitor progress towards sustainable food security?

The adoption of the Sustainable Development Goals is a milestone in the fight against hunger, but one of the most important elements over the next 15 years is how we shall measure our progress towards meeting this goal. It will be essential to evaluate the key

sources of progress as well as problems along each dimension. Monitoring sources and their contributions in turn requires understanding trade-offs between alternatives. An esteemed panel from the World Food Center at University of California, Davis will be addressing this very subject in the area of food production, nutrition and health, and the steps we should be taking through to the completion of the goals in 2030.

We hope to answer these questions, and a whole lot more throughout the Borlaug Dialogue this World Food Day. Follow [Farming First](#) for more expert commentary, or follow [#FoodPrize15](#) on Twitter.

Ambassador Kenneth M. Quinn is the President of the [World Food Prize Foundation](#). The annual [Borlaug Dialogue](#) hosted by the Foundation in Iowa is taking place 14-17 October 2015.

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