

The Journey from a Farm in Shandong Province China to Ames Iowa

by Nathan Cook, CARD Editor

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As is typical of many Midwesterners, Wendong Zhang grew up with family ties to agriculture. In some ways, his grandfather's farm in Shandong province in Northeastern China would be similar to an Iowa farm. Located in the western portion of the province most of the family-run farms rotated crops between wheat and corn. The farming methods in the province, where, Wendong says, economic development lagged behind the rest of the country, lagged far behind the United States. "Back then, machinery was not widely adopted as it was cost-prohibitive for farmers," he said. "I remember as a kid riding a very small tractor and grinding wheat because there was no large machinery that could do both."

In his lifetime, the farms around his village started going through major changes. "Over the last 20 years there have been large changes in which crops are grown and the way in which they are grown," he said. Wendong said farmers in his village switched from grains like wheat and corn to consumption grapes, which later gave way to using small greenhouses to grow produce like honeydew melons, cucumbers, and tomatoes. There was an economic rationale for switching—at first, consumers were

willing to pay premiums for exotic varieties of grapes, making them more lucrative than grains, then eventually farmers realized they could use the land more intensively to grow larger amounts of vegetables in greenhouses. "The limiting constraint now is labor, not land. As long as you put in the labor you'll have a good crop," Wendong said.

The changes in agricultural practices had a positive economic effect in Shandong province—the average annual income of a farmer in Wendong's hometown has risen from about \$1,500 to \$10,500, outpacing the rate of overall inflation in China.

As Wendong watched the culture of farming change in Shandong Province, he became not only interested in the positive effects, but the negative effects as well. "I studied environmental science in college and I was interested in the massive problems that come along with economic development. Gradually, I became more interested in the human aspects of environmental problems," he said.

His interest in economic development and environmental science took him from Fudan University in Shanghai, which only admitted 40 students out of 750,000 high-school graduates in Shandong provinces,

to Ohio State University. Wendong earned his master's in economics in 2012, then through the advice of his academic advisor, he entered the environmental science graduate program and earned his PhD in agricultural, environmental, and developmental economics in 2015. "Looking back, I feel a complete arc—I still feel very connected to my agricultural and environmental background," he said.

Wendong came to Iowa State University in August of 2015 as an assistant professor of economics and an extension economist, leading the Iowa Land Value Survey and the Soil Management and Land Valuation Conference – the longest running conference at ISU. The goal of his research and extension program, he says, is to promote the long-term sustainability of the agro-ecosystem. He has also taken an interest in the similarities and differences in agricultural and environmental problems faced by the US and China. "Because of the different political and social systems, they could take very different approaches, but I think China has already learned a lot and are learning from Europe and the US," he said. ■

farm households and the farm sector are of perennial significance in China and the United States. Despite significant differences and even disputes, Chinese and US agricultural industries have a lot in common and most importantly have a lot to learn from each other. As China's president Xi puts it: the Pacific Ocean is vast enough to embrace both China and the United States.

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