SUCCESS STORY

Hands-on Agronomy Education Nurtures Senegalese Farming Future

The Ohio State University/Université Gaston Berger

Photo by Richard Dick, The Ohio State University

The Ohio State University Extension Specialist Brad Bergefurd teaches two UGB students where to place the seedlings to be transplanted as hundred more watch the demonstration.

The people of Northern Senegal are poised to begin growing more of their own food, reducing reliance on imports, thus creating a more sustainable future based on self-reliance. An irrigation project by the World Bank created 1,400 hectares of newly irrigated land to be farmed by 243 farmers on small two- to five-hectares plots. However, the availability of irrigated land solves only part of the problem. New farmers need a lot of technical and practical assistance to make sustainable agriculture a reality in Northern Senegal. A higher education partnership funded by the U.S. Agency for International Development through Higher Education for Development is providing the necessary training to farmers for long-lasting results.

The partners, the Ohio State University (OSU) and Université Gaston Berger (UGB), are creating new degree programs in agro-ecology and crop production. Their activities include implementing a pilot extension and outreach program with the farmers working the newly irrigated land, troubleshooting problems, and conducting farm research on site. An immediate problem the farmers face is the amount of time it takes to plant up to five hectares plots of land, which are much larger than typical Senegalese farms. A farmer is able to transplant 15 plants per minute and about 9,880 tomato plants are needed for one hectare. "I have concern about being able to transplant the plants when they are ready before the rains come," said Aliou Fall, a farmer.

Brad Bergefurd, OSU extension specialist, immediately understood the challenge and recommended the farmer use a mechanical transplanter. The inexpensive device can plant 50 plants per minute, dramatically reducing the amount of time needed to fill a field. With a solution available, education was the next step. The partners purchased a transplanter and held a demonstration and training on December 2012 at the UGB student farm. Recognizing the tremendous impact this technology can have on the future of Senegal, representatives from the media, farmers associations and UGB, as well as politicians, 113 local farmers and 144 students were in attendance.

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— Mateugue Diack, partnership director and Université Gaston Berger

The learning opportunity created by the partnership left an impression on the attendees. "Not only is it fast, but the rows are perfectly straight, I hope to someday use a transplanter in my fields," said El Hardj Dia, a farmer.

Local farming organizations are planning to purchase additional transplanters, and eventually establish a local transplanter dealer in the Saint-Louis region. Mateugue Diack, partnership director and faculty member at UGB, considers the wider impact of the training and opportunity for sustainability. "This simple machine has the potential to transform farming not only in Senegal, but across West Africa, enabling Africa to rely less on imports, and increase our ability to export Senegalese produce to Europe," he said.

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