Feed the Future Country Fact Sheet

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Farmers Increase Food Security with Climate-Smart Agriculture Methods

Chelsea Rinnig

Peace Corps Volunteer Chelsea Rinnig works with a community member to make lines with a “ripper,” a tool that assists in the strip plowing process.

In Zambia, the majority of the population engages in subsistence farming. Working across several Feed the Future-funded projects, Peace Corps Volunteers are training Zambians in conservation and climate-smart agriculture techniques. Here are the stories of three volunteers who are working with local community members to increase food security and mitigate the adverse effects of nutrient mining, soil erosion and poor water management.

Establishing Demonstration Plots

This past growing season, Peace Corps Volunteer Chelsea Rinnig, of Santa Monica, California, established a demonstration plot to teach farmers about conservation agriculture and food security. A community member offered a small space of land for use as the demonstration plot. Rinnig used a “ripper,” a tool that assists in the strip plowing process, to promote soil and water conservation in planting orange maize seeds. She invited the local farmers group to help fill in the ripped lines with organic-manure fertilizer. This climate-smart technique yielded a good-sized harvest. From this success, the group learned the benefits of orange maize, which is high in vitamin, A, increasing food security.

Coordinating Training for Local Farmers

After conducting a community assessment with local farmers, Volunteer Morgan Marks, from Furlong, Pennsylvania, coordinated two trainings on rice production in her home district. The first training was attended by 185 participants, including 18 of her fellow volunteers and their community counterparts. The second training had a turnout of 123.

Marks collaborated with the Japanese International Cooperation Agency (JICA), which promotes the production and sale of rice, to facilitate lessons on climate-smart methods and appropriate technologies in rice production. Participants learned about climate-smart agriculture technologies and created maize shelling devices from metal that is pounded into an accordion-like shape. These machines make shelling maize faster and less labor intensive. Farmers in the district are now more capable of meeting local demand, and thus contribute to improved food security.

Connecting Communities with Information

Demonstration plots are often successful in introducing new techniques, but it takes community support and buy-in from farmers to implement these kinds of activities. Sometimes all it takes is one person to start a chain reaction. One night over

dinner, Peace Corps Volunteer Phillipe Holmstrom, from Fair Oaks, California, was approached by his local counterpart, who expressed interest in trying the same “ripping” method of tilling that Chelsea Rinnig introduced in her community. Holmstrom had little experience with the method, but he had a handbook, which he and his counterpart studied. With his newfound knowledge, the farmer used the method to plant over a hectare of maize. The crop flourished while nearby fields had dry, brown maize that stood at only half the height of his.

This is exactly the outcome Peace Corps Volunteers seek: community members empowered and encouraged to try new activities—ones that improve food security and increase livelihoods.