Engineering Service Corps: Agriculture Project Highlights

The Engineering Service Corps (ESC) program draws on the expertise of Engineers Without Borders USA’s most seasoned volunteers from across engineering disciplines and industry sectors. The Engineering Service Corps collaborates with international NGOs, governments, United Nations agencies and local communities to design and implement sustainable and technologically appropriate solutions to engineering challenges. Our engineers are experienced in working in contexts where resources are limited and cultural awareness is imperative.

Improved market Access in Rural Guatemala

For the community of El Salitre, Guatemala, a trip to the larger markets of the neighboring city of Joyabaj meant a 2-hour drive. To remove this barrier, ESC volunteers partnered with the community to build a 230-foot bridge that connects El Salitre to Joyabaj over the river that once separated them. Today, the community of El Salitre can reach the market to sell produce and other goods in a 20-minute walk.

Improving Efficient Crop Production in Mozambique

The nonprofit organization iDE works with smallholder farmers in Mozambique to grow vegetables in the dry season to supplement their rainy-season crops. While these crops provide welcomed supplemental income, many spoil before they can reach the market. Through a collaborative project with iDE’s Mozambique program, ESC designed a crop cooler, which is a post-harvest cold-chain storage system. ESC volunteers provided the design and completed facility assessments and technology tests. The crop cooler will help farmers reduce post-harvest waste and expand the availability of high-nutrient produce for the community while stabilizing smallholder farmer incomes.

Strengthening Kosovo’s Local Dairy Production

More than 90 percent of the milk consumed in Kosovo is imported, but Kosovo has the potential to develop a robust dairy market. ESC partnered with USAID and the Kosovo Association of Dairy Producers to improve dairy quality and raise consumer awareness of fresh, local products. ESC volunteers conducted water quality tests and other assessments at 11 dairy farms to identify potential causes of water contamination and to observe day-to-day farming practices. A training curriculum and brochure outlining hygiene best practices was then created to help farmers improve milk quality.

Growing Exports and Income Through Solar Herb Drying

In Southern Kosovo a group of 50 women farmers have been able to sell native herbs for export to Europe through the usage of solar drying tunnels provided by USAID. ESC saw an opportunity to improve the efficiency of the drying tunnels by training members of the cooperative and by suggesting installment of low-cost thermometers, reducing drying times by 25-50%. ESC’s training has enhanced the cooperative’s ability to produce quality herbs for market.