



Feed the Future Country Fact Sheet

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Solar Drying Technology Provides Solution to Food Waste

At the beginning of mango season in northern Benin, the plentiful fruit provides food and income for farming families all across the region. Mangoes are so plentiful, in fact, that every year supply outpaces demand and smallholder farmers are left with fruit that rots on the trees or cannot be sold in local markets once harvested.

To enable communities to take full advantage of a profitable orchard crop, Feed the Future Peace Corps Volunteer Steve Smith teamed up with local partners in Boukombé, Benin to support the installment of a solar drying facility that can process and preserve mangoes that would otherwise go to waste. Boukombé is the hottest part of Benin's Atacora region and a major producer of mangoes.

Through a partnership between the Peace Corps and U.S. Agency for International Development to support food security in West Africa under Feed the Future, a regional association of about 14,000 women in Atacora received a small grant to launch the drying facility, start preserving local foods, and generate new economic activity for women and families. The association partnered with a local NGO that builds solar-based equipment to install a solar captor on the roof of the facility. The solar captor heats up air, which is then pulled through vents and across drying cabins filled with trays of mangoes.

Members of the women's association were trained to use the drying equipment and to select and sort mangoes for processing. The installment of the solar dryer also spurred a juice- and jam-making project, an additional income-generating activity that takes advantage of the sorting process in fruit drying and nearly eliminates waste. As a result of the marketable skills and training they acquire working in the drying facility, women can increase their earning potential in the local agriculture sector.

The solar drying facility in Boukombé is one of the only mango-drying operations in all of Benin, and its renewable energy approach contrasts with the gas-powered drying units that are more common in other mango-producing regions of West Africa. Eventually, the dried mangoes and other products processed in Boukombé are expected to be sold in local supermarkets across the country.