SNAPSHOT
“Man-Made Uzbek Oasis”

USAID and a coalition of public and private partners transform the Uzbek fruit tree sector

The USAID Agricultural Linkages Plus Project (AgLinks Plus) and its partners are leading efforts to transform the Uzbekistan fruit tree sector. Working with Uzbek researchers, commercial nurseries, and farmers, this public-private partnership is helping to turn Uzbekistan’s fruit orchards into man-made oases.

Uzbekistan has a long history of producing world-renowned fruit crops: stone fruits (peaches, nectarines, cherries, apricots, and plums); pome fruits (apples, pears, and quince); subtropical fruits (pomegranate and persimmon); and grapes. With USAID support, Uzbek farmers have made great productivity improvements in their orchards and vineyards over the past four growing seasons employing project-promoted productivity improvement techniques—pruning, trellising, grafting, and budding, pollinating, and more. AgLinks Plus and a coalition of sector leaders are now moving the tree fruit sector to the next production plateau: Integrated Intensive Orchard Management.

This approach combines three core technologies: dwarf tree varietals, appropriate trellising, and drip irrigation. Integrating these technologies in high-density orchards—up to 2,500 trees per hectare depending on the type of crop—results in highly competitive orchards yielding excellent returns on investment.

In collaboration with the Shreder Horticultural Research Institute of Uzbekistan and five private nurseries, this development initiative is growing a local supply of guaranteed “true-to-type” tree seedlings—specifically, dwarf varieties—needed to establish and/or maintain intensive (high-density) orchards. A key component of this advanced production approach is an in-vitro tissue culture lab at Shreder where micro-propagation technology will allow rapid production of large numbers of “genetically identical” true-to-type plants. Using a relatively small amount of resources, saplings are then propagated throughout a network of commercial nurseries.

Along with modern dwarf varietals and proper trellising, a third critical requirement of intensive orcharding is delivery of the right amount of water to the right place at the right time. Coalition partners are demonstrating advanced drip irrigation systems that deliver water appropriately and conserve a precious scarce resource. Using less water, USAID is helping Uzbek farmers transform their orchards into man-made oases.

"Using modern varietals, trellising and advanced drip irrigation technology has had a huge impact… we are seeing a 60% increase in growth rates and 40% more budding in our mother plants which leads to increased fruit set.”

—Abdullah Aripov, Researcher, Shreder Horticultural Research Institute of Uzbekistan