



## Feed the Future Country Fact Sheet

Online Version: <https://www.feedthefuture.gov/article/mechanization-and-irrigation-project-demonstrates-sustainable-ways-scale-technology-adoption>

# Mechanization and Irrigation Project Demonstrates Sustainable Ways to Scale Up Technology Adoption in Bangladesh



CSISA

Scaling up agricultural technologies is rooted in a basic economic principle: economies can only grow so much without technological advancement to improve efficiency in production. That's why a Feed the Future program focused on cereal crops in South Asia is helping smallholder farmers in Bangladesh, one of the poorest countries in the world, adopt innovative technologies and farming practices that will enable them to sustainably grow more of their own food.

Since 2009, Feed the Future's [Cereal Systems Initiative for South Asia](#) (CSISA) has combined innovative research, extension and market-oriented solutions to boost farmers' capacity to produce staple crops in more efficient, climate-resilient and ecologically responsible ways. The program has already demonstrated success in popularizing improved cropping techniques, introducing new and more productive crop varieties and linking farmers to markets.

But for Feed the Future to have transformative impacts on agricultural production in Bangladesh, a critical mass of smallholder farmers in the areas where the initiative works need to have access to more advanced and efficient technologies at affordable prices.

In order to reach more farmers with critical agricultural technologies, Feed the Future established a specific CSISA project focused on mechanization and irrigation in Bangladesh. Led by the International Maize and Wheat Improvement Center in partnership with agricultural value chain experts International Development Enterprises, the project increases farmers' access to agricultural machineries and surface water irrigation equipment that are appropriate for smallholders, with a focus on getting the right technology for efficient farming into local markets.

In order to maximize the scalability of new technologies, the mechanization and irrigation project focuses on those technologies that have proven through CSISA to have the most potential for enhancing productivity and conserving natural resources in the region. These include fuel-efficient surface water irrigation pumps and agricultural equipment that conserves resources by increasing precision, such as tools that plant seeds at a consistent depth in the soil.

To achieve widespread commercial availability of these technologies, Feed the Future is building public-private partnerships with key actors in Bangladesh's agricultural supply chain, including agricultural machinery importers and manufacturers, local machinery dealers and local service providers. The project targets service providers as key agents in technology dissemination, as smallholder farmers in Bangladesh tend to hire local providers who already have the technology they need

rather than investing directly in large mechanized equipment themselves.

In its first six months, the mechanization and irrigation project has forged agreements with two major private agricultural machinery companies, leveraging over \$600,000 of investment to commercialize the machineries at scale in the areas where Feed the Future's work is concentrated. Bangladeshi food products company PRAN-RFL Group is also a commercial partner in the project and has already imported over 1,200 fuel-efficient pumps to Bangladesh for sale at a reduced cost to local service providers throughout Feed the Future's focus areas.

To date, over 2,000 hectares of land in Bangladesh have already undergone transformative agricultural intensification facilitated by local service providers who have sold improved mechanized and irrigation services to farmers. As Feed the Future continues to engage private sector partners through CSISA, more smallholder farmers will be able to access more sophisticated technologies and sustainably increase production on their land.