

Rwanda loses an estimated 150,000 tons of agricultural produce annually which is equivalent to nearly 30 percent of total harvests—due to poor post-harvest management. Inadequate storage facilities, poor harvesting and handling practices, lack of modern drying technologies, pest and disease damage, and weak transport infrastructure continue to undermine farmers' efforts and incomes.

However, a youth-led Rwandan agritech innovation is helping to reverse this trend by connecting farmers directly to markets while ensuring produce reaches consumers in fresh and marketable condition.

Founded in Rwanda, Afri-Farmers Market, an agritech e-commerce platform that leverages digital tools to link rural smallholder farmers with urban buyers, is reducing post-harvest losses and improving incomes for thousands of farmers across the country.



At Cooperative Duhuzimbaraga in Rwamagana District, farmers are already witnessing the impact of the platform through improved market access, technical support, and modern cold-chain transportation systems.

The platform currently serves more than 13,000 contracted farmers, connecting them with assured buyers including households, restaurants, hotels, and businesses. This market linkage enables farmers to secure fair prices while significantly reducing losses that occur between harvest and sale.

The innovation received Rwf134 million through the Innovation Challenge Fund (ICF) under the Commercialization and De-Risking for Agricultural Transformation (CDAT) project, a World Bank-supported initiative aimed at transforming Rwanda's agri-food sector through youth-led innovations.

According to Alex Kyeyune, Head of Agriculture and Research at Afri-Farmers Market, the funding enabled the company to invest in refrigerated trucks that preserve produce quality throughout the supply chain.

"With this support of CDAT we got refrigerated trucks, which deliver from the farms to our collection centers (market) and from the collection center to clients (consumers) without the product losing its freshness, quality and price," Kyeyune said.

The cold-chain logistics system addresses one of the biggest challenges facing horticulture farmers, where fruits and vegetables often spoil before reaching markets.

For members of Cooperative Duhuzimbaraga, the benefits have been substantial. The cooperative's seasonal earnings increased from Rwf4.5 million to Rwf8.5 million after partnering with Afri-Farmers Market.

Jean Marie Vianney Nyamurasa, president of the cooperative, said that before signing a contract with the company, farmers often harvested crops without knowing whether buyers would be available.



*Jean Marie Vianney Nyamurasa, president of Duhuzimbaraga cooperative*

The uncertainty frequently led to heavy losses and forced farmers to sell produce at low prices.

“We used baskets and ferried produce on bicycles for long distances to reach nearby markets thus most it got damaged and was bought at low prices,” he explained.

Nyamurasa noted that the combination of technical assistance, reliable transportation, and guaranteed markets has reduced post-harvest losses within the cooperative by approximately 40 percent.

“Being assured of on-farm technical assistance, transportation through cold trucks and ready buyers has greatly reduced the losses we used to experience because of poor storage and transportation,” he said.

Beyond logistics, the digital platform is also helping farmers make better production and marketing decisions. Cooperative leaders have received specialized training on how to use smartphones to collect and upload production data, enabling the platform to coordinate supply with market demand more efficiently.

Kyeyune said the company plans to expand access further by introducing a USSD-based version of the platform, allowing farmers without smartphones to benefit from the service.

“This technology will soon be available on USSD phones to further enable farmers to increase incomes and also cut down on post-harvest losses,” he said.



*Alex Kyeyune, Head of Agriculture and Research at Afri-Farmers Market*

The platform’s current reach of more than 13,000 farmers has already surpassed targets established under the delivery contract signed between Afri-Farmers Market and the Rwanda Agriculture and Animal Resources Development Board (RAB) through the CDAT Innovation Challenge Fund.

While the innovation’s contribution currently accounts for less than two percent of Rwanda’s total annual post-harvest losses, experts say it demonstrates the potential of technology-driven solutions to address a long-standing challenge in the agricultural sector.

Janvier Ahimanishyize, an ICF Consultant, believes that greater investments in digital agriculture and post-harvest management innovations could help Rwanda make significant progress in reducing food losses nationwide.

“There is need to extend the CDAT project and lessons learnt to reach more farmers and fund other e-commerce innovative solutions that can add value or even fill the existing gaps in post-harvest loss management that remain at the national level,” Ahimanishyize said.

As Rwanda seeks to strengthen food security, increase agricultural productivity, and improve farmer incomes, innovations such as Afri-Farmers Market are demonstrating how technology, market access, and modern logistics can transform agricultural value chains and ensure more food reaches consumers instead of being lost after harvest.