



SUCCESS STORY

Use of ZECC and Crates Boosts Farmers' Income

HORTICULTURE

INNOVATION LAB

Better Quality Produce and Increased Farmer Earnings through Adoption of Good Postharvest Practices.



Since the training in ZECC construction and use of crates, Mr. Leonce has improved his income as he no longer suffers postharvest quantity and quality losses during storage and transport of produce.

"ZECC is affordable technology for a farmer to protect his produce against weight loss, quality loss, and price decrease."

> Mr. Kanamugire Leonce Vegetable Farmer, Ruhango

For the last 5 years, the 30-ha marshland at Rugondo in Tambwe cell, Ruhango sector is cultivated by 453 cooperative members - 262 females and 191 males. To target the in-demand crops for the market, vegetables like eggplant, cabbage, tomato, and amaranth are annually rotated with maize. The production cost is high due to seasonal price fluctuations, losses from poor handling, and lack of proper storage of the produce.

Postharvest solutions that increase the quality and life of vegetables, through handling, storage, as well as better packaging can greatly enhance farmers' income. USAID's 'Reducing Postharvest Losses in Rwanda (RPLR)' project in partnership with RAB is working to address issues in the country's horticulture value chain. Implemented by Agribusiness Associates Inc., RPLR project is aimed at increasing food security in Rwanda, by understanding and identifying the most efficient ways to reduce postharvest losses.

RPLR project has organized on-farm training of farmers on appropriate postharvest handling techniques aimed at reducing the losses at different stages of vegetable production. "Before being trained by RAB/RPLR on using crates and ZECC in November 2018, I was losing 50kg of produce every week because of overripening at farm and post-harvesting storage at the ambient open room of my house", stated Mr. Kanamugire Leonce, a farmer of Tambwe cell and one of several hundred of farmers benefiting from the project.

The project has trained UATA, Mr. Leonce's cooperative which has helped him in constructing his own Zero Energy Cool Chamber (ZECC). The project has also supported him with 10 crates. He is storing eggplants, chili pepper, and amaranths in ZECC before transporting vegetable crates to market. He is selling market-acceptable quality produce without any spoilage and is earning a higher income. Mr. Leonce said, "Before the training when I was delivering my produce at the market, the quality was not good as there were no sorting and grading practices. At the market, I was getting the price of the second-grade produce."

Mr. Leonce is currently growing eggplants on a 0.06-ha plot and the production costs are 75,800 frw. The production is 2,400kg (60 bags of 40kg each) which is harvested 8 times per season. He is earnings 4,000 frw/bag which makes a total of 240,000 frw per season. The project staff visited him recently and Mr. Leonce, the father of 4 children, was happy to have saved the postharvest losses that he used to have.

Kanamugire Leonce advises his colleagues to overcome the losses by taking advantages of ZECC and Crates. Most cooperative members are making more income from vegetables than maize with the adoption of good postharvest practices and they want to keep using the modern techniques in order to get high quality produce.