

Innovation for household vegetable production in Kenya

In Kenya, Rebecca Dero was growing various leafy vegetables and tomatoes in a sack garden, a technology promoted by Kisumu County Department of Agriculture, Livestock and Fisheries under the Community Feeding Programme to increase family food and nutrition security.



Rebecca Dero showing her improved sack-garden technology.

Credit: Chesha Wettasinha

The sack garden has a middle column made of stones and pebbles into which water is poured, but Rebecca discovered that the water trickles down quickly to the bottom, leaving the upper parts of the sack dry. She had to use lots of water – a scarce resource in her area – to keep all the soil moist.

She decided to improve the system so that it uses less water yet ensures that all parts of the sack receive enough water.

Reservoir

She inserted a perforated polythene tube connected to a 20-litre water container, which serves as the reservoir. The perforation makes it possible to provide drip irrigation to each plant in the sack garden.

Her innovation has enabled her not only to improve her yields but also to produce vegetables and tomatoes year-round without relying on rainfall. With abundant produce, she has been able to improve and diversify her family's diet and to sell the surplus for income.

Rebecca has trained other community members on her innovation, and was recognised and awarded certificates by the County Governments of Kisumu and Makueni at the 2018 annual International Farmer Innovation Day and at the FIF in 2019, respectively, for her outstanding innovation in food security and climate-change adaptation.

Report by Vincent Mariadho, Prolinnova–Kenya coordinator



Sack-garden technology.

Credit: Chesha Wettasinha