



SUCCESS STORY

Chimney Solar Dryer Boosts Efficiency and Income

HORTICULTURE

INNOVATION LAB

Women Entrepreneurs increase their income by using Solar Dryers.



Since, Ms. MUSANABERA Fortunee started using the Chimney Dryer, she is saving time and producing good quality dried products which have high market demand.

"I used to dry Orange Fleshed Sweet Potatoes for 5 days and now by using Chimney Solar Dryer, it is taking 3 days without any kind of stress like bird damage, rain, or dirt."

> Ms. MUSANABERA Fortunee Vegetable Farmer, Ruhango

There are an estimated 1 million rural households in Rwanda that grow horticultural commodities. For most rural households, produced fruits and vegetables provide an important source of nutrients as well as income. The poor handling, lack of proper storage and processing practices not only result in a great loss in the market value of the harvested produce but also their unavailability during the off-season.

Postharvest solutions that increase the quality and life of horticulture produce, through handling, storage, packaging, and better processing, can increase their availability and greatly enhance farmers' income. USAID's 'Reducing Postharvest Losses in Rwanda (RPLR)' project in partnership with University of Rwanda, Rwanda Agriculture Board and National Agriculture Development Export Board, 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.

In April 2018, RPLR project in collaboration with University of Rwanda, organized training on small scale postharvest handling practices with a focus on different drying techniques. "I was motivated by the training on drying technology and started drying OFSP for milling and selling the flour", stated Ms. MUSANABERA Fortunee, a female entrepreneur and one of several hundred of farmers benefiting from the project.

The project has trained and supported a female entrepreneur's group, INKINGI Y'URUGO in the installation and use of chimney solar dryer and Ms. MUSANABERA Fortunee is an active member of this group. The solar dryer is accessible to all the members of the group. Earlier, she was drying OFSP openly under the sun which was lot of work and had many challenges. She had to remove drying produce quickly if it started raining and it was challenging to even dry produce during raining months. The birds and other flying insects were another major concern during open-air drying process. Lastly, the hygiene was also not good because she had to touch the drying produce many times.

After the training, Ms. MUSANABERA has started to dry many commodities such as orange fleshed sweet potato, beetroots, amaranths, and *igisura* (Ilitica dioica). Ms. MUSANABERA shared that it takes a shorter time for the commodities to dry with chimney solar dryer than drying under the sun. Additional benefits are, the color and quality of dried OFSP is much better and its safety is acceptable by the market. Currently, she is selling OFSP flour at 1,000FRw/kg, beetroots flour at 4,000FRw/kg, igisura at 10,000FRw//kg, and amaranth flour at 2,000FRw/kg. "Since we started using the chimney solar dryer, I am saving time, safety is acceptable and the market demand of the dried product is high which means my income has also increased", said MUSANABERA Fortunee.

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