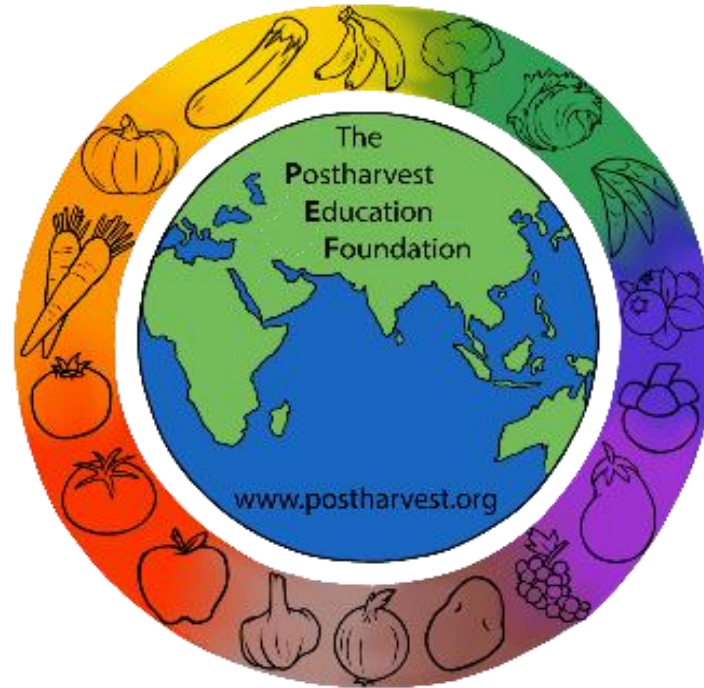


The Postharvest Education Foundation (PEF): Role in postharvest capacity building through innovative extension platforms and effective training programs

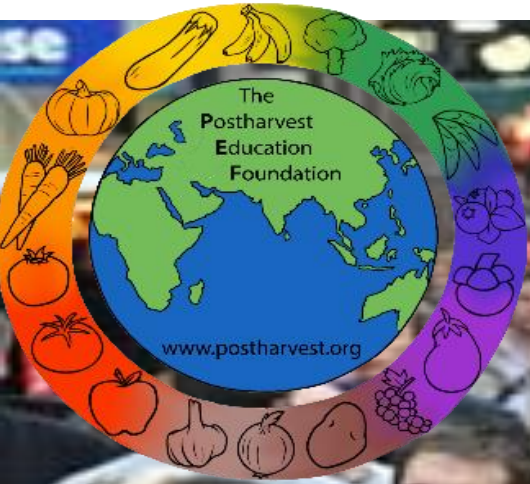


*Empowering people
to reduce food
losses...*

Vijay Yadav Tokala, Majeed Mohammed and Lisa Kitinoja

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The Postharvest Education Foundation (PEF) recognizes the realities of the current global challenge to feed a world of 10 billion people by 2050.





One-third or more of all the global food produced never makes it from the farm to our fork. Measured as a country, food waste would be the third largest for greenhouse gas emissions, according to the UN Food and Agriculture Organization which revised upward its estimated carbon footprint of food waste to a staggering 3.6 gigatons of carbon dioxide. FAO, 2015

INFOGRAPHIC on POST HARVEST LOSSES

in selected Caribbean countries

TOMATOES

Guyana 34%
T&T 27%
St Lucia 20%

MANGOES

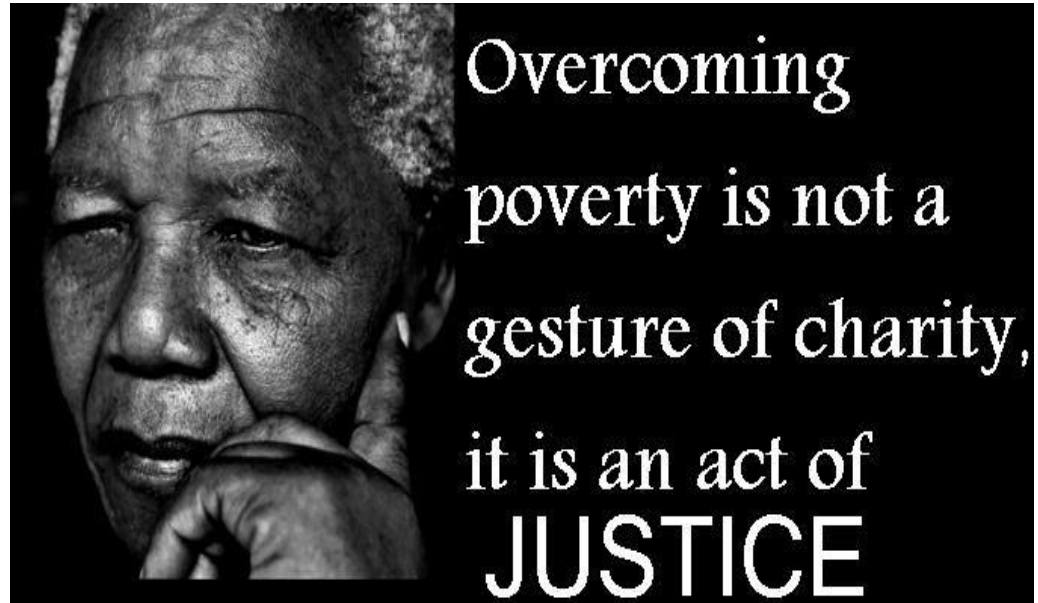
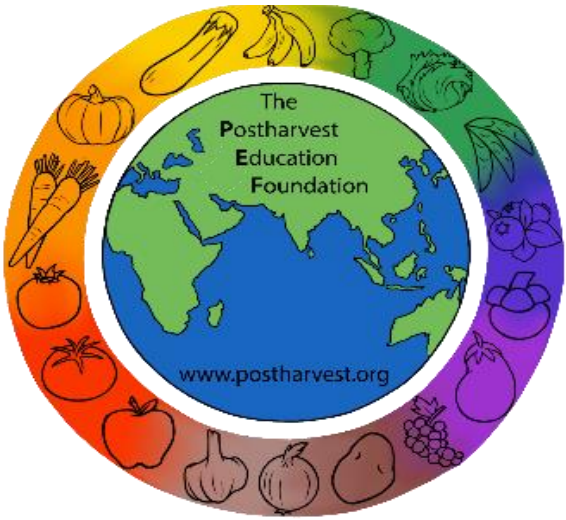
Guyana 32%
St. Lucia 23%
T&T 17%

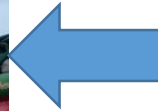
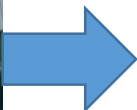
CASSAVA

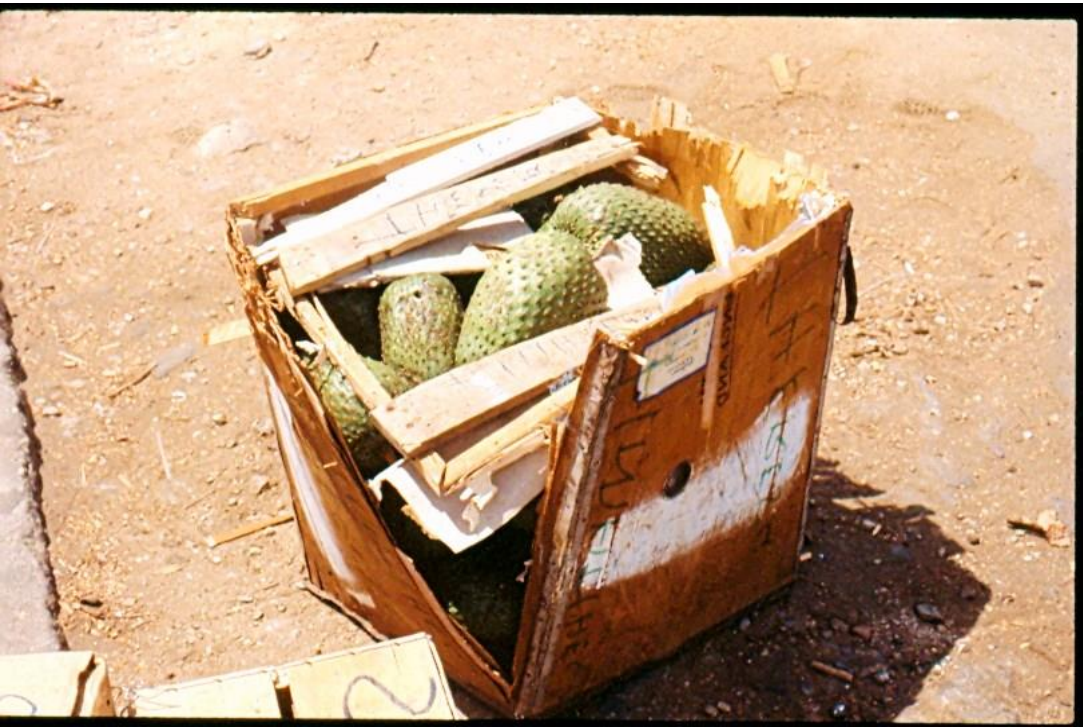
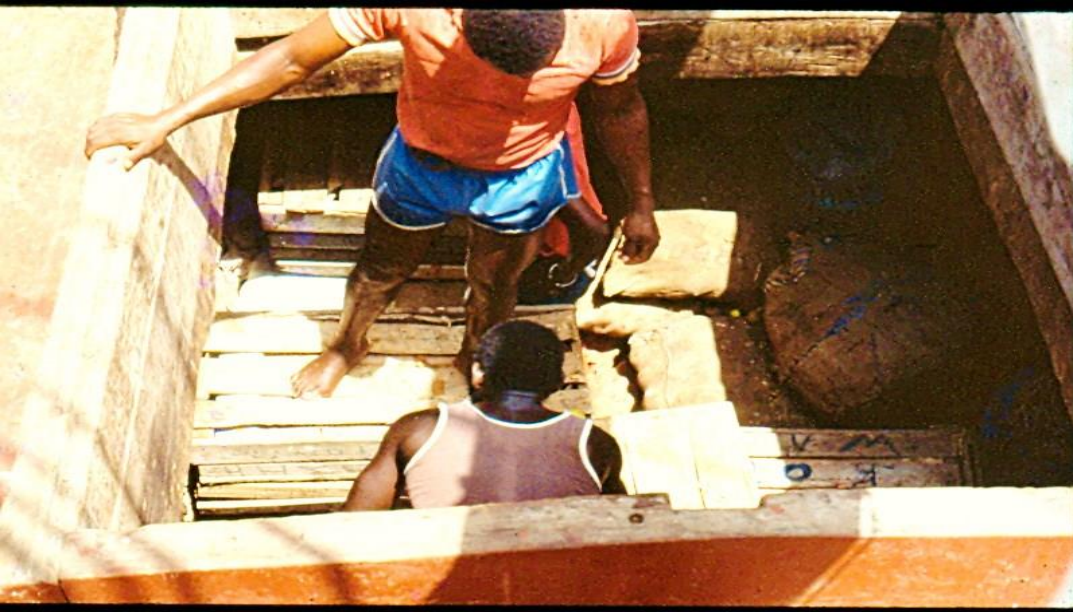
Guyana 23%
T&T 20%



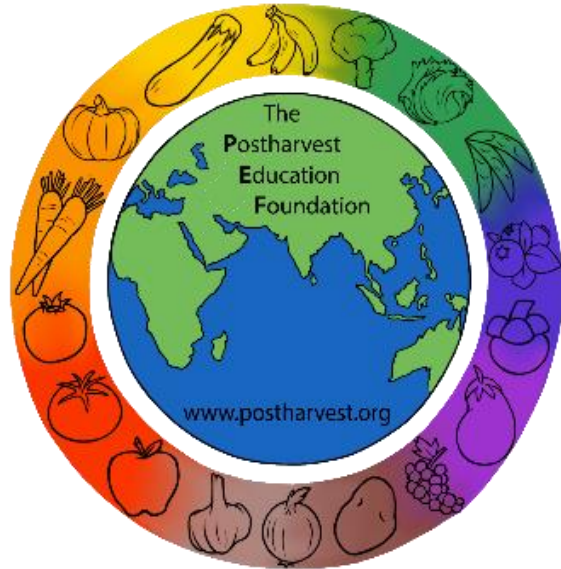
Globally, today more than 795 million people are hungry and 160 million children under age 5 are stunted.



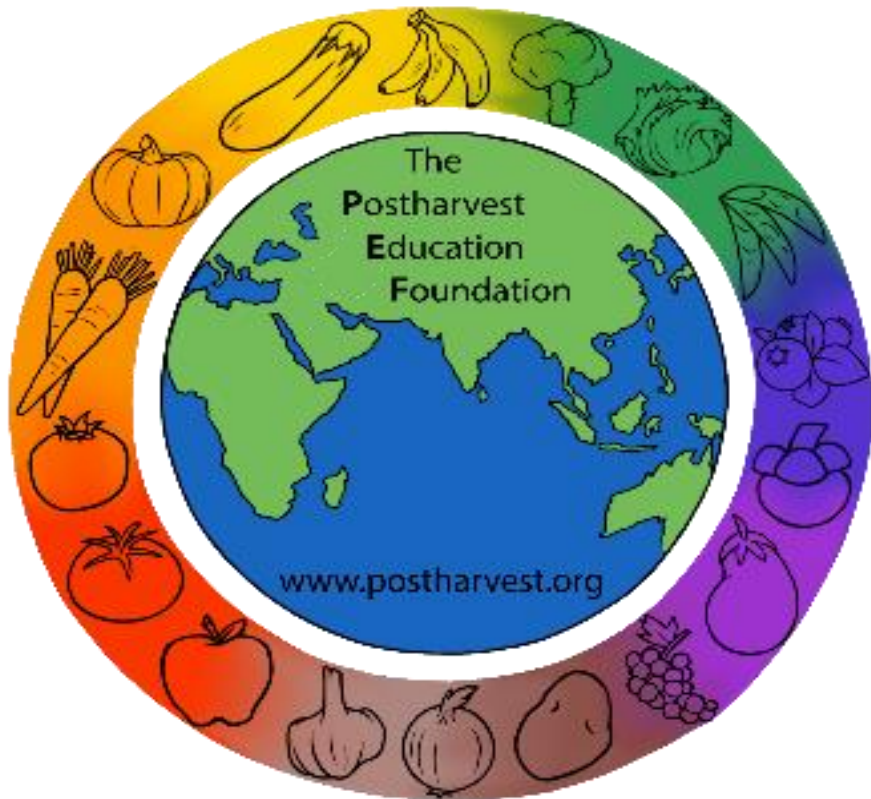




As incomes rise, people demand more than just calories from their food as they search for a broader range of nutrients to consume. This additional demand for dietary diversity indicates that the 33% projected increase in population translates to a 60% increase in needed food supplies. Reducing food losses and waste offers an important avenue of increasing food availability without requiring additional production resources, and could contribute to rural development and poverty reduction by improving agribusiness livelihoods.



PEF's mission is to provide innovative programs that motivate and empower people to reduce food losses and waste.



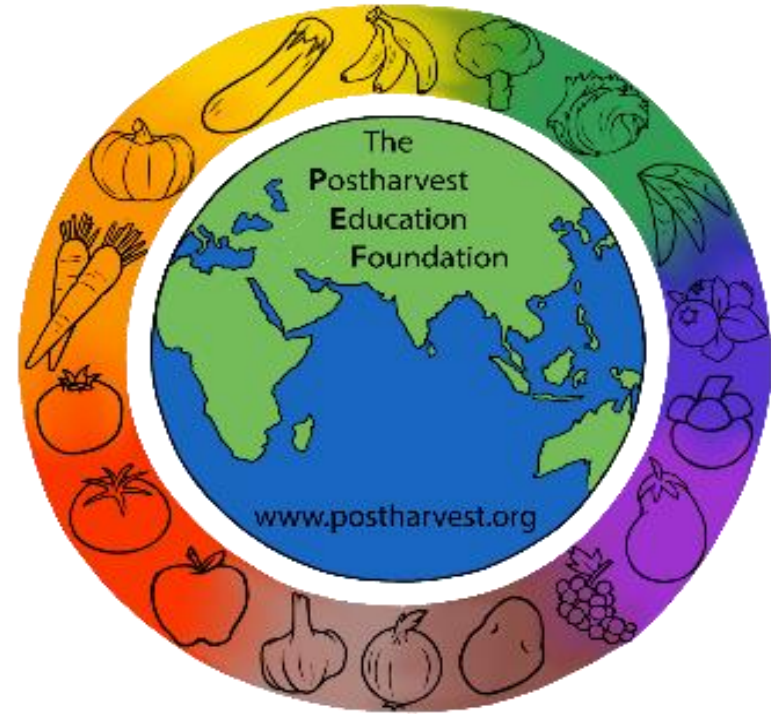
At the heart of the PEF strategy is a structured e-learning program for professionals in the developing world interested in learning hands-on practices that directly address postharvest losses. E-learning is an effective way to reach practicing scientists and extension agents in distant places that may otherwise be difficult to reach. They in turn, reach local farmers, traders and marketers via their extension education and training efforts.



What The Postharvest Education Foundation (PEF) is doing

- a. Conducting a variety of postharvest e-learning programs for young professionals working with small-scale farmers.
- b. Providing free access to postharvest training materials for those involved in extension work and training farmers, marketers and other produce handlers.
- c. PEF supplies postharvest tools and basic equipment for use in applied research and for improving practical field operations.
- d. PEF organizes postharvest workshops and conducts short courses and study tours.





The Postharvest Education Foundation (PEF) was founded in 2011 by Dr. Lisa Kitinoja and established with the assistance of a small group of like-minded colleagues, with an aim to provide the motivation, training and mentoring for postharvest professionals around the world. Founding members included Adel A. Kader and Diane M. Barrett, postharvest extension specialists from UC Davis.

A Postharvest Technology Refresher Training Workshop

"Improving Food Security & Productivity
Post Harvest Technology"

USAID



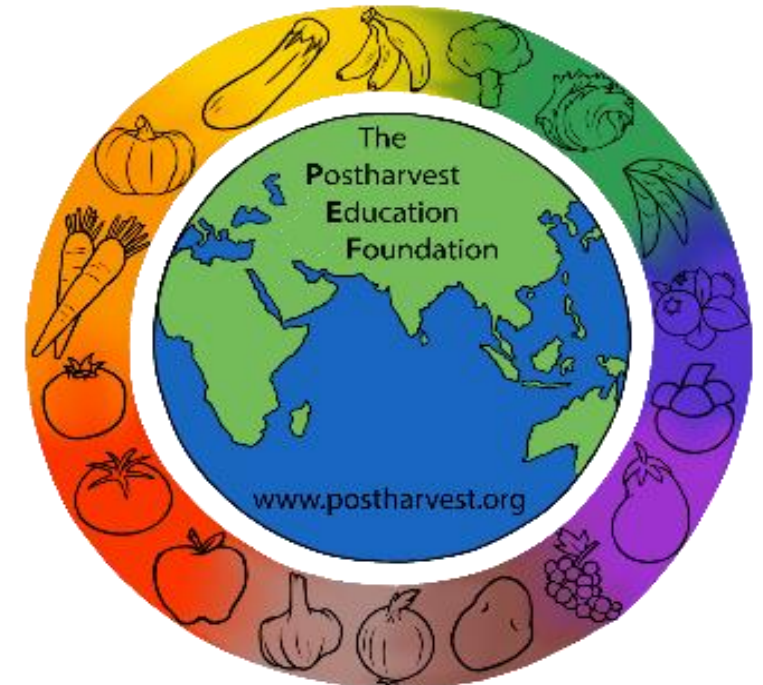
PEF Global Postharvest E-learning Program

- One year long program
- 10 assignments
- Loss assessment, small-scale technologies, costs and benefits, postharvest demo design, extension training program design
- Mentor guided
- 20 to 30 participants per year
- Postharvest tool kits
- Graduates are “postharvest specialists”



As of 2018 more than 140 PEF e-learners graduated and are working in 28 countries around the world.

PEF e-learning graduates in turn have trained more than 30,000 farmers and food handlers each year.



The postharvest training centers serve as a platform to establish linkages where extension workers and local postharvest trainers meet with growers and other stakeholders in the value-chains to provide training to improve local capacity and knowledge on innovative produce handling practices, small-scale food processing, storage, and marketing. PEF sponsored postharvest e-learning courses and training have shown to be effective in global capacity building and technology transfer with outreach to more than 30 developing countries.



PTSC Model in Arusha, Tanzania (Postharvest Training and Services Centers)



The PTSC established in Arusha, TZ was selected as one of 25 case studies to be highlighted as part of the Global Knowledge Initiative postharvest assessment project.

The PTSC Model is being adapted and adopted in many new locations -- Rwanda, Burkina Faso, Guinea in Africa, and Tuskegee, Alabama



PEF Success Story



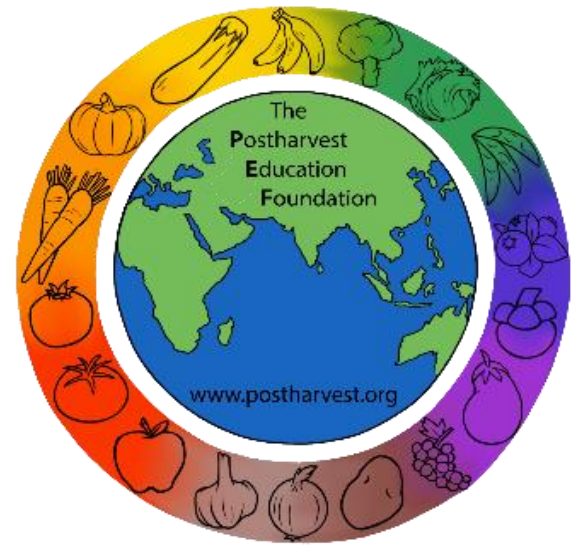
Noel Valentin Mulinda (Rwanda) 2012 PEF e-learning graduate:

He has opened a private “Postharvest Services” office called POLYTASK LTD. in Kigali and also began advising local retail produce vendors and traders towards reduction of postharvest losses and extend shelf life of their perishable produce. (Company website: www.polytask.net).

He has trained 60 leaders of the agricultural cooperative “IMPUYAKI COOPERATIVE”, in the Northern Province in Rwanda (representing another 880 member farmers) on loss reduction and quality improvement techniques for handling agricultural produce to better meet customer needs.



PEF Success Story



Esther Mwaisango (Tanzania) –

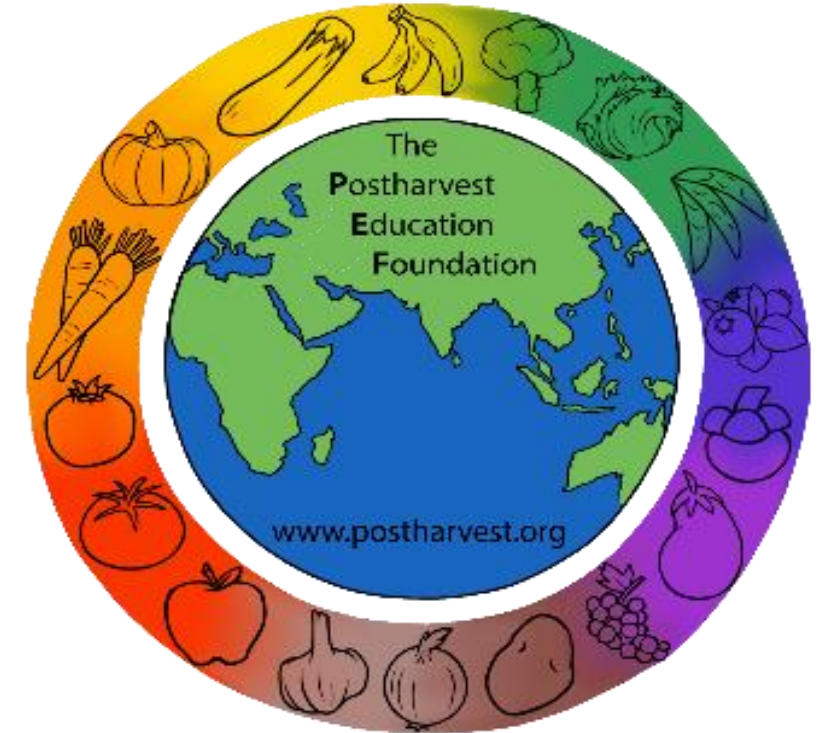
2012 PEF e-learning graduate:

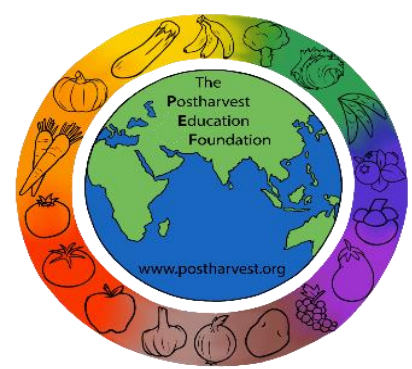
She designed and established a new packinghouse in Lushoto, Northern Tanzania, with funding from Ministry of Agriculture and with help from her supporting team of postharvest trainers.

The packinghouse serves 3500 members of 2 local vegetable producer cooperatives. It is of a simple design based upon the manual “Small-scale Postharvest Handling Practices” and includes several movable packing lines and training programs for leader farmers and packinghouse workers. Cold storage for the vegetables is provided via a large repurposed “reefer” container with diesel powered refrigeration.

Future Targets

In the past 7 years PEF has trained 140 young people as “postharvest specialists” but globally thousands more are needed to address the issues of food losses and waste in their home countries.





Future Targets



PEF is working with the “**World Food Preservation Center**”, “**ADM Institute of Prevention of Postharvest Loss**” and the “**World Resources Institute**” to develop books, manuals, loss assessment protocols and organise conferences.

PEF will continue to partner with organizations who are involved in reducing food loss/waste and provide advice, mentoring, tools and technical support for their extension projects and training programs.