

Improving **POSTHARVEST PRACTICES** to Reduce Food Loss

By Ra Thorng

Cambodia's agriculture sector accounts for 20.71 percent of the country's gross domestic product and employs about 31 percent of its total population in 2019.¹ While several food crops produce a significant surplus, about 50 to 60 percent of fruits and vegetables in the markets are imported from neighboring countries just to meet domestic demands.

¹H. Plecher, 2020.

Improving the country's horticultural sector will contribute to job creation and poverty alleviation. According to the Ministry of the Agriculture, Forestry, and Fisheries, the horticultural industry has grown significantly in recent years. In 2019, the country devoted about 58,000 hectares of land for vegetable production, supplying 68 percent of the local market demand. These estimates are expected to reach 63,000 hectares and meet 76 percent of the local demand by 2023.

Although fruit and vegetable production are highly profitable, it is severely affected by postharvest losses, which reduce farmers' profits and increase consumer prices. Postharvest losses typically range from 20 to 40 percent but the Food and Agriculture Organization's Save Food Initiative reported an average of 45 percent loss for fruits and vegetables in developing countries, including Cambodia. This amounts to economic loss due to wasted resources and inputs, decline in sales and profits, and foregone food to feed the growing population.

Leading Positive Change

Ms. Phang Chantha, a lecturer and researcher from the Food Research and Development Center under the Graduate School of the Royal University of Agriculture (RUA), and a proud alumna of Mekong Institute (MI) under the **PROSAFE (Promoting Safe Food for Everyone) project**, is taking steps to help address these challenges.

“I conducted several trainings for smallholder farmers and food processors but I needed to learn more about postharvest safe food handling because in Cambodia, fresh produce are mostly spoiled or damaged after harvesting or during transport to markets, resulting to waste and reduced profits of farmers,” she explained.

Ms. Phang disclosed that from MI’s safe food courses, New Zealand and Philippine experts taught her innovative practices that not only will reduce food safety risks but also contribute to maintaining produce quality.

She added that MI’s exposure trips to Sumsung Vegetable Producer Group and Tops Market in Khon Kaen, Thailand reinforced her understanding of how to apply standardized procedures and requirements on food safety handling, storing, packaging, transporting, and product display of fresh produce in Cambodia.



Paying It Forward

“I shared these good postharvest handling practices and applicable packaging and cool storage techniques to vegetable farmers in the provinces of Kampong Thom, Siem Reap, and Battambang,” Ms. Phang said.

In time, Cambodian farmers started to adopt these in their farms and packinghouses, resulting to less damage to fresh vegetables.

Ms. Phang also passed on what she has learned from MI to university students in RUA’s Faculty of Agro-Industry, government officials from the General Directorate of Agriculture, and vegetable processors from Bannan Safe Packaging Company to help establish a strong network of food safety champions who will set a sustainable food safety culture in Cambodia. ■

(This story is in two parts. Learn how Ms. Phang Chantha helped communities thrive after completing MI’s PROSAFE trainings at <https://cutt.ly/6gzleJ7>.)



Ra Thorng is a Program Coordinator under MI’s Agricultural Development and Commercialization Department. Ra has been with MI for the last seven years, contributing his

expertise to help build a food safety culture in Cambodia, Lao PDR, Myanmar, and Vietnam under the PROSAFE project. For information on the project, please contact adc@mekonginstitute.org.