Australian Government
Australian Centre for International Agricultural Research

Horticulture

Developing vegetable value chains to meet evolving market expectations in the Philippines

Overview

On average, Filipinos eat less than 25% of the World Health Organisation's recommended intake of vegetables. Reasons include availability, affordability, cultural and dietary factors, and the negative perception of vegetable quality and safety.

It is common to find pesticide residues above permissible limits in vegetables and in soil and water samples. Vegetable farmers are poorly trained in the appropriate use of pesticides and continue to use unsafe pest control practices involving broad-spectrum and persistent insecticides. This leads to excessive pesticide residues in harvested crops and exposes farm workers to pesticide poisoning.

Aware of these issues, consumers are increasingly interested in purchasing vegetables that are certified safe to eat.

Organic farming brings its own challenges, with many of the pest and disease control measures proving to be ineffective, and some of the organic controls introducing new biological hazards. Also, there is no market advantage for organic producers.

A scaled Good Agricultural Practice system, easily implemented by farmers, could be a better solution, and if linked with the right markets, and supplying certified safe-to-eat produce, could attract a premium price for high quality vegetables.

KEY FACTS

ACIAR Project No. HORT/2016/188
Duration: February 2019 to December 2023 (5 years)
Target areas: Philippines
Budget: A$3,100,029

Project Leader
Dr Gordon Rogers, Applied Horticultural Research

Key partners

- University of Sydney
- Visayas State College of Agriculture, Philippines
- Foundation for Agricultural and Rural Development, Philippines
- Visayas State University, Philippines
- East West Seed Company
- Landcare Foundation of the Philippines

ACIAR Research Program Manager
Irene Kernot

Objective

The aim of the project is to improve the capacity of selected vegetable supply chains in the Philippines to deliver vegetables that meet customer expectations of quality, food safety, nutritional value and price.

The objectives are to:

- Understand the food safety, regulatory and consumer environment in which vegetable value chains operate.
- Develop, test and refine a staged Good Agricultural Practices protocol to supply consumers with safe vegetables in the Philippines.
- Develop and evaluate enabling technologies and capacity to deliver a Good Agricultural Practices protocol in selected vegetable value chains.

Expected scientific results

- Increased understanding of the nature and types of food safety risks (including chemical residues and foodborne diseases) along the vegetable value chains in the Philippines.
- Increased awareness of both the potential sources and routes of contamination in vegetable production, and postharvest handling, storage and processing practices in the Philippines.
- Development of strategic and innovative methods to detect and manage contamination in vegetables.
- Development of robust crop management and post-harvest treatment options and technologies that will minimise food safety risks in vegetables.
- Scaling-out of the models used in this project for adaptation to other regions and other horticultural crops.

Expected impact/outcomes

- Use of the knowledge and skills gained by the project researchers to undertake participatory research and design and pilot new Good Agricultural Practices protocols.
- Use of increased understanding of the value of the pilot Good Agricultural Practices protocols by the policy consultation committee in related policy discussions.
- Increased knowledge and skills of farmer intermediary groups who are helping to deliver the project training modules to the participatory farmers, and other farmers close to the pilot sites.
- Adoption of the improved crop management and marketing practices by local farmers, resulting in increased productivity and enhanced crop quality.

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