

Supply chain overhaul

An ACIAR project has helped to improve efficiency and quality for small agricultural producers in Mindanao, reports Janet Lawrence

PARTNER COUNTRY: Philippines **PROJECT:** Positive impacts at farm-household, institutional and community levels, improved cooperative operations and better developed buyer-seller relationships **DESCRIPTION:** A project to demonstrate that the marketing system used by a group of farm families in Mindanao might be improved through the establishment of well-run producer cooperatives **CONTACT:** Roy Murray-Prior, r.murray-prior@curtin.edu.au

On the island of Mindanao in the southern Philippines, farmers grow produce on the mountain slopes – largely potatoes, cabbages, tomatoes and other temperate vegetables that they sell both locally and beyond. Growing conditions are good; the area is free of typhoons, rainfall is regular and the soils are young.

However, farmers rarely receive a high price for their produce. Current market structures in the supply chain, little or no value-adding and high post-harvest losses result in generally poor prices.

What's more, vegetable farmers face strong competition in the supermarket sector from China. Consequently, farmers are poor and efforts to improve themselves through the formation of cooperatives have been largely unsuccessful.

Both the Philippine and Australian governments have focused their efforts on alleviating poverty in Mindanao, particularly in rural areas. ACIAR commissioned a project to find out how to improve the efficiency and quality management in vegetable supply chains in southern Mindanao. The project involved the Curtin University of Technology in Western Australia in partnership with the University of the Philippines in Mindanao.

Project leaders Dr Roy Murray-Prior and Professor Sylvia Concepcion steered a study of the supply chain for temperate vegetables from Kapatagan, on the slopes of Mount Apo near Davao, in southern Mindanao.

The study involved rapid appraisal, analysis of case studies and personal interviews with farmers, rural traders, wholesalers and retailers. The team conducted research and extension activities along the entire supply chain, from investigating the soils to consumer preferences, and determined the institutional changes needed for the new approaches to be successful.

The team found that farmers were unlikely to improve their incomes by focusing on the highly competitive 'wet' markets, as these markets did not provide sufficient premium for quality.

Wet markets are fresh-produce, local markets common throughout Asia.

The team also recognised that cooperatives were unlikely to be competitive in supplying wet markets because the existing system was efficient. Trials were initiated, designed to develop long-term buyer-seller relationships that would improve the efficiency of the supply chain and assist the flow of timely market information.



Growing conditions are good, but weaknesses in the supply chain have kept prices down.

DISPELLING SOME POPULAR MYTHS

- ▶ **Pesticide use is a serious health risk to consumers:** residues were detected at relatively low levels and the pesticides used tended not to be associated with serious health problems. Beneficial insects were present.
- ▶ **Low crop productivity is due to use of low inputs:** on the contrary, it was often a case of excess inputs – not knowing how much to apply was the problem. Lime use has increased to overcome soil acidity, micronutrients are being applied, and applications of phosphorus, nitrogen and potash have decreased.
- ▶ **Farmers are being taken advantage of by financiers:** this was not a major issue. Farmers prefer to transact with market intermediaries who pay cash and with many traders to choose from, they may also trade opportunistically.
- ▶ **Market information is lacking:** farmers talk among themselves, and information on prevailing market prices is widely known. Farmers' main problem until now has been their incapacity to respond. However, knowledge of alternative marketing systems to the 'wet' market was poor, and this is now being addressed.

A key component of the project was the encouragement and support it provided to farmer groups and cooperatives. Results can be seen in the improved operations of the Vegetable Industry Council of Southern Mindanao, the Kapatagan Livelihood Development Cooperative (which was the only remaining cooperative when the project began and was on the verge of collapse) and the establishment of Maharlika Farmers' Cooperative and Kapatagan Upland Farmers' Development Cooperative.

"The positive impacts of the project are apparent at both the farm-household, institutional and community levels," Dr Murray-Prior says. "Farm households are changing their agronomic and mar-

keting practices because they realise this is the way to lift incomes."

The good news is that farmers who are members of cooperatives or who participated in the workshops now have higher incomes than farmers without direct involvement in the project. Maharlika Cooperative has lifted prices paid to farmers and improved their growing practices.

Project members from the University of the Philippines in Mindanao have improved skills in supply-chain analysis. This is recognised through their involvement in Mindanao Policy Review Forums, in drawing up policy recommendations for the President, and also their participation in Mindanao Vegetable Congresses. ◀