

The first cut is the deepest

Workshops in pruning and other pre-harvest work are helping Vietnam's fruit growers achieve a better quality harvest, reports Rebecca Thyer

Convincing Vietnam's temperate fruit growers to cut some of their fruit-producing trees back to knee-height sounds like a difficult task, especially as the peach and plum trees that dot the mountainous northern province of Lao Cai are an important feature of indigenous farmers' livelihoods.

However, an ACIAR-funded project between the NSW Department of Primary Industries (NSW DPI), the Queensland Department of Primary Industries and Fisheries and the Vietnamese Ministry of Agriculture and Rural Development has persuaded farmers to participate in a project that will improve overall productivity by radically changing how trees are pruned and managed.

Heavily pruned trees quickly regenerate to produce fresh, young fruiting wood and after seeing the project team's results at demonstration orchards, farmers are willing to trial the new methods.

The plums traditionally grown in the region are based on a Chinese cultivar that produces small fruit, which is picked early to avoid fruit fly attack. As the fruit ripens, fruit prices are often greatly reduced to ensure it sells before it rots.

Increasing competition from US and Chinese imports is also an issue.

Project leader Dr Shane Hetherington, from NSW DPI, says the project follows an earlier one which introduced genetically improved cultivars. These cultivars will produce better-quality fruit at different times of the year, helping to boost income and to spread payments over a longer period.

However, to reap the rewards of the earlier project and make the most of the new cultivars, basic pre-harvest techniques, post-harvest handling and marketing must be improved.

"Although we thought we'd be concentrating on improving fruit handling from harvest onwards, we had to take a step back and look at pre-harvest techniques. We have experimental orchards across northern Vietnam which will be used later in the project as demonstration orchards when the benefits of pruning, pest control, fertiliser use and irrigation become obvious."

Demonstration orchards are already showing the benefits of pre-harvest work. They include a traditionally managed orchard, an orchard that has been pruned and moderately fertilised, and an orchard that has been cut back to knee-high trees, fertilised, irrigated and sprayed with pesticide.

"We also believe that Vietnamese orchardists will be more accepting of these new techniques if we use the variety they're familiar with for our demonstrations," says Dr Hetherington. "This is particularly the case because these traditional cul-

tivars are still able to provide a good household income if they're managed correctly.

"The Chinese cultivars have not reached their full potential and within three years, the knee-high plants will be getting a good commercial crop. It's important to show that potential while simultaneously introducing new genetically-improved cultivars."

The new cultivars being gradually introduced will produce better-quality fruit and broaden harvest windows.

Pham Dinh Que, deputy director of Lao Cai Province's Department of Agriculture and Rural Development, says improving fruit quality is the project's aim: "Instead of producing more plums, we want to grow bigger and better plums to meet consumer demand.

"Right now it takes 40 to 50 small plums to yield one kilogram, but we are looking to have only 15 to 20 plums per kilogram."

During the main harvest season, plums are sold at 500 to 1000 Vietnamese dong (VND) per kilogram, but if they are sold two weeks later in June, growers can receive 3000 to 4000 VND per kilogram, Mr Que says.

Farmers taking part in the project, such as Sen Van Cuong, a member of the Nung ethnic minority in Bac Ha District, realise they will produce fewer plums, but agreed to take part for the sake of quality improvement.

Mr Cuong makes about five to six million VND from his fruit in a good season, and three to four million VND after a poor harvest. "I joined the project using more than 30 of my total of 90 trees. It's not easy for people to cut their trees when they can continue to produce fruit, but I have dared to do so."

Pruning skills are also being improved for peach growers in the province's Sa Pa District. Farmer Nguyen Van Khao says he earned 13 million VND from one tonne of peaches grown on 45 trees in 2004. "But these trees in my orchard are 10 years old, their fruit is not very big and it becomes worse and worse. We knew that when we cut the outdated branches, trees would be fresher and give better fruit. However, we previously just cut according to intuition and experience, not from using training. So the prunings didn't reach our expectations."

With the help of the project team, Mr Khao and others are hoping for improved results. ◀

PARTNER COUNTRY: Vietnam

PROJECT: Improving postharvest quality for temperate fruits (PHT/2002/086)

DESCRIPTION: Changes in pre- and postharvest management can significantly improve fruit quality and lifespan

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Farmers are hoping to produce bigger and better fruit from their trees by boosting pre-harvest skills.