REPORT

—Vegetables

New vegetable hub under development for Vietnam

MOC CHAU—A team of local and international experts from a range of aid and development organisations is hoping to develop Moc Chau into Vietnam's new summer vegetable hub.



Dr Gordon Rogers

DIRECTOR

AHR

Applied Horticultural Research is an Australian horticultural innovation consultancy.



ietnamese love vegetables; they are on the table with nearly every meal.

In Hanoi, the nation's capital, popular summer vegetables are being supplied from China, or from Da Lat

1,500km away, when they should be coming from Moc Chau, just four hours away by road.

Vegetables are an important part of the country's economy. Vietnam now produces 11.4m tonnes of vegetables annually on 772,000ha of land, and this is increasing at 6 per cent per annum.

Hanoi consumers love to eat cabbage, tomatoes, peppers, beans, lettuce, broccoli and carrots, but the weather in summer is simply too hot to grow them. From May to September, daily temperatures in Hanoi normally reach about 32°C, but can climb to a scorching 40°C.

Cool-season vegetables struggle at these temperatures; tomatoes don't set fruit, broccoli heads are deformed and lettuce and cabbage don't form heads at all.

To overcome these problems, temperate vegetables in summer have been grown mostly in the cooler areas around Da Lat and transported to Hanoi and other northern centres by road – a distance of 1,500km that takes more than two days by truck.

The alternative is to import vegetables from China during the northern summer but this brings with it





concerns about questionable food safety standards and pesticide residues

The solution could lie in an Australian government aid project in the north-western Vietnam town of Moc Chau, located in Son La province.

Moc Chau is 300km from Hanoi via a good road. It has large areas of arable land and is about 1,000m above sea level. The elevation is important because it means the temperatures during summer are much cooler than in Hanoi. Summer temperatures average 18–25°C, similar to those in Da Lat and well suited to vegetable production.

Moc Chau has all the other requirements for growing good vegetables: a total area of about 2,000km², adequate water for irrigation, and sufficient infrastructure to support a new vegetable industry in the region.

The area already has a strong tradition of agricultural production, with major industries, including dairy and corn production, well established.

Why hasn't Moc Chau already developed itself into a major northern vegetable growing region? Well, there are several main reasons.

There are few effective linkages between small farmers in Moc Chau and the larger retail and wholesale markets in Hanoi. The supply chain is also not well enough developed to bring perishable crops to Hanoi markets in good condition.

Beyond the logistical problems, there is very high rainfall in Moc Chau during the production season, which encourages disease, and farmers in Moc Chau are not consistently producing what consumers in Hanoi demand.



SAFE VEGETABLES

High pesticide residues in vegetable crops produced in Vietnam and in China are a major issue for consumers. There are many pesticide poisonings from eating vegetables in Vietnam and this has led to a high level of consumer scepticism about safety.

The Vietnamese government has recognised this issue and has introduced the Safe Vegetable Certification system and also the more rigorous VietGAP system.

The current project, which is funded by the Australian Centre for International Agricultural Research (ACIAR), is working within both these systems to deliver high quality, pesticide-free vegetables that consumers can eat with confidence.

RETAIL HELP

The project operates on two levels. One group is working on marketing aspects and on forming strong links between markets in Hanoi and farmer groups in Moc Chau. These new linkages are crucial to the success of the project. In Moc Chau, as in most rural Vietnamese communities, there is a strong commune and village system, and the project team is utilising these existing networks for training, production and marketing.

The second arm of the project is aimed at improving the technical growing skills of the farmers in areas such as postharvest handling, safe vegetable production, better crop varieties and in the use of lowcost greenhouses to protect crops

The project team, working directly with communes in Moc Chau, has set up sites at Ta Niet village (Chien Hac commune), An Thai village (Muong Sang commune) and the Tu Nhien village (Dong Sang commune). The people in these villages have a range of ethnic backgrounds but all are involved in vegetable growing and they have a strong leadership system already in place.

Popular summer vegetables are being supplied from China, or from Da Lat 1,500km away, when they should be coming from Moc Chau, just four hours away

Led in Vietnam by the Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), the project teams aim to understand and support smallholder farmers' interaction with large, modern retailers. There are three main steps to that end: analysing consumer demand and developing alternative marketing channels; optimising production and postharvest systems; and implementing and analysing the Farmer Business School approach to help improve decision-making based on market signals.

A key element of this project is the linkages established with retailers in Hanoi. Strong links have been formed with the Metro Cash & Carry supermarket chain, which will be one of the key outlets in the north. Fresh Studio, a Vietnam-based consulting firm, will help with supply coordination, post-harvest and safe vegetable production techniques.

The great news for consumers in Vietnam's north is that with the help of this innovative and important project, they can look forward to a regular supply of fresh, clean, locally produced summer vegetables. (A)

TOP LEFT—A cabbage grown in Vinh as part of an AusAID card project. marketed with a sticker identifying its origin in Nghe An province BOTTOM LEFT-Mr Duyen, leader of the farmer group at Ta Niet village

PROJECT PARTICIPANTS

In Vietnam, the Northern Mountainous Agriculture and **Forestry Science Institute** (NOMAFSI), part of the Vietnamese Academy of Agricultural Science (VAAS), coordinates operations, runs farm trials, and provides training and agronomic expertise.

The Hanoi University of Agriculture (HUA) handles the economics, while the Centre for Agrarian Systems Research and Development (CASRAD) runs consumer studies and supply chain optimisation with help from the Fruit and Vegetable Research Institute (FAVRI).

The French agency CIRAD (Centre for International Cooperation in Agronomic Research for Development) is responsible for regional activities in Moc Chau. The Vietnam-based company Fresh Studio fulfils a key supply coordination role in Moc Chau as well as helping with training in post-harvest and safe vegetable production techniques.

Australian operations are coordinated by project leader Dr Gordon Rogers of Applied Horticultural Research. Dr Ken Menz assists with economics, John Baker of Produce Marketing Australia provides marketing direction and Mike Titley helps with vegetable agronomy.