

# IT TAKES MORE THAN A VILLAGE

## Growing quality food

Keeping our food free from pests and diseases is a tall order for farmers. But when many people share in this responsibility, the results are worthwhile: healthy farmers, healthy crops and healthy food on our plates. This is a story of how participants in the food production chain are making a difference to meet the increasingly strict demands for safe and high quality food.

### Reaping the benefits

In the cool mountains of Chiang Mai, 36-year-old farmer Prasit Karnmangmee – Noy for short – is reaping the benefits of sustainable agriculture. His 4.5-rai farm – barely a hectare – brings in a steady annual income of US \$2,000. This is enough money to feed his family, and also send his two children, ages 5 and 11, to school.

Noy grows lettuce, red cabbage, persimmons, plums and pears on his land. Due to his effective and safe use of crop protection products, his produce regularly ends up in local supermarkets, restaurants, airline meals, and even as far as Singapore and Malaysia. In addition to farming, Noy has almost completed his social development studies, which will prepare him to be a community leader for his hill-tribe village of 18 families.

### Subsistence farming

Life has not always been this good to Noy. Ten years ago Noy and his wife Maneewan were subsistence farmers, raising a young family as they tirelessly toiled on their land.

“We grew whatever was available then. If we produced more than what we needed to feed our family, then we got a little bit of income,” explains Noy. Unfortunately, this did not happen very often.

### Seeds of change

Life took a turn for the better when Noy and other hill-tribe farmers joined the Royal Project Foundation initiative on Good Agricultural Practices (Royal Project GAP). Noy’s family learned to work with “plant doctors,” an affectionate term for local extension workers who had been trained and assessed by the Plant Protection Centre of the Royal Project Foundation.

The doctors recommended crops that were more suitable for cool climates, and then showed farmers how to produce good quality crops with high yields. They introduced techniques for protecting crops against pests and diseases.



Noy’s farm produces seven tonnes of vegetables and two tonnes of fruit each year.

### Laying the ground work

Using pesticides to protect crops was not a new concept to Noy. But, like many other village farmers, Noy had never learned the details for effective and responsible use of pesticides.

This was the challenge that plant doctors confronted: teaching farmers how to best employ crop protection products in order to ensure personal safety and keep crops within legal limits of pesticide residue levels. To achieve this task, the Thai Crop Protection Association (TCPA), a member of CropLife Asia, proposed to help the Royal Project Foundation with farmer training. In 1991, the TCPA began teaching responsible use of pesticides to farmers in Northern Thailand.

After five training sessions with TCPA, Noy speaks with a new outlook: “I should produce good fruit and vegetables in a safe way for me, the environment and consumers.”

### Following the tracks

In a neighbouring village, 29-year-old Rattanasawang Noytoo – known as Poe to his friends and family – has followed Noy's lead. Shy and soft-spoken, this farmer has seen how pests can damage his lettuce, cabbage and beetroot crops. He explains, "In summer time, I could lose up to half of my crops to pests, and a third during rainy season. It affects my income."

Poe's participation in safe-use training has shown him how to overcome these obstacles. He now uses an approach that plant doctors call "integrated pest management" or IPM. With a rich mix of tools for managing pests – biological, mechanical and chemical controls – Poe has seen success similar to Noy: his small-scale, four-rai farm now produces nine tonnes of vegetables each year.

### High-quality harvests

Poe's training has had a tangible result for his wife and three-year-old son. Today, he earns an annual income of roughly US \$2,250 by sending out his high-quality produce to market. As Poe himself says proudly, "Our fruits and vegetables have less pesticide residues."

This claim is put to the test every time Poe's produce is collected for various markets.

Just two kilometres away from Poe's farm, Mae Hae Station serves as a packaging house for 14 surrounding villages, including the one in which Poe lives. On an average day at Mae Hae Station, six tonnes of produce from roughly 2,100 hill-tribe



Cabbages in Poe's farm are regularly tested for pesticide residues.

## Quick Facts

Royal Project Foundation and  
TCPA Safe-Use Training 1991-2005, Thailand

### Royal Project Area:

- Provinces: Chiang Mai, Chiang Rai, Mae Hong Son, Payao, Lamphun
- Royal Development Centres: 37 stations
- No. of project villages: 278
- Total land area: 149,257.12 rai (23,881 hectares)
- Land under cultivation: 34,789 rai (5,566 hectares)
- Total population: 126,307
- Total households: 25,477
- No. households with commercial production: 17,595

### Safe-use training in Royal Project Areas:

- Total farmers in area: 11,959 farmers
- No. trained by 2005: 9,642 farmers (122 villages, 28 centres)

farmers are screened for pesticide residues. If residue levels are even slightly close to the strict limits set for food crops, the whole batch of produce is thrown away, unfit as food or even animal feed.

### Good to eat

Dr Nuchnart Jonglaekha, who heads the Plant Protection Centre of the Royal Project Foundation, believes that the best way to ensure high quality produce is to get at the root of pesticide use – working hand in hand with farmers. She considers the rigorous tests as an end, and not the means, to good agricultural practice.

"Pesticide residue testing is the last thing for us to do. We concentrate on training our extension workers so they can manage plant diseases and minimise pesticide residues in crops," emphasises Dr Nuchnart.

We all want our food to be healthy and free of pests and diseases. These food guardians of Northern Thailand – farmers, government workers, scientists, plant doctors and industry extension workers – show us the way to high quality food.