

RESEARCH BRIEF

Struggling for sustainability: Some issues around intensive fruit and vegetable production in Mae Chaem district, Chiang Mai

BRITISH COUNCIL NEWTON FUND, INSTITUTIONAL LINKS PARTNERSHIP PROJECT
BETWEEN THE UNIVERSITY OF YORK & CHIANG MAI UNIVERSITY, THAILAND. 2018-19

(NB: All photos taken by David J.H. Blake, unless otherwise stated)



Interview with Por Kasem, one of the most experienced and largest vegetable growers in Long Pong Agricultural Cooperative Land Settlement Scheme. He grows shallots, tomatoes, kale, long beans and cabbages on over 100 rai of land. Having occupied the land in 1971, he began growing on just a few rai with his own labour, but currently employs Shan migrants to work on a contractual basis for each cultivation task.



The contents of a local agricultural merchant's display case containing a wide variety of pesticides in Mae Na Chon sub-district. Farmers often prefer to buy more potent pesticides that get results, rather than "safer" ones in terms of human and environmental health. They claimed to dislike wearing too much protective clothing, as they find it uncomfortable.



The cultivation model adopted requires high external inputs of labour, irrigation water, fertilizer (mostly chemical, but occasional additions of chicken dung) and pesticides. Farmers are inherently reliant on market forces over which they have little control – so find it hard to break out of a cycle of debt and dependency on external actors.



An ethnic Hmong woman selling persimmons from her farm in a Royal Project supported village in Mae Na Chon sub-district. Produce is grown with agri-chemicals, but farmers are encouraged to use the least necessary and produce is checked for residues prior to sale. The best quality fruit and vegetables are sold via Royal Projects outlets at a premium price, but lower quality produce is sold on the open market.



A modern supermarket display in Chiang Mai selling "pesticide safe" produce. Mae Chaem farmers expressed an interest in selling to such markets and lowering their use of agrichemicals, but said that the transport costs involved make their produce uncompetitive with producers nearer to Chiang Mai.



The morning market in Mae Chaem township sells local produce. This was the favoured market for some local intensive vegetable producers, who didn't trust eating the vegetables they grew themselves, believing them to be contaminated with pesticides. They think eating them is more risky than the act of spraying them.



Empty vegetables boxes under signs advertising artificial growth promoters in front of a tomato field near the entrance to Long Pong Settlement. Other posters along the roadside market various pesticides, hormones and fertilisers (see photo below), while sales representatives from agribusiness companies are regular visitors to the village.



Middle-class consumers who shop at this weekend market in Chiang Mai are becoming increasingly concerned about the safety and provenance of the food they buy. Generally-speaking, food quality standards are relatively weak and poorly enforced in the Thai agri-food sector, in part due to the influence of large agribusiness interests in settling policy.



Vegetable produce from Mae Chaem is mostly sent by middlemen traders to wholesale markets in Chiang Mai, such as the Muang Mai market pictured above. The drive only takes about 3-4 hours as roads are good, compared to the situation several decades ago.

History and context of Long Pong Agricultural Cooperative Land Settlement Scheme

- Established by new settlers clearing forest for agriculture alongside the main road (made all-weather around 1969) between Mae Chaem and Hot districts, where they found fertile soil and reliable water resources
- Government agricultural extension agents encouraged settlers to grow intensive vegetables for the market, while traders and middlemen from Chiang Mai and Chom Tong district came to sell inputs and buy produce from villagers.
- However, the land was officially classified state-owned reserved forest and the Forest Industry Organization (FIO) repeatedly tried to forcibly remove the villagers from the land for tree plantations.
- After protracted struggle for rights to remain, a compromise was found in 1975, whereby the villagers were allowed to establish an officially-recognized agricultural Cooperative Settlement (*Nikhom Sahagon*) and the FIO were given other areas to manage
- Nowadays, the members of the Cooperative feel relatively secure, even though they lack official land title. They maintain limited tenure rights through solidarity with villagers living in other government-sanctioned land settlement schemes throughout Thailand.
- As a result of this relative security (compared to other communities), farmers have invested heavily in developing sprinkler irrigation systems. Most contemporary extension support comes from representatives of agribusiness firms and progressively less from government agents
- Total area of the Settlement is 5,450 rai (872 ha) and most families are ethnically either *Khon Muang* (northern Thai) or Hmong

Quotes from local actors – Interviews conducted in August 2018

"If the vegetables don't look beautiful, then the traders won't buy them. Therefore, we must spray [pesticides]." Por Kasem, farmer, aged 65, Gong Hin Kaek sub-district

"Farmers don't dare eat their own vegetables, due to the high levels of pesticides they use." Mae Foi Thong, aged 78, retired government official and school director, respected elder in Mae Chaem district

"Growing monocrop vegetables [peut cheung diow] is even more risky that animal feed maize, as the profits can be wiped out by a single event such as heavy rain or disease...they end up falling into debt and can never escape." Khru Uthit, agroecological farmer & former teacher, Mae Na Chon sub-district.

"The reason I gave up [running an agri-chemical supply shop] was because I was scared of the chemicals....The villagers tend to mix pesticides at stronger concentrations than traders recommend. They have a single thought and that is to ensure the spraying has results." Mr Pattaraporn Pitakam, former shop owner, Ban Long Pong, now a local politician & organic vegetable grower.

"Farmers want to change to growing pesticide safe vegetables, as growing organically is very hard to treat some pests.....change must come from government policy, as it is not enough for government agencies just to say farmers ought to grow organically, then not back it up with funds and support." Por Somboon, local farmers leader and politician in Provincial Administration Organization

"These days villagers don't even dare to eat mushrooms found in upland fields, due to a belief they contain pesticide residues. When Public Health officials tested the blood of villagers, they found 100 % had traces of pesticides." Khru Bandit, Border Patrol Policeman and director of a primary school for ethnic minority children in a highland village.