

What a satellite does to Ban Paa Phai, a northern Thailand's agrarian community?

Manoj Potapohn, Sunthorn Buranaviriyakul and Attachai Jintrawet

Kru Somsak was so excited about a satellite dish installed at his school and the prospect that his primary school students can get into cyberspace via broadband connection. He however noticed that the corporate-donated system failed to function properly so he kept bucking Chiang Mai University's researchers, who he happened to come into contact, to visit his school and lend a helping hand. The fixing failed. The satellite was still circulating in the orbit and only a month afterwards, according to a local newspaper, the test run had been complete and the system was in operating conditions.

Kru Somsak was obviously ahead of time and his enthusiasm had not been caught up by the rest of Ban Paa Phai's residents. As they are trying to hold their community oriented livelihood together while coping with reality of the market, they may be on the verge of finding a solution in information and communications technology (ICT). But research suggests excitement with ICT may be short-lived as social process to accompany the technological change has to be locally initiated. This paper is a preliminary report on initial conditions at Ban Paa Phai, including production activities, structure and current flow of information, within and across the spatial community boundary. This would be a basis for subsequent projection of real welfare improvement that is facilitated by the use of ICT.

Ban Pa Phai is within reach of university researchers and has for almost a decade been a demonstration site for food security oriented production activities. This was initiated to cope with closure of a forest reserve nearby. Construction of a paved road in the 1980s exposed the villagers to vagary of the market forces, experiencing the boom in garlic prices in the 1980s, over consumption and financial collapse with bust of garlic prices after the trade liberalization with China. Coping mechanisms include a switch out of chemical fertilizer and pesticides and non farm cash activities (from for example processed food, home-made textile etc.) as well as off farm employment. Experience from encountering with researchers and university students led to villagers conducting a research of their own and this is the process that facilitates the adjustment. It started from community building via revival of local culture and tradition building group's identity. It subsequently has been oriented towards finding a solution to the villagers' debt accumulation and potentially can be directed towards reorganization of production activities. All the non farm production, off farm employment and production of organic crops are information intensive activities.

Ban Paa Phai (literally bamboo-forested village) is about 25 kms away from the city of Chiang Mai. Over a century old settlement of cattle traders by origin, it is located on the northern edge of Chiang Mai valley in a 5.6 sq km flat plain surrounded from all sides by nine other villages bordering a forest reserve from the north. Together they form Tambon (or subdistrict) Mae Pong within which Ban Paa Phai is at the center in term of geographic location and leadership. The whole Tambon is well drained and well watered by three streams of which one emanates from reservoir in what was once denuded forest reserve. It was reclaimed with initiation of His Majesty the King in the 1980s and was turned into an educational center where villagers learn technical skill such as frog, fish and mushroom raising, for food security purpose.

Ban Paa Phai, where some of these skills are put into practice, has become a demonstration site attracting large number visitors, as much as 250 groups a year, according to an unofficial count in 2005.

Separately, another innovation is undertaken on administrative side. Mae Pong sub-district, like many thousand other all over Thailand, has been a political entity on receiving end of by now almost 10-15 year old drive for decentralization. This means local government is to assume more tax collection power and is made accountable to provision of local public service. It is run by mostly young staff in their 20s or 30s. They are preparing themselves to assume many new role including running schools, watershed planning etc. Current head of Mae Pong Tambon Administrative Organization (TAO) is the former headman of Ban Paa Phai village. He has carried with him, to the elected of TAO head, years of experience of working with the community.

Other changes in Ban Paa Phai during the last 25 years include the following. First, there was a road construction (by government agency called Rural Development Department) in 1982 to be paved with asphalt in 1995. Second, traders were able to get closer to buy farm products directly, and there were a boom in garlic price in the 1980s which was followed by establishment of the Huay Hong Khrai Royal Development Study Center, at the formerly denuded forest land. The Huay Hong Khrai Center (as it is commonly called) managed to attract research attention from students (with from a very quick count at least three masters degrees thesis written on the Huay Hong Khrai itself) and professors dropping by. In 1999, HHK was instrumental in organizing a survey documenting resource and well as population in eight villages in Mae Pong subdistrict including Ban Paa Phai. Through interactions with researchers, villagers learn about

data collection which leads to doing research of their own. With support of Thailand Research Fund, the villagers put together one research report two years ago on revival of the local culture. It was an end in itself as well as a means for community building. The second research, which is still ongoing, deals more with materialistic side, i.e. resolution to the debt burden which is a matter of concern of villagers and policy makers. At Bt20 million, if distributed evenly to all 215 households in Ban Paa Phai it will be about two times average annual income. This is above average of the tambon's debt burden, since bordering villagers are poorer (being hired labor) and are not as much into the debt trap.

Root causes of these debts as well as their remedy are still a subject of investigation – by villagers themselves and by government staff from Bank of Thailand as well as Ministry of Finance. Part of the problem was due to price and production risk causing high fluctuation in cash income from farming and hence consumption loan. Commodity booming years of the 1980s when garlic, the villagers' main cash crop, was Bt70/ kg, 3.5 times in nominal term compared to the current price level led villagers into borrowing sprees. Villagers reported frequent incidents of crop failure whenever a big rain causing market-ready garlic to rotten. In addition, there was high cost debt servicing. Since then, many coping mechanisms were taken up such as (a) adjustment away from mono-cropping towards multiple farm household activities, (b) production of own inputs or own food. It ensures minimum nutrients for village residents. Income enhancing initiation has not been that successful. As a result, the debt burden does not seem to have decreased. Villager leaders used to seriously thought of the prospect of receiving government assistance to set up village banks to lower cost of capital, or suspension or exemption of debt altogether. But they agree that without increase in income through a production system that is

more responsive to market demand it is harder to rectify imbalance in their pocket books on sustained basis.

Organic farming is a good depiction on the villagers' ongoing struggle to revitalize their agricultural production system. Villagers have undertaken bio-fertilizer production through a cooperative for the past few years. This was prompted by early 2003 blood test on 102 village residents, showing all except 5 people chemical residual at harmful level and subsequent introduction of bio-fertilizer production technique (Sayan, 2004, pp.76). Farmers are able to make fertilizer for their own use from locally available or obtainable ingredients of which some has insect repellent property. These ingredients are digested and become organic substance through the presence of effective mechanisms.

While purchase cost is an advantage, uncertain quality of local-made fertilizer is a drawback which is compounded when excess supply of farm labor for material gathering is unavailable. An experiment run by head of the fertilizer cooperative last year showed the presence of plant disease (caused by fungi in soil) that cannot be handled by his own bio-fertilizers, prompting him and his group members to look for an alternative. Currently, they contemplate buying fertilizer from a supplier who promised ready market for organic farm produce, and superior bio-fertilizer product. While this is still tentative since the group is still to work out tight production schedule and production process certification, the interest has produced multiple visions on how organic farming of the villages can be best grown. An alternative proposal, articulated by the TAO head, focuses on marketing cooperative, village-own certification and a cooling facility.

Much of the initiations like the one above were hard to resolve without data and careful assessment of alternatives. Data base is currently the information and communications technology for development that is most responsive to the planning needs by villagers, their cooperative and local government. Multiple Cropping Center of Chiang Mai University has recently designed and installed a data base at the Mae Pong TAO. This helps avoid duplicative data collection and allowing local data to be made available locally. But the data collection process is yet to be interactive with villagers' cooperative and integrative with economic activities of the villagers itself so it can adequately represent economic and social life in the village. But then it will open up privacy issue, optimal disclosure and access to information to be worked out among villagers.

Currently, Kru Somsak's school is to share the access to broadband connections with some 30,000 other schools in Thailand. The system capacity paid for with budget of the ministry of education is severely limited, and the idea of technological spillover, i.e. the school becoming the connecting point for entire Ban Paa Phai village is just impractical for the time being.

Reference

Sayan Kulawong (2004), Changing from chemical to organic agriculture for environmental sustainability of Ban Paa Phai, Am Phoe Doi Saket, Changwat Chiang Mai, unpublished master degree, Chiang Mai University: Chiang Mai Thailand.