Chapter Two

AGRICULTURAL AND ECONOMIC PATTERNS

Lak Chang economy today is clearly a local adaptation of the national economy of China. The latter is essentially a capitalistic market economy modified by state regulatory controls and ownership of key industries. On the surface, Lak Chang, like most Tai villages in Daikong, has grown considerably since the reform of 1976, but it is still a peasant village that has capitalised on its traditional subsistence production. It is important to note that growth in the production system has not resulted in a breakdown of the traditional subsistence production but rather in its augmentation under the influence of the modern national economy.

Yearly Agricultural Cycle

The subsistence base in Lak Chang, as in all Tai villages, is agriculture. The functional unit in these as in almost all economic matters is the family, often referred to as the “household” (aun). Goods are produced, distributed and consumed primarily by the household unit and any relevant economic decisions are made there. In Lak Chang, there are 203 such household units, averaging four or five individuals in each. The household is ideally a patrilocal extended family under the leadership of the eldest active male. In the house of Liu, Sam Fong is, therefore, the leader.
Like all Lak Chang villagers, Sam Fong is, first and foremost, a wet-rice cultivator. Non-glutinous rice is his staple food and the main crop. At the beginning of the rice-growing season in late May, his paddy fields, softened by the first monsoon rains of the year, are ploughed by the water buffalo. His plough is made of cast iron with a triangular blade measuring about six inches at the top and tapering to a point, but with a sufficiently large surface. The plough is attached to a wooden yoke fitted onto the buffalo’s shoulders and the animal is guided by means of a long string attached to a halter and running through its nostrils.

As the rains increase in frequency, seedlings are grown in a nursery bed which is prepared when the first water begins to reach the fields. Sam Fong selects one of the most fertile fields, on the edge of the village; this seed plot is ploughed and harrowed and the weeds removed. Sam Fong informs his cooperative work group of the day the prepared plot is to be seeded and, on the morning of the designated day, his helpers—about 10–15 people—turn out. Men hoe channels in the soft mud, women follow, scraping up mud with their feet. This work forms eight or ten flat mud beds about three and a half feet wide, separated by foot-wide channels of water. The men then drain the water from the field and Sam Fong’s sons walk up and down the rows sowing the rice seed in the soft mud.

Figure 2.1 Irrigation canals in Lak Chang provide an abundant supply of water throughout the year.
The seeds are germinated before they are sown by soaking them for one whole day and then covering them with straw. Water is sprinkled frequently to prevent overheating. Sprouts begin to appear on the second day after they are soaked, and are now ready for planting. They will be allowed to grow a foot or so in height in the seed plot before they are transplanted into the larger fields. A rudimentary bamboo fence is built around the seedbed to keep out ducks and chickens, sometimes scarecrows are placed in the seedbed to chase away birds.

About six weeks later, usually early in June, the fields have been ploughed and harrowed and the seedlings are ready for transplanting. The water flows through the irrigation canals and waterways to flood the paddy fields. Sam Fong’s household makes certain preparations in advance; a small straw-thatched shelter is erected near the seedbed to protect the seedlings from the sun after they are pulled and many bundles of thin bamboo strips for tying the seedlings into bundles are also prepared.

Once again, members of his cooperative work group are informed and they gather in the afternoon of the designated day for transplanting. The transplanting group consists mostly of women and transplanting is usually done in the afternoon so that the seedlings will not be exposed to the noon sun on the first day. Seedlings are pulled by the roots and after a few hundred seedlings have been pulled, the bunch is slapped against the foot to rid the roots of any clinging mud. The bunch is tied together with a thin bamboo strip and the tops are usually cut off. The bunches are placed in the shade of the thatched shelter before being transported to the paddy fields, which may be some distance from the seedbeds.

Transplanting usually starts at one end of the field. Both men and women in the work group plant together in a long line, each takes a step about a foot long and at these intervals plant three or four seedlings into the mud. It is tedious, back-breaking work, but is done with a great deal of courting and joking between the sexes. Young men show off by holding contests to see who can finish a row first. Frequent rests are taken to drink tea and smoke cigarettes. When the day is done, Sam Fong invites all members of his work group to an evening meal at his home.

On late June and early July afternoons, Lak Chang is deserted except for old people and small children. Men and women, older boys and girls spend their days in the field and the work will go on until all the village fields have been planted in turn. As they transplant, Lak Chang peasants gradually extend a fresh carpet of
evenly trimmed rice lawn across the valley floor. After the fields have been planted, household members can do their own weeding, regulating the water in the household fields and repairing the dikes. The work group will not be necessary again until harvest time four months later.

During the months of June and July, the rain clouds hang heavily over Lak Chang. The rainy season reaches its climax in August, when the Khon River runs swiftly and begins to swell and overflow its banks. By late August, the rains begin to taper off and the rice grows waist-high. The rainy season gives way to winter. The weather begins to turn cold in the early morning and at night.

Harvest begins when plants are yellow and heads droop, showing that the grain is ripe. The average length of time from the preparation of the seedbeds to harvesting is about five months. Harvesting, like transplanting, is a cooperative affair among relatives, friends and neighbours and the work party that helped Sam Fong plant his fields works for him on the harvesting. Each peasant determines the day on which he wishes to start harvesting, but the decision is usually made and the date set in consultation with members of the work group to avoid any conflicts in schedules.

Harvesting time, which begins in October and ends in November, is a rejoicing time when every able-bodied man and woman, armed with a small sickle which has a serrated edge, work together to reap the fruit of their labour. In Lak Chang, water is usually cut off two weeks before harvest time to allow the fields to dry. After that the work group gathers on the appointed day at about nine, after the morning dew has been dried by the sun, and the harvest begins. Once the grain is cut, it must dry in the sun for several days before it can be threshed. In this period, Sam Fong and his children prepare the threshing ground and help to harvest the fields of other members of his work group. When the grain is dried, Sam Fong and his crew return to the fields and tie the rice stalks into clusters of ten with thin strips of split bamboo. About five clusters are tied together to form a bundle or a sheaf. The work crew then beat the sheaves of rice into giant baskets, knocking off the rice grain. The grain is stored in baskets and put away in the household granary.
In Lak Chang, every mou of fertile land produces a yield of at least 1,000 to 1,200 kilograms of rice. All peasant households have an average landholding of 10–14 mou, so every household can produce much more rice in a single crop than is normally required for domestic consumption. After the paddy is threshed, each peasant family makes an offering to the chao baan (village spirits) and gifts of “new” rice are carried to the monastery, with grateful thanks for the blessings of a good harvest.

By mid-November, the harvest is over and the weather begins to turn cold. But winter is not a time of idleness for Sam Fong. On the contrary, this is the time of year when Lak Chang peasants plant crops that supply the money to buy goods and services they themselves do not produce. The raising of secondary crops in the paddy fields and on the other land is an important part of the peasants’ activity. Hence November turns out to be the busiest time of year. Right after the harvest of rice is over, the fields are prepared for wheat.

During the Great Leap Forward, Lak Chang villagers were urged to plant wheat as a secondary crop. But the peasants had always considered wheat to be a low-yield crop. Traditionally, they spread whatever compost was available, turned the soil over and sowed seed in rows about a foot apart, then left the crop alone to make whatever heads would grow. Since all wheat was sold at a low price to the government, and wheat was never a part of the Tai diet, the Tai peasants never tried application of fertiliser, careful soil preparation or irrigation on wheat because the yields they expected could not justify such outlays and such effort.

Nowadays, however, Sam Fong and other villagers have realised that wheat, when properly cultivated, is a high-yield crop. Instead of sowing a thin trickle of wheat in rows that are close together, Lak Chang peasants now open up widely spaced furrows at least four inches across and enrich them with fertiliser. They mix organic compost and chemical urea into the soil below, then plant wheat across the whole width of each furrow in a band and bring in irrigation water to drench the whole field. By using the intensive method they learned from the Hans, Lak Chang peasants now reap 30–40 bushels of wheat per mou. And the price is very good.

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1 mou = 1 acre. This yield seems extraordinarily high household production and is based entirely on the villagers’ verbal accounts. However, Lak Chang peasants insisted that a crop of rice normally provides enough yield to last for three years of household consumption.

2 1 bushel = 15 litres.
Soybeans are another important cash crop for Lak Chang villagers. Soybeans grow well in the paddy fields and require no ploughing or tilling. Seeds are normally planted in November in the open space between the dry rice stalks and the ripe vines are cut a week before the New Year celebration in April. Stalks are bound into sheaves which are allowed to dry in the sun for several days before they are threshed. A peasant who has a large crop may thresh his soybeans in the field on a small threshing floor similar to that used to thresh rice. A few baskets of beans are kept for household consumption and the rest are sold by weight to Chinese dealers in Muang Khon. The stalks are piled in a corner of the vegetable garden. After the rains begin in late March and April, mushrooms sprout from the mouldy heap and supply the family with a delightful dish for several months.

In addition to wheat and soybeans, watermelons, onions, garlic, cabbages and groundnuts are also grown in the paddy fields after the rice harvest, partly for domestic consumption, but largely for sale in the market. Numerous other plants are also grown all year round in a garden plot which every household maintains. Various garden vegetables such as tomatoes, chillies, gourds, mustard, potatoes, plantains, ginger and pineapples are grown, both for sale and for home use.
Land Tenure

Since agriculture is the basis of livelihood in Lak Chang, land is of utmost importance. Numerous Tai legends concern ancestral heroes who defended their land and fought to the death with the Jingpo and the Lisu and chased them up the hills where they now reside. Lak Chang families now occupy 2,500 mou of cultivated land in the immediate vicinity of the village.

Traditionally, the Tai land tenure system was that all farm land was communal property and private ownership was not recognised. The village community, or network of villages, was the land-owning unit and lands were recognised as belonging to one or another village. There were, in a real sense, no landlord or tenant classes in the Tai country. The chaopha was the only real landlord in the strict sense when he designated the limits of the land at the disposal of a village. Within these limits, land was allocated by the headman to the villagers according to their needs and the lands might be reallocated at any time to ensure fair distribution or to accommodate new settlers and population increases.3

In earlier times, a peasant was allowed to hold only as much land as he could work and as long as he could pay tax to the chaopha. Migration, cessation of working the land or expulsion from the village automatically reverted the land to communal property for reallocation by the headman to a new settler or another resident.

In places where the population did not overcrowd the land, the right to work the land passed on to the children after a person's death and the children were allowed to retain the land if they could continue to work it. In Muang Khon, for instance, a greater degree of the right of occupation was recognised. An occupant of the land and his descendants could not be challenged as long as they lived in the village. It was not necessary to work the land to retain the title, inheritance was possible and renting to tenants was also allowed, though not the sale of the land.

The traditional land tenure system was abolished after the revolution of 1949 and was replaced by cooperative farming and, later on, the commune system. After the reform of 1976, however, the traditional land tenure system, albeit in an altered form, was revived.

Of paramount importance at the present time is the basic principle that all farmland belongs to the state and cannot be bought or sold. Farm plots are allocated by an elected village committee to all the households according to their needs and the availability of the land, and the land may be reallocated at any time to ensure fair distribution. Given the overwhelming importance of land allocation in village society, *a central fact of Tai village life today is that there is still sufficient land, that it is evenly and fairly distributed, and that no family is landless or has too little land.*

Since 1976, the paddy land of Lak Chang has been reallocated three times, in 1982, 1986 and 1994. The 203 households of the village now own a total of almost 2,500 mou of farm land and the average holding is approximately 13 mou per household. In real terms, the communal farmland is officially divided into 203 plots varying in size from 10 to 16 mou, depending on the distance of the farmland from the village proper and on the richness of the land. Fields located closer to the village are considered preferable to those further away. Households that are allocated the distant fields usually get a slightly bigger piece of farm land.

The distribution of paddy land is usually carried out according to the needs and the number of people in the household. There is a periodic review of the situation by the village committee so that adjustment and reallocation of farmland can be properly made with regard to the increase in the number of households in the village. For instance, in 1982, Sam Fong, with four sons and five grandchildren in his household, was allocated 16 mou of prime paddy land. In the mid-1980s, two of his sons set up their own households and, in 1986, Sam Fong, with only two sons left in his household, was allocated 12 mou of paddy land. In 1994, Sam Fong was allocated 11 mou of paddy land.

### Cooperative Work Groups

In Lak Chang, cooperation is the basic theme of social relationships within the village. “All villagers are *pii nong* (brothers and sisters) and all help one another” is the way village society is fondly described to an outsider. In real life, villagers cooperate in building and keeping up the monastery, and join in communal work to repair the road at the beginning and the end of the rains. They also cooperate in house-building and in cleaning and maintaining the irrigation systems. At weddings and funerals, representatives from almost every village household come to help.
The most outstanding form of economic cooperation in Tai village life is the exchange of labour in rice farming. In Lak Chang, reciprocal work groups help to prepare seedbeds and to plant and harvest the rice. The reciprocal labour-exchange groups are usually activated for rice-growing only, not for growing cash crops like wheat and soybeans.

Every peasant household has its own group of people who come to help and whom it goes to for help. The labour-exchange groups are not necessarily composed of relatives and neighbours, although it is a tendency for households that live close together to work together.

At rice-planting time in late May, the households of a labour-exchange group stagger the sowing of their seedbeds so that the seedlings of each member household will be ready to transplant a few days apart. When the paddy fields have been ploughed and harrowed, word is passed on to the members of the cooperative group that the first household to transplant will do so on a certain day. Each cooperating household then arranges to send the required number of workers on the appointed day to help pull up the seedlings, cut them to an even length and transport them to the larger fields where they are transplanted by the work group. On subsequent days, the other households’ fields are transplanted in turn. At harvest time, the same process is repeated as the cooperative work groups go to the fields to cut the rice, thresh and winnow it, and transport it back to the granary of the owners in the village.

The principle of cooperative labour exchange is primarily the number of workers. If Sam Fong’s household provides three workers for one of his neighbours at harvest time, his neighbour in turn sends three workers to Sam Fong’s fields. Reciprocal obligations are seldom if ever evaded. As a rule, a household must repay the number of labour days it receives from one of the households with whom it exchanges labour. Sam Fong, like all leaders of the household, keeps careful records of these labour transactions. Each morning during the rice-planting season, he will direct members of his household to go help such and such a family to whom labour is owed. Since his household has a number of workers, it is possible for him to divide their labour and send different members to fulfil his obligations to different cooperating households on the same day. If Sam Fong is unable to fulfil his commitment on a certain day, he is expected to hire someone to take their place. During the transplanting and harvesting time, the daily wage is 10 yuan per person.4

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4 At the time of field research, 1 yuan was equal to 4 Thai baht and 6 yuan were equal to one American dollar.
The exchange of labour allows the peasants to carry out the back-breaking work of rice production quickly and joyfully. In the fields, there is a great deal of teasing and joking among friends and relatives. Young unmarried boys and girls take the opportunity to flirt with each other. Cooperative labour exchange turns hard work into a pleasant experience which is looked forward to with anticipation especially by young boys and girls.

The importance of cooperative work groups in Tai village society can hardly be overstated. The size of their particular work group is a matter of concern to all village households. A family is proud and its members’ faces beam when 25 to 30 people or more show up to help them with transplanting or harvesting. Such a large network of helpers establishes its status as a family that has achieved a good name in village society and it gives its members a sense of pride and belonging.

The same households within a work group cooperate with each other year after year. Labour-exchange groups are relatively permanent and reflect one of the most important social and economic ties in the village society. Members of labour-exchange groups are not only kinsmen, friends and neighbours but also allies upon whom one depends in all important affairs of life.

Animal Raising

The care of farm animals is an important part of Tai peasant economic life. Almost every Tai peasant has at least one water buffalo which is essential for ploughing and harrowing. Water buffaloes are normally stabled in the house compound. Since the paddy fields are cultivated all year round, the buffalo cannot graze in the fields, so the peasant must go out every day and cut grass from the edges of his ricefields and along the irrigation canals and waterways. Buffaloes are raised solely as work animals and they are never slaughtered. Tai peasants normally eat pork, purchased in the village. They rarely eat beef. Milk is also not a part of the Tai peasant’s diet and there is no dairy farming by Tai peasants.

Pigs, on the other hand, are raised both for household consumption and for sale in the market. Pigsties can be found in every household compound and pig breeding is a major source of revenue for the villagers. Taking care of the pigs is mostly

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women’s work. They are usually fed messes of coarse vegetables and weeds collected from the edges of the ricefields, mixed with rice chaff and all kinds of leftovers, and cooked in a large pot over an outdoor fire; usually enough of this mess is cooked at a time to feed the animals for a couple of days. Normally, there is an average of four to five pigs per family in Lak Chang. Villagers dispose of their pigs, when fully grown, by selling them by weight to dealers who come to the village.

Nearly every peasant household in Lak Chang also raises some poultry. Chickens are raised primarily to sell at the market. Few Tai families eat more than three to four chickens a year and eggs are also rarely eaten by the family. Chickens must forage for much of their food, even though at times they are fed some paddy and rice-mill leavings. Many households also raise a few ducks. The duck is a useful means of controlling pests in the ricefields. A line of ducks waddling along an irrigation ditch early in the morning in the rice-growing season on their way to the ricefields is a familiar sight. They feed on rice crabs, insects and snails that infest the fields.

Non-Agricultural Production

In Lak Chang, some domestic handicrafts are still important, although in the last two decades, many handicrafts have dwindled. Spinning and weaving have all but vanished. Cotton-weaving used to be an important home-industry of every household until cheap textiles replaced much of it. Looms and spinning wheels, at which women worked during the day when free from other household chores, were traditionally kept in the open space underneath the granary. Some of the traditional Tai fabrics are very beautiful; the background of the cloth is usually of black cotton, but it can hardly be seen for the elaborate patterns—woven in silks of artistic shades—with which it is covered. The day of cloth weaving, however, is gone for most village women. All cloth, including ornamental pieces, is purchased from the market.

Tai men have always woven baskets and mats. Today, weaving with cane, bamboo or straw fibre is almost completely in the hands of men. Basket and hat weaving is a more specialised skill practised only by expert weavers, usually older men. Even

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though most handicraft products are largely for home use, many small household items such as bamboo chopsticks, brooms, hats and baskets are additional sources of income for many village households.

Trading is another important part of the Tai economy. Trading at the market place, as part of social and economic life, has taken place for as long as people can remember and, today, markets are held in all large cities in Daikong usually at five-day intervals. In Muang Khon, where Lak Chang villagers go to attend the market and to exchange local news, local traders and villagers from all ethnic groups—especially the Hans, Tais and Jingpos—display their produce and wares in the stalls and on the footpaths. Tai women take a more active role than men in trading. Village women bring eggs, vegetables, fruit, handicrafts and many other items to sell. Traditionally, all trading was done by barter, but today cash transactions are preferred. Most Tais sell their products at the market only to buy immediately some other things they want to take home such as salt, cigarettes, clothes, hoes, knives and other farm implements.

**Household Income and Expenditure**

The households of Lak Chang are well integrated in the market economy. On average, over 80 per cent of the total agricultural production is sold and only 20 per cent is retained for home consumption. Average household incomes vary very little in Lak Chang, since farm sizes and agricultural production are rather similar for most if not all households. Annual household cash incomes concentrate in the 12,000 to 15,000 yuan range.

In Lak Chang, the sale of agricultural produce includes rice, wheat, soybeans, watermelons, vegetables and pigs. Although most peasants produce rice primarily for domestic consumption, the sale of excess rice has always been a major source of household income. The sale of rice is usually done during two periods of the year. The first period is right after the harvest in November. Lak Chang peasants usually sell the “left-over” rice from the previous year to clear their rice granary for storage of this year’s harvest. The second period is in July and August when the rice stock elsewhere in China is decreasing and the market price of rice is relatively high. The peasants who have more rice than they need for consumption can get a good price for their crop at this time of year.
Second to rice is wheat, which is the most important cash crop in Lak Chang. Wheat is harvested in March and around this time Chinese traders from Muang Khon and Kunming will bring trucks into the village to buy wheat. When the price is agreed upon, the wheat will be measured and transported from the fields into town.

In addition to rice and wheat, there are various cash crops such as soybeans, watermelons, cabbages, chillies, mustard and other vegetables which are widely grown in Lak Chang. Most of the crops take only a few months before they can be harvested and sold and the village women will bring these crops to sell in the open market in Muang Khon. In recent years, soybeans and watermelons have become very popular among Lak Chang villagers. The price of these crops is high and Chinese traders will come to buy them at the farms.

Pigs are the only animals that can earn income for the peasants, amounting to no less than 1,000 yuan per year. Cash income derived from the sale of chickens and ducks is very small by comparison.

Table 2.1: Estimated Farm Costs and Cash Income (yuan)

<table>
<thead>
<tr>
<th>Costs</th>
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<tbody>
<tr>
<td>Seed</td>
<td>43</td>
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<tr>
<td>Fertiliser</td>
<td>250</td>
</tr>
<tr>
<td>Insecticide</td>
<td>136</td>
</tr>
<tr>
<td>Transport</td>
<td>560</td>
</tr>
<tr>
<td>Equipment</td>
<td>180</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total estimated costs</strong></td>
<td><strong>1,369</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>5,000</td>
</tr>
<tr>
<td>Wheat</td>
<td>4,000</td>
</tr>
<tr>
<td>Watermelons</td>
<td>1,200</td>
</tr>
<tr>
<td>Soybeans</td>
<td>700</td>
</tr>
<tr>
<td>Pigs</td>
<td>1,000</td>
</tr>
<tr>
<td>Vegetables</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total estimated income</strong></td>
<td><strong>12,700</strong></td>
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</tbody>
</table>
Table 2.1 shows estimates of the costs of producing major crops and the farm income per annum. It should be realised that the figures are those of the farmers whose conception of cost is the cash expense incurred in direct crop production. This cost obviously does not include the unpaid wage for family members, and allowance for depreciation of farm equipment and tools, which are usually included in the calculation of cost in ordinary business practice. Another important point is that the reported cost includes only items that the farmers remember and the figure might be slightly lower than that of the actual costs.

<table>
<thead>
<tr>
<th></th>
<th>Estimated Household Expenditure (yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>800</td>
</tr>
<tr>
<td>Clothing</td>
<td>2,500</td>
</tr>
<tr>
<td>Cigarettes and liquor</td>
<td>1,100</td>
</tr>
<tr>
<td>Health and hygiene</td>
<td>900</td>
</tr>
<tr>
<td>Charity and ceremonies</td>
<td>1,400</td>
</tr>
<tr>
<td><strong>Total estimated expenditure</strong></td>
<td><strong>6,700</strong></td>
</tr>
</tbody>
</table>

Table 2.2 shows the average household expenditure in Lak Chang. Household expenditures include all costs that are not directly related to farming. All peasant households manage to keep their spending below their incomes. In Lak Chang, the costs for purchased food account for only 15 per cent of the total household expenditure. A great deal more money is spent on cloth, liquor and cigarettes. Another major item of expenditure is charity and ceremonies. This includes money donated to the village monastery on special occasions, villagers’ contributions to religious activities, contributions made to friends, neighbours and relatives for wedding and funeral rites.

Compared to manual labourers in Muang Khon, all Lak Chang peasants are well-to-do. The surplus of income over expenditure is sufficient to keep traditional agriculture going and for the purchase of a few modern inputs such as farm trucks and colour televisions. The difference between income and household expenditure is saved for house-building and, perhaps, for the most substantial investment of all, that is, the wedding.

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7 Manual labourers normally earn a monthly salary of 150–200 yuan.
In recent years, Lak Chang villagers put a great deal of their surplus money into new housing and the purchase of consumer goods to improve their quality of life. The new housing they built and the resulting expansion of the village proper took additional acreage out of agricultural production. The population of Lak Chang has also increased substantially during the past two decades. Even though the Chinese government has, during the past two decades, enforced a strict population control policy whereby a Han family is permitted to have only one child per family and all ethnic minority groups, including the Tai, are allowed only two children per family, Lak Chang’s population has only quite recently begun to stabilise.

8 Should the population continue to increase, it can easily be foreseen that the additional population will not be able to make a living on the farmland cultivated today. Agriculture in Daikong is at the crossroads. One can hardly be expected to increase family income and feed more people simultaneously from subsistence production. Even a modernisation of agriculture and an intensification of land use, including animal husbandry, cannot solve both these problems in villages with small farms, which are in a majority in Daikong.