Occasional Papers 2

Contract Farming in Thailand: A view from the farm

A report for Focus on the Global South

By Isabelle Delforge

The Occasional Paper Series

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Credits:

Research and Writing: Isabelle Delforge
Interpreter: Wipaphan Kokeatkachorn
Editors: Nicola Bullard, Alec Bamford, Chanida Bamford

Focus on the Global South
CUSRI, Chulalongkorn University,
Wisit Prachuabmoh Building,
Bangkok-10330 Thailand
Ph: 66-2-2187363-65, Fax: 66-2-2559976
Web: www.focusweb.org

May 2007

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ISBN Number: 974 – 9941-16-0

FOCUS on the Global South

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ABOUT CONTRACT FARMING

From small farms to fast food chains and supermarkets

The fast food retailer Kentucky Fried Chicken requires chickens that weigh exactly two kilograms in order to fit the size of the portions. Some segments of the Japanese market want okra with 5 ridges on the fruit while others require 7 ridges. Baby corn exported to Europe and Japan must be between 4 to 7 cm long. On the global food market, varieties, shapes and colours are now increasingly standardised and food safety regulations are becoming extremely strict.

To reach that level of uniformity in food production and to secure their supplies in quantity and quality, some agribusiness companies have set up their own industrial farms and plantations. However, the industry is increasingly relying on a completely different mode of production to meet its needs. Instead of investing in their own production units, the companies sign a contract with the producer, specifying exactly the product they want, the way it will be produced, the quantity, the deadlines, and the price.

According to the FAO (Food and Agriculture Organisation of the United Nation), “contract farming can be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice”.[1]

In the US, more than one in ten farm operators are receiving some income from contracts, and the value of production under contract is about 36 percent of the total agricultural production of the country. Nearly all poultry and eggs are pro-

duced under contract and this system is widely used for pigs, fruit, dairy, cotton and vegetable production.[2]

Contract farming raises serious concerns about food production in Thailand and other parts of Asia in terms of social justice, environment sustainability and corporate control.

Thailand : a leading role in Asia

Thailand is one of the pioneers in contract farming in Asia, largely due to the role of its leading agribusiness company Charoen Pokphand (CP) who started establishing contracts with chicken farmers in the seventies. In 1970, a Thai-US joint venture between CP and the US company Arbor Acres started importing American-grown broilers and layers into Thailand and introduced industrial poultry raising practices in the country.[3] Subsequently, the active promotion of contract farming by the state since the mid 1980s resulted in the rapid expansion of this practice. Box 1 shows for example the list of tax exemptions granted to CP Foods in 2003. In 1992, D. Glover already estimated that "of all countries in Asia, Thailand probably has the most extensive experience with contract farming, in the widest range of crops".[4]

Although there are no statistics on the total number of contract farmers in Thailand, observers from the Department of Livestock, the industry, the FAO as well as local NGOs reckon that this mode of production keeps expanding along with the ambition of Thailand to become "the kitchen of the world". According to the FAO Integrated Pest Management regional programme, "contract growing is becoming the most dominant export production system"[5]

Box1: Tax privileges to CP Foods

While contract farmers have to pay taxes, CP Foods annual report 2003 shows the list of tax exemptions granted by the Board of Investment to some of its activities. This list includes.

1. Exemption from payment of import duty on machinery as approved by the Board.
2. Exemption from payment of income tax for certain operations for a period of 5 years and 8 years from the dates on which the income is first derived from such operations.
3. A fifty percent reduction in the normal income tax rate on the net profit derived from certain operations for a period of 5 years commencing from the expiry dates in 2 above.
4. A deduction of an amount equal to five (5) percent of the increased income of certain promoted operations over previous year for ten (10) years.

Source: C P Foods, Kitchen of the World, Annual Report 2003.

According to CP, the company has currently 12,000 chicken farmers, 5,000 pig farmers, about 10,000 rice farmers and 10,000 corn growers under contract.[6] But many other companies are operating along the same lines. In 2003, the Senate Committee on Agriculture and Cooperatives carried out an investigation on contract farming. Its report recognises the growing importance of this system and lists 14 companies practicing contract farming in Thailand.[7]

Linking small farmers to the global food system

Contract farming is a mode of production that allows small farmers to integrate into the global food system. According to an FAO report, "Changes in consumption habits, such as the increasing number of fast-food outlets, the growing role played by supermarkets in many countries and the continued expansion of world trade in fresh and processed products, have also provided the impetus for further development of this mode of production."

The same report explains that: "In an age of market liberalisation, globalisation and expanding agribusiness, there is a danger that small-scale farmers will find difficulty in fully participating in the market economy." Contract farming is organised to provide farmers with backward and forward linkages such as extension advice, mechanisation services, seeds, fertilisers and credit as well as a guaranteed market for their production. "It offers an important way in which smaller producers can farm in a commercial manner. Similarly, it also provides investors with the opportunity to guarantee a reliable source of supply, from the perspectives of both quantity and quality."[8]

This FAO report's aim is actually to give advice to companies already engaged in contract farming or planning to do so, and to government officials seeking to promote and monitor contract farming. It seems that the FAO has not produced such a guide to support farmers involved in those ventures.

Different types of contracts

Of course, not all contracts between a company and a producer are alike and the practice shows many different models of contract farming.[9]

The centralised model is a vertically coordinated system where the company purchases the crop from a large number of small farmers and processes or packages and markets the product. In Thailand, this system is common throughout the poultry sector, some vegetable production and the sugar-cane industry. For example, in 1997/1998, over 200,000 farmers grew sugar cane under contract with 46 individually owned sugar mills.

CP, for example, also uses this model for its extensive broiler production. Small farmers invest in an industrial

closed farm with an evaporative cooling system. CP provides them with chicks, feed and medicine (on credit) and the farmers raise the birds according to strict instructions provided by the company. When the chickens reach the required weight, CP comes and collects them. The company then pays the farmer according to the performance (feed conversion ratio and mortality rate) and the market price.

The informal model involves informal production contracts, usually on a seasonal basis, between farmers and individual entrepreneurs or small companies. It is often used for crops such as fresh vegetables or tropical fruits that require only a minimal amount of processing. For example, in the Northern provinces of Thailand, farmers grow chrysanthemums and fresh vegetables for the Chiang Mai and Bangkok markets under verbal agreements with individual traders.

In Southeast Asia, the formal subcontracting of crops under the intermediary contract farming model is a common practice. In Thailand, large food processing companies and fresh vegetable entrepreneurs purchase crops from individual collectors and middlemen who have their own informal arrangements with farmers. In the snap-frozen vegetable industry in Northern Thailand, two companies directly contract out to middlemen who organise over 30,000 farmers to grow soybeans, green beans and baby corn, primarily for the Japanese market.

Contract farming also occurs under a multipartite model, where a variety of organisations are involved, including private companies, state institutions and farmers. Finally, under the nucleus model, the company not only subcontracts production to small farmers, it also manages a central estate or plantation, which has often been used in connection with resettlement or transmigration schemes.

Small farmers' crisis

To many farmers, contract farming presents a very attractive alternative to independent farming. Research by Jacques-chai Chomthongdi demonstrates that rice farmers' incomes in Thailand have not increased since 1977. His findings show that : "real farm income in 2000 had not increased since 1977. On the contrary, farm costs increased over the same period of time. Moreover, in some of the years, farm spending tends to be higher than the farm income. Thus, it is fair to say that farmers, in general, are worse off than before."[10] Farmers in Thailand have been looking for stable and decent incomes for decades.

When companies are recruiting farmers for their contract agreements, they offer them a secure market and promise them good incomes. It is therefore not surprising that many farmers are genuinely interested in entering such ventures. When asked why they joined contract farming, farmers usually give two main answers: "We were making so little money in our farm! We wanted to find a way to earn enough cash to make a decent living, to send our children to school and to be able to pay for family healthcare". Lack of capital is the other reason why farmers join contract agreements : "We don't have any money to buy seeds, chicks or other inputs to start the production cycle. Sometimes, we cannot get a loan with the bank if we don't have a contract with a company".[11]

Even though contract farming looks quite attractive for farmers as well as for private companies, this system raises serious concerns regarding social justice, environmental sustainability and corporate control. Very often, instead of being the win-win agreement promised by its promoters, it becomes an elaborate way of exploiting small farmers.

Farmer exploitation and corporate control

Even though contracts could give farmers some certainty that the free market does not provide, exploitative practices of this model are undermining this potential.

Small-scale isolated farmers are usually not in a position to negotiate a fair contract with large transnational companies, their agents, their technicians and their lawyers. In a study of contract farming in Thailand, Sukpal Singh notes that most of the contracts are one-sided in favour of the company. For example, in a contract with the company Frito Lay Thailand, farmers agree to sell their produce exclusively to the company, but on the other hand, the company is not committed to buy the product from the farmers.[12] CP contract farmers do not even receive a copy of the contract when it is signed. The Thai Senate Committee on Agriculture and Cooperatives reached similar conclusions. Although its report recognises the potential of contract farming to modernise the agricultural sector in Thailand, it also admits that "most of the contracts exploit farmers and producers. Farmers have to follow the conditions set by the processing factory which are not equitable".[13]

Low incomes are one of the major complaints of the farmers. Broiler raisers under contract with CP in the Northeast of Thailand can earn as little as 1700 baht a month per worker (approx. US$43*), after deducting the costs of production and repaying the debt to the company, the bank or the loan shark. This is below the minimum wage of 2720 baht for 20 working days (approx US$68).[14] The way farmers' incomes are calculated is usually very complex. It can vary according to many factors such as efficiency, the quality of the product, its size, and usually the market price as well. This calculation makes it very difficult for the farmer to anticipate how much he or she will eventually get and to check if the contract has been honoured.

Another damaging impact of this mode of production is a tremendous increase in farmers' debt. The investment required to enter industrial agriculture is obviously much higher than for traditional farming. In a group of 19 farmers raising chickens on contract interviewed in October 2004, the average current debt per household was around

241,034 baht (approx. US$6,025). Pig raising requires even higher investments.[15] National statistics show that in 1999/2000, the average debt per agricultural household was 37,231 baht (approx. US$930).[16] Many farmers fear that they will never repay their debt because of their very low income and the continuous investments required by the company, but as long as they are indebted, it is very difficult for them to break away from the company.[17]

Contract farming also shifts most of the risks of production on to the farmers. In animal raising, farmers borrow to invest in modern infrastructure on a long term basis (5 to 10 year loans). But the contract with the company rarely exceeds one year. If the company does not renew the agreement, the farmer is left with the debt. The risks of natural disasters and crop failures are also borne by producers. For example, during the bird flu crisis in Thailand in 2004, some farmers under contract with CP did not receive any chicks for more than 6 months, without receiving any compensation or even any explanation for this long delay. Minimising risks is also one of the advantages for the industry that the FAO sees in contract farming: "Production is more reliable than open-market purchases and the sponsoring company faces less risk by not being responsible for production".[18]

Farmers also complain about other conflicts with the company regarding issues such as the quality of the feed and the inputs provided, delays in payment, the length of the break between the production cycles, etc. There is so far no negotiation space or arbitration body to settle those disputes. In the case of the formal centralised model of contract farming, farmers effectively become the workers of the company ("Our job is to raise the chickens that belong to CP. We build the farm and we simply do what they tell us to do.") But the company does not provide any of the obligations under a typical employment contract such as minimum wages, sick leave or severance pay.

In many cases, contract farming has led to an increase in the use of pesticides, with the associated environmental damage.[19] The company imposes the amount and the type of chemicals that should be applied. As it does not have any long term commitment to the farmers, it tends to overexploit their land. Moreover, the widespread use of some industrial seeds or animal species is also a major threat to the environment. Local varieties are wiped out, undermining biodiversity.

More fundamentally, contract farming has been used by transnational corporations to extend their control over resources, and to impose industrial modes of production. As the FAO report puts it: "Contract farming offers access to crop production from land that would not otherwise be available to the company, with the additional advantage that it does not have to purchase it"[20]. With the support of international institutions and national governments, contract farming is also leading to the privatisation of extension services. Company agents are visiting farmers more regularly than government extension officials, promoting some technologies, providing inputs and giving access to credit and markets. The technologies they are promoting answer the needs of the industry, which can be radically different from small farmers' needs for low cost and locally controlled modes of production.

Contract farmers' rights, and the right to be a non-contract farmer

Because it involves an increasing number of farmers and because it is a key mechanism to link small producers to the agribusiness sector, contract farming raises important questions for farmers and workers organisations, and to the whole movement confronting the corporate-led liberalisation of food and agriculture. Through debates and discussions, a common political agenda is emerging.

First, the rights of the contract farmers should be at the core of every action and position on this issue. This is a major challenge because contract farmers are usually not organised within larger federations. They are neither ordinary contractual workers affiliated to trade unions, nor independent producers gathered in farmers' organisations. As an NGO worker put it, in terms of organising, "they are like dogs without a name on the collar". Many contract farmers seem to be willing to raise their concerns collectively, but the only place where they meet is at gatherings held by the company itself.

Second, the issue of contract farming can not be addressed in isolation from the global crisis of the agriculture sector. With the current export-oriented policies and the withdrawal of state support and domestic protection measures, small farmers go bankrupt. They become extremely vulnerable in negotiating contracts with large agribusiness companies. Improving farmers' conditions (with price management schemes, tariffs, promotion of sustainable practices and so on) will benefit contract farmers as well as independent producers.

Finally, it seems to be increasingly important to defend the right to be a "non-contract farmer", and to produce food in a non-industrial way. In Thailand, the promotion of industrial farming is getting so overwhelming that small scale traditional farming is becoming either impossible or illegal. For example, the Ministry of Agriculture and Cooperatives is providing some financial incentives for fruit growers on the condition that they are under contract with a company.[21] The quality requirements imposed on farmers are becoming so strict and complex that contract farming is becoming the only way for producers to comply with the standards. Some farmers are concluding that it is becoming almost illegal not to be bound with any company.

* Approximately 40 Baht = US$ 1

Thai agribusiness had a pioneer role in promoting contract farming in the region. Many farmers have now experienced this new mode of production and are developing their analysis of its potentials and its limitations. The diversity and dynamism of civil society groups and people's organisations in the country can now be at the forefront in questioning this mode of production, developing alternatives and promoting farmers' and workers' rights.

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FIELD RESEARCH
CONTRACT CHICKEN AND PIG RAISING IN THAILAND

Introduction

In July 2004, Charoen Pokphand (CP), the largest agribusiness company in Thailand invited Focus on the Global South to visit their farms in response to an article Focus published raising concerns about industrial farming during the bird flu crisis.[1] During a two-day visit to Nakhon Ratchasima province (three hours north-east of Bangkok), several CP executives guided a small team of NGO workers and farmers' leaders on visits to a large factory farm belonging to the company, seven contract farmers raising chickens and pigs as well as a chicken processing factory.

According to CP, contract farming is the best way for small farmers to modernise their production and to enter export markets. It is a "win-win" deal between producers and agro-industries and a key element of the export oriented food production model.

Following up on our field visit with the CP executives, Focus on the Global South felt the need to meet contract farmers independently and decided to conduct our own research in order to get a clearer picture of the situation. The objective of this research was to understand better how contract farming works, who gets involved and why, and who benefits from the agreement. It also aimed at better understanding farmers' perceptions about this mode of production and the main problems they are facing.

Some issues, such as the environmental impacts of industrial farming, the quality of the inputs (e.g. the use of drugs in feed), or even the worker's health and safety are beyond the scope of this study. Nevertheless, they are extremely important if we want to analyse the full impact of contract farming on society. Some other institutions have conducted research on these issues.[2]

For this initial study, we chose to focus on chicken and pig raising to supplement the basic information acquired from the field visit. This particular study is Focus on the Global South's contribution to a broader study on contract farming in Thailand initiated by a group of Thai NGOs, including the Alternative Agriculture Network, Rural Reconstruction Alumni and Friends Association (RRAFA) and Biothai. Other studies being conducted by this group cover shrimp-farming, rice seed production, and corn and soybean growing.

This research does not aim to give a comprehensive picture of contract farming in Thailand. Rather it seeks to present an initial assessment of the situation and to raise the main issues in terms of farmers' and workers' rights. It is part of a long term process involving farmer movements, trade unions, NGOs and international organisations aimed at developing strategies by which both contract and independent farmers can improve their bargaining power and living conditions.

Methodology

Because of budget and time constraints, we conducted a series of case studies instead of a broader research that could be replicated across the whole country.

We interviewed 19 chicken farmers and 7 pig farmers in three different provinces in central and north-eastern Thailand (Nakhon Pathom, Buri Ram and Roi Et). Each of the farmers had a contract with a large food-processing company. The field research took place in October 2004. The names of the farmers, the districts where we conducted the study, and the contracting companies will be kept confidential to avoid exposing the farmers who took part.

Farmers were interviewed individually at their farms, following the questionnaire (see Annex). We also conducted a focus group discussion with 11 chicken farmers. The selection of the farmers was random. We went to districts where we were told that there were contract farmers and we asked around where the chicken or pig farmers were.

All the farmers that we visited agreed to participate in the interviews and were quite willing to talk about their situations.

Among the 19 chicken farms that we visited, 17 produced meat (broilers) and two produced eggs (layers). These farms had between 5,000 to 10,000 chickens, which is considered a relatively large size in Thailand. Among the seven pig farms that we visited, three of them were producing piglets (with a capacity of around 150 sows per farm) and four of them were fattening pigs (with around 320 pigs per farm).

Among the farmers that we interviewed, the first one to sign a contract was in 1995 while the last one to start was in 2004.

Out of the 26 farmers we interviewed, 18 were women (70%). They were the ones present at the farm and who knew about the business. This hints at a high incidence of female labour in this sector.

Apart from interviewing farmers, we got some strong support from partner organisations (local NGOs and farmers' leaders) and we also interviewed provincial livestock officers and academics to build a broader understanding of the issue.

Once again, because of the small size of our sample, we cannot project the results of this case study to the whole country. Nevertheless, this research gives us a picture of the situation and concerns of those farmers. We hope that in the future independent researchers can conduct a full study of the impact of contract farming on small and medium-sized farmers in Thailand.

Thai chicken conquers the world

Although the livestock sector is a relatively small part of the agricultural sector in Thailand, some of its segments are considered a remarkable success story in terms of industrialising food production and engaging in export markets.

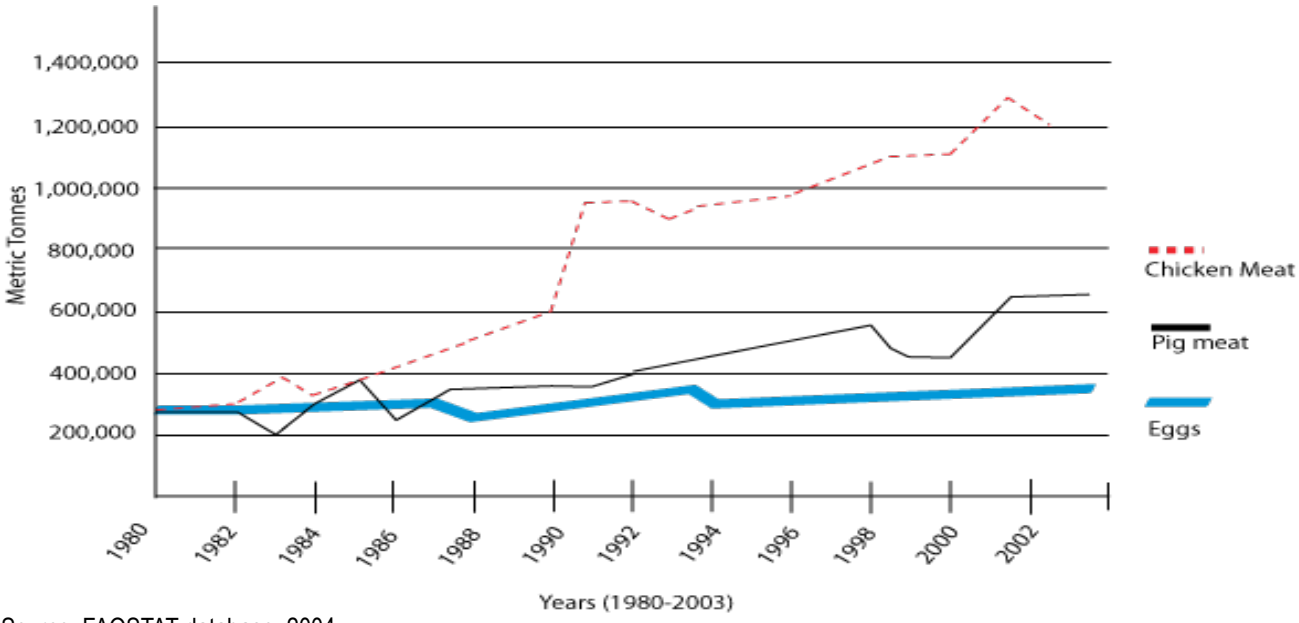
The poultry industry in particular is often presented as a success story in the Thai ambition of becoming the "kitchen of the world". In the span of two decades, it transformed itself from the rural, backyard production of chickens catering to the domestic market to industrial production of chicken meat predominantly for international markets.

Between 1980 and 2002, production of chicken, pork and eggs increased continuously. While pork output almost doubled in two decades, poultry meat almost quadrupled over the same period. (see Figure 1)

During the same two decades, Thais increased their consumption of meat. The sustained increase in household purchasing power before the 1997 economic crisis led to a higher demand for high-value commodities such as meat. Even though bovine meat consumption declined slightly, pig and egg consumption increased steadily while chicken consumption grew very rapidly (Figure 2). Chicken became extremely popular as the price dropped due to mass industrial production. Per capita, Thais now consume annually an estimated 3.4 kg more poultry than the global average.[3]

However, it is mainly because the country has entered the world market that its production of chicken meat has increased so dramatically. In 2002, Thailand was the world's fifth largest exporter of chicken meat, selling abroad 468,000 tons of chicken meat and canned chicken for US$ 963 million.[5] The main export markets were Japan and the EU, accounting for 54% and 31.23% of the exported vol-

Figure1: Meat and eggs production (metric tons)



Source: FAOSTAT database, 2004

ume respectively.[6] After rubber and rice, chicken is the third agricultural product exported from Thailand (in value).

As far as the major chicken producers are concerned, there is no clear division between chicken produced for export and for the local market. The Japanese and EU markets demand only certain parts of the chicken (e.g. boneless breast). The parts not exported (e.g. wings, ribs, internal organs) are packaged or further processed into local products (e.g. chicken balls, sausages) for distribution in the domestic supermarkets and convenience stores in major urban centres. Therefore, the former segmentation between production for local and export markets has been broken.[7]

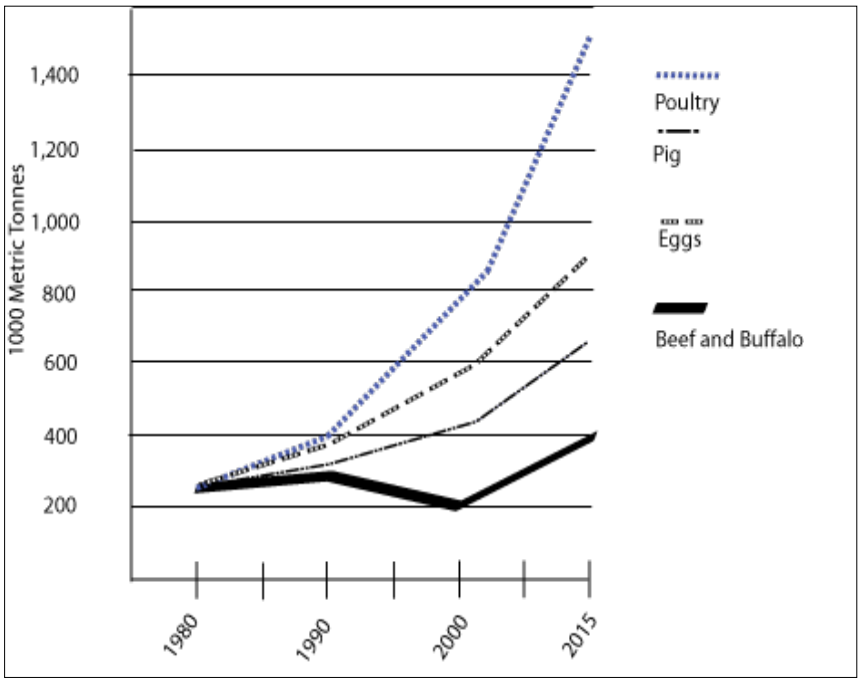
On the other hand, pork and egg production have not followed the same international expansion as the poultry sector. Most of the pork and eggs produced in Thailand are consumed domestically.

Producers and production chains

There are officially 31,072 chicken and duck farms in Thailand raising about 217 million birds. These statistics exclude the large number of farms with less than 500 broilers, native chickens or ducks, or farms with less than 100 layers. Farmers producing native chicken varieties mainly produce for their own consumption and for the local markets. They do not send their produce to slaughterhouses. Pig farming is a much smaller sector in the Thai economy. According to the Livestock Department, there are around 1007 pig farms in the country (including swine for meat and breeding). This includes farms raising more than 50 sows for breeding and 500 pigs for meat production.[8]

According to an FAO report, 76% of farms producing chicken for the broiler marketing chain (passing through slaughterhouses) are managed by agribusiness companies or by their contract farmers.[9] However, the Thai Development Research Institute (TDRI), estimates that 99 %

Figure 2: Consumption of meat and eggs



Source: FAOSTAT (2003), FAO (2002)[6]

of the farms producing chicken meat are under contract with a company, while only 6% of layer farms and 11% of pig farms are under contract.[10] However, there is no exact data on the number of contract farmers in the country.

In different interviews, CP, which is known to have significant market share in this sector, gave conflicting information regarding the number of contract farmers it is working with. It ranges from 12,000 chicken farmers and 5,000 swine farmers,[11] to a total of 10,000 farms for all its activities (including rice and corn).[12] According to the company, half of its production of chicken meat comes from its own industrial farms and half of it is from farmers they contract with.

Most of the broiler farms included in the official CP inventory raise between 2,000 to 5,000 birds, which is considered as medium size. However, some factory farms raise up to 400,000 chickens (and even one million birds).[13]

In Thailand, the broiler production chain is highly vertically integrated. This means that the same companies control the whole sector, from chicks to feed and from processing to marketing. The giant agribusiness company Charoen Pokphand (CP) introduced industrial chicken farming and contract farming in Thailand as early as the 1970s, importing breeding stocks from the US and developing intensive production techniques with Thai farmers. The revolution in technology, production and trade which transformed chicken production and consumption in Thailand over the past decades is attributed to this company and to the support that it got from government policies (e.g. through strategic tax exemptions; see Box 1). Even though CP remains the biggest actor in the Thai broiler sector, there are now 13 vertically integrated firms, privately operating about 22 poultry dressing plants.[14]

Figure 3 : Thailand's major exporters of frozen chicken

1. Saha Farm Co., Ltd.
2. C.P. Intertrade Co., Ltd.
3. B. Foods Product International Co., Ltd.
4. GFPT Public Co., Ltd.
5. Better Food Co., Ltd.
6. Laemthong Poultry Co., Ltd.
7. Golden Foods International Co., Ltd.
8. Sun Valley (Thailand) Co., Ltd.
9. Central Poultry Processing Co., Ltd.
10. Sunek Food Co., Ltd.

Source: Food Market Exchange[15]

According to FAO estimate[16], in the broiler sector, CP controls 20% of the market in chick production, 40% in animal feed and 20% of the export markets (2001). CP's market share in the pork retail sector is about 20%.[17]

Even though egg and pig production have not reached the same level of vertical integration, deep changes have also occurred in these sectors. Imported industrial varieties have replaced local breeds, leading to the use of commercial feed and to the development of closed farms with cooling systems. Due to the higher investment costs required, smaller independent farms have been excluded from the market. This process has been controlled by major agribusiness companies and many independent farmers are now engaged in contract farming.

Table 1: Distribution of poultry inventory and farms, by type of activity Thailand, 1 January 2000

Type of poultry	Number (million birds)	% of population	Number of farms	% of farms
Broiler	91.57	42.2	10,476	33.7
Native chicken	72.97	33.6	8,369	26.9
Layer	24.80	11.4	7,459	24.0
Duck (all types)	27.88	12.8	4,768	15.3
Total	**217.23**	**100**	**31,072**	**100**

Source: Statistics Branch, Planning Division, DLD, MAOC, 2001

Meeting contract farmers

Entering contract farming with a company: how does it start?

Before entering contract farming, about half of the farmers that we interviewed were involved in non-agricultural activities. Some of them worked in Bangkok or even abroad (e.g. in construction work, as a cook), while the others were living in their village but had another job such as a motorcycle repair shop mechanic or carpenter. The other half of the farmers were involved in agriculture before starting producing pigs and chicken under contract. Some of them were fulltime farmers (mainly rice farming combined with traditional livestock activities), or had mixed activities (e.g. dress maker and rice farmer, civil servant and jute farmer, food stall seller and rice farmer).

The first contact between the farmers and the company happens through the company's local agent. Some farmers said that they took the initiative to contact an agent after seeing their neighbour or their relative involved with the company. "I saw my uncle raising chicken and I felt the income was good, so I asked the company to come," said a chicken farmer. However, most of the farmers that we interviewed were approached directly by the agent who visited their farm individually or who invited them to a demonstration farm. "They organised a visit of a farm in the province. I went with 17 other farmers. After the trip, they asked if we were interested. I said I was," said a farmer raising pigs. In our sample, farmers signed their first contract between 1995 and 2004.

During our field trip to Nakhon Ratchasima organised by CP, we were told by the company executives that they were now selecting their farmers very carefully to avoid any trouble. The people in charge of recruitment explained that they checked if the farmers gambled or drank alcohol, and if they had a good reputation in the village.

However, the farmers we interviewed did not mention that kind of selection process. They said that to be accepted, they mainly needed to have a piece of land and a land title, to use as collateral for a bank loan. The company then checked if the land was large enough for the construction of the pig or chicken house (a chicken or a pig house is between 500 to 1,000 square meters) and easily accessible by road.

Nevertheless, three farmers we interviewed used other people's land or land titles to set up the activity. For example, one woman had already put up her land title as collateral for a previous bank loan, so she decided to borrow her brother's land title to start the contract farming business. This has created a decade long trap as the brother keeps asking her for money, threatening to get his land title back from the Bank for Agriculture and Agricultural Cooperatives (BAAC) if she does not obey.

The other requirement mentioned by the farmers is that they have to be ready to invest a large amount of money to build up a modern chicken or pig house. As we will see in the following section, most farmers do not have enough capital and need to borrow the full amount, or part of it, to start the business.

Why not independent?

When asked why they joined contract farming instead of running an independent farm, farmers gave two main reasons. First of all, they do not have the capital to set up independently. "I wanted to raise chickens but I had no capital. It is difficult to get chicks from other sources," said one farmer. A contract provides farmers with the inputs (chicks, piglets, feed, medicines) and access to a bank loan for the infrastructure.

The second main reason for entering contract farming is the market it offers. A farmer said, "There is no market for independent farmers. Now, no one would come and buy your chickens at the farm. If there was a market, I would be independent." Another one explained that, "Farmers cannot sell to other sources, we have to sell to the company. There is no independent chicken farm in this area," and "If we want to export, we have to work with a company."

In pig farming, there is an independent market and buyers go to the farms to buy meat and piglets. But contracts give farmers a guarantee to sell. "We sign a contract to be sure to sell our pigs. When the price is very low, no one buys on the free market, but the company buys anyway," explained a farmer. Another one said, "I wanted the marketing risk out of my hands."

A few farmers also mentioned that contract farming makes the job easier: "It is convenient: we give a call and the feed comes, we give another call and the vet comes…"

The contract also gives farmers a sense of security: "I was scared of failing. With a contract, it is more secure, it is like getting a monthly salary".

Farmers who chose CP did so either because it was the biggest company, or because it was the only one operating in the area. "CP is the biggest, it will not go bankrupt easily," explained a farmer.

Who works in the farm?

The chicken and pig farms we visited were all family run businesses. There is usually more than one person involved (e.g. husband and wife, daughter and father). The

family staff do not receive any wage, except in one pig farm where one man hired his two brothers and paid them 10,000 baht a cycle (six months). In our sample, very few contract farmers hired workers. Out of the 26 farms that we visited, only five hired workers on a permanent basis (four of them were pig farms and one was a layer farm). Two broilers farms were hiring workers occasionally (on a daily basis).

Seventy per cent of the farmers that we interviewed were women, suggesting a high incidence of female workers in this type of agreement. They answered our questions either because they were the only one present in the farm, or simply because they knew better the details of the activity. Their husband, father, son or brother were sometimes attending the interview, adding some comments, but leaving the leadership to the actual head of the business.

Raising chickens is considered very hard work: carrying the feed and husk bags, feeding the animals, taking away the dead chickens in the morning, giving the medicine. Pig raising seems to be less strenuous than raising chickens, even though it seems to require more staff. In the households that we visited, there were usually two people working in the chicken farms, and three in the pig farms.

Whatever the production, someone must stay on the farm day and night to turn on the generator if the electricity goes off. A power cut leads to the interruption of the cooling system which can cause the death of many animals. Many farmers mentioned that they were expected to permanently stay in the farm. “I cannot go anywhere. I have to look after the chickens and stay in the house. When the vet comes and we are not here, he blames us,” said a chicken farmer.

For most families, raising chicken or pigs is not the only economic activity in the household. Most of them still grow rice for their own consumption, and they sometimes grow other crops (e.g. sugarcane, coffee) or raise cattle. Eight farmers mentioned that a member of the family works outside the village bringing in some extra income (e.g. labourer in Brunei, soldier, worker in Bangkok). “My daughter had to drop out of school and went to work in Bangkok,” said a chicken farmer.

Contract farming: how does it work?

Investment

First, farmers have to invest in building a chicken or a pig house according to company specifications. Most of the farmers we interviewed started by building an open farm, i.e. a chicken house with good ventilation but with no air-cooling system. In order to build that farm, most of them borrowed money from the BAAC. According to the farmers we met, this initial investment ranges from 120,000 baht to 200,000 baht, while for pig-raising, it ranges from 200,000 baht to 500,000 baht.

Since 1999, companies have been requesting farmers to upgrade their farm into a “closed” system with an “evaporative cooling system” (EVAP). It is a form of air conditioning with large fans on one end of the house and water dripping on a surface at the other end. The system maintains the temperature at 25 to 27 degrees Celsius, suitable for imported breeds. This technology has reduced the average raising period for standard broilers from 45 to 40 days[18] and it allows the raising of more animals per square metre. According to the farmers, it has also reduced the birds’ mortality rate. On the other hand, the EVAP system has dramatically increased the costs of production because of the intensive use of electricity.

CP developed its own technology for the EVAP system in order to make it more affordable than the previously imported equipment. However, it is still a high investment cost for the contract farmers (around 200,000 baht). The equipment is produced by a CP subsidiary and at least in some cases, CP advanced the price of the equipment and deducted it progressively from farmers’ income.

The average total investment of the 19 chicken farmers that we met was 488,000 baht. For the seven pig farms that we visited, this figure went up to 650,000 baht. This includes the initial investment and the EVAP system, but not the regular upgrades that the farmers have to do in their farm. They do not keep tracks of those regular upgrades. Our figures are based on farmers’ accounts, and not on the actual receipts from the bank or the company.

Production cycles

Once the farmers have their industrial farm, the company provides them with all the inputs necessary for the production: chicks, piglets, feed and medicine. Farmers have to follow very scrupulously the instructions of the company in terms of quantity and quality of feed, when to give the medicine, and so on. They are not allowed to use any other input, such as replacing company feed by corn produced in the farm in order to reduce the costs. Farmers do not pay for the inputs when they receive them, but the cost of inputs is deducted from their pay from the company.

At the end of the cycle, the company collects the chickens, eggs or pigs. When the company comes depends on their needs, which creates some resentment among farmers. As one farmer put it: “Our earnings depend on the age of the chickens but we never know when they will take them. Whenever they want the chickens, they get them. It is their chickens. They warn us a few days before coming.”

The company pays the farmers about 15 days after the animals or eggs are collected, according to a calculation system described in the next section. Even though the date is uncertain, farmers are sure that the company will come to collect all the produce. However, in some cases, the company rejects animals if they do not meet the required quality. In our research, this problem was only mentioned

by one pig farmer: “When the piglet is lighter than 18 kg, the company doesn’t take it and we sell if for meat.”

The production chain is split into different phases, each of them being contracted separately by the company. Contrary to traditional animal raising, where farmers breed the animals, feed them, select them and kill them, contract farmers specialise in only one stage of the production process:

- In broiler chickens, some farms produce the chicks and others raise them until they reach “adult size”.
- In layer chickens, some farms produce hens and others produce eggs.
- In pig-raising, some farmers produce piglets and others fatten them.

The time of the cycles and the type of contract vary according to each stage of production. We will not enter into a detailed description of each system, except when it is necessary to understand farmer’s income calculation.

Imported breeds

For pigs as well as for chicken production, CP, for example, is importing hybrid varieties from the world’s leading breeding companies. It imports the grand parent or the parent stock and produces its own chicks and piglets. These industrial varieties grow much faster and produce more meat than the local breeds. A farmer said she used to produce native chickens: it took her about 70 days to raise them, while the industrial varieties take only 40 days to raise. But on the other hand, they need much more care, they require specific feed and they are more sensitive to the heat.

The companies are implementing the industrial raising techniques developed in industrialised countries, such as the use of antibiotics in feed to make the chickens grow faster. The use of those medicines is regulated to avoid building up resistance in consumer’s bodies. For example, there is a safe period to be respected between the last dose of the antibiotic and the slaughtering of the chickens. However, some farmers that we interviewed argued that the companies sometimes collect the chickens before this safe period. “When this happens, I feel sorry for the consumers,” said one farmer.

Incomes and costs of production

Chicken meat producers’ incomes

To determine farmer’s income, we asked them how much they spent and earned during the past production cycle. We then deducted the cost of the capital (defined as loan repayments). This calculation shows that many of them are in a very critical situation, if not bankrupt.

In this report, all the figures were given by the farmers themselves. Even if they might over or under estimate their incomes or debt, it still gives a good indication of their financial health.

Table 2 shows that out of 17 households raising broilers, four of them lost money in the last (two month) cycle. It also shows that the average income per farm is around 3,485 baht per month. Taking into account that there are usually two people working in the farm, it is much lower than the minimum wage, which is 2,720 baht for 20 working days per person.[19] The average income of the contracted broiler farmers that we interviewed is also lower than the average agricultural wage in Thailand of 2,865 baht per month (for the first quarter of 2004).[20]

Farmers’ income would probably be lower if production costs such as land and labour had been calculated here.

Farmers receive an income both from company payments and from selling chicken manure to neighbours or on the local market. While many expenses for inputs are incurred from the company, some are not, including the cost of electricity, gas (to operate the EVAP system and other equipment) and husks (spread in the chicken farm). They also have to repay the loan to the bank.

The companies pay the contract farmers according to a series of complex mathematical formulae. None of the farmers that we interviewed were able to explain clearly to us the calculation showed on their pay slip. One of them said, “Why aren’t we simply paid by kilo of meat? We can never check if our payment is correct!” After long scrutiny of the pay slips that we collected, we also reached the same conclusion: with the information the farmers receive, it is virtually impossible to understand, check and anticipate how farmers get paid. The “ability cost”, the main farmer’s income, is based on a figure (probably derived from the feed conversion ratio - FCR) that is not explained on the pay slip we examined. Figure 4 shows a simplified version of a pay slip (for one broiler farm over one cycle).[21]

Costs of production

As shown in the case above, the cost of the feed, the chicks and the medicines is not deducted from the farmer’s income as a separate item, but is part of the calculation of the feed conversion ratio. However, it is possible from the pay slips to calculate the price of those inputs. Based on two pay slips, one for a broiler and one for pig fattening, we can estimate the relative costs of the inputs to produce one kg of meat (see Table 3). Feed is clearly the most expensive input, amounting to 78% and 76% of the total for broilers and pigs respectively. This shows how important the feed business is for a company like CP. It also explains why CP feed sales for broiler production in Thailand (18,059 million baht) exceed the sales of CP exported chicken meat (12,419 million baht).[23]

Table 2

Broiler farmers' incomes per farm and per 2 months cycle (in Baht)

Farm no. (1)	C1	C2	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	Aver-age
Capacity (2)	7,500	7,000	6,000	7,000	7,000	11,000	8,000	5,000	6,000	6,500	6,500	6,500	10,200	6,500	5,000	6,500	7,500	7,041
Date of first contract	1,997	1,998	1,997	1,999	1,999	1,996	1,999	2,001	1,996	2,000	2,000	2,004	1,998	2,001	2,001	2,000	1,996	
Income from company (3)	14,342	12,000	9,500	18,000	25,000	14,000	43,000	29,000	38,000	28,000	27,800	30,400	60,900	30,000	30,400	30,000	24,567	27,348
Manure (4)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Total income	17,342	15,000	12,500	21,000	28,000	17,000	46,000	32,000	41,000	31,000	30,800	33,400	63,900	33,000	33,400	33,000	27,567	30,348
Electicity, fuel and husks (5)	8,500	11,000	9,620	10,800	9,500	9,770	17,425	12,050	14,737	15,425	15,425	15,425	21,500	15,425	12,050	14,100	15,425	13,422
Capital cost (6)	10,254	10,840	8,790	8,346	7,326	5,860	11,720	7,324	5,860	12,840	8,790	8,790	20,744	8,790	7,324	13,184	12,442	9,954
Total expenses	18,754	21,840	18,410	19,146	16,826	15,630	29,145	19,374	20,597	28,265	24,215	24,215	42,244	24,215	19,374	27,284	27,867	23,377
Net income	-1,412	-6,840	-5,910	1,854	11,174	1,370	16,855	12,626	20,403	2,735	6,585	9,185	21,656	8,785	14,026	5,716	-300	6,971

(1) Each column represents a broiler farm, each with 1-2 workers; C3 and C19 are not included here because they are layer farms.

(2) Maximum number of chickens per cycle

(3) Net income from the company, after deduction of the advance for chicks, feed and medicine, and of debt to the company for equipment

(4) Farmers sell chicken manure on the free market (to neighbours, etc.). Average income according to farmers' information.

(5) These expenses are paid separately by farmers. Other production costs such as land and labour of the owner have not been calculated.

(6) Calculation based on initial loan figures given by the farmers and information from BAAC

According to BAAC: interest rates for loans for chicken contract farms range from 7 to 9% and if delayed, from 10 to 13%.
Loans: from 300,000 to 2 million baht for between 5 to 10 years.

Calculation of the monthly loan payment on http://www.cuweb.com/cgi-bin/dcu/simple.cgi X2 on the assumption that there are 6 cycles/year.

The figures in this table are based on the farmers' initial loan, an average of 9% interest rate over 8 years.

Figure 4 : Broiler production (one cycle: 39 days)

Production Analysis:
- Number of dead chickens and difference from standard value.
- Calculation of the feed conversion ratio (total weight of feed divided by total weight of chicken caught) and difference from standard value.
- Price of the medicine.

Income:

- Rent of the space:	15,000 baht (0.32 baht per m^2 per day)
- Ability cost:	16,000 baht (x per chicken caught)
- Feed conversion ratio bonus	3,500 baht (if the FCR is higher than standard, farmers receive a bonus)
- Mortality rate bonus	780 baht (if the mortality rate is lower than the standard, farmers get a bonus, if it is higher, they are penalised)[24]
Total income	**35,280 baht**

Deductions:

- Deduction farmers' debt with CP	12,000 baht (advanced money and equipment)
- Deduction bag costs	500 baht
Total deductions	**17,000 baht**
Balance received for this cycle:	**18,280 baht**
Total debt remaining with CP:	61,500 baht

Table 3
Producing 1 kg of meat - cost of inputs

Inputs	baht/kg of chicken	%	baht/kg of pig	%
Chick/piglet	3.41	20	5.55	21
Feed	13.68	78	19.67	76
Medicines	0.32	2	0.78	3
Total	17.41	100	26	100

We can now give a tentative estimate of the total costs of production per cycle in the broiler sector. It is based on the cost of the inputs per kg of chicken from the example above and on the average costs of electricity, fuel, husks and capital calculated in Table 2. It is only an indication, because the price of the inputs is drawn from only one case (one farm for one cycle) and the other costs refer to the 17 farmers we interviewed. It should also be noted that the labour of the owners is not taken into account.

Figure 5 shows that 91% of the total costs of production are inputs provided by the company (chicks, feed and medicine). The remaining costs are electricity, fuel and husks (5%) and the cost of capital (4%).

Egg producer's incomes

We concentrated our research on the broiler sector which has a leading role in the Thai livestock industry. We also interviewed two layer farmers to build up some understanding of their situation. Their incomes were significantly higher than the incomes of most broiler farmers, but a larger sample would be needed to conclude that the layer business is more profitable and why this is so. The first farm (C3) started in 2003 while the other one (C19) had been established since 1995. The monthly net income given by the first farmer is surprisingly high (32,185 baht a month, or approx. US$800), especially considering that it is remuneration for a single worker (the owner himself). In the second farm, the monthly income given by the farmer is slightly higher at 38,078 baht, but it covers two people's work (husband and wife). The first is about eleven times higher than the average income in the agricultural sector while the second is about 6.5 times higher.

The company collects the eggs every day (or every other day) but farmers get paid every month (28 days). There is a guaranteed price per egg and per cycle (e.g. 1.7 baht/egg), but if the weight of the eggs or if the production exceeds company standards, farmers get a bonus. The company provides the hens at the beginning of the cycle and progressively deducts the costs every month. At the end of the 14-month cycle, farmers sell the hens back to the company and get an additional income. They subsequently wait for the next cycle to start. There are about two cycles in three years.

Figure 5: Broiler production cost per cycle (%)

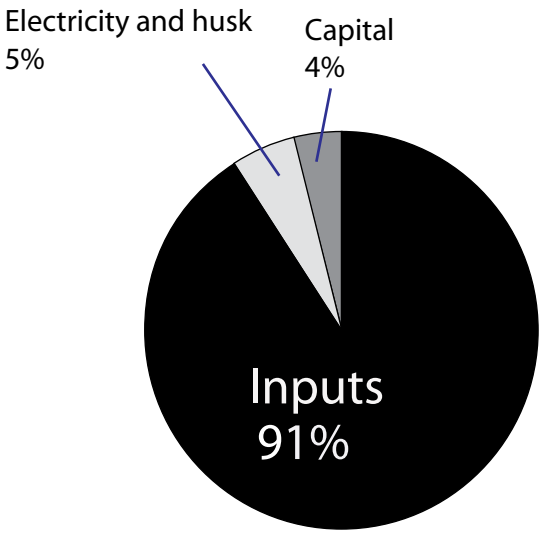


Table 4: Layers farmers' incomes per farm and per month

Farm no.	C3	C19	Average
Capacity (1)	5,280	5,300	5,290
Date of first contract	2003	1995	
Income from company (2)	53,000	45,000	49,000
Manure (4)	9,000	8,000	
Total income	62,000	53,000	57,500
Cost of hired labour	12,000	0	6,000
Cost of gas, electricity	4,000	5,400	4,700
Capital cost (4)	13,185	9,522	11,354
Total expenses	29,185	14,922	22,054
Net income	32,815	38,078	35,447

(1) Maximum number of hens per cycle
2) Net income from the company, after deduction of the advance for hens, feed and medicine, and of debt to the company for equipment.
(3) Farmers sell chicken manure on the free market (to neighbours, etc.).
(4) Calculation based on initial loan figures given by the farmers and information from BAAC

According to BAAC: interest rate for loans for chicken contract farms range from 7 to 9% and if delayed, from 10 to 13%. Loans: from 300,000 to 2 million baht for between 5 to 10 years.
The figures in this table are based on the farmers' initial loan, an average of 9% interest rate over 8 years. Calculation of the monthly loan payement on http://www.cuweb.com/cgi-bin/dcu/simple.cgi.

Pig farmers' incomes

We interviewed four farmers raising pigs for meat.[24] Our findings show very large variations between the farms in terms of income. The first farm (P4) raises 1,200 pigs while the others raise about 320 pigs, this might explain some difference in the incomes. The average monthly net income is 6,515 baht per farm (taken from an average income of 39,095 baht per six months). P4 earns 27,975 baht a month. P5 is in deficit and P6 and P7 earn 2,304 and 2,001 baht per month respectively, and which covers the work of two people.

Farmers receive the piglets, the feed and the medicines from the company at the beginning of the cycle. After about six months, the agent comes to collect the pigs.

Table 5: Pig raising for meat - Income per 6 months cycle (in Baht)

Farm no.	P4	P5	P6	P7	average
Capacity (1)	1200	320	325	320	541
Date of 1st contract	1998	1999	1998	1998	
Income (2)	356,000	70,000	90,400	80,000	149,100
Electricity	60,000	17,500	22,500	15,000	28,750
Hired labour (3)	20,000	24,915	0	0	11,229
Capital cost (4)	108,150	64,890	54,072	52,992	70,026
Total expenses	188,150	107,305	76,572	67,992	110,005
Net income	167,850	-37,305	13,828	12,008	39,095

(1) Maximum number of pigs per cycle
(2) Income from company after deduction of cost of piglets and feed
(3) Does not include labour of the owner
(4) Calculation based on initial loan figures given by the farmers and information from BAAC

According to BAAC: interest rate for loans for swine contract farms range from 7 to 9% and if delayed, from 10 to 13%. Loans: from 500,000 to 1 million baht, for to 5 to 6 years.

The figures in this table are based on the farmers' initial loan, an average of 9% interest rate over 6 years.

Calculation of the monthly loan payment on http://www.cuweb.com/cgi-bin/dcu/simple.cgi X6 on the assumption that there are 2 cycles/year.

Farmers' income is calculated according to another set of mathematical formulae more closely related to the weight of the pigs.

A pay slip for a pig fattening farm gives an example of the income structure (Figure 6). As in chicken production, the debt owed to the company and the cost of the bags is then deducted from the income.

Figure 6 : Pay slip summary for pig fattening

Raising return	Baht
1) payment for labour: (2 baht per weight increase during the raising time)	75,200
2) ability cost: (0.80 baht per weight increase during the raising time)	30,000
3) Bonus for damage:	11,000
Total income:	116,200

The catching and weighing of the pigs seems to be a source of conflict between the farmer and the company. One farmer explained that, "the previous vet used to cheat about the weight. When the new vet came, I suddenly realised that my pigs were much bigger!" Another farmer said, "Sometimes, the agents are not honest. They cheat with the weight. Farmers are busy catching the pigs, we cannot check when they measure the weight".

The pig farmers we interviewed also complained about the price of the feed. A farmer said that, "The problem is that company feed is very expensive and the price is always increasing. But the price of the piglets is low (sold to the company to be sent to fattening farms). The company is taking advantage, it is not fair". Another farmer producing pig meat since 1998 explained that, "At the beginning, it was good. But the price of the meat has not changed while the cost of the feed keeps increasing. At the end, the income gets worse. Many people are leaving."

Finally, several farmers mentioned that some conflicts arise in the compensation process because of the bad quality of the sows provided.

The gaps between cycles

The income calculations detailed above are based on the assumption that farmers receive the chicks, hens and piglets regularly. But in reality, it is not always the case and when contract farmers talked about their incomes, the problem of the gap between the cycles was raised. After catching the chickens or the pigs, the farmer has to clean the house and get ready for the new cycle, but many of them complain about the long wait until the delivery of the next cycle of chicks or piglets. "When I started, the sales agent said that it would be three cycles per year," said a pig farmer. "The loan contract with BAAC is based on three cycles a year. But after the first cycle, I saw that the gap was longer. Actually, it is two cycles a year. The contract doesn't say how many cycles a year it is". Another farmer said, "The company didn't supply pigs as foreseen, so I face problems with BAAC. When there are delays, I have to bear the burden." A chicken broiler farmer said, "The company told us the break will be only one week long but it is actually 15 or 20 days. They also said they would give us 7500 chicks per cycle but they give less. Only twice a year they give us 7500 chicks." "If only they gave me the chicks more regularly, I would make some profit!" said another one.

In the chicken sector, this problem became more acute after November 2003 because of the bird flu epidemic.[25] Out of the 19 chicken farmers that we visited in October, five of them had not received any chicks since March. They were unemployed, some of them raising mushrooms in the chicken house, waiting for the chicks to arrive. A farmer explained that she was not informed about the long gap: "They didn't tell me in advance that they would not come again. Only two months ago, the agent came and said that the Livestock Department had to come and check first. I did what they told me, but they haven't come yet." In the aftermath of the bird flu crisis, the Livestock Department issued new regulations to improve the safety of the farms. But the findings of our field trip showed that some of the farms that had complied with the new requirements were not provided with any birds.[26]

Another farmer also did not receive an explanation: "I was not told that they would stop. I called the vet to ask why he had disappeared. I called him many times! They said that the transport of birds was prohibited, but around here, some of us have chicks and some others don't". However, this farmer remained confident and added, "I think the company will come back, they haven't abandoned us".

In a written interview, we asked one company the reason for these long gaps. The company public relations office answered that it was partly due to the government prohibition on transferring poultry in the areas being monitored for bird flu, and partly due to the lower demand for Thai meat on the domestic and export markets. The company said that these were temporary conditions.

The bird flu crisis clearly shows that contract farmers bear the risk of market contraction. When demand is low, the gap between the cycles increases, or production simply stops altogether. Contract farming provides a very flexible supply system for the companies, which leaves farmers in an extremely vulnerable situation.

Benefits

In practice, contract farmers are effectively workers for the company. They work full time for the company and they depend entirely on the company for the inputs, the technology and the marketing of their whole production. The company makes all the decisions related to the production and the workers' job is to raise animals. However, in terms of benefits and workers rights, contract farmers are not protected the same way as factory workers are.

The companies do not provide any social security or health insurance to the farmers. Among the 26 farmers we interviewed, three subscribed to private health insurance (one chicken farmer, and two pig farmers) and one chicken farmer benefited from her husband's social security (who worked as a civil servant). All the other workers have to pay for the medical expenses of their family. Some of them mentioned that the government scheme to provide medical care for 30 baht a visit was their social security scheme.

Likewise, paid leave, sick leave, severance pay or a pension scheme are not included in the contracts with farmers. The few farmers hiring labourers to work in their farms do not provide them with any employment benefits or social security.

A chicken farmer explained his attempt to be covered by such benefits:

"When I have problems, I usually ask questions to the company vet when he visits me. If he doesn't give me the answer, I go to the office. I have a group of 10 farmers, all with the same company. We went to the office to ask to be covered by the social security like people working for the government. The manager of the province's branch said he could not do anything. He referred us to people with more power. Then he suggested an extra deduction from our salary for a pension and health care scheme. Usually, both the company and the worker share the deduction for the social security. But here, only the worker had to contribute. For us, the government social security would be better than the 30 baht scheme because for any sickness, we would get the full treatment for free. It was a very small demand but we didn't get it."

A continuous debt

Contract farmers are de facto company workers. The company invests in the production costs (by providing the inputs), but farmers bear the burden of the infrastructure and fixed costs. One pig farmers summarises the situation: "We invest, but we are workers. If they think our performance is low, we are scolded even though this is our investment." Another farmer said, "I was blamed by the manager because many pigs died. He said it was because I didn't take care of the pigs. I said, "Who would destroy one's own income?""

According to our field research, farmers perceive debt as the worst problem facing them with contract farming. During our interviews, a large part of the discussions was related to the debt burden. It is a very sensitive issue and most farmers express discouragement about it. "I don't want to think about that debt any more, it makes me feel too bad", said one chicken farmer after being asked to give us details of the family debt. "It is such a headache to be in debt!" said another.

We asked farmers how much their current total household debt was. This figure includes debt with the company, with the bank and informal debt. It does not differentiate between debt incurred for farming and debt incurred for other purposes (e.g. children's education, health care, social obligations or other economic activities).

The following table (Table 6) shows that contract farmers are heavily indebted. An average debt of 300,563 baht per household is extremely high compared to the national average debt per farming household of 37,231 baht (1999/2000)[27], and to the average national household debt of 83,119 baht (2000).[28] The average debt figures are based on the total household debt declared by farmers (it is not only related to their economic activity, but also to education, housing, social expenses, etc).

Table 6: Average household's debt (in baht)

	Baht	No. of farms
Chicken farmers	241,034	19
Pig farmers	462,142	7
Total	300,563	26

Many farmers said that they did not have any debt, or only a few thousand baht debt, before starting with contracts. "I was even a money lender before," said one chicken farmer, "but now, I have a debt with two banks and a loan shark".

Farmers explain that this high debt is due to the initial investment which is often higher than expected. "The sales agent came to visit us and said that 330,000 would be enough to build the farm", said a pig farmer. "But it was not enough. They didn't tell us about the electrical instal-

lation and the storeroom. The full investment was about 500,000. I had to borrow from my relatives. Now, the BAAC is scared that I wouldn't pay back so they are restructuring the debt."

But the farmers we interviewed mainly lamented that entering contract farming was actually entering a continuous debt cycle. "The debt is continuous," said a chicken farmer, "after we finish repayments, a new debt comes. Now we have to meet new safety criteria and make new debt. I am discouraged to take a new loan again." Another chicken farmer said, "How can we repay the debt? The debt will stay because the company keeps providing new equipment all the time. They bring modern technology from outside, it brings more debt."

Farmers feel that they have no choice but to buy more equipment. According to a pig farmer, "If we don't buy the new equipment, the company will not deliver the pigs. They threatened me: "if you don't invest more, I don't give you anymore pigs". Now I have to invest 10,000 baht to upgrade my equipment. The company provides different things, such as a device to measure the humidity. It is not useful, but if you don't buy it, they don't release the pigs. The vet has to sell. The manager puts pressure on him to sell more material."

If farmers are late in repaying their loan, the bank interest rate increases. For example, at the BAAC, the regular interest rate for that kind of investment is between 7 to 9% a year, but it rises to 10 to 13% if farmers delay. The situation gets even worse with informal debt, with some loan sharks charging around 3 to 5% a month in interest. In those conditions, the debt accumulates and it becomes extremely difficult for farmers to get out of the trap.

According to the farmers, the contract helps them to get a loan at the bank, mainly the BAAC. It seems that in chicken farming, company staff do not accompany the farmer to the bank to get the loan. But in pig farming, one farmer said, "CP went to BAAC with me, they helped me to get the loan."

In several interviews, CP executives assured us that farmers remained free to quit the programme if they felt it was not profitable. Although this is technically true, the debt makes that option moot. Many farmers said that the debt was binding them to the contract. "How could I quit? I have invested more than one million!" If they quit the contract, they remain with the expensive closed farm that cannot be used for any other purpose (the lack of alternatives is discussed in the following section). "If the company wants to buy our chicken farm, we would be happy to leave, even if we lose some money," said a chicken farmer.

But some farmers are more confident: they hope to start making profit once the debt is repaid. One pig farmer said, "If someone has enough capital, it is OK to raise pigs under contract. But if he has to take a loan, that cannot work well. He would always be under the control of the company". Another farmer said "After repaying all the debt, what remains will belong to me."

The contract

All the chicken farmers we interviewed said that they signed a written contract, except for one who did not remember signing anything. In pig-raising, two farmers had a verbal agreement, while the five others had signed a contract.

Looking at the gender of those who signed the contracts, in three cases, the man of the family (husband or father) signed the contract but it was actually the woman who did the work. In another case, one woman signed the contract because she was the investor, but her father ran the farm. However, in the majority of the farms that we visited, the main worker, woman or man, was the signatory of the contract.

The duration of the contract is one year for broiler and pig-raising and one cycle (1.5 years) for egg layers. The contract is renewed on a yearly basis, giving the company and the farmer the option to leave the agreement. For some farmers, this short-term commitment from the company is a source of worry due to their long term investments (5 to 10 years). "If my contract is not renewed next year, that would be a big problem. The company can stop any time."

None of the farmers that we met had a copy of the contract. Once it is signed, the company takes it back to the office. Some of them read it and remember parts of it: "It says that we are the raisers of their chickens," said several farmers. Another one said, "I don't remember what's in it, except that we cannot sell the company's feed or raise pigs from other sources. We would be penalised for two cycles for doing that. The contract says that we are the people raising pigs for the company."

Some farmers did not read the contract: "We sign the contract and they take it away. We don't read it, we don't have time to read it. What I know is that the contract says that we raise their birds ("rab chang liang")."

We asked CP for a copy of the contract, but they refused the request by saying,

"It is not possible [to give you a copy] because the contract between CP and the contracted farmers is an agreement between both sides. Before the contract is made, the farmers obtain various information, such as the return for raising the chickens, the price paid by CP, the cost of livestock and feed, etc. The farmers can compare the CP price with market prices in general before deciding to join the project. In addition, they can also leave the program to do their own production and marketing at the end of the contract if they think the market price is better than that of CP."

Labour disputes and organising

Even if the contract is "an agreement between both sides", as is claimed, farmers do not feel that they have any bargaining power. A farmer said: "We have to follow the instructions. It is not up to us to do what we want. We have no voice. When we propose something, they don't accept." Another farmer said, "We have no opportunity to discuss anything. We cannot bargain with the company. It is like a communist regime. Our role is to raise the pigs and meet the target, that's it. I am a slave, even though I invested!"

Several farmers complained about the lack of space to solve disputes. "I talked about my problems. They told me that I was the only one in the country to face those problems. Farmers are afraid to talk because they bear the debt burden. If the pigs are not delivered, we cannot repay the loan." A farmer also explained that they were too dependent on the companies to enter into negotiations. "We rely on them, so we cannot put pressure on them."

Several farmers mentioned their failed attempts to discuss their working conditions, the quality of the inputs or their low incomes with the company. They either complain to the agent or the vet visiting them, or go to the office in their province. None of the farmers that we interviewed was involved in any formal farmers' or workers' union. But we came across two cases where contract farmers (broiler) had gathered informally to ask for better conditions. In the first case, mentioned earlier, they were demanding to be covered under the government's employee social security legislation. In the second case, a group of women farmers were asking for higher margins: "We sometimes meet here and we discuss with other farmers. We think that the benefit is small and the expenses keep increasing. We went to talk to the manager at the province level, but he referred us to a higher ranking manager. We also went to that higher level, we met the manager, but he didn't act. We wanted to get more benefit, a better margin. But they didn't agree."

We did not come across any dispute that had been solved in favour of the farmers.

One company organises regular meetings (every three months according to one pig farmer) with contract farmers at the district level to update them on technical issues, quality standards, new requirements, etc. But it does not seem to be a place to solve disputes: "At the meeting, they ask "Does anyone want to say anything?" But no one dares to speak", said a farmer.

During our interviews, several farmers said that they would like to discuss their problems with other farmers. One of them mentioned such a process: "We are discussing about organising a group of chicken farmers. We want to ask the government to force companies to deliver chicks."

But generally, we met a strong sense of fatalism among farmers:

"I was born as a farmer. We have always been in a disadvantaged position. Farmers are like blind people, they would follow whoever would lead them, even if it is to fall."

The lack of a dispute settlement mechanism in contract farming was also identified as a major problem by the Senate Committee on Agriculture and Cooperatives: "There is no agency acting as a mediator to look into the fairness of the contracts and to consider how both sides can gain more benefits. Farmers are in a disadvantaged position, so the contracts are unfair."[29]

In the places that we visited, Livestock Department staff were not acting as mediators between the farmers and the company. Farmers only mentioned that Livestock Department officials issued the certification standard for farms. They also visit the farm to check the production a few days before the company takes the chickens.

Some farmers mentioned that the Livestock Department officials sometimes visited the farm with or without the company agent, but company visits remained much more frequent.

Even if the government has a policy to encourage contract farming, none of the farmers in our research considered that the Livestock Department was actively promoting it. A provincial official told us that they were not promoting any kind of contract farming and that, as a government body, they would not favour any particular company. Their job was only to make sure that the safety requirements were implemented.

Farmers perception and assessment: is it worth it?

Even if the picture of farmers' incomes and working condition presented here seems quite grim, it does not mean that all farmers are dissatisfied with the agreement. The crisis in the farming sector in Thailand is such that a contract may be perceived as a good deal, or at least, as a lesser evil.

Farmers were asked if they would recommend anyone else to join contract farming. Apparently, their neighbour and relatives regularly ask them the same question, so answering it was quite spontaneous. Out of the 26 farmers that we interviewed, five would recommend it to others. They often add, "I recommend it, but there are problems" or, "I recommend it, but it is a huge investment". Another five farmers did not give straight answers: "I tell them to come and look first." However, the 16 other farmers said that they would not recommend it to anyone.

In the focus group discussion, farmers explained that the fact that there is some cash circulating in the activity is very attractive to villagers: “When we recommend people not to do it, they believe we want to keep the money. We get cash, so they think we have money”. Traditional farming in Thailand does not involve a lot of cash transactions and the chance of getting 12,000 to 30,000 baht per cycle (for broilers) is appealing. Farmers do not always realise that a large part of it is siphoned off by the electricity bills and the bank loan.

Even if they draw such a negative assessment of their activity, few of them are ready to leave. Some of them said that they would quit if they could repay the debt, but most of them said that they would stay because they have already invested. One farmer said, “I will stay forever, but I will only expand when I have finished repaying this loan”.

Among farmers, there is also a strong perception that there is no alternative. Rice farming, combined with traditional livestock and agriculture crops, gives an extremely low income. In livestock activities, “there is no market, we have no capital,” said many farmers. And the other economic sectors do not offer many job opportunities, especially for people who want to stay in the village. Talking about their contracts, several farmers said: “It is better than doing nothing”.

Conclusions: behind a success story

The livestock industry and especially the broiler sector in Thailand is presented as a success story due to the dramatic increases in production and exports over the last decades. Here, contract farming is presented as a “win-win” relationship, providing stability and good incomes to farmers. Our case study shows that for small producers of livestock for large agribusiness, the reality is rather different.

In terms of income, broiler farmers are in a very precarious situation, earning an average of 3,485 baht per month (approx. US$87), generally for two workers. This is less than the minimum wage and the average income in agriculture at the national level. In our sample, layer and pig farmers were getting higher incomes on average, even though some of them also were in deficit.

Our case study shows that the stability expected in such an agreement is actually a myth. Incomes are fluctuating and extremely difficult to anticipate and monitor. Similarly, companies are not obliged to deliver chicks and piglets regularly. With the bird flu crisis, some farmers had been unemployed for more than six months without any prior notice or any compensation. The fluctuating gaps between the cycles give companies an extremely flexible source of supply, transferring the risk of the market’s variations to the farmers. Moreover, farmers are committed for many years because of their bank loan (five to ten years), while companies sign only year-to-year contracts.

More burdensome than the low income is the overwhelming debt problem. The average debt by household in our case study was 300,563 baht (approx. US$7,500). It is more than ten times the national average for farming households already considered as heavily indebted. The debt makes it almost impossible for the farmers to quit the venture and creates a strong dependency on the contracting agribusiness companies.

This case study also reveals serious concerns in terms of workers rights. Workers are bound by a contract without receiving a copy of it, and sometimes, without even being given a chance to read it. They are de facto employees, but the company does not take responsibility for their social benefits (e.g. social security, sick leave, paid leave, severance pay). The farmers that we interviewed were not organised and had very little bargaining power with the company. They have no mediator to turn to in case of a dispute.

The fact that contract farming in Thailand is attracting an increasing number of farmers shows the magnitude of the crisis in independent farming and the urgency to set up agricultural policies that guarantee farmers’ livelihoods.

We are aware that this case study is only a first attempt to better understand the life and working conditions of the contract farmers and that more research needs to be done to give a full picture. We hope that this research will draw more attention to this changing work relationship in the food production chain and will help independent farmers as well as contract farmers to defend their rights.

Endnotes

1 "The flu that made agribusiness stronger" : http://www.focusweb.org/the-flu-that-made-agribusiness-stronger.html?Itemid=94
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2 - R.Moekchantuk and P.Kumar : "Baseline survey. Export Okra Production in Thailand", Inter-country Programme for Vegetable IPM in South and SE Asia, Food and Agriculture Organisation of the United Nations, Bangkok, 2004.
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5 FAO, The Statistics Division http://www.fao.org/es/ess/toptrade/trade.asp

6 Thai Broiler Processing Exporters Association : http://thaichickenandduck.com/docfile/Table2_0.pdf

7 A. Costales : "A review of the Thailand poultry sector", FAO, March 2004.

8 Livestock Department, December 2004. However, if we include farms raising at least one pig, there are 90,000 pig farms in the country.

9 A. Costales: idem

10 "Project on livestock industrialization. Trade and social-health-environment impacts in developing countries", IFPRI - FAO, July 2003. http://www.fao.org/WAIRDOCS/LEAD/X6170E/x6170e3b.htm

11 Interview in June 2004

12 Written interview in December 2004.

13 "Project on livestock Industrialisation. Trade and social-health-environment impacts in developing countries", idem

14 A Costales, idem

15 Food Market Exchange http://www.foodmarketexchange.com/datacenter/product/poultry/chicken/detail/dc_pi_pt_chicken0404_01.htm

16 "Project on livestock Industrialization. Trade and social-health-environment impacts in developing countries", idem

17 idem

18 A. Costales: idem

19 Minimum wage in that province: 136 baht per day.

20 National Statistical Office, Government of Thailand : http://www.nso.go.th/eng/stat/lfs_e/lfse-tab7.xls

21 This table is based on the pay slips that farmers receive at the end of each cycle. Figures have been very slightly altered to protect our sources.

22 Formulae: 9.50 baht multiplied by the difference between the actual death rate and the standard death rate, multiplied by the number of chickens at the beginning of the cycle and divided by 100.

23 CPF Kitchen of the World, Annual Report 2003

24 We also interviewed 3 farmers managing a pig breeding farm. The calculation of their income has not been included in this report because of some gaps in data collection.

25 Some contract farmers said that they had to stop producing broilers from November to February and that they were told by the agents that it was because of the bird flu crisis. If this information is correct, it would show that some companies already knew about the bird flu outbreak in November, three months before the government and the industry officially admitted that Thailand was affected.

26 I. Delforge: "The flu that made agribusiness stronger" : http://www.focusweb.org/the-flu-that-made-agribusiness-stronger.html?Itemid=94
"The politics of the bird flu":http://www.focusweb.org/the-politics-of-bird-flu-in-thailand.html?Itemid=94

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28 National Statistics Office, Government of Thailand : www.nso.go.th

29 Report on the investigation on contract farming of the Senate Committee on Agriculture and Cooperatives, Bangkok, 2003, page 11 (in Thai).

Annex
Questions for the Research on Contract Farming

Name: (Male or Female?)
Village:

1. Current contract farmers

What is your production under contract ?
What is your capacity (how many chickens? Pigs? Rais of corn/rice?)
When did you start your first contract ? (date)
How many people work with you? (male or female?)
What is your monthly income (average) ?
How much did you invest ?
What is your total household debt ?
Do you have any social security/health insurance ?
Do you and the other people working with you have any other activity (other production) or job ?
What did you do before ?
How much was your income ?
And how much was your debt ?
Why did you become a contract farmer ?
What has changed in your life since you started contract farming ?
What do you like about contract farming ?
What are the problems ?
Would you like your children to be contract farmers ?

2. Former contract farmers

What was your production under contract ?
What was your capacity? (how many chickens ? Pigs? Rais of corn/rice?)
When did you start your first contract ? (date)
When did you stop ? (date)
How many people worked with you ? (male or female?)
What was your monthly income (average)?
How much did you invest ?
What was your total household debt ?
Did you have any social security/health insurance ?
Did you and the other people working with you had any other activity (other production) or job ?
Why did you stop contract farming ?
Who made the decision to stop ?
What is your job now ?
What is your total household debt ?
Would you like your children to be contract farmers ?

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Focus on the Global South,
c/o CUSRI, Chulalongkorn University, Wisit Prachuabmoh Building,
Bangkok-10330 Thailand
Ph: 66-2-2187363-65, Fax: 66-2-2559976

ISBN: 974-9941-16-0