

Over the last 40 years the world has witnessed a remarkable increase in the consumption of poultry, pork and beef. Multinational meat processing companies have been able to respond to the hugely expanded export trade only by tying hundreds of thousands of small farmers into production contracts. In this article we examine contract farming in the poultry sector of two leading producing countries – Brazil and Thailand.

Contract farming in the world's poultry industry

GRAIN

World consumption of meat has grown dramatically over the last 40 years. Whereas in 1965 per capita consumption was 25.3 kilos a year, it had almost doubled, to 41.0 kilos per year, by 2005.¹ Consumption has grown most rapidly in the South, where the Western way of life, with its heavy consumption of beefburgers and chicken nuggets, has been strongly promoted by mass media. Between 1982 and 1994 meat consumption grew by 5.4 per cent a year in the South, compared with 1.0 per cent in the North.² And within the South it is the richer countries, such as China, South Korea, Brazil and South Africa, where consumption has grown most rapidly. In poor countries consumption of even the cheaper meats is still very low.³

The consumption of poultry has risen more dramatically than that of other meats (although pork remains the most heavily consumed meat). World poultry production increased from 8.9 million tonnes in 1961 to 70.3 million tonnes in 2001.⁴ It was a much faster increase than that registered by either beef or pig production. Although small farmers still produce most of the chickens consumed throughout the world, it is integrated, industrial poultry farming that has registered the most rapid growth. Indeed, from an

agribusiness point of view, poultry has been the big success story in livestock production over the last half century.

Several factors came together to facilitate industrial poultry production: new breeding techniques, which made it possible to separate off the various stages of the production process (see article by Susanne Gura on page 2); the rapid expansion of monoculture farming, which permitted big increases in the production of maize and soya, both of which are used to produce the feed needed to rear chickens in confined conditions; and neoliberal market reforms, which opened up the markets in many developing countries and ruined hundreds of thousands of small farmers, making them anxious to secure a regular income and thus willing to sign contracts with the multinational companies. Contract farming, which was virtually unknown in the poultry sector half a century ago, has proliferated rapidly. Governments, donors and international agencies have all promoted it, presenting it as a win-win solution in which the multinational companies are provided with the huge quantities of poultry they need and small farmers get access to the market economy.⁵

Industrial poultry production has been predominantly geared to the export market.

1 Dr Thomas E. Elam, "Projections of Global Meat Production 2050", 21 August 2006. <http://tinyurl.com/28xaub>

2 Christopher Delgado, Mark Rosegrant, Henning Steinfeld, Simeon Ehui and Claude Courbois, "Livestock to 2020: The Next Food Revolution", Brief no. 61, October 1999.

3 Economic Research Service/USDA, "Patterns of World Poultry Consumption and Production". <http://tinyurl.com/yprogw>

4 FAO data, July 2002, reproduced in *ibid.* <http://tinyurl.com/yprogw>

5 For an example of this positive analysis, see C. Eaton and A. Shepherd, "Contract Farming: Partnership for Growth", FAO, Rome 2001.



Companies have looked for low-cost areas of production, and investment has been concentrated geographically, both in certain countries and then in certain areas within these countries. Two countries that have experienced a big expansion in industrial poultry production are Brazil and Thailand, currently the world's largest and fourth-largest chicken exporters.

Brazil

Brazil's chicken exports have risen more than 500 per cent in the last ten years (*see* Table 1), and in 2004 it overtook the United States to become the number one world supplier. Today it provides about two-fifths of the chickens traded on the global market. More than two-thirds of Brazil's poultry exports consist of frozen chicken parts, with another 29 per cent made up of whole frozen chickens. The EU is its main export destination, but a third of Brazil's poultry exports now go to the Middle East, and roughly 10 per cent to China.

Table 1: Brazil's chicken exports (tonnes)

| | |
|------|-----------|
| 1995 | 428,988 |
| 1996 | 568,795 |
| 1997 | 649,357 |
| 1998 | 612,447 |
| 1999 | 776,359 |
| 2000 | 916,094 |
| 2001 | 1,265,887 |
| 2002 | 1,624,887 |
| 2003 | 1,959,773 |
| 2004 | 2,469,696 |
| 2005 | 2,845,946 |
| 2006 | 2,712,342 |

Source: USDA

Brazil's chicken exports fell 4.7 per cent in 2006, largely because of a drop in European consumption as a result of the bird flu scare. But it was only a temporary setback: in the first half of 2007 they bounced back, earning US\$2.1bn, an increase of 47 per cent compared with the same period in 2006. The industry predicts that total exports for 2007 will reach 3.2 million tonnes, earning close to US\$5bn. Poultry has become one of Brazil's leading industrial sectors; it employs about four million people and generates about 1.5 per cent of the country's economic output.

Brazil's poultry agribusiness was born in the south and south-east of the country; four-fifths of the country's poultry exports still come from the states of Paraná, Santa Catarina and Rio Grande do Sul. Recently poultry companies have started to build processing plants further to the north, on the edge of the Amazon basin, as this is where much of the soya and maize used to produce chicken feed are now grown, and the states there are also offering generous tax breaks. Mato Grosso is today the country's leading soya-producing state.

The biggest company in the sector is Sadia,⁶ a Brazilian-owned company founded in 1944, which is responsible for about 26 per cent of Brazil's chicken exports. It sells more than a thousand products made from processed poultry, pork and beef. Its operations include breeding farms for poultry and pig grandparent and parent stock, hatcheries, slaughterhouses and animal feed production plants. It has 13 chicken-processing plants and is building two new ones in Mato Grosso. When they are fully functioning in 2009, these two plants alone will employ 8,000 people directly and 24,000 indirectly. Each plant will have the capacity to slaughter half a million chickens a day. The next largest companies are Perdigão, another Brazilian company, with a 17 per cent share of exports, and Cargill, a US giant, with a 12 per cent share. US-based Tyson, the world's largest producer, is now planning to move into Brazil,⁷ holding joint venture discussions with Perdigão, Avipal (Brazil's fifth-largest producer), Globoaves (Brazil's largest producer) and the poultry processor Dagránja.⁸

Sadia was the first company to introduce a vertically integrated system. Using imported genetic material, its plants produce, usually from its own hatcheries, one-day-old "parent" chicks, which are supplied to the multipliers. The multipliers cross breed from the parents and produce one-day-old chicks, which are supplied to the *integrados*, as the contract farmers are known. All the chicks reared for the companies come from imported stock. Some of the *integrados* may also rear native chicken varieties in their back yards, but these will be consumed by the farmers themselves or sold at local markets.

Onório Granzotto is an *integrado*. He lives near the town of Serafina Corrêa in the southern state of Rio Grande do Sul and raises chickens for Perdigão. He said that he had been attracted to contract farming because it offered a secure market and a good income. About six times a year Perdigão delivers by truck one-day-old chicks, along with chicken feed and medicine. The company also provides

⁶ Sadia's name comes from the adjective *sadio*, which means "healthy" in Portuguese.

⁷ *World Poultrymeat*, no. 108, 7 September 2007.

⁸ From an industry point of view, a closer union between Brazil and the USA makes sense. The USA has been losing ground to Brazil in many export markets, mainly because it exports only cheap rear-quarter dark meat at very low prices. All of the more expensive white breast meat is sold on the US market. In Brazil, by contrast, consumers purchase all poultry cuts, so high-value breast meat forms a large part of exports



veterinary checks. In October 2006 Onório told an ActionAid researcher⁹ that he was rearing 14,000 chickens in a 100-metre-long battery. He said that it took 45 days to fatten the chicks and that, after raising four consignments, he had to stop for 20 days to allow for the cleaning and disinfecting of the battery.

Three family members (Onório, his brother and his son) are involved in the business. After deducting their costs, which include electricity and transporting the chicks to the factory, Onório said they earned about R\$500 (US\$200) from each lot. "It's not very much but we get by", he said. "Once it was good business, but today it's not so good. If we had to start from scratch and invest money in the construction of the battery, it wouldn't be worth it." Onório said that they had 25 hectares of land and could supplement their income by crop farming. He said life must be very hard for some of his neighbours who did not have enough land to do this.

After 45 days the chickens are collected by *carregadores* (carriers). The *carregador* is generally employed by a gang master, who may be collecting from 100 *integrados* within a 20-kilometre radius. Marcus de Paula, a *carregador* in Serafina Corrêa, told the ActionAid researcher that he had no set hours for work and that his gang master phoned him whenever he needed him. "We work in a team of 12, which includes the boss. We generally visit 4–6 farms per shift but sometimes we have to visit 6–8 farms and then we'll have to work a 24-hour shift. At every farm we each carry 16 boxes of chickens weighing about 40 kilos each. The dust and the stench are bad. I tried using a mask but it was dreadful, so I gave it up." The *integrado* pays the gang master, who then pays the *carregadores*. According to Marcus, he received R\$12 (US\$5) for each farm visit.

It seems that the most serious health problems occur in the factories. By far the most important source of employment in the small town of Serafina Corrêa is Perdigão's poultry slaughtering and processing factory, which employs 2,300 workers. According to figures provided by the municipal government, about one fifth of the town's adult population suffers from repetitive strain injury (RSI). Alidete Orso Begnini, aged 33, is one of those afflicted. For 16 years she worked in the Perdigão factory, taking the innards out of chickens and cutting and cleaning chicken parts. She began to feel pain in her shoulder but for two years the factory would not accept that she suffered from a serious medical condition. "I kept trying to see the company doctor and they kept saying there was no appointment

available", she told ActionAid. "Finally someone saw me but the company said that it wouldn't give me any sick leave. I left my job that day and I haven't gone back. I went straight to a public health clinic and was told to go to a specialist because my case was serious." She received treatment but never fully recovered. Today she receives a small government disability pension. Her condition, which affects her hand, arm and shoulder, means that her husband and children have to help her with the household chores. She finds it difficult even to wash her hair and put on her clothes.

As often happens in cases of RSI, it is difficult to prove the company responsible, and Perdigão denies any liability. However, Dr Roberto Mauro Arroque, who has worked as a doctor in Serafina Corrêa for 32 years, is fairly certain that he knows what the problem is. "I am 90 per cent sure that the problems people are having are to do with the factory. The work is highly repetitive. People don't have enough time off and the conveyor belt moves quickly. They have to cut four chicken thighs a minute, cutting them off the chicken and taking the bone out. It is the counterforce of the action that is the problem, and it comes every 15 seconds. Most workers don't complain about their pain. They think it is normal. Perhaps a third of the workers in the factory have problems." So far, little action has been taken by the Brazilian government or the Brazilian trade unions to improve conditions in the



Brazilian chicken for sale in Japan

⁹ The interviews from Serafina Corrêa are compiled from an unpublished ActionAid report.



factories. There is little doubt that the companies would be reluctant, for the speed at which poultry workers do their job has helped to give Brazil the world's lowest production costs for chicken.¹⁰

Thailand

The poultry industry is often presented as an exemplary success story in Thailand.¹¹ In just two decades it installed industrial methods of production and became a leading exporter of poultry. Thai chicken production grew from about 380,000 tonnes in 1980 to 1.4m tonnes in 2001. Although Thais greatly increased their own consumption of chicken across this period, and small farmers are still important producers for the domestic market, the driving force behind the expansion was the export market. Chicken became the country's third most important export product (after rubber and rice). The main export market was Japan, which regularly accounts for half of foreign sales.

One company in particular played a key role in the expansion: Charoen Pokphand (CP). In 1921 the Chia brothers (Ek Chor and Siew Whooy Chia) from China set up a seed shop in Bangkok's Chinatown and began exporting swine and poultry to Hong Kong. Some years later they formed an animal feed production company called Charoen Pokphand Feedmill. In 1970 it set up a poultry breeding venture with Arbor Acres of the USA and started the industrial breeding of broilers and layers, using imported genetic material. Currently working with 12,000 chicken farmers (along with 5,000 pig farmers and 10,000 maize growers), CP is the biggest player in the Thai chicken market. There are 11 other firms operating in the broiler sector. Although the farmers have to pay taxes, the companies enjoy a wide range of tax breaks, including exemption from import duty on machinery and exemption from income tax on certain operations. CP's operations are highly integrated, with the company controlling, indirectly or directly, everything from chicks and feed to processing and marketing.

The set-up is very similar to that in Brazil, but there are differences. According to CP, half of its chickens are reared on its own industrial farms, (which is not the case in Brazil). The rest of the chickens are raised by contract farmers. Most of the broiler farms included in the CP inventory raise 2,000–5,000 birds. Some are much bigger, raising up to 400,000 birds or, in one case, 1 million.

When asked why they began contract farming, farmers gave two main reasons. First, they did

not have the resources to set up independently. "I wanted to raise chickens but I had no capital", said one farmer. A contract means that the company will provide farmers with inputs (chicks, feed, medicines) and deduct payment later. It also means that a bank will supply a loan so that the farmer can pay for the necessary construction works and the other outlays. The second reason is the apparent security that a contract offers. "I was scared of failing", said another farmer. "With a contract, it's more secure. It's like getting a monthly salary."

The farmers must rear the chicks in strict accordance with the company's instructions. The companies determine the amount and type of chemicals to be used, with little concern for their impact on either the farmers' health or the environment. Companies are copying techniques used in the North, such as the addition of antibiotics to the feed to make the chickens grow more quickly. The farmers are supposed to stop using antibiotics for a prescribed period before sending the chickens off for slaughtering. Sometimes, however, the companies collect the chickens early. "When this happens, I feel sorry for the consumers", commented one farmer. After collection, the companies pay the contract farmers according to a series of complex mathematical formulae. None of the farmers interviewed in the Focus on the Global South report was able to explain clearly the calculation shown on their pay slip. Although incomes varied, the average monthly income of the contracted broiler farmers was 2,720 baht (about US\$68). This was lower than the average agricultural wage of 2,865 baht.

Contract farmers often get into debt, and they see this as their most serious problem. This debt is accrued in various ways. Very often the initial investment is much higher than that predicted by the company. The cost of feed, which the farmers must purchase from the company, increases regularly. Farmers often have to invest in more modern equipment. Since 1999 companies have insisted that farmers upgrade their farms into a "closed" system with an "evaporation cooling system" (EVAP), which is a form of air conditioning that allows the battery to be kept at a constant temperature. While this system has made it possible to reduce the average rearing period from 45 to 40 days, it has dramatically increased the costs of production, as it entails a much more intensive use of electricity. "The debt is continuous", said one chicken farmer. "After we finish repayments, a new debt comes along. We have to meet new safety criteria or purchase new equipment." And



¹⁰ According to a USDA report quoted by ActionAid.

¹¹ Much of the information in this section is taken from Isabelle Delforge, *Contract Farming in Thailand: A View from the Farm*, a report for Focus on the Global South.

the farmers know they will lose their contract if they refuse to update their installations.

The financial security of the arrangement has also proved to be something of a myth. The contracts are one-sided. Small-scale, isolated farmers are not in a position to negotiate a fair deal with large transnational companies. The companies do not even allow them to retain a copy of the contract they have signed. Even the Thai Senate Commission on Agriculture and Cooperatives, after recognising the role of contract farming in modernising farming, admitted that “most of the contracts exploit farmers and producers. Farmers have to follow the conditions set by the processing factory, which are not equitable.”¹² The companies appear to overcharge for the feed. Feed accounts for a colossal 78 per cent of a farmer’s costs (not including his or her labour). Not surprisingly, perhaps, feed sales are highly profitable for CP. In 2003 its income from feed sales for broiler production in Thailand brought in 18.1 billion baht, compared with earnings of 12.4 billion baht for its chicken exports.¹³

The company feels under no obligation to the farmers, even though they have often invested all their capital (and more) into the new venture. If a company faces a problem of overproduction, as many of them did in the wake of the bird flu epidemic in 2003, it collects the chickens late. This creates some resentment among the farmers. “Our earnings depend on the age of the chickens, but we never know when they will take them”, commented one farmer. “Whenever they want the chickens, they get them. The chickens belong to them.” Or it can simply stop delivering chicks to the farmer. When Focus on the Global South interviewed 19 chicken farmers in October 2004, five of them had not received any chicks since March. Or the company can simply decide not to renew its contract with the farmer. Most farmers invest on a long-term basis, for at least five years, but their contract with the company rarely exceeds a year.

Although most of the chicken farmers interviewed by Focus on the Global South complained about the conditions under which they work, few of them were thinking of giving up contract farming. There was a strong perception among them that there was no alternative. Rice farming, combined with traditional livestock, brings a very low income. And other economic sectors offer few job opportunities, especially for people who want to stay in the village. “It is better than doing nothing”, many concluded.

As well as introducing industrial poultry farming in Thailand, CP played a key role in bringing it to China. It was the first foreign firm to invest in China, establishing a feed subsidiary in the Shenzhen economic trade zone. Today there are at least 100 companies connected to CP in China alone. It is the largest supplier of broiler chicks to Chinese farmers. Indeed, CP is said to have been responsible, virtually single-handedly, for changing the country’s dietary habits. China’s per capita poultry consumption is likely to treble over the next five years, turning it into a huge market. CP is poised to take advantage of the opportunity this will offer. The CP Group is already the second-largest chicken producer in the world (after Tyson Foods of the USA), with an annual output of 40 million chickens.

New form of bonded labour

Contract farmers have many obligations but few rights. They generally work full-time for a company and depend on it for inputs and technology. They are inextricably bound to the company, in that they do not own even the animals they are raising, and the company takes all the decisions related to their rearing. The farmers are, in practice, factory workers, yet they enjoy none of the rights acquired by organised labour: they receive no sick pay, no paid holidays and no compensation if they are sacked. They even have to bear the financial cost of any calamity, such as the death through disease of the animals they are rearing.

The contract farmers are at the bottom of a chain in which all involved try to pass to those below as much of the financial risk as possible. At the top are the international breeders (some of whom, like the UK-based Genus plc, have formally established the “de-risking” of their operations as a company objective). They have devised legally binding mechanisms for safeguarding their earnings: they have carefully worded contracts, and increasingly they patent the genetic material they provide to ensure that all users pay. The poultry companies, in their turn, transfer as much of the risk as they can to the contract farmers, whom they exploit in all the ways discussed above. In practice, the companies transfer to the most vulnerable the main risks of a volatile export market. The contract farmers have become bonded labourers, who in some ways have fewer rights than slaves: because they had invested money in the purchase of their slaves, plantation owners made sure they were provided with food and other minimal conditions for survival. International breeders and the giant poultry companies feel no such obligation.

12 “Report on the Investigation into Contract Farming of the Senate Committee on Agriculture and Cooperatives”, Bangkok, 2003 (in Thai).

13 CP Kitchen of the World, Annual Report, 2003.





Photo: Auckland Animal Action

Battery-reared chickens


The way forward

Meat consumption appears set to grow inexorably over the next few decades. Projections from the Center for Global Food Issues predict per capita annual consumption of meat (in which poultry has an increasing share) to reach 68.8 kilos by 2050. As the world population is expected to reach 9 billion by then, such a level of consumption would require 624 million tonnes of meat.¹⁴ That means 359 million tonnes over and above today's production of around 265 million tonnes. Such a level of production does not seem not feasible, particularly if the world is to allocate large tracts of land to agrofuels. As the Center points out, the world could not produce this quantity of meat today, even if it were to use all of the world's productive farmland.

The Center argues that the only way that this demand can be satisfied is by more than doubling the yields of crops grown as animal feed. It states: "The only environmentally responsible way to accommodate the world's increasing demand for meat is to produce increased amounts of feed crops without using more land. The only way to accomplish that is to substantially increase yields." Although the connection is not made explicit, its conclusion provides convenient ammunition for the biotechnology companies that are arguing that

only GM crops can provide the required increase in yields.

This, however, is not the future that farming communities around the world want. They believe that the stampede into industrial animal production disempowers their communities, dangerously reduces genetic diversity, exacerbates the environmental crisis, creates new threats to world health, and wipes out local food cultures. It also contributes vast amounts of waste to the environment, including manure, urine, carcasses, excess feed and feathers. In 1997 industrially reared animals in the USA produced 1.4 bn tonnes of waste, which is equivalent to about 5 tonnes of waste for each person.¹⁵

The way forward, the communities say, is to source most food locally and to promote food sovereignty. This might well lead to a reduction in per capita meat consumption in the rich countries of the North (though not among many of the poorer countries in the South, which already consume very little meat). This would bring health benefits, for animal products are the primary source of the saturated fats responsible for cardiovascular disease, diabetes and some cancers.¹⁶ The most important gain, however, would be the boost this would give to local communities and local knowledge. Rethinking livestock production will be one of the challenges of this century. 



14 Center for Global Food Issues, Dr Thomas E. Elam "Projections of Global Meat Production 2050", Monday 21 August 2006. <http://tinyurl.com/28xaub>

15 Ibid.

16 Polly Walker, Pamela Rhubarb-Berg, Shawn McKenzie, Kristin Kelling and Robert S. Lawrence, "Public Health Implications of Meat Production and Consumption", *Public Health Nutrition*, 8 (4), 2005, 348-56. <http://tinyurl.com/298bww>