Regional focus

Chokchai – more than just a dairy farm

Western riding at a dairy farm. There are not many dairies where this is commercially exploited, but in Thailand at Chokchai it is possible. There are even more plans for diversification, but milking cows remains the core business.

By Stuart Lumb

Once you’re in Thailand’s capital of Bangkok and drive northeast for one and a half hours you’ll arrive at Farm Chokchai. This dairy farm was set up in 1957 by Chokchai Bulakul and now has a total of 5,000 dairy cows of which 3,000 are productive at any one time. The Chokchai dairy business farms a total of 333 ha (8,000 acres), split into several blocks. At the farm a young Thai lady, Ratree Charoensom, dressed in cowboy boots, jeans, checked shirt and cowboy hat, met me at the farm entrance. Was this the typical garb of Thai dairy technicians? Seeing my questioning expression Ratree explained that agrotourism is very important to Chokchai.

Some years back the farm was going through tough times. Choak Bulakul, son of the farm’s founder, spent a number of years studying in the USA at the University of Vermont. He also spent time on cattle ranches and got bitten by the Western bug - the outcome of which was the establishment in 2000 of an American Western style theme park complete with period style shops, bucking broncos and the like on the farm estate. Hence Ratree’s Western outfit.

Ratree is actually the farm secretary but she also acts as a farm guide - one of 15 - who escort groups round the Chokchai complex.

Adult visitors pay a $4.30 entrance fee and children are charged $2.00, a significant amount of money for a Thai family. Nevertheless, in an average year the farm receives 200,000 visitors, including school parties, which come from all over Thailand. For those of you who may think agrotourism is a bit of a gimmick - an additional annual farm income of over $700,000 is not to be sneezed at. In addition the farm has a well-stocked souvenir shop and a large Western style restaurant serving a wide range of steaks - the steak naturally derived from Chokchai steers.

Hygiene for visitors
Farm visitors have first to wash their hands, go through a footbath and finally a misting screen, which gives the guides a chance to explain to visitors what biosecurity is all about. Visitors then get taken to see an immaculate line of Holsteins being milked, during which the groups are told the basics of milk production. Next it’s on to sturdy trailers for a farm tour encompassing the large yards containing the cows, some of the farm’s arable land and the Western theme town. From there it’s on to see the farm’s dairy, after which it’s only a short walk back to the restaurant for a quality rump steak before heading home.

So what of the actual dairy operation itself? The original stock was imported from New Zealand and over the years has become acclimatised to Thai conditions. Around 10 years ago a profitable sideline was established exporting cows to other SE Asian countries, namely Vietnam, Laos and Malaysia. In fact the demand for these genes is such that there is a two-year waiting list. Peru, China, Indonesia and the Philippines are also keen on taking Chokchai bloodlines. Semen has been imported from the USA to improve bloodlines. In addition Chokchai maintains its own 12-bull AI stud.

Production groups
The cows are kept in groups of 48 head, dependent on yield - high - 6-8,000 litres, medium - 5,000 litres and low - 4,000 litres. In addition the high yielders are housed in

Tour guides Ratree Charoensom (right) and Sakul Gleephimai.
Although the Western style attracts many visitors, the dairy cow is central in Chokchai farming.

Guides explain milking of the cows in the parlour.

paddocks nearest to the milking area. The high yielders are milked at 4am, 8.30am and 2pm, whereas the two other groups are just milked twice - at 4am and 8.30am. Cows are milked through a California parlour. “Break even yield is 4,000 litres” commented Choak.

Arable-wise Chokchai grows three crops of maize per year. Also grown are ruzi (Brachiaria ruziziensis) and concord (an Italian type rye grass) grasses. Lucerne (alfalfa) was tried but could not be grown successfully.

Around 18-20 tonnes of milk are sold daily to local dairies at a price of 12.5 baht/kg (~$0.25/kg). The milk price is related to SNPs, fat percentage etc. Two tonnes of milk are processed per day through the farm dairy for the benefit of visitors. Ten different types of milk are produced and visitors can give a hand to make some of the 40 tonnes of ice cream that the plant turns out each month. The scale of the business is hard to imagine - just in terms of staffing - the whole farm employs 800 workers.

Calf and cow feeding
Sakul Gleennphimai has a degree in animal science and is the assistant livestock manager. He gave a description of the calf rearing protocol: calves are given colostrum up to 10 days of age after which they go onto skimmed milk, which is mixed with milk from cows that are on antibiotics. Calves receive 4 litres/day in 2 feeds, up to 90 days of age. At 10 days of age hay, concentrates and water are introduced. Hay is available ad-lib with concentrates being limited to a maximum of 1.4 kg.

The dairy cows receive their forage in the feedlot after milking. Whole fresh corn, corn silage and fresh grass is distributed with a forage mixer and the ruzi hay by a side feeder. Concentrates are fed in the milking parlour during milking and also in the feedlot. The split into production groups makes it easy to feed the cows according to their production. The quantity is calculated following NRC (2001) standards.

“All feed are produced by ourselves, we are self sufficient,” says Sakul. The basic diet for maintenance is ruzi hay, whole fresh corn and corn silage. A daily ration for a milking cow that produces more than 30 kg of milk a day would consist of 15 kg concentrates, 4 kg ruzi hay, 9 kg whole fresh corn and 8 kg corn silage.

The bulk of the feed is given to the cows in the paddocks and because of the high temperatures cows are fed at night and then again at 4am. Chokchai hardly surprisingly has its own feed mill and in addition to milking for its own stock sells dairy rations as well, such that it is the second largest dairy feed compounder in Thailand.

R&D team
Choak is not content to let the business stand still. Students from the local universities come out to Chokchai to work hands-on with various projects. Chokchai has a large research and development team and has links with many universities. The team has been working on embryo transfer and the first batch of embryos is likely to be exported towards the end of 2008.

Chokchai has excellent facilities for seminars and is attracting Bangkok companies to come and use Chokchai as a rural business venue. Another development in the pipeline is an all-terrain vehicle off-road circuit.

More controversially, Chokchai is involved along with the local Mahidol University in a buffalo-cloning project. Traditionally the buffalo was used as a draught animal but gradually it has been replaced by the tractor to the extent that there is a serious likelihood of the buffalo becoming extinct. Whilst some sections of Thai society might object to cloning on ethical grounds, Choak takes a more pragmatic view - if cloning can save the buffalo then so be it. Chokchai is an amazing experience, and should you be visiting Thailand be sure to make it a part of your travel itinerary.