

## **China's Shift to Beef**

*Rising consumption and a looming shortfall in China's herd will mean more beef imports*

By Mark Godfrey

The invitation to visit a “beef farm” in Hebei province, 60 kilometres east of Beijing suggested a day of green fields, sheds of hay and wizened Chinese herdsmen. Yet almost two hours out of Beijing’s chronic traffic and down the two-laned road into Dachang, the township where the farm stands, there were no paddocks to be seen and no bullocks lazing about in the summer sun.

The small, flat fields here looked limp, every inch worked hard to push up a wave of young millet sprouts. The millet occasionally gave way to a field of barley or a patch of potato stalks. Locals in other fields tended water melons under acres of clear plastic sheeting.

There were none of the neat brick farm houses and stone barns which characterize some of the rice growing villages of southern China. Farmers in industrial and populous Hebei are more likely to live in one of the countless ugly unpainted concrete apartment blocks in the same-looking towns blobbed all over the province, the roads between them thronged with bicycles, motorbikes and cars.

It was a relief to reach Dachang and pull in from the teeming flow of blue Dongfeng trucks, at a complex which looks more like a factory than a farm. A red banner over the grill metal gate read “Welcome to Hebei Dachang Fuhua Meat Product Co.” The “farm” is also a meat factory, with cattle lazing in feed lots out the back.

The confusion may have been lost in the translation of our host’s faxed invitation. Or more likely it reflects China’s rudimentary agricultural sector, which is constrained by a shortage of arable land. Large by Chinese standards, Fuhua’s “farmers,” RMB600 (EUR60) a month labourers, tend 200 cattle in covered and outdoor pens. Most were of the local Chinese Yellow, though three pens held about 50 cross breeds, local Chinese Yellow cattle mixed with European Simmental and Charlois breeds.

The quality and weights of local cattle improve by cross breeding, explained Feng Dianhu, a chain smoking Communist Party official who runs the factory and the local township. Heavy set but slower growing than Western breeds, the local breed nonetheless delivers good meat yields, said manager Feng. “The meat from Yellow cattle is good, very lean.”

“Mixed breeds grow faster,” chimed one of a couple of farmhands cleaning the yard with twigged brooms. Cattle arrive at the plant as bull calves and are held for up to six months here for finishing before slaughter. Local villagers farming a few cows typically sell young cattle at 300 kilo weight to feed lots like Fuhua, where cattle are fattened over several months and then steered into the factory for slaughter when they reach 500 kilos weight.

Farmers who fatten cattle for Fuhua typically sell for RMB8 (EUR0.80) per kilo live weight and average RMB1,000 (EUR100) profit per beast, explained Feng. “They usually buy an animal at RMB3,000 and sell for RMB4,000.” The meat is sold to Beijing’s luxury hotels and to several beef hot pot restaurants in the city.

Fuhua is held up as a model in the province, where beef cattle are usually fed left-over vegetables, millet and occasional bags of grass in small sheds by villagers. Though 60 percent of China’s beef herd is currently fed on small feed lots there is a shift to US style feeding lots where thousands of cattle are fattened in giant sheds. Feed lot cages like those at Fuhua are partly to explain for a dramatic rise in China’s cattle numbers, up from 60 million to 149 million between 1980 and the end of 2005.

Small compared to China’s 1.3 billion population, China’s cattle count is nonetheless the third largest herd in the world (India has 340 million, Brazil 180 million cattle). An output of 7.1 million tonnes ranks number four in world standings, behind the USA, Brazil and the EU. Yet per capita consumption is low by international standards, at 5.46 kilos per person (compared to an average 30 kilos in Western countries).

Fuhua’s feeding and killing complexes were clean and neat, so too a two-storey restaurant beside the main gate. In a banquet room on the first floor a hot pot feast was served by cheerful wait staff in neat uniforms. Thin strips of beef and lamb were dipped into the boiling oil along with chopped potatoes, leek and noodles made of flour. Local government officials who run the factory take guests and customers to dinners here, sharing space with day – trippers from Beijing on a weekend drive.

Those upwardly mobile Chinese are eating more beef than ever, thanks to higher wages powered by China’s relentless economic growth. More than 60 percent of meat produced in China is pork, compared to nine percent beef, according to the Chinese Ministry of Agriculture. But the Chinese diet is diversifying and beef and lamb consumption rising. There’s been a huge rise in popularity of fondue-style hot pot restaurants as well as Japanese and Korean barbeques across the country.

Hamburgers help beef sales too. Fuhua is seeking a deal to supply regional branches of US fast food chain McDonald’s and manager Feng is proud of a deal to supply animal fats to another US convenience food multinational, KFC. China is the fastest growing market for McDonald’s which has 750 outlets nationwide (and adding outlets at an average rate of seven a month).

While China is fattening and killing better Yellow and crossbred cattle there's a shortfall looming because the country doesn't have enough cattle to meet rising consumption. A local policy of killing bull calves at birth for serum production has squeezed beef herd numbers. “China consumed over seven million tonnes last year but cattle are not being replaced and slaughter houses are complaining,” says Dr Claus Deblitz, director of the Asian Agribusiness Research Centre. He predicts that from 2008 China won't be self-sufficient in beef cattle. “The gap is getting wider, by then [2008] China will need to import 50,000 tonnes of beef per annum.”

Beef imports are already rising. China's accession to the WTO forced it to cut tariffs on beef imports from 45 percent in 2001 to as low as 12 percent in 2004. Australia in particular has profited due to a Chinese ban on US beef because of an earlier outbreak of BSE on American farms. Australia shipped 206 tonnes in May 2007, compared to 91 tonnes during the same month last year, a rise of 126 percent. In the first five months of 2007 Australia shipped 934 tonnes to China, compared to 352 tonnes during the same period last year.

Most of Australia's beef exports are shipped to China as chilled cuts: in particular tenderloin, rib eye and strip loin, says Timothy Kelf, manager of international market projects at Meat & Livestock Australia Limited (MLA), a market promotion agency. Even though there was a rise in the first two quarters of this year in imports of manufactured/minced beef in China there's a shift to higher quality chilled cuts. That matches market trends in Japan and Korea, says Kelf. Fresher chilled beef, he explains, is regarded by Chinese retailers as far superior to frozen meat, which is typically stored up to 18 months.

Australia and India had 23 and 17 percent of the Chinese beef import market in 2006. There's plenty of room for Australia to grow its figures, says Tilley, whose producer-owned MLA employs seven staff on market research and sales at its Beijing office. In 2006 Australia shipped 3,414 tonnes to Taiwan, which has a much smaller, though wealthier population. Greater China (including Taiwan) accounted for only five percent of total Australian beef exports in 2006 though China does take 31 percent of the country's (beef and mutton) offal exports. Japan accounts for 43.5 percent of the country's beef exports.

China's share of Australian exports will increase, predicts Kelf, but consumers here remain price sensitive. BSE restrictions block exports from most of South America but Brazil's entry into the local meat market would be good for other players like Australia which sees itself as a "niche player," selling beef to China's upper tier retail and hospitality sectors, says Kelf. "As a lower cost supplier Brazil would take pressure off beef prices in China and drive up consumption."

China's beef prices, at a current average RMB17 (EUR1.70) per kilo, are high by regional standards, and traditionally more expensive than pork and chicken products here. Yet beef started to look more affordable this summer as shortages drove pork prices to record highs. The per kilo price for pork climbed to RMB18 in July, for the first time exceeding that of beef. China's beef retail price averages will rise however to RMB25 per kilo by 2012, according to figures provided by the Asian Agribusiness Research Centre (AARC), an Australian-based organization researching beef production trends in Asia.

Trends in price and demand in China look favourable to beef exporters. Yet beef from the EU, US and Brazil are barred since the emergence of BSE in those territories. BSE-free China is "very, very restrictive" towards beef from countries with an incidence of the disease, says Raimondo Serra, Agriculture Counsellor at the EU Commission's embassy

in Beijing. Irish beef and beef products are blocked from mainland China but sell in relatively small volumes in Hong Kong: 300 tonnes in 2006 according to Bord Bia statistics.

As a member of the WTO China's tariffs on meat import are not high – the figure ranges between 12 percent for fresh beef and 25 percent for frozen beef. Yet the country enthusiastically uses technical barriers to trade to protect its markets, so called Sanitary and Phytosanitary (SPS) measures. “Generally China is very keen to use SPS,” says Serra. Such measures are a less clear cut way to protect markets. “You can debate for years the amount of residue in an imported meat product. Setting your food safety provisions at a very high level is easier to defend than if you rise the tariff from 15 to 80 percent.”

For importers this can mean a complex and costly testing and approvals process. China hasn't observed guidelines from the UN-run World Organization for Animal Health (OIE) which dictate that even countries which are not BSE free can sell beef from cows less than 20 months old. “We think there are enough of safeguards in place, but China is not applying these guidelines,” says Serra.

As a new member of the OIE - it became a full member only in June – China will however be expected to follow OIE guidelines. The EU and US both fought to get China into the OIE so it could apply pressure.” Even though US beef has been assigned a "controlled risk" status by the OIE China has been reluctant to agree on export certificates permitting the resumption of US beef imports. “That's causing US farmers a lot of frustration,” says Lynn Heinze, vice president of the U.S. Meat Export Federation (USMEF). Her organization has predicted that Chinese beef imports will nearly double by 2010. The US is the world's top producer of beef, followed by Brazil, which overtook the EU to rank as the world's number two producer. (China is right behind the EU in fourth place, producing 7.5 million tonnes).

Some of China's strictness is explainable, given that local tastes extend to beef products not popularly exported elsewhere: bull testicles, brains and cow stomachs are all popular delicacies in Beijing's better restaurants. Australia has just signed a comprehensive protocol on exports of offal to China. Canberra has had 45 abattoirs accredited by the CNCA, which made inspection visits last December. “Those products in Australia are on cutting room floor and they are worried that because we don't consume these products that the hygiene standards are lax.”

China would be a “very attractive market” for beef offal because of premium prices paid locally for tripe and offal products, says David Eiffe, Asia manager at Bord Bia. After successfully negotiating a health certificate guaranteeing market access for pork Ireland now wants to begin formal discussions on access for Irish beef offal, says Eiffe.

That may take some time however. China demands a protocol be negotiated with the exporting nation before allowing imports. “It's a very lengthy procedure which can take

years to complete, says Serra. "It took six years for 32 Italian brands to secure the protocol for Parma ham imports into China."

China's openness to imports may depend on how it manages local beef supplies. Mechanisation is kicking in faster in Northern provinces like Hebei where feed lots of local Chinese Yellow breed are being fattened in larger numbers. Yet China lacks large scale meat processing plants or any recognisable national beef processing companies with the economies of scale to process large quantities of beef cheaply.

Small factories in southern China, the country's rice belt, process ox meat ready cooked and spiced in vacuumed packing for sales in local convenience stores. Cheaper, and of inferior quality, ox and water buffalo meat products also account for much of China's 55,000 tonnes of beef exports in 2005, according to China's Ministry of Agriculture. Less than one percent of output, the exports went mostly to southeast Asia.

For China to grow its herd number the policy of culling male calves on the country's dairy farms needs to be ended, says Dr Claus Deblitz, who argues that bull calves should instead be fattened for beef production. "Farmers get only RMB250 for a bull calf killed for serum production, explains Deblitz. "It's low value. China has 24 million dairy cows. Given that 50 percent of calves are male it makes sense that dairy calves can make up for beef cattle deficit." In Japan so-called dairy beef (calves born to dairy cows) accounts for two thirds of Japan's beef needs.

Despite much lower labour costs here China's land shortages make beef prices higher in China than in southern American countries like Argentina. Smaller feedlots mean beef production in China is not efficient at producing beef. Even with recent privatization and liberalization of the country's economy China's larger farms, like Fuhua, retain a high degree of state control, making the sector unwieldy. Though 240 million families till plots averaging 0.5 hectares in size, mostly in southern China, 2,000 state owned farms sit on 4.7 million hectares in the country's fertile northeast.

China's feed supplies are another problem, says Serra. "Land is finite in China; it has to feed 20 percent of the world's population on seven percent of the world's arable land. "Even if you move to feedlots and intensive farming you still have to invest a lot for feed purposes." The country's 125 million hectares of arable land is 0.1 hectare per person, compared to 0.6 hectare in USA.

In a large shed at the Dachang plant, Fuhua workers shoveled maize into a noisy crushing machine. At intervals they mixed the groundings with wispy silage piled on another side of the huge warehouse. Cattle are also fed a mix of millet stalks and silage. "It's of low nutritional value," says Dr Dr. Jochen Koeckler, director of international affairs at the German Farmer's Association (DLG), which organizes the annual AgricChina farm machinery and animal husbandry fair in Beijing.

Quality feed will have to be imported to make up for the country's limited and overworked bank of arable land, argues Koeckler. Know how is also an issue, he says.

More than 320 million of the country's 782 rural dwellers are involved in agriculture but few are skilled farmers. "Only 23 percent of China's harvest is mechanized," he says.

China's environmental problems are another block to the emergence of an efficient domestic beef sector. Grazing bans to restore grassland and reforestation projects means less room for grazing and greater demand for feed. A demand for bio energy will mean competition for farmland and corn.

Other, more unpredictable factors, like animal diseases, could influence meat sales in China. Meat sales dropped during the SARS outbreak in 2003 when it was thought the disease originated from animals. There have been several outbreaks of foot and mouth disease, mostly in southerly provinces. The specter of bird flu which still hangs over China has helped beef sales at the expense of poultry markets.

While clamping down hard recently on the use of antibiotics and carcinogens in food China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) has been fighting a tit-for-tat battle with US producers, blocking offal imports from American meat processor Tyson Foods on the grounds of excessive traces of antibiotics.

Controversies over food safety may ultimately benefit the meat industry however in China, where smuggling and mislabeling have long been problems. There is little knowledge in store or among Chinese households about beef selection and preparation, says the USMEF's Lynn Heinze. "It's an opportunity for American meat exporters to explain to China the quality and versatility and thus the yield of US beef."

Australia's MLA already takes roadshows into supermarkets and food outlets around China to entice local consumers to buy beef. "Education is a priority for us," says Timothy Kelf. "Beef is still consumed out of the home in China, we hope consumers will start cooking it at home." MLA's local master butcher travels the country giving classes to meat retailers.

Exporting beef into China is difficult, but China may find that cheap imports solve shortage worries, and tame recent food prices which have been driving inflation in China. Rising incomes, more expensive tastes will drive demand for beef. China's land bank isn't going to increase however. Imports will rise, but hopeful foreign beef exporters will have to be prepared for a lot of red tape.