CHINA’S GREAT BEEF CHALLENGE

A GOLDEN OPPORTUNITY FOR THE AUSTRALIAN BEEF SECTOR

SAMPLE PRECIS

ANZ AGRIBUSINESS INSIGHTS 2014
DEMAND DRIVERS

> Beef consumption increases with rising GDP per capita. Rising income levels result in a change in lifestyle and higher consumption of higher priced protein, such as beef.

> China has low per capita beef consumption at around 4.1kg per capita. Rising urbanisation coupled with increasing disposable income is driving demand for beef in China.

> Per capita beef consumption varies significantly between urban and rural areas in China. Historically, consumption in urban areas has been about four times rural per capita consumption.

> In urban areas, the ‘Upper Middle’ to ‘Highest Income’ household groups consume as much as 40% more beef than the ‘Low Income’ group.

> Increasing beef prices fuelled by supply constraints and rising demand, further discourages demand in rural areas.

> Beef is not part of regular diets and only accounts for 7.8% of total meat consumption. It is perceived as a special item with the common Chinese family unfamiliar with cooking methods – this has led to eating beef away from home, mostly in the restaurants.

> In urban areas it is though more than half of the beef being consumed is taking place away from home, mostly in restaurants. A large portion of beef consumed in rural areas also takes place away from the home.

> In recent times, western style food service has increased and beef consumed in the form of burgers and steaks, is gaining acceptance. With an increasing number of fast food restaurants like McDonalds and Burger King, beef consumption is expected to grow.

Note 1: Per capita beef purchases excludes consumption away from home.

Source: USDA, China Statistical yearbook, China MOA, IMF and ANZ research.
CONSUMPTION

> Historically, per capita consumption of beef only accounted for a small portion of total meat consumption.

> But, with 27 million people entering middle class status every year, demand for beef is increasing.

> Recent safety issues with other meat (pork and poultry) has also contributed to increases in beef consumption.

> Given the domestic supply side constraints, the anticipated increase in demand provides a huge opportunity for major beef exporting countries.

> The majority of the beef consumed in China is sourced through wet markets. Wet markets are very important for fresh produce, especially meat, seafood, fruit and vegetables.

> However, increasing concerns about food safety and hygiene are changing meat and beef buying patterns away from the wet market and towards more retail packaged and processed products.

> It is thought that 2% of beef was sold through retail consumer channels in 2010. By 2020 it is thought that 40% of beef in China could be sold through ‘organised retail’, making it the largest consumer channel for beef.

> A small rise in per capita beef consumption from the current low levels in China would create further significant demand for beef. At the current population every 100 gram increase in per capita consumption will require about 140,000 tonnes of beef. An increase in per capita consumption by 2.0 kg, will increase the demand by 2.7 million tonnes, which is about 50% of 2012 estimated consumption.

BEEF CONSUMPTION CHARACTERISTICS

> Most popular in North and Northeast regions.
> Highly expensive, compared to other meats.
> Leaner & healthier.
> Mainly sliced and consumed in hotpots, soups and stews.
> Prefer ‘fresh’ beef over ‘chilled’ or ‘frozen’.
> Strong demand for offal and variety meats.
> Tenderness is less important.
> Consumption is high during winters – due to factors like lack of refrigeration, perceived as ‘hot food’ etc.

MEAT CONSUMPTION IN CHINA

Regional preference of Pork, Poultry and Beef

Pork is the staple protein consumed across China.

PER CAPITA MEAT CONSUMPTION IN CHINA

Kilograms

China Beef consumption is estimated to reach ~7.3 million tonnes by 2020.
CHINA BEEF & CATTLE IMPORTS INCREASING RAPIDLY

IMPORTS

> As a result of stalled production growth, production has not been able to keep pace with consumption, resulting in the establishment of unofficial trade channels (the grey channel) and more recently a rapid increase in official beef imports

> In 2013, official imports grew four fold. A contributing factor for this increase was the safety issues in other meat products which increased demand for beef. While poultry was effected by H7N9, pork consumption slowed down due to ‘The Floating Dead Pig’ incident, where 16 thousand dead pigs were found in a Shanghai river in March 2013, with numerous similar incidents in other rivers since

> China mainly imports beef to meet its growing demand while cattle are mainly imported to improve predominantly dairy but also beef cattle genetics. With its low meat yield when compared to the main beef producing nations, cattle imports are required to improve genetics and hence productivity

> China’s beef import policy has been driven by domestic health and food safety issues, banning imports from those countries that do not have disease free cattle/beef industries. This has benefited Australia, Uruguay and New Zealand whom have low disease risk as well as high animal husbandry and food safety standards

> Australia is the major exporter of beef to China and has benefited most from China’s increasing beef consumption. Australian beef exports have grown at a CAGR of 500% or 1,900% across the period 2012 and 2013

> Other than official imported beef and cattle, there are large volumes entering China through grey channels, in particular via Hong Kong and Vietnam. Beef imports into Hong Kong have increased significantly after China imposed a ban on US beef due to the BSE outbreak in 2003. Brazilian beef also reaches China in large volumes via Hong Kong. Large volumes of Indian buffalo meat are entering China via Vietnam

Source: USDA, UN Comtrade, China MOA, China Statistical yearbook and ANZ research
BEEF TRADE THROUGH ‘GREY’ CHANNELS HAS BEEN IMPORTANT FOR CHINA IN RECENT YEARS

Ban on US and Brazil beef exports to China coupled with recent scandals in pork and poultry meats has led to an increase in exports to the peripheral countries, which then enters into China via unofficial trade channels called ‘grey trade channels’.

**RECENT TREND IN BEEF IMPORTS**

<table>
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<tr>
<th>Country</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
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<td>242</td>
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<td>404</td>
<td>443</td>
</tr>
<tr>
<td>THAILAND</td>
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<td>79</td>
<td>86</td>
<td>80</td>
<td>80</td>
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</table>

Source: USDA, UN Comtrade, US MEF and ANZ research

Beef and cattle received into China via grey channels have played an important role in recent years, supplementing constrained China domestic beef supply. Vietnam is thought to be the largest middle market, supplying Indian sourced buffalo meat in volumes that may be higher than 400k tons annually. Large volumes (probably more than 100k tons annually) of higher quality, predominantly Brazilian and US sourced beef are also entering China via Hong Kong. Smaller volumes may be entering via other Asian countries. It is thought as much as 60k tons could be entering via Thailand, but this is considered high and not as likely due to import tax on beef into Thailand. It is also understood high volumes of cattle are being walked across the Indian border into Bangladesh. Industry commentators talk of numbers as high as 20k a day, much of which is being processed in Bangladesh with some cattle and beef entering China via Myanmar stock routes, maybe as high as 80k tons beef equivalent annually.
WHERE CAN CHINA OFFICIALLY SOURCE BEEF FROM TODAY?

GLOBAL BEEF INDUSTRY

- As beef is a perishable, supplies will always be tight due to higher storage costs. In 2013 estimated total production and consumption was around 67.5 million tonnes.

- The United States, the world’s largest beef producer currently has a record low cattle herd and low slaughter and beef production. This is a result of the devastating drought that has impacted key cattle producing states that have now been through a period of drought induced herd liquidation.

- Brazil, the world’s second largest producer and exporter is expanding production, however the industry is constrained by rising labour cost, rising beef export prices, its continued positive FMD status and also rising domestic consumption.

- India, the fourth largest beef producer and largest exporter is expected to experience continued growth in beef production. The cow is considered sacred in India so bovine meat is predominantly from buffalo and is therefore lower in quality. India also carries a positive FMD status.

- China’s beef production is flat due to a significant deterioration in the herd since 2000. The domestic industry is not able to keep pace with consumption growth making it a net importer.

- The US has been suspended from exporting beef to China since the outbreak of BSE in 2003, while Brazil has been suspended since 2012 after a positive BSE case in Parana state. India also has no facilities approved for export to China.

- Today China relies predominantly on Australia for its beef imports. Other major exporters are Uruguay and New Zealand with smaller volumes being sourced from Canada and Argentina. Due to their early adopter positions these countries and in particular Australia and New Zealand with their geographic locations and high quality and safety standards are well placed to capitalise on future demand growth.

- China will encounter intense competition for tight beef supply from the Asian region which has a net beef import position of 3.5 million tonnes annually. This will result in continued high prices for beef in global markets.

GLOBAL BEEF TRADE – MAJOR REGIONS/ COUNTRIES

Australia and New Zealand are well placed to cater to the growing demand in China. However, competition is anticipated in the short to medium term from the other main beef producers not currently supplying beef through official export channels. Brazil is taking steps towards having processing facilities accredited for export to China, in December accepting a China inspection team and has also recently had a number of facilities approved for pork and chicken export to China. India also recently signed an MOU to supply buffalo meat.

AUSTRALIA’S BEEF EXPORT MARKET PROFILE IS DIVERSIFYING DUE TO CHINA BEEF DEMAND

TRADITIONAL EXPORT MARKETS – JAPAN, US & SOUTH KOREA

> Japan, US and South Korea have traditionally been the major export destinations for Australian beef, accounting for more than 80% of total exports up to 2007 and more than 70% of total exports up to 2011

> With the changing demographics and food consumption patterns throughout the emerging APAC countries and in particular China, diversification in Australia’s beef export markets is occurring

> In 2012, Australian beef exports to these traditional three export markets fell to 69% of total beef exports before falling to 59% of total beef exports in 2013

> Growth in beef exports to China in 2012 and 2013 is the major reason for the market diversification which has occurred across that period

CHINA

> China has emerged from less than 1% share of Australia’s beef exports in 2008 to the third largest market by volume in 2013

> Demand for beef has increased with urbanisation and the recent food safety issues in the pork and poultry sectors. Official imports are increasing with stagnating domestic production not keeping up with demand and also the crack down on the unofficial grey trade

> China’s suspension of US and Brazil beef has helped boost the export volumes from Australia

Source: MLA, DAFF

1. South East Asian countries include Indonesia, Taiwan, Philippines, Malaysia, Hong Kong, Thailand, Singapore
THE OPPORTUNITY FOR THE AUSTRALIAN CATTLE AND BEEF SECTORS IN SUMMARY

AUSTRALIAN OPPORTUNITY SUMMARY

> With urbanisation and a growing middle class in China, the demand for beef is rising. Due to stagnate domestic production and food safety issues in China, the ANZ model analysis concludes there is likely to be a significant supply side opportunity for global players.

> Specifically for Australia, there is significant opportunity given its leading cattle and beef industry as well as its early adopter status.

> However, the success that Australia has achieved in the China beef market in 2012 and 2013 may not continue unless the Australian beef and cattle sectors rise to the challenge.

> For Australia to maintain its share in the growing China market and at the same time continue to service its traditional markets, the sector will require continued productivity growth.

> To achieve the high case export scenario, the sector will require annual productivity growth of between 2.5% and 2.9%, depending on the actual level of China beef consumption. This is similar to productivity rates of the 1990s and is more than the long term annual productivity growth rate across the period back to 1970. Given Australia’s mature sector, it is unlikely these productivity rates can be achieved, but if they were, it could see an export value of between $9.9 billion and $10.7 billion in 2030. This could be $131.6 billion across the period to 2030 or an extra $43 billion compared to a scenario where the sector does not rise to this challenge and lift productivity.

> The low case export scenario is considered achievable, but would still require annual productivity growth of between 0.9% and 1.2%, depending on the level of China beef consumption. The high side of this growth rate is twice the annual productivity growth since 2000, but less than the long term annual productivity growth rate across the period back to 1970. If the sector can achieve this productivity growth, it could result in an export value of between $6.8 billion and $7.1 billion in 2030. This could be $109.2 billion across the period to 2030 or an extra $14.2 billion compared to a scenario where the sector does not rise to this challenge and lift productivity.

<table>
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<tr>
<th>Year</th>
<th>Production in year ’000 t cwt</th>
<th>Decadal Average ’000 t cwt</th>
<th>Decadal % Increase</th>
<th>Decadal Annual Productivity</th>
<th>Period % Increase</th>
<th>Period Annual Productivity</th>
<th>Period % Increase</th>
<th>Period Annual Productivity</th>
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<td>952</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>1,770</td>
<td>1,573</td>
<td>86%</td>
<td>6.4%</td>
<td></td>
<td></td>
<td></td>
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<td>1989</td>
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<td>1,483</td>
<td>-11%</td>
<td>-1.2%</td>
<td>65%</td>
<td>2.5%</td>
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<tr>
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<td>1,835</td>
<td>27%</td>
<td>2.4%</td>
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<td>2012</td>
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<td>2,110</td>
<td>8%</td>
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Global Agribusiness Research

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