



CHINA'S PROTEIN DEMAND TRANSFORMATION

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China’s animal protein demand continues to play catch-up

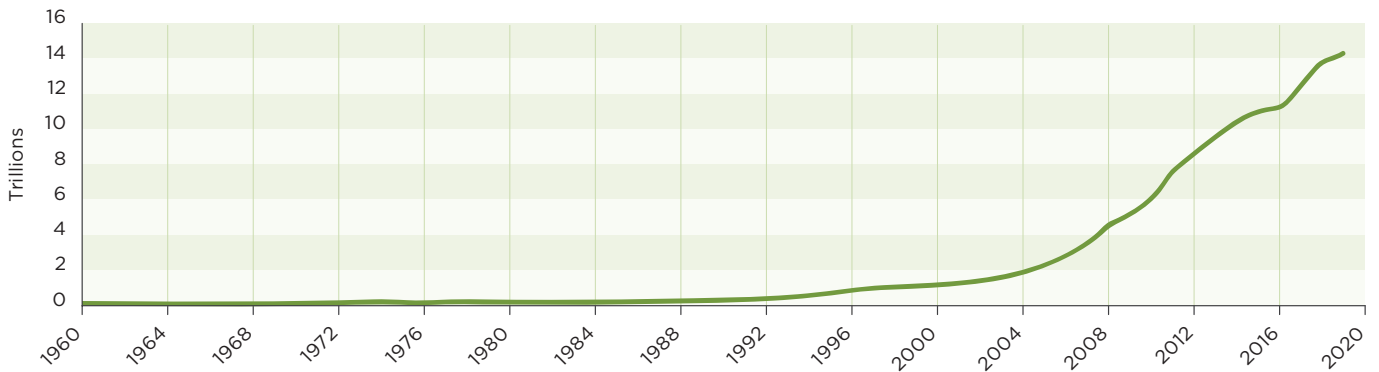
The success of the Chinese economy in shifting from a reliance on agrarian traditions to a global superpower is truly amazing. The upward trajectory over the last 70 years has transformed the everyday lives of the Chinese population, but it has also impacted on the global food supply & demand equation.

How has this rapid change impacted on Australia? As a significant net exporter with a small population, this question frames the future of Australian exports, especially for agriculture.

While there are the current trade tensions that are front of mind, consumer demand, in the end, will drive pragmatic trade flow decisions. This report takes a look at the long-term outlook for the world’s second-largest economy (and soon to be the largest) on the demand for Australian red meat.

The significant measure at a citizen level of China’s evolution was that the economic growth contributed to the lifting of 400 million people out of poverty between 1981 & 2002. The importance, from a red meat perspective, is that increasing Gross Domestic Product (GDP) and growing consumption of red meat are closely aligned. Meat consumption in China has already increased at a colossal rate. In 1975 China consumed just 7 million tonnes of meat, and by 2019 this had increased to over 81 million tonnes.¹

Chinese GDP (current USD)



Source: WorldBank, Mecardo

Meat & Livestock Australia (MLA) report that *“In 2019 China had 19.0 million households with an annual income of over \$35,000 USD. This is expected to grow to 38.8 million households by 2023.”*²

The US\$35k threshold is significant, as MLA research has shown that this household income level has signalled strong and sustained demand for red meat in other examples of countries emerging from developing to developed nation status.

¹ OECD FAO data, meat includes sheep, beef, pork and poultry

² Source: MLA Market Snapshot, Aug 2020

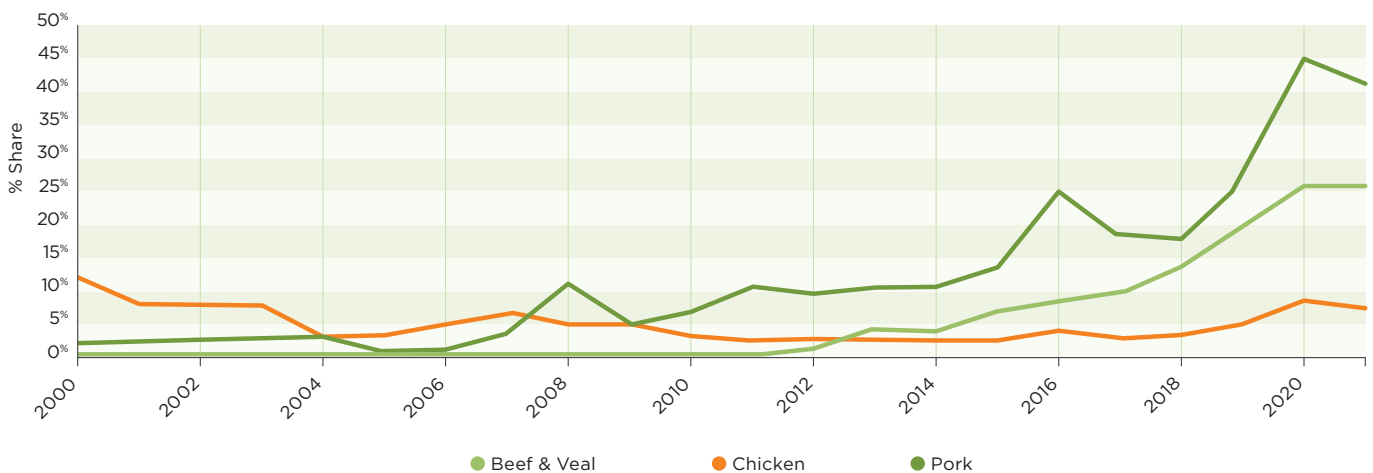
Global impact

This growing demand will in the first instance be demonstrated by an increase in imports directly into China, it will then however, have knock-on effects as other markets find that this demand and competition disrupts traditional markets and supply lines. Redirection of product will leave demand gaps and see other red meat consuming countries securing existing supply lines or searching for new suppliers.

“China has quickly become Australia’s largest export destination for sheepmeat, registering more than 500% increase in the last 10 years. It is also by far the largest and most important customer of Australian mutton.”

“Australian beef exports to China have experienced rapid growth, increasing 60-fold over the past 10 years. The country is now the 3rd largest destination for Australian beef.”, MLA Market Snapshot.

China’s meat imports as share of world exports



Source: USDA FAS, Mecardo

Mining boom to dining boom

Initially the impact of mining on manufacturing output which leads to increased household income and ultimately increased spending was little understood in relation to red meat consumption.

But the improving prospects of countries, as they lift GDP productivity via manufacturing output, has now been identified by MLA as a reliable indicator of increased household expenditure, and that this translates directly into an increased “appetite” for red meat. The previous milestone transformation of everyday lives in China was on the back of manufacturing providing higher salaries and lifting China’s GDP largely on the back of Australian mineral imports (the “mining boom”).

The phenomenon of increasing red meat consumption as disposable income increases is not a new concept, with other now “developed” Asian countries having gone down this path. The large population in China that is now moving into the red meat target market is however the biggest population group to move into this economic cohort, which will mean it will have an ongoing impact on all supply/demand norms.

This fact is at the fore in the thinking of some of Australia’s largest and most successful mining companies as they invest mining profits into cattle stations. It is the growing demand for red meat mainly in the developing countries that underpins the business model.

“China and other developing Asian countries need more than minerals. Increasing populations and rising affluence are fuelling demand for beef,” Tim Lee, ABC Landline.

African Swine Fever (ASF)

There seems to be mounting evidence that the impact of ASF, while dramatic when it first arrived in China in 2018 (resulting in up to 60% of the herd being destroyed), is now reducing. Determined efforts by China to rebuild the herd have resulted in a remarkably rapid rebuild.

China’s Bureau of Statistics reported the breeding sow herd at 38.2 million at the end of Quarter 3 2020. This is not far off the pre-ASF inventory, and the recovery goal of 43.9 million head by the end of 2020.

China sow inventory numbers 2018 - 2020³



Source: Ministry of Agriculture & Rural Affairs, National Bureau of Statistics

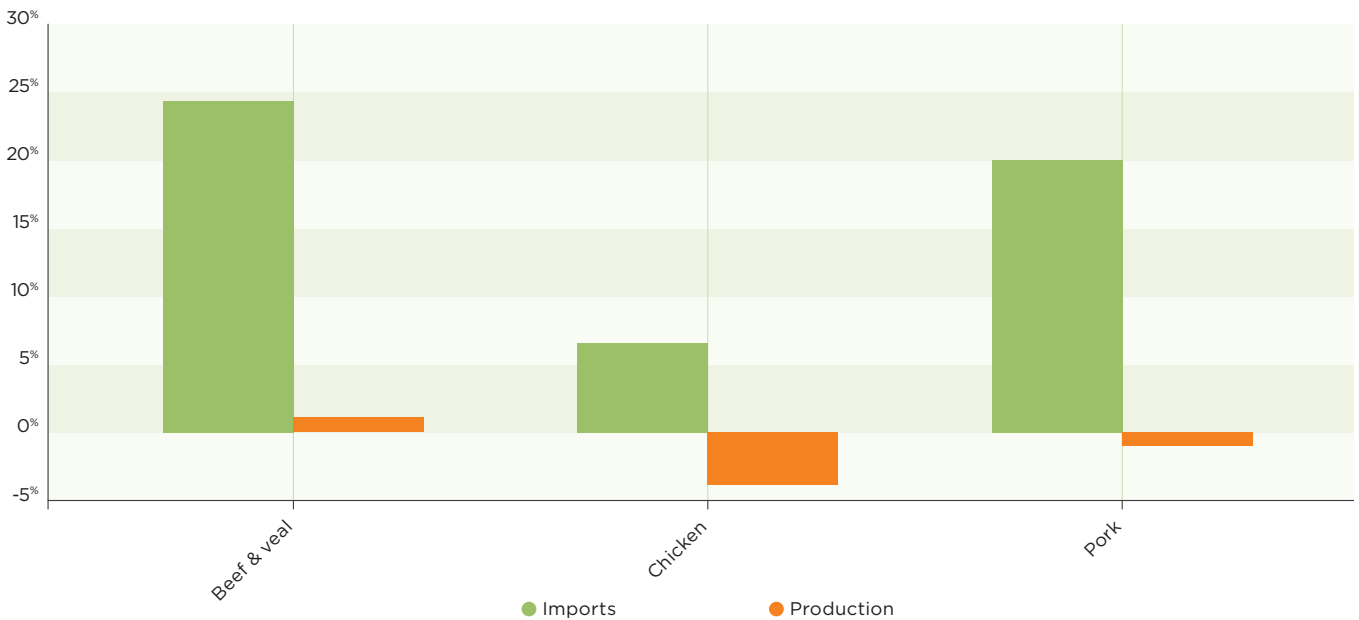
Dim Sums Graphic

³ Chart source: <http://dimsums.blogspot.com/2020/10/stats-bureau-shows-slow-rebuilding-of.html>

The initial impact of ASF saw domestic pork prices double which resulted in an unprecedented surge in pork, beef & chicken imports. While this surge was significant, the growing trend of increased imports and China's protein import dependency was well-entrenched before the ASF outbreak in China.

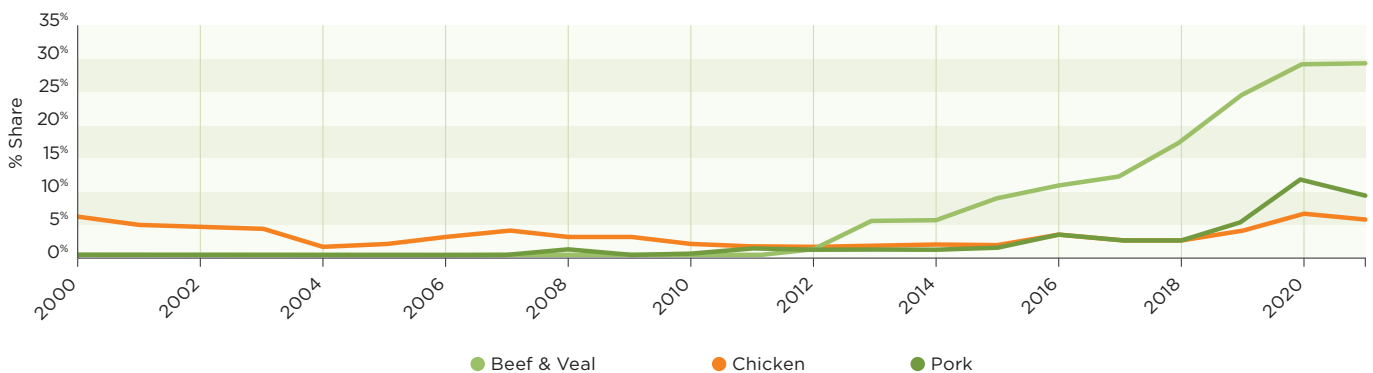
For beef & pork, China's consumption is growing much faster than domestic production. From 2013 to 2017 (pre-ASF) beef production in China grew by 215,300 tonnes to 6,346,200 tonnes at a compound annual growth rate (CAGR) of 0.9%, while beef imports grew at a CAGR of 24% over the same period.

China's meat imports and production compound annual growth rate 2013 - 2017



Source: USDA FAS, Mecardo

China's meat imports as share of domestic consumption



Source: USDA FAS, Mecardo

ASF has shaken up world red meat supply & demand, and coupled with COVID-19 interruptions to supply has contributed to a “golden period” for red meat producers. This demand is especially noticeable for beef & lamb, with China embracing a more western-style diet on the back of household income growth.

So while the recent higher red meat prices may be in large part the result of ASF, with around 25% of global pig numbers euthanised, it could be that ASF was just the “petrol on the fire” of an already increasing demand for red meat in China. This demand cannot be seen in isolation however, with the knock on impacts reverberating into all markets.

Food inflation

China’s inflation is most often measured by the consumer price index (CPI), which tracks the prices people pay for a “basket” of goods and services. The list of goods is weighted, with those more often bought for daily consumption getting a higher weighting. China has never disclosed the weighting of its CPI basket, but estimates suggest food, tobacco and alcohol account for around 30 per cent, while pork – a daily staple of the Chinese diet – is believed to be the most heavily weighted product.⁴

This would explain the sharp inflation spike from the beginning of 2019, *“with as many as 60% of its breeding sows gone by the second half of 2019, production of market pigs plunged and pork prices soared to new highs”*.⁵

This created a renewed focus on food security as well as food affordability, and in turn, an urgency to address the ASF issue. China’s five year economic development plan calls for ‘absolute’ food security and self-sufficiency in cereal grains.⁶ An objective, clearly impacted by the ASF outbreak.

As a result, the herd recovery & rebuild program will include systems that will protect against future disease outbreaks, with modern and secure piggeries constructed. An increased focus on this program will occur, however limitations in productive capacity will remain for beef and crops reliant on broadacre production.

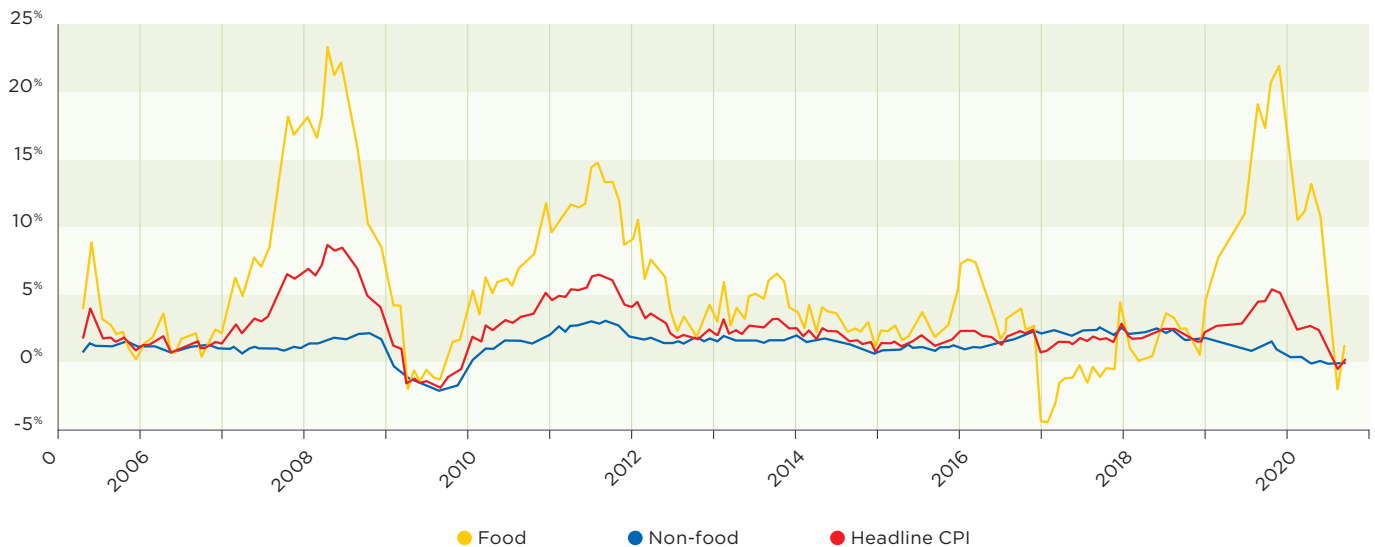
While food inflation flared briefly inflamed by ASF, the national pig herd has recovered quicker than previously estimated, after a huge national rebuild effort, therefore food inflation is predicted to trend downwards in 2021.

⁴ www.scmp.com/economy/china-economy/article/3109080/china-inflation-how-it-measured-and-why-it-important

⁵ www.reuters.com/article/china-swinefever-pigs-idUSL4N2FC2RL

⁶ www.gro-intelligence.com/insights/articles/chinas-roadmap-to-food-security

China's consumer inflation rate⁷



Source: National Bureau of Statistics

SCMP Graphic

So what impact will food inflation potentially have on Australian red meat exports to China?

The on-going risk of food inflation, with recent global COVID-19 influenced rises, remains a constant in the Chinese government thinking, with the growing affluent class expecting the supply of red meat at reasonable prices to be maintained.

This will warrant that the import necessity for all protein sources including red meat are continued into the future, with the demands of its citizens likely to trump any geo-political issues ensuring trade continues.

Alternative proteins or Aussie quality?

A potential solution is that China will emerge as a leading producer & consumer of alternative animal protein to meet this growing demand. These alternatives would include both cellular produced meat & plant-based protein.

The “westernisation” of the Chinese consumer may lead in this direction as the next generation of consumers apply the principles of reduced red meat consumption observed in first-world societies. China presents a slightly more complex model to predict, as the size of the population and the emerging demographic with the spending capacity still has the potential to overwhelm existing red meat supply chains.

The reputation of Australian red meat will support demand; this is especially noted by the affluent Chinese consumer (and the target market for our red meat).

The perception of Australian beef by this demographic was noted in a recent MLA survey as “(Australian beef is) usually tender, guaranteed safe, more nutritious, the most superior beef, (the) animals are well cared for and (it) is a sustainable industry”, MLA Market Snapshot.

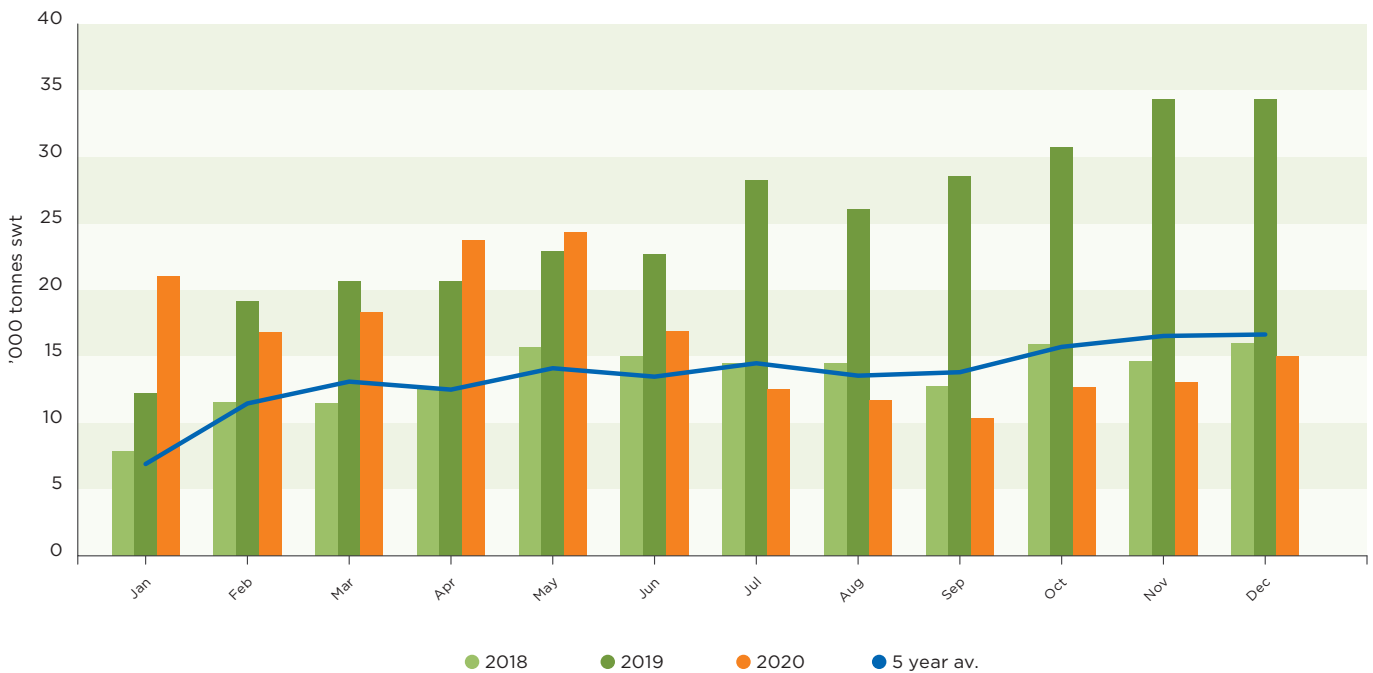
⁷ www.scmp.com/economy/china-economy/article/3117158/china-consumer-inflation-turns-positive-december

What does it mean?

As has often been quoted recently, we are in unprecedented times. Will the outlined demand continue or will China rebuild stocks and production capacity to a satisfactory level and then settle back resulting in a decrease on the current protein demand? Or will we see the new-found appetite for red meat from a growing affluent class in China continue the strong demand and support high prices of recent times?

Like most governments, the Chinese regime will ensure that it places the needs of its citizens first. For this reason, we can look forward with some confidence that the “dining boom” in China will continue, with Australian red meat producers set for good prices for some time yet regardless of any sabre rattling in the political sphere.

Australian Beef Exports - China



Source: DAWE, Mecardo

Sources: BMI Research, OECD, Mecardo, Meat & Livestock Australia, USDA FAS, WorldBank, DAWE, Dim Sums, National Bureau of Statistics, Reuters, Gro Intelligence

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