

Industry projections 2023

Australian cattle

MLA's Market Intelligence - insights@mla.com.au

KEY POINTS

- In 2023, the national cattle herd will transition to a growth phase, with any increases in numbers now considered to be beyond a rebuild.
- A two-scenario forecast for cattle slaughter reflect the processing sectors ability to deal with labour issues.
- Prices are forecast to operate at longer term averages in 2023



KEY 2023 NUMBERS



Herd:

28.8 million head



Slaughter:

6.62 million head



Carcase weights: 315 kg/head



Production:

2.09 million tonnes cwt

*Graphic illustrates year-on-year change

Summary

In 2023, the national cattle herd will transition to a mature phase, with any increases in cattle numbers now beyond 'rebuild' status.

Southern:

• Southern Australia will continue to drive increases in cattle numbers, particularly NSW, with supply improvements also expected from southern WA, SA and Victoria.

Northern:

• 2022 saw favourable seasonal conditions for large parts of Queensland, driving the beginning of the state's herd rebuild and an improvement in female numbers. Northern Australia's rebuild is expected to gain significant pace this year.

The national herd is at its highest level since 2014. The record retention of females for 15 consecutive months, coupled with above-average marking rates has delivered larger calf drops, bodes well for supply to increase substantially in 2023 for both young and slaughter-weight cattle.

Input prices and cost of production will be major factors affecting the ability of the sector to remain productive and efficient. Availability of skilled and unskilled workers to manage the increased supply of cattle in 2023 will be the major macro issue affecting the red meat industry. The processing sector's ability to process cattle will determine production levels and therefore exports in 2023.

This year, Australia is well placed to deliver on changes in global supply dynamics, despite the world economy facing economic headwinds that are affecting consumer confidence. For example, there could be a possible contraction of US supply (returning the nation to a net importer), while Brazilian currency fluctuations may lead to increased volatility in the global market.

2023 will be a year of transition for the cattle industry. Positive outcomes along the entire supply chain seem likely as the exceptional operating conditions on-farm continue. The overall outlook for Australia's beef industry both domestically and internationally – to deliver high quality beef in larger volumes – is expected to become a feature of 2023.



Table 1: Situation and outlook for the Australian cattle industry

	2017	2018	2019	2020	2021	2022	% change 2022 ^e on 2021	2023 ^f	2024 ^f	2025 ^f	% change 2025 f on 2022
Cattle numbers ('000 head)*											
As at 30 June	27,965	28,052	26,187	24,621	26,111	27,583	6%	28,817	29,344	29,588	7%
Percentage change	4.0%	0.0%	-7.0%	-6.0%	6.0%	5.6%	-6%	4.5%	1.8%	0.8%	
Slaughterings ('000 head)											
cattle	7,158	7,873	8,482	7,145	6,018	6,150	2%	6,625	7,224	8,000	30%
calves	413	468	565	414	285	325	14%	390	380	380	33%
total	7,571	8,341	9,047	7,559	6,303	6,475	3%	7,015	7,604	8,380	33%
Avg carcase weight (kg)											
cattle	297.6	290.8	283.4	294.3	313.0	320.0	2%	315	308.0	302.0	-6%
calves	45.7	41.3	49.3	48.5	40.5	39.4	-3%	39.4	45.1	45.9	16%
Production ('000 tonnes carca	se weight)										
beef	2,130	2,289	2,404	2,103	1,883	1968	5%	2,087	2,225	2,416	23%
veal	19	19	28	20	12	13	8%	19	21	25	92%
total beef and veal	2,149	2,309	2,432	2,123	1,895	1981	5%	2,106	2,246	2,441	23%
Cattle exports ('000 head)											
	867	1,126	1,304	1,049	772	600	-22%	619	681	750	25%
Beef exports** ('000 tonnes)											
total carcase weight	1,492	1,655	1,807	1,528	1,305	1255	-4%	1,490	1,598	1,780	41%
shipped weight	1,015	1,126	1,229	1,039	888	854	-4%	1,014	1,087	1,211	41%
Domestic utilisation ('000 ton	nes carcase we	eight)***									
total carcase weight	638	635	599	575	<i>578</i>	588	2%	597	627	633	8%
kg/head***	26.0	25.6	24.3	22.8	22.5	22.2	-1%	22.2	22.6	22.8	3%

Source: ABS, DAFF, MLA forecasts

e = estimate

Assumptions

Weather

Coming into 2023, the Bureau of Meteorology's (BOM) data indicated that no part of Australia was experiencing drought conditions (except for the north-eastern part of the Northern Territory). However, anecdotal evidence suggests that despite receiving average rainfall in 2021 and 2022, parts of Queensland had not recovered from the most recent drought and were still experiencing pasture deficits.

In December 2022, the Northern Territory and Queensland's Cape Region received well above their average summer rainfall – however, the remainder of Queensland received average rainfall as La Niña conditions eased.

In January 2023, significant rainfall events occurred across widespread areas of northern WA, the NT and Queensland. This rain will provide much needed soil moisture for some areas still recovering from drought and will help boost the northern herd rebuild.

Early forecasts suggest that El Niño will begin by June 2023. If this eventuates, significant herd liquidation is not expected until late 2023 or early 2024.

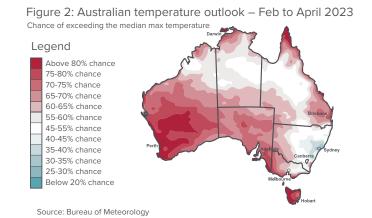
Chance of exceeding the median rainfall outlook — Feb to April 2023

Chance of exceeding the median rainfall

Legend

Above 80% chance
75-80% chance
70-75% chance
60-65% chance
55-60% chance
45-55% chance
40-45% chance
35-40% chance
Below 30% chance
Below 30% chance

Source: Bureau of Meteorology



^{*} MLA's forecasts and estimates are based off ABS data including operations with an EVAO below \$40,0000 per annum . For more information, please visit www.abs.gov.au

^{**} excl. canned/misc, shipped weight

^{***} Domestic meat consumption is measured by removing the portion of exports (DAWR data) from total production (ABS data) and assuming the difference is consumed (or at least disappears) domestically. Imports are also added to domestic consumption when present. Per capita consumption is calculated by dividing domestic consumption by ABS population data. Please note that domestic per capita consumption is entirely a supply statistic and does not take account of waste or non-food uses of livestock meat products.

Floods

In early January, the Kimberley region of WA was hit by severe flooding caused by Cyclone Ellie.

The four local councils of Derby West Kimberley, Broome, Wyndham East Kimberley and Halls Creek were affected. Properties in these areas were significantly impacted, with over 700,000 cattle affected by the cyclone and flooding.

The flooding did cause stock losses and could impact 2023 live export numbers out of the Broome Port.

Interest rates

Currently, Australia's cash rate sits at 3.1% – the highest it's been since October 2012. High interest rates may impact land values and businesses that are heavily reliant on debt financing or overdrafts. Many analysts expect interest rates to keep rising until inflation sits within the Reserve Bank of Australia's (RBA) target range of 2–3%.

The big four banks have forecast the interest rate to remain above 3% in 2023. Their forecasts are outlined below:

• Westpac: 3.85%

• CBA: 3.35%

• NAB: 3.60%

• ANZ: 3.85%

Exchange rate

The Australian exchange rate, compared to the USD, sits at 70¢ as at 18 January 2023. This is the highest the Australian dollar (AUD) has been since August 2022, but it is 2¢, or 2.7%, below where it sat in January 2022. A high AUD affects the competitiveness of Australian meat exports but makes imported input supplies cheaper.

Australia's trade weighted index (TWI) currently sits at 61.9, below the 64.1 recorded in March 2022. The TWI reflects Australia's exchange rate compared to our main trading partners, weighted for the size of trade with each country.

Farm Management Deposits (FMDs):

As at 30 December 2022, there was \$1.17b being held in Farm Management Deposits (FMDs) by 8,548 beef farms. There is an additional \$1.19b and \$433m held in mixed beef-cropping and beef-sheep, respectively.

These ensure that Australian beef producers have funds available should seasonal conditions deteriorate, or market prices fall. Compared to 2019 figures (when Australia was still in the grips of drought), these FMD numbers are far more positive. In December 2019, there was only \$889m being held in FMDs by beef farms – today, there are 34% more funds being held.

Inflation

The RBA estimated that inflation for Q4 of 2022 would reach 8%, before falling to 6.25% by June 2023. This high inflation rate may mean consumers will become more conservative with expenditure and input costs increase across the supply chain. It is also likely to lead to higher wage costs within the supply chain as salaries increase to reflect the rising cost of living.

Input prices

Fuel

According to the Australia Bureau of Statistics (ABS) Consumer Price Index (CPI) data, the average daily price of petrol in Australia was 179.9¢/l at the end of November 2022 (the most recent data point available). This price is 7.9% higher than petrol prices for the corresponding date in 2021 but is 17% below the 216.9¢/l record posted in March 2022 following the Russian invasion of Ukraine.

Electricity

In the RBA November economic outlook, it's estimated that electricity costs could increase by 20–30% in 2023. Given the high energy needs of processing plants, such a rise in electricity costs will impact the profit margins of Australia's processing sector.

Employment

Australia's Department of Home Affairs Migration Program planning indicates that in 2022–23, Australia will welcome 142,400 skilled workers, an increase of 79% on the previous financial year. This is an increase of 29% in reference to pre-pandemic (2018–19) levels. Encouragingly for the beef sector, especially processors, regional skilled immigration is expected to reach 34,000 people – up 204% on last year. It is hoped that the projected increase in immigration can help alleviate labour issues in the sector.

2022 in review

Read the 2022 Year in review:

A historical rebuilding year for Australia's cattle herd







Supply

2023 national herd rebuild

Australia's cattle herd will continue to grow in 2023 and will exceed the 10-year average herd size. This is driven by exceptional seasonal conditions for three consecutive years in southern Australia.

Despite overall national growth, northern Australia's lack of lengthy, successive wet seasons will result in its herd rebuild reflecting the length and intensity of summer rainfall in 2022–23 and subsequent years.

Key factors driving the national growth include:

- medium-term industry confidence at the farm level, underpinned by ample availability of grass, grain and water
- a younger and larger female breeding herd, underpinned by significant genetic improvements which drive higher national herd productivity, fertility and growth rates
- multiple joinings since spring 2020 with above-average branding rates, delivering increased supply in 2023 and 2024.

Over the longer term, larger numbers of breeding females will continue to be joined, improving the availability of cattle supply well into 2024 regardless of seasonal outcomes.

Herd

In 2023, the national cattle herd will reach its highest level since 2014 at 28.8 million head, increasing 1.1m or 4.5% year-on-year. The herd's growth will taper in 2024 and 2025, rising by 1.8% and 0.8% respectively to fully mature at 29.6m head and then decline in the years following.

This will be the largest the herd has been since the late 1970s, pointing to the significance of the preceding years which have driven the most intense rebuilding period of the cattle herd in nearly 50 years.

As female reproductive performance remains strong, underpinned by pasture and water availability, genetic improvements, and sound on-farm management, the breeder herd is expected to return to pre-drought levels in 2023. As a result, we will see larger calf drops and strong cattle supply in 2023 and 2024, with larger yardings expected in NSW in particular this year.

Under the assumption that the season will return to normality and potentially drier conditions in 2023, cattle supply is expected to rise in the southern states. The northern WA rebuild will depend on the extent of stock losses from the recent flooding events that occurred in the Kimberley.

Figure 3: National cattle herd 30 million head 29 28 27 26 25 24 23 22 21 20 19 18 17 16 20 20 20 19 18 17 16 20 Source: ABS, MLA forecasts

Slaughter

Processor capacity, impacted by availability of skilled and unskilled labour, will be the key determinant of adult cattle slaughter in 2023. If processor capacity can increase through improved labour availability, slaughter is forecast to reach 6.625m head this year. This is a rise of 7.7%, or 475,000 head, on current 2022 estimates.

If processors are unable to increase their capacity to cope with the uptick in cattle supply due to lack of available skilled and unskilled employees, adult cattle slaughter may remain firm on 2022 levels and reach 6m head.

Availability of slaughter-weight cattle is expected to improve significantly throughout 2023, with larger numbers of preceding calf drops turned off.

million head

9

8

7

6

5

4

And And And And And And And Andread And Andread Andrea

Figure 4: National adult cattle slaughter

If labour mobility and availability improve significantly, a slaughter volume above 6.625m head (in line with higher supply) may be realised.

In 2024, slaughter is expected to improve further, rising 9% year-on-year to reach 7.22m head – although this would remain well below the 10-year average of 7.78m head. In 2025, slaughter will reach 8m head, reflecting an easing in labour availability issues and a more typical number of processed cattle relative to the herd size. This volume would be 30% higher than 2022 estimates.



The processing sector's capacity to manage improved supply while dealing with challenging labour conditions will be a closely followed issue in 2023.

Australia's ability to process the current backlog of visa applications and processors tapping into the international labour market will be critical drivers behind easing the current labour shortage and therefore dealing with increased cattle supply.



Click here to access the MLA's NLRS Weekly Slaughter Report

Carcase weights

Carcase weights in 2022 reached record highs of 320kg/head. In 2023, carcase weights are forecast to decline 2% to 315kg/head. By 2024, carcase weights are forecast to return to 2021 levels at 308kg/head and in 2025, carcase weights will hit 302kg/head, 6% lighter than 2022 weights but still 9kg/head above the 10-year average.

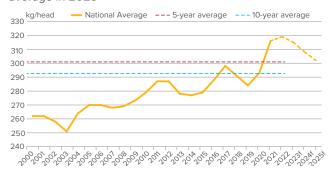
These higher weights have been driven by record numbers of cattle on feed, above-average conditions supporting improved pasture and grass availability, and lower female kill rates. By 2024, a decline in weights is expected due to higher female slaughter rates, a larger percentage of grassfed cattle turn-off and a return to average seasonal conditions.

The 2022 average carcase weights have increased 14%, or 39kg/head on the 20-year average. In 2002, the average carcase weight for adult cattle sat at 258kg, 61kg under the average weights of 2022. These consistent weight gains clearly display the:

- increased throughput and dependency on the feedlot sector
- significant genetic improvements Australian cattle producers have made e.g. lifting growth rates, improving net feed intake efficiency, and generally increased productivity in the herd.

Long-term average carcase weights have improved 3%, or 9kg, from the 10-to-5-year average. This is a structural change in the cattle supply chain and supports increasing production if slaughter remains constant.

Figure 5: National carcase weights outperform long term average in 2023



Production

Beef production is forecast to reach 2.087m tonnes in 2023, a marginal increase on the 2022 estimates. Despite carcase weights softening in the 2024 forecast, they will remain above the long-term average and, in line with higher slaughter rates, will see production reach 2.2m tonnes. This is a 13% increase on 2022 estimates.

If this cattle supply cannot be supported by the processing sector in 2023, then beef production will be adversely affected as a result of labour constraints.

According MLA's June 2022 Cattle Projections report, production for 2022 was estimated to be just under two million tonnes, a 6% increase on 2021 figures. This is despite very low slaughter rates, as production is supported by the high carcase weights from 2022. Production is expected to increase with the increase in cattle coming on to the market after the rebuild. If supply cannot be supported by the processing sector in 2023, then production for that year may be impacted.

Figure 6: Cattle carcase weights and production million tonnes cwt ■ Production —— Carcase weight (RHS) 330 320 310 2.3 300 21 290 280 270 250 2015 2018 2019 2016 2011 Source: ABS MI A forecasts

Live export

2022 was a challenging year for Australia's live cattle export sector. Numerous supply and demand factors weighed in on trade, including high Australian cattle prices, the ongoing impact of the COVID-19 pandemic, cattle disease outbreaks (particularly in Indonesia), war in Europe and rising inflation.

Australian cattle exports reached a 10-year low in 2022, decreasing to 600,084 head. This was attributed to weak consumer confidence, increased competition from cheaper alternatives such as frozen Indian buffalo meat (IBM), poultry and lower cost cattle from competitor suppliers. Subdued demand in Indonesia and Vietnam, Australia's largest export markets, saw export volumes down 17% and 65% year-on-year respectively.

However, consultation with various industry stakeholders indicates an uplift in export volume of around 12% in 2023 on 2022 levels to around 660,000 head. Recent upticks in Australia's exports to key markets such as Indonesia, Vietnam and China are positive signs of a recovery which is expected to gather momentum over 2023. Fundamentally, Australia's Asian markets present solid long-term growth opportunities for exports due to the rising demand for high quality protein as populations and household incomes grow. This is underpinned by a continued preference for freshly slaughtered beef by consumers.



These countries will see the strongest and most diversified growth in meat consumption globally in coming years, with beef expected to outperform other proteins (Fitch Solutions, FAO-OECD). Competition from IBM, other live cattle suppliers, and cheaper proteins will remain a challenge for Australian live cattle exports in both Asian and the Middle East/North Africa (MENA) markets. However, strong established trade relationships, the positive reputation of Australian cattle with both customers and consumers, and growing demand in Asian and MENA markets will support export recovery as Australia's cattle supply increases and prices ease from 2023 and into 2024.



Click here to visit MLA's LiveLink interactive Dashboard for export statistics

Key macro issues

Labour

Labour supply is key to the capacity of the red meat industry, especially in the second half of the supply chain e.g. processors. MLA's latest State of the Industry report indicated that approximately 428,000 people were employed in the red meat industry across the entire supply chain in 2022. This labour is spread out over 44,600 cattle businesses in Australia, as well as other red meat industries – however, this labour pool is in direct competition with other sectors such as mining and construction. Remaining competitive with wages is difficult without the support and immigration of international workers. Although international workers are being approved for visas, administrative wait times are extensive. The training of new labour also creates long lags in the processing sector which, in turn, constrains the number of cacases a plant can process. It is likely that we will not see an alleviation of these pressures until mid/late 2023 when the current pool of unskilled labour is suitably qualified. New government visa programs, such as the PALM visa program including metropolitan agricultural food businesses, may alleviate labour pressures.

The availability of labour into 2023 will determine the capacity of the processing sector, hence the two-scenario forecasts in these projections. If the labour shortage is not addressed swiftly, and processing hours or shifts are not increased, a reduced slaughter figure will be reached in 2023 regardless of the increased supply of cattle.

2022 State of the industry report



Click here to read the 2022 State of the industry report: The Australian red meat and livestock industry

Cost of production

Cost of production has been especially impacted within the processing sector, with the increasing cost of critical activities such as packaging, waste removal, electricity and wages. This, along with the inflated price of processor cattle, has significantly tightened margins for the processing sector. Processor cattle prices peaked in August 2021 at 1,044¢/kg cwt and have reduced marginally since then. High cattle prices increase the cost of production along the entire supply chain.

Electricity costs are forecast to increase by 20–30% in 2023, according to the RBA estimates. This could be considered conservative given the energy demand from overseas. The final impact of this will be determined by recent government policy to help with high energy costs.

Wages and training are large components of a cattle businesses' expenses. The continued competition for labour with more lucrative industries has put strain on the wages that cattle businesses can pay. The number of people required to run these businesses also puts a strain on the cost of production.

Input prices

The rising cost of inputs along the supply chain increased throughout 2022. Key indicators suggest this pressure is unlikely to ease in 2023, with the RBA increasing the cash rate to try and quell inflation. The cash rate in January 2023 is 3.1%, following eight consecutive rate rises since May 2022, as inflation reached 7.3% in January 2023¹.

Grain prices have been inflated over the last few years with greater competition from international markets.

The current conflict in Ukraine – the fourth largest wheat producer in the world – as well as drought conditions in Europe and the USA has further increased pricing pressures. Meanwhile, demand for key commodities such as oil seed, wheat and barley continues to grow.

With less grain on the international market during 2022, prices spiked. Wheat prices in 2022 rose above the historical average, and well above the 2021 prices, with prices peaking in May 2022 at \$500 per tonne – 50% above the five-year average. Although these prices have softened in 2023, they remain well above average.



¹ Source: Reserve Bank of Australia

Grain prices out of the Darling Downs, one of Australia's key lot feeding regions, have been above historical prices for the last year. High grain prices constrict margins in the feedlot sector, which is now a critical part of the supply chain after

registering record numbers on feed. Other input prices such as fertiliser have been increasing in price throughout the last two years, placing pressure on grain production and mixed farm margins. Although supply is available, many producers are holding on to grain. They are preferring to to store it on-farm to wait for markets overseas to take product. These factors increase the ration cost for feedlots.

Any significant input price increases, or lack of accessibility, will subsequently affect the productivity, capacity and performance of the Australian cattle herd in 2023. This will extend from the farm gate through to the consumer. Inputs and cost of production will be major drivers of processing capacity and numbers of cattle on feed in 2023, therefore affecting buyer willingness to operate in the market and thus price performance.

Figure 7: Darling Downs Wheat Price \$ tonne 400 300 Source: ABS, MLA forecasts

Global supply forecasts

USA

The United States of America (USA) occupies a unique role in the global beef market, as the only participant to be a major importer and exporter at the same time. The country has the world's largest beef production system and consumer base, meaning that shifts in American beef production heavily affect the global market.

Over the past several years, in response to ongoing drought in North America, the industry has undergone widespread destocking. This has, in turn, increased US exports and limited imports, increasing supply into Australia's four largest export markets and pressuring Australian beef's price competitiveness.

The impending end of the drought will reverse these trends, reducing US supply into Japan and South Korea while increasing demand for imports into the US itself. As Australian production is expected to increase through the upcoming year, falls in American production should support Australian export prices in our key markets.

The US herd has been in a technical destocking phase since the start of 2019, when the female slaughter rate rose above 47%. This trend has accelerated each year since, with the FSR reaching 51% in 2022, the highest rate seen since 1985. This can also be seen in the slaughter rate, which rose by 3% in 2022 to 34 million head for an annual turn-off rate of 37%, the highest on record.

The USA produced an estimated 13 million tonnes² of beef in 2022, 2% higher than 2021 and 3% above the 5-year average. American domestic consumption usually accounts for around 90% of production and is stable year-to-year, so this uptick in production has had an outsized impact on

This high rate of production has come at the expense of the herd, which has been in liquidation and is likely to continue declining over the next year. The United States Department of Agriculture (USDA) has forecast a herd of 89.4 million head for the start of 2023, which would be the lowest since 2015 and the third lowest on record.

Although many commentators are forecasting a swing back to herd rebuilding in 2023, production levels may take longer to recover than previous rebuilding phases. Although US production has grown over the long term, the US herd has not; increases in production have come from increased carcase weights. As feed input costs are currently high in the US and may remain so, the cost of additional gain could be very high. This means that future increases in production would likely come from a larger herd, which has been trending down for decades and would take years to eventuate if it were to occur.

Given the large US domestic market for beef, a decline in production would be clearly felt in export markets, and the US is highly likely to swing back to a net importer in the global market.

Figure 8: USA FSR 2012-2022

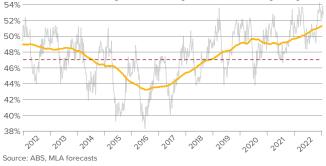
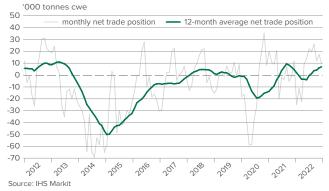


Figure 9: USA net beef trade position 2012–2022





Industry projections 2023 – Australian cattle – January

Percentage 56% female % of slaughter --- Average --- 12-month rolling average

² Source: USDA, MLA estimates

In 2022³ US exports rose by 5% year-on-year to 1.6 million tonnes carcase weight equivalent (cwe), 25% above the 10-year average and enough to become the world's second largest beef exporter. Imports also grew by slightly under 1%, but the relatively small increase meant that the US was a net beef exporter over the year.

This has meant that US market share grew in Japan and South Korea, largely at the expense of Australian exporters. The strength of the US dollar did assist Australian exporters, but only to a limited extent. US exporters obtained the highest market share in Japan and South Korea since before the US Mad Cow Disease outbreak of 2004.

Looking forward, the decline in US production and subsequent drop in export volumes is likely to position Australian exporters well in Japan, South Korea and the United States (three of Australia's four largest export markets). With US beef being Australia's primary competition in those markets and relatively constrained market access conditions for other major exporters, any US decline in export volume drives demand for Australian beef. This could assist in maintaining unit prices, even if macroeconomic conditions soften further.

The key variable for the US market over the next year is when the drought breaks. Given the already-diminished herd and accelerating FSR, any female slaughter in 2023 is likely to be cutting into the core of any future herd rebuild due to a reduced female breeder herd.

It's likely that cow-calf operators will begin retaining stock to rebuild their herds as soon as sufficient rain falls occur, but it remains to be seen if the breeding stock will exist in sufficient numbers to recover quickly. If not, the recovery will be very slow, and the US will swing back to being a net beef importer, potentially for several years.

Brazil

Beef exports from Brazil have doubled over the past decade, from 942,000 tonnes in 2012 to just under 2 million tonnes in 2022. This has made Brazil the largest beef exporter in the world, responsible for as much as 20% of global exports.

Despite this, beef production has not grown in the past decade outside of the standard cattle cycle. In the 12 months to September 2022, Brazil produced 7.8 mt cwe beef, 4% more than the preceding 12 months but very close to average production over the decade.

This export growth without equivalent production growth is likely to continue. The USDA has forecast the Brazilian beef production to grow by 2% and export to growth by 3.5%. Longer-term forecasts generally show Brazilian exports growing substantially over the decade.

Given production has grown slower than exports, domestic consumption has been falling in Brazil for years. Peaking in 2013 at an estimated 6.5 mt cwe, in 2022 YTD domestic consumption fell by 19%, which translates to a per capita term decline of 24% as the population continues to grow.

The rise of a substantial, permanent export industry in Brazil and subsequent decline in domestic supply can be largely attributed to increased demand for beef in the global market and decline in the value of the Brazilian real against the USD.

The growth of the Chinese beef market is well known, growing from a minor destination for exporters at the start of the 2010s to the largest market in the world today. China has been responsible for roughly 70% of the growth in international beef imports between 2012 and 2022 and is now the destination for just under a quarter of all exports. This huge increase in demand has contributed to growth in prices over the last decade, with an outsized impact on exporters who lacked market access to other already-developed markets like Japan and the US.

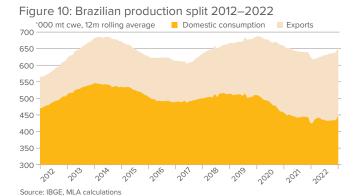
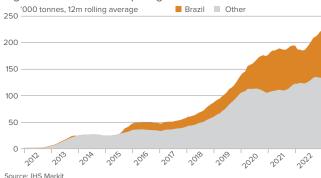


Figure 11: China beef import growth 2012–2022



Prior to the emergence of Chinese imports, Brazil largely exported commodity-grade beef to low-cost markets like Egypt and Russia. This trade did not attract especially high prices, meaning the incentive to export was not as strong – similar prices could often be found selling domestically. The huge increase in demand has pushed up the price and provided a market that was able to pay considerably higher prices for beef.

Between 2012 and 2022, the average price of Brazilian exports rose from US\$4.75 to US\$5.93. This was a 35% increase largely driven by favourable prices for exports to China. In 2022, 62% of Brazil's exports went to China. These were at an average price of US\$6.42/kg, which is considerably higher than other markets available to Brazilian exporters.

Over the same period, the value of the Brazilian real has dropped substantially. Between 2012 and 2022, the real has fallen by 60% to 19¢/real. Given the parallel development of export-oriented processors, this currency decline has made export prices considerably more attractive, and subsequently put substantial pressure on domestic beef prices.



³ Source: MLA's estimated Nov/Dec figures

Over the past decade, the average price of a rump steak in Brazil has risen by 128%, well above inflation and outpacing other proteins. Similar spikes in price can be observed in other cuts and has meant that Brazilians are spending more on beef, while being able to afford less.

This all means that the Brazilian beef export trade is likely to behave differently to its Australian or American equivalents. Slaughter and production are not especially strongly correlated with exports, global demand and the exchange rate. This means that demand side factors, not supply, are likely to drive changes in Brazil's export volumes. If Chinese demand fell, or the real appreciated against the USD, it is likely that exports would drop and be reabsorbed into the domestic market.

Figure 12: Brazil domestic consumption and exchange rate

kg per person — Domestic consumption — US\$/Real (LHS) US\$/Real

0.6

0.5

0.9

0.4

0.3

0.2

On the other hand, if the currency depreciated further or demand rose, it is likely that exports would also rise. This is a relatively new dynamic for the global beef market, but is likely to become more commonplace as the share of internationally-

Price

Supply

Two key lead indicators of the Australian national herd rebuild's position point to significant improvements in cattle supply in 2023 as a result of intense herd rebuilding for the preceding two years:

25

24

23

Source: IBGE, Fitch, MLA calculations

1. Female slaughter rate (FSR)

traded global production increases.

2. Stock Turn-off Ration (STR).

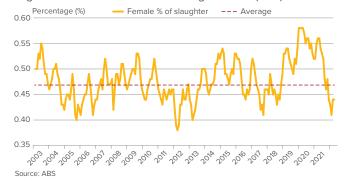
FSR

The female slaughter rate (FSR) measures the number of female cattle processed on a quarterly basis compared to the total cattle throughput. For five consecutive quarters (15 months), the FSR has averaged its lowest rate on record at 43.3%. This is well below the 47% benchmark which recognises whether the herd is liquidating or rebuilding.

The significance of such a low FSR driving higher retention of heifers and cows to rebuild herd numbers supports the outlook of a longer term, improved supply of cattle in 2023 and 2024 regardless of seasonal outcomes.

Higher supply of both finished and young cattle will place downward pressure on market price, as seen during November 2022, when national yardings reached their highest volume in two years and cattle prices trended downwards.

Figure 13: Australian Female Slaughter rate (FSR)



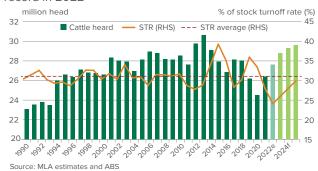
STR

The second measure of significance is the stock turn-off ratio (STR). This lead indicator measures the number of cattle processed and live animals exported compared to the herd size as a percentage.

Based on last year's estimates, the STR will reach its lowest point on record at 24% due to historically low live export and slaughter volumes, well below the long-term average of 31%.

This retention of animals on-farm justifies the expected improvement in cattle supply in 2023 and therefore the impacts this will have on price performance. Quality and finish of stock will become a significant driver of market performance for cattle, with the higher supply allowing buyers to be more selective.

Figure 14: Stock turnoff rate (STR) hits lowest point on record in 2022



Buyer demand

Regardless of rainfall performance, buyer demand and competition between restockers and feeders (which has driven the market's strength over the past two years) is expected to soften in 2023. As a result of this, less competition between buyers and increased supply is expected to place downward pressure on cattle prices generally, relative to the record years of 2020–2022.

Lower feedlot utilisation rates and record capacity in Q3 2022 point towards improved feedlot demand to fill pen space, if input costs and cattle prices ease margin pressure and allow lot feeders to do so. If conditions allow, feedlot buying activity may improve as the year progresses and therefore increased competition may support prices remaining steady.

While the expected return of average seasonal conditions will lessen restocker demand, areas that will look to continue to rebuild, namely Queensland and parts of WA, may drive higher demand based upon rainfall events. This, in turn, may spike or uphold improved price performance relative to the general market throughout the year in specific areas or states.

Processor demand is expected to improve, with softer cattle prices assisting this. Labour availability within the sector will determine the capacity of processing plants and therefore the number of cattle slaughtered. Over the past three years processors have paid a substantial discount to restockers and feedlots – this dynamic may even out in the next year.

Price forecasts - MLA indicators

National Feeder Steer

MLA's cattle projections now include the forecast for the National Feeder Steer indicator (Feeder Steer), to better represent industry analyst (exc. MLA) price estimates. The Feeder Steer is forecast to trend upwards on current rates by 6.6% or 28¢, to hit 419¢/kg live weight (lwt) on 30 June 2023. A Feeder Steer price at this level would remain 8.5% or 33¢/kg lwt above the five-year average, in current terms.

Analysts also forecast continued demand for feeder steers due easing processor capacity constraints.

The expected increase in cattle supply, macro-economic drivers and operating environment factors has provided support for upward pressure on prices for industry analysts' forecasts for the Eastern Young Cattle Indicator (EYCI) to 30 June 2023.

The EYCI is forecast to reach 811¢/kg carcase weight (cwt) mid-way through 2023 – reflecting a 4% or 31¢/kg cwt rise on current prices. If this price was realised, it would remain 61¢ or 8.1% above the five-year average, in current terms.

StoneX Feeder Steer Price Forecast⁴

MLA's cattle projections will also utilise the Argus Feeder Steer (spot) Index and the StoneX forward curve (six-monthly outlook). Argus is assessing the Feeder Steer spot market at 390 cents/kg lwt for cattle in the February delivery window, with feedlot pricing and transactions covering a spread of 370-420A¢/kg at the start of February. Meanwhile, the StoneX forward swaps curve can be seen strengthening to 400 cents as the second half of 2023 approaches. At current rates, that would indicate a rise of 1.7% on current January rates. The 400¢ Mid-Market-Mark (MMM) price by July 2023 would reflect a 3.3% or 14¢ softening on the industry analysts forecast for the National Feeder Steer price of 414¢/kg lwt.

Figure 15: Aggregated Industry Average Feeder Steer Price Forecast



Figure 16: Aggregated industry average EYCI price forecast

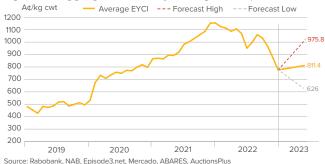


Figure 17: StoneX Feeder Steer Index Price Forecast - 2023





⁴ See disclaimer for SFPL on page11

Looking ahead

As the national cattle herd grows and large parts of Queensland continue to recover and rebuild, the cattle industry's outlook remains extremely positive. Large volumes of females will continue to be joined, ensuring an uptick in the supply of cattle well into 2024.

An abundant availability of grass and water on-farm is ensuring producer confidence remains robust. Buyer demand is expected to soften in 2023 and therefore place downward pressure on prices (relative to the record years of 2020–2022) driven by increased supply. The quality and finish of cattle will continue to determine and dictate market performance as the market reverts to operating in a more typical fashion that was last seen prior to 2020.

Supply of both young cattle and slaughter-weight animals are expected to increase continually throughout the year. The processing sector's ability to deal with an acute shortage of labour will determine the total number of cattle processed in Australia in 2023.

A return to drier seasonal conditions with the possibility of below-average rainfall in 2023 may drive a higher turn-off of stock, specifically slaughter-weight cattle, such as cull cows and heavier steers. If this increase in supply cannot be managed by the processing sector due to a shortage of labour, repercussions for the broader industry will be felt throughout the market.

While the potential for a global recession weighs on the economic outlook, current global dynamics point towards continued demand for Australian beef in established and emerging markets.

The American herd liquidation and its FSR rates promote a positive outlook for the Australian export position in global markets as cattle supply increases in line with herd growth. This places Australia in an exceptional position to capture opportunities and deliver high quality beef both domestically and around the globe in 2023.



Disclaimer for SFPL

StoneX Financial Pty Ltd (ACN 141 774 727 | ABN 50 141 774 727) ("SFPL") is a member of the StoneX Group Inc., group of companies. The StoneX Group Inc., group of companies provides financial services worldwide through its subsidiaries, including physical commodities, securities, exchange-traded and over-the-counter derivatives, risk management, global payments and foreign exchange products in accordance with applicable law in the jurisdictions where services are provided. References to over-the-counter ("OTC") products or swaps are made on behalf of StoneX Markets LLC. ("SXM"), a member of the National Futures Association ("NFA") and provisionally registered with the U.S. Commodity Futures Trading Commission ("CFTC") as a swap dealer. SXM's products are designed only for individuals or firms who qualify under CFTC rules as an 'Eligible Contract Participant' ("ECP") and who have been accepted as customers of SXM. StoneX Financial Inc. ("SFI") is a member of FINRA/NFA/SIPC and registered with the MSRB. SFI is registered with the U.S. Securities and Exchange Commission ("SEC") as a Broker-Dealer and with the CFTC as a Futures Commission Merchant and Commodity Trading Adviser. References to securities trading are made on behalf of the BD Division of SFI and are intended only for an audience of institutional clients as defined by FINRA Rule 4512(c). References to exchange-traded futures and options are made on behalf of the FCM Division of SFI. StoneX Financial Ltd ("SFL") is registered in England and Wales, Company No. 5616586, authorized and regulated by the Financial Conduct Authority [FRN 446717]. StoneX Financial Pte. Ltd. ("SFP") (Co. Reg. No 201130598R) holds a Capital Markets Services Licence regulated by the Monetary Authority of Singapore for Dealing in Exchange-Traded Derivatives Contracts, Over-the-Counter Derivatives Contracts, and Spot Foreign Exchange Contracts for the Purposes of Leveraged Foreign Exchange Trading, SFPL holds an Australian Financial Service License and is regulated by the Australian Securities and Investments Commission (AFSL: 345646). StoneX Financial (HK) Limited (CE No.: BCQ152) is regulated by the Hong Kong Securities and Futures Commission for Dealing in Futures Contracts. 'StoneX' is the trade name used by StoneX Group Inc. and all its associated entities and subsidiaries Trading swaps and over-the-counter derivatives, exchange-traded derivatives and options and securities involves substantial risk and is not suitable for all investors.

IMPORTANT DISCLAIMER: The information herein is intended for general informational purposes only and is therefore not a recommendation to trade nor represents investment research or an offer to buy or sell any derivative or security. The information herein does not take into account your particular investment objectives, financial situation and/or needs and does not create a binding obligation on any of the StoneX group of companies including but not limited to SFPL, to enter into any transaction with you. You are advised to perform your own independent investigation (both financial and legal) of any transaction to determine whether such transaction is suitable for you. No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior written consent of StoneX Group Inc.

© Meat & Livestock Australia, 2023. ABN 39 081 678 364. MLA makes no representations as to the accuracy of any information or advice contained in MLA's Australian cattle industry projections 2023 and excludes all liability, whether in contract, tort (including negligence or breach of statutory duty) or otherwise as a result of reliance by any person on such information or advice. All use of MLA publications, reports and information is subject to MLA's Market Report and Information Terms of Use. Please read our terms of use carefully and ensure you are familiar with its content.



