Food for thought

A regular look across food, beverage and agribusiness supply chains

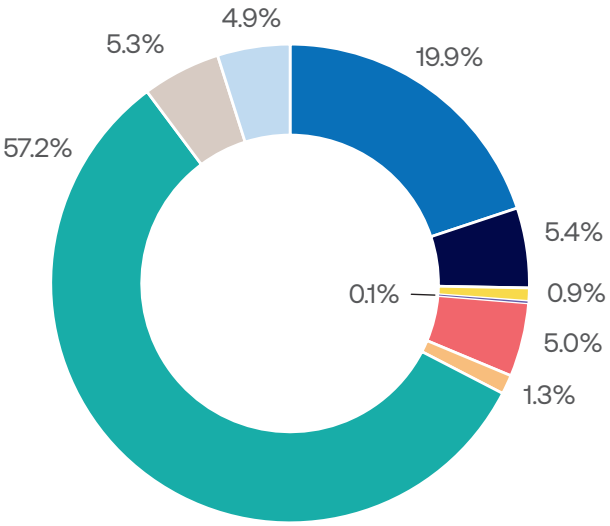
Autumn 2025

The fibre battle: cotton, wool, polyester and the race for dominance

Think about it – you're browsing in a clothes shop and a piece of clothing catches your eye. Do you check the label to see what fibres it's made from – cotton, polyester, wool or something else? Does that influence whether you buy it, or do you care more about the cost and look?

In the world of textiles, a fierce competition is playing out between natural fibres like cotton and wool versus synthetics like polyester. Each fibre has passionate advocates and critics, particularly regarding environmental and economic issues. This battle for the hearts, minds and wallets of consumers impacts global supply chains, trade policies – and the price of your next outfit.

Global fibre production 2023 - percentage share



Key features

- Polyester, 57.2%
- Polyamide (Nylon), 5.3%
- Other Synthetic Fibers, 4.9%
- Cotton, 19.9%
- Other Plant Fiber, 5.4%
- Wool , 0.9%
- Other Animal Fiber, 0.1%
- Viscose, 5.0%
- Other Manmade Cellulosic Fibers, 1.3%

Source: Textile Exchange, ANZ

A market in flux

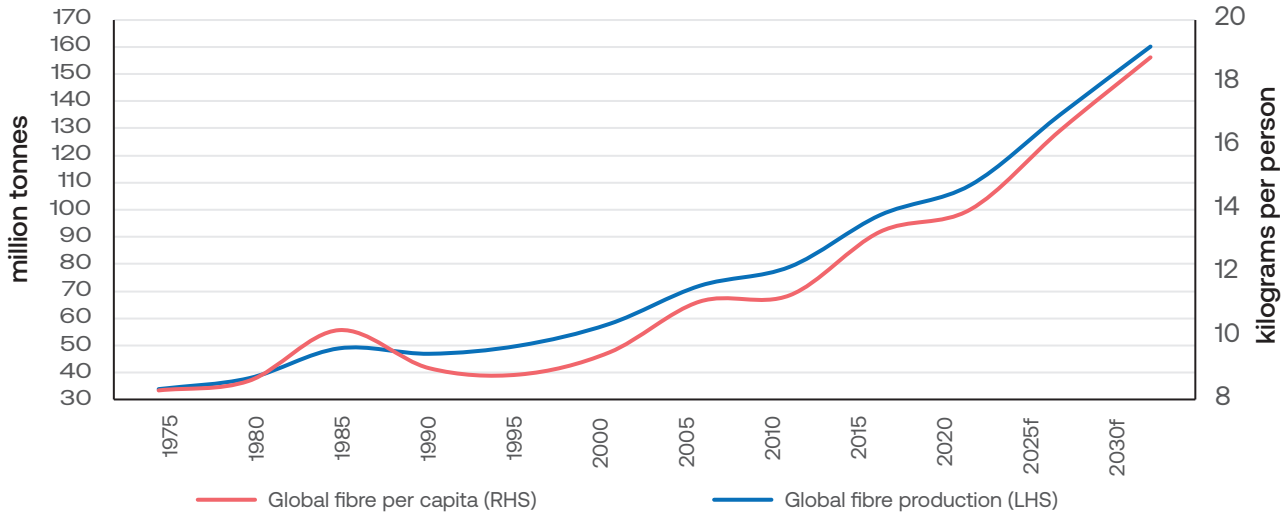
The global textile industry is estimated to be worth well over $1 trillion per year. Through rising incomes, fast fashion, shorter production cycles, seamless global logistics and the viral power of social media trends, fabric production continues to surge. The scale is staggering – about 128 million tonnes of fabric are produced annually, equating to 16 kg per person or over 50 clothing items per year for every person on earth.

About two-thirds of all fabric is now made from artificial fibres, with polyester accounting for around 57 percent of the total. Of the remaining third, cotton accounts for 20 percent, while wool makes up around 1 percent. Polyester dominates due to affordability and versatility, while cotton and wool face challenges from high production costs and shifting trade policies.

Natural fibres: premium but pressured

For many, cotton remains the go-to fibre, especially for breathability and comfort. Interestingly, many people obsess over thread count in sheets – despite many not knowing what it means. Is a 1000-thread count sheet really better, or are we just impressed by big numbers? In reality, thread count matters up to a point, but past a certain threshold, it's mostly marketing. A well-woven 400–600 thread count sheet can feel just as luxurious as one boasting a much higher number.

Global fibre production vs per capita 1975 - 2030f



Source: Textile Exchange, ANZ

Cotton quality varies significantly by the region where it's grown. Egyptian cotton is prized for its extra-long staple fibres, creating exceptionally soft and durable fabrics. US cotton, particularly from Texas and the Mississippi Delta, is known for consistency and volume. Meanwhile, Australian cotton is favoured by many manufacturers for its bright white colour, low contamination and sustainable farming practices. Australian growers have also made significant advancements in water efficiency, using around 48 percent less water per bale over the last two decades.

Cotton often finds itself entangled in trade wars. In recent years, China has imposed and lifted tariffs on both Australian and US cotton, pushing exporters to diversify. Vietnam, Pakistan and Turkey have stepped in as new buyers. Cotton fabric manufacturing is also shifting, with rising labour costs in China making countries like Vietnam and Indonesia increasingly important textile hubs due to lower costs and favourable trade agreements.

Wool: from suits to space

Wool has woven itself through history – from ancient Greece to the "riding on the sheep's back" era in Australia. Before the 1960s, wool accounted for over 10 percent of global textiles. Today? Around 1 percent.

Wool remains synonymous with luxury, but how many people wear suits anymore – especially post-COVID? The shift toward casual and "athleisure wear" has reshaped demand. That said, wool still has a place in the modern world – it is thriving in sportswear, high-end fashion and even space technology due to its breathability and quick-drying properties.

Not all wool is created equal and many people don't realise the difference between Merino wool and coarser types used in carpets and blankets. Australia is the undisputed leader in fine wool production, particularly Merino wool, which accounts for around 90 percent of the world's fine apparel wool. The best-quality Australian Merino comes from certain regions in New South Wales (New England and Riverina), Victoria (Western Districts) and parts of Tasmania. Merino fibres are significantly finer than regular wool, making them softer and more suitable for next-to-skin garments.

Meanwhile, New Zealand is primarily known for its strong wool, which is coarser and more durable, making it ideal for carpets, upholstery and industrial textiles. This wool typically comes from breeds such as Romney and Perendale sheep, which are distinct from the Merinos used in fine wool production. Although it doesn't match the softness of Merino, New Zealand's wool is prized for its durability and is widely used in home furnishings and durable textiles. In contrast, China, Argentina and Uruguay also produce significant amounts of coarser wool, mainly used for carpets and upholstery.

The wool industry faces both opportunities and hurdles. On the upside, its biodegradability and durability appeal to sustainability-conscious consumers. Brands like Icebreaker and Smartwool have positioned Merino as a premium outdoor fabric, while high-fashion houses like Zegna and Loro Piana still value it for tailoring. Wool has

even entered unexpected markets – NASA has tested wool for insulation and car manufacturers are exploring wool-based composites. However, wool's high cost, processing requirements and ethical concerns over mulesing remain barriers to mainstream adoption.

Polyester: from shiny to sustainable?

Many older consumers still remember polyester's shiny, stiff and sweaty reputation – think disco-era suits that made you glow (and not in a good way). But polyester and synthetics in general have come a long way.

Polyester is just one of many synthetic fibres, including nylon, acrylic and spandex. Nylon, first made for parachutes in WWII, now dominates sportswear. Acrylic mimics wool but is cheaper and less breathable. Spandex (Lycra) is found in everything from leggings to superhero costumes.

Polyester has evolved – modern variants are softer, quick drying and even mimic silk or cotton. It dominates fast fashion and activewear due to low cost, durability and wrinkle resistance. Its biggest production hubs are China, India and Bangladesh, where manufacturing remains cost-effective and reliable.

But polyester is also seen by some as a sustainability villain. Being derived from petroleum, and shedding microplastics, polyester can take centuries to decompose. Supporters argue that polyester lasts longer and requires less water than cotton. Brands like Patagonia and Adidas are pioneering recycled polyester, but even that still releases microplastics. The next frontier? Bio-based polyester and fully biodegradable alternatives.

The evolving battle: who wins?

Consumers today expect their clothes to look good, fit well and perform better – without sacrificing sustainability. That's why blended fabrics are booming. Cotton-polyester blends provide the best of both worlds – breathability combined with durability, making T-shirts and everyday-wear last longer. Wool-synthetic blends are gaining traction in outdoor gear, where stretch, warmth and sweat-wicking (where the fabric pulls moisture away from the skin and spreads it out to evaporate quickly) properties are essential.

The broader shift toward athleisure – led by brands like Lululemon – reflects how fibres must now meet rising consumer expectations around performance, comfort and appearance. Female-driven trends on platforms like Instagram and TikTok continue to influence not just styles but fabric demand, accelerating the push toward stretchy, sweat-wicking blends.

Meanwhile, the cutting edge of fabric innovation includes bio-based polyester and lab-grown wool, which could redefine sustainable fashion in the coming years.

The entire industry is adapting – from fibre sourcing to production, marketing and retail. Fast fashion giants like Zara and H&M are incorporating more recycled fabrics. Platforms like Temu and Shein, rising rapidly through low-cost, high-speed fashion, are drawing scrutiny from some US regulators concerned about labour sourcing and market disruption. Luxury brands are pushing traceable, ethically sourced materials as ultimate status symbols. Manufacturing is shifting, with production moving from China to Vietnam, Bangladesh and Ethiopia. Even marketing is changing – social media forces brands to be more transparent, faster to adapt and better at storytelling.

What's next for fibres?

So, where does the fibre battle go from here? Polyester isn't going anywhere, but scrutiny over microplastics and fossil fuel reliance will push for more sustainable alternatives. Cotton and wool will hold their ground, particularly at the premium end of the market.

Then there's the question of overproduction – the world is drowning in fabric, with landfills overflowing with discarded clothing. Will the industry slow down? Probably not. But it is likely that the industry will see more regulations around textile recycling and circular fashion models, with resale, rental and repair gaining momentum – not just for sustainability, but because it's becoming fashionable and financially smart.

And finally, the quirky reality? In this race for the future of fibres, we may end up back where we started – wrapped in natural fibres, but with a high-tech twist. Maybe one day, someone will design a Merino wool jacket embedded with nanotechnology that repels stains, regulates temperature and posts your outfit on Instagram. Until then, the world keeps spinning and the sheep keep grazing – oblivious to the fact that their fleece might just be the next big thing, again.

Artificial Intelligence (AI) in the FBA supply chain: the smartest thing in your fridge (and on the production line, in the warehouse and at the checkout...)

Your AI-enhanced morning coffee: the future is already brewing

It's 6 AM. You groggily prepare your coffee, making a mental note to buy more beans. Then you remember - your new AI-enabled coffee machine already knew you were low and ordered more before you even realised. Months earlier, thousands of kilometres away, AI ensured your favourite blend was harvested at peak ripeness, transported efficiently and delivered without delays. Back in your kitchen, your smart fridge suggests a breakfast recipe based on ingredients about to expire, helping you cut food waste. (It even understands not to be too chatty this early in the morning.)

Sounds futuristic? Not anymore. AI isn't just changing how food is produced and delivered - it's rewiring the entire system, from data point to dinner plate. And for some of the world's biggest food, beverage and agribusiness (FBA) companies - including meat processors, grain handlers and retailers - AI is quickly becoming an essential competitive advantage.

The new AI: why this time is different

For years, agtech has focused on automated irrigation, GPS-guided tractors and drone-monitored crops. While this brought major benefits to food supply chains, today's AI is something entirely different. AI doesn't just follow instructions - it learns, predicts and optimises in ways humans never considered.

AI in meat processing: the rise of the digital butcher

The art of butchery is centuries old, but AI is bringing a high-tech upgrade to the meat industry - one that's faster, safer and more precise than ever before. AI-powered vision systems assess carcass quality in milliseconds, grading meat for tenderness, fat marbling and value with pinpoint accuracy. Where humans require years of experience and training, AI scans thousands of data points instantly, ensuring every cut meets exacting standards.

AI isn't just grading meat - it's revolutionising how it's processed and sold. Smart robotics are taking over dangerous cutting tasks - reducing injuries and precision-slicing steaks to restaurant-grade specifications. AI-driven sorting systems ensure high-end Wagyu is sent to Japan's luxury steakhouses, while value cuts head to domestic retailers. AI is even predicting demand trends so that processors can adjust production before supply chain issues arise.

Looking ahead for consumers, the next step may be AI-powered butchery on demand. Imagine a future where customers can personalise their meat orders - selecting fat content, thickness and cut style - while AI-controlled machines process their order instantly. And once it's delivered, your AI-powered oven will cook it to perfection - and without judging you if you order your steak well-done.

Grain handling: smarter storage, faster exports

For major grain handlers, AI is taking quality control to the next level. AI-powered sorting systems scan each grain with microscopic precision, detecting contaminants, optimising blending strategies and ensuring every shipment meets the highest standards - whether it's wheat for Indonesian mills or barley for China's breweries.

Meanwhile, grain storage is getting a high-tech upgrade. Smart sensors inside silos act like mini weather stations, tracking temperature, humidity and pest activity in real time. If a hotspot threatens to spoil a batch, AI detects the issue early and triggers adjustments, preventing expensive losses.

On the export front, AI is turning bulk shipping into a logistics masterpiece. Imagine an AI-powered transport control system for grain, constantly monitoring vessel arrivals, port congestion and geopolitical risks. If a heatwave in India spikes wheat demand or a Red Sea shipping crisis threatens delays, AI reroutes shipments, times exports perfectly and locks in the best price. For traders, it's like having a Wall Street algorithm fine-tuning every deal in real time.

Smarter supermarkets: how AI prevents empty shelves and overstocked warehouses

Ever wondered why some supermarket shelves are mysteriously empty, while others are overflowing with food no one seems to want? That's a supply chain inefficiency hiccup. AI is seeking to iron out these occurrences, ensuring the right products arrive at the right place at the right time.

Traditional forecasting relied on a mix of historical data and educated guesses. AI does something smarter - it monitors real-time demand, weather patterns, transportation delays and social media trends. If a cyclone is about to hit Queensland, AI triggers early shipments of bottled water and non-perishables. If a TikTok trend suddenly makes a niche snack go viral, AI reroutes shipments before stock shortages happen.

Meanwhile, AI-powered predictive maintenance keeps factories running at peak efficiency. If a key machine is about to fail, AI spots early warning signs and schedules repairs before breakdowns happen - resulting in fewer shutdowns, fewer shortages and lower costs.

The use of AI in food processing is expanding rapidly as companies look for smarter, faster and more sustainable ways to produce food. Across areas like fruits and vegetables, dairy, meat and poultry and convenience foods, AI is being used to improve quality control, increase efficiency and reduce waste. One forecast predicts that investment in AI food processing technologies will more than double from USD 12.7 billion in 2024 to USD 26.8 billion by 2033, with the strongest growth expected in sectors where precision and consistency are critical to meeting both consumer expectations and regulatory standards.

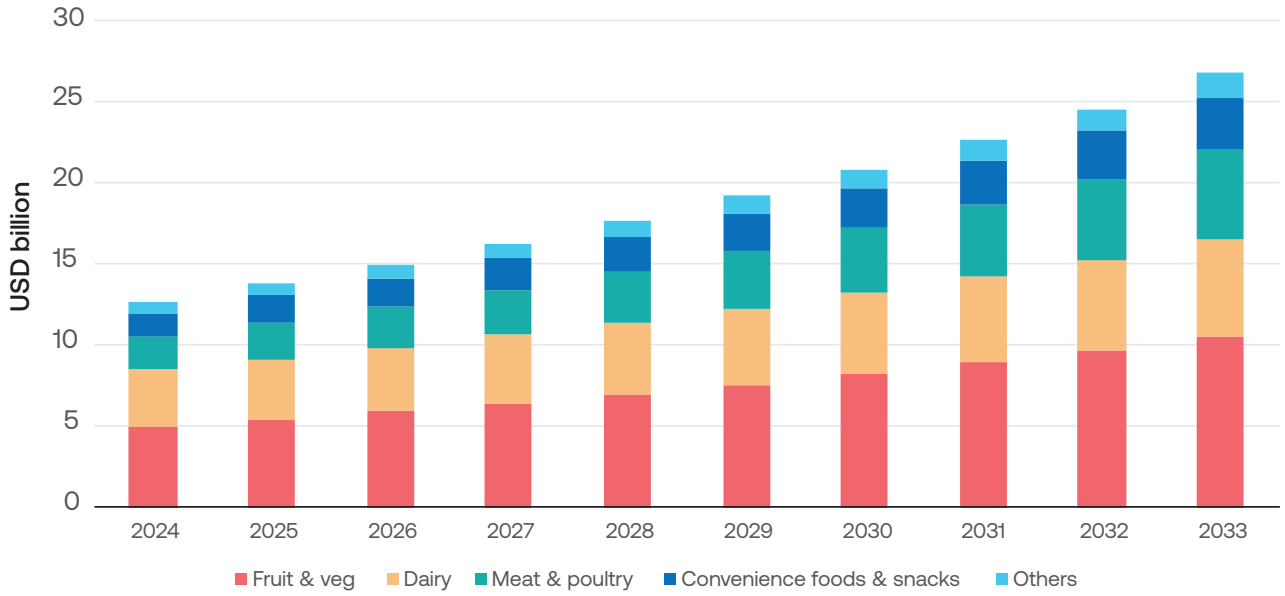
Spoiler alert: AI is coming for food waste

Food waste is one of the biggest inefficiencies in food systems – it costs billions, creates massive emissions and can leave people hungry while perfectly good food gets tossed. Some estimates suggest that one-third of all food globally is wasted - left to spoil in warehouses, discarded by supermarkets or rotting at the back of home fridges (or school bags, if we're being honest).

AI is stepping in to stop the madness. Supermarkets are using AI-powered demand forecasting to order just enough, preventing overstocked dumpsters and panic markdowns. In food factories, AI-powered cameras inspect freshness faster than human eyes ever could. At home, smart fridges could track expiration dates, suggest recipes and remind you to eat your leftovers before they become fermentation experiments.

If AI cuts waste by even five percent, that's billions saved, fewer emissions and more food available for those in need.

Forecast investment in AI food processing technologies 2024 - 2033



Source: Dimension Market Research, ANZ

AI vs food fraud: how technology is exposing fakes before they hit the shelf

That bottle of Grange Hermitage you paid a fortune for - real Barossa Valley wine or a Shanghai counterfeit? That premium Wagyu steak - hand-fed, or just rebranded supermarket beef? AI is increasingly stopping food fraud before fake products hit the market.

AI-powered chemical fingerprinting can verify wine composition in seconds, ensuring premium bottles aren't cheap imitations. AI image recognition scans meat texture and fat marbling, detecting if "Wagyu" is the real thing. Deep-learning fraud detection systems expose fake organic labels - if an "organic" farm is producing enough kale to cover half of Australia, AI knows something's not right.

For food companies this isn't just about ethics - it's about survival. Counterfeit food costs the industry billions, and if one scandal can ruin a brand's reputation overnight, then stopping fraud before it happens becomes essential - and that's where AI comes in.

The takeaway: AI is already changing the way we eat

For FBA companies, AI isn't a trend - it's an inevitability. Businesses that embrace AI-powered analytics, automation and sustainability will lead the industry. And if AI finally figures out how to tell you when the avocados, pears or bananas in your kitchen are perfectly ripe before turning to mush overnight, then maybe that's the greatest food innovation of all.

Feeding the animals: the essential role of animal feed in FBA supply chains

What's for dinner? The unsung hero of global agriculture

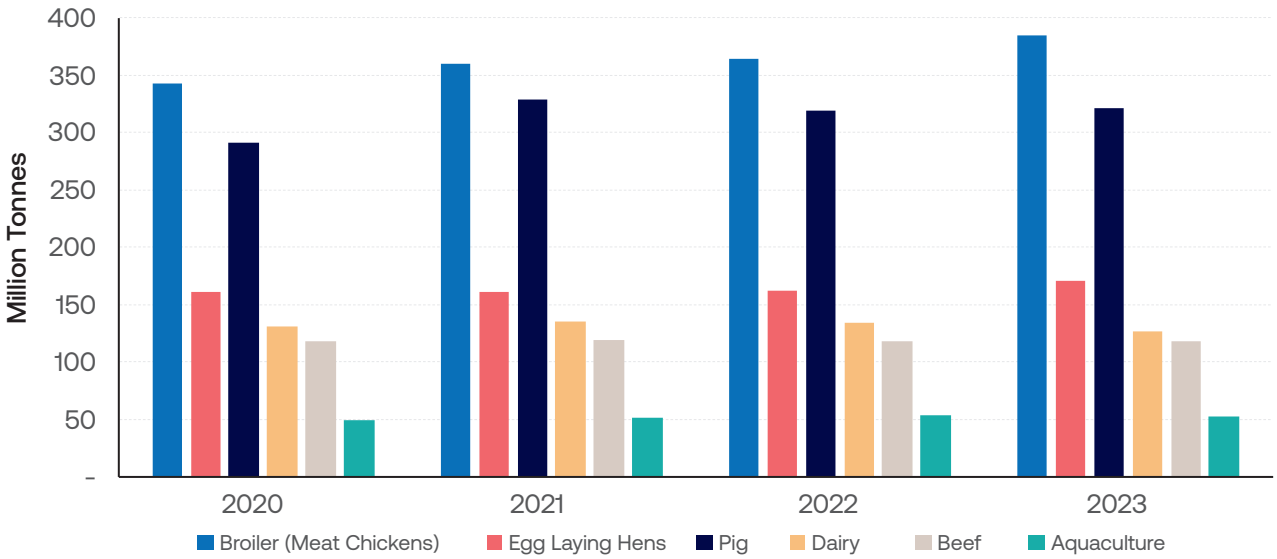
We obsess over where our food comes from – but what about the food that feeds our food? Animal feed is the hidden force behind the world's meat, dairy, poultry and aquaculture industries, shaping everything from the cost of a cheeseburger to the sustainability of farmed salmon. It's a vital component of agricultural supply chains, quietly driving global food production while often overlooked in broader discussions. In terms of size, the International Feed Industry Federation estimated that global animal feed production exceeded 1.3 billion metric tonnes in 2023.

Globally, demand for animal feed is rising at an extraordinary pace, driven by increased meat and dairy consumption. As incomes grow, particularly in Asia and developing markets, diets are shifting towards higher protein intake. More cattle, chickens, pigs and farmed fish mean an ever-growing demand for feed. But what exactly are we feeding them and how is this industry evolving in an era of heightened sustainability concerns, cost pressures and supply chain risks?

The big eaters: who's hogging the feed?

If there were an Olympic sport for consuming the most feed, poultry would take gold. Chickens, both for meat and eggs, consume more feed than any other farmed animal, thanks to their rapid reproduction, short life cycles and relative lack of pasture based feeding. Pigs follow closely behind, consuming vast amounts of grain and protein meal to meet global demand for pork. Cattle, while often associated with pasture grazing, rely heavily on supplementary grain and protein feed, especially in feedlots – large-scale operations where cattle are fattened on grain before processing. Feedlots have expanded significantly in Australia and globally, particularly as consumer demand for grain-fed beef has grown. In Australia, the number of cattle in feedlots regularly exceeds one million head, making up a significant portion of the beef supply. Meanwhile, aquaculture is the fastest-growing protein sector, with farmed fish consuming large volumes of fish meal, soy-based feed and increasingly alternative ingredients like algae and insect protein.

Global animal feed usage by sector



Source: Alltech, ANZ

Who's buying? The global feed supermarkets

China is by far the world's largest consumer of animal feed, purchasing an astonishing 200 million tonnes annually. Its vast pork, poultry and aquaculture industries depend heavily on imports, particularly soybeans and corn from Brazil and the US. Other major feed importers include Japan, South Korea and Mexico, which have significant livestock sectors but lack sufficient domestic grain production. These countries rely on stable international trade flows to keep their industries running, making feed a highly sensitive and strategically significant commodity in global trade.

Trade policies and tariffs can dramatically impact global feed markets.

In recent years, tensions between China and the US have led to fluctuations in soybean trade, forcing China to diversify its sourcing. The war in Ukraine has also reshaped global grain flows, with disruptions to wheat and corn exports affecting livestock feed prices worldwide. For Australia, shifting trade patterns present both challenges and opportunities, particularly in supplying alternative feed grains to markets looking for stable and sustainable sources.

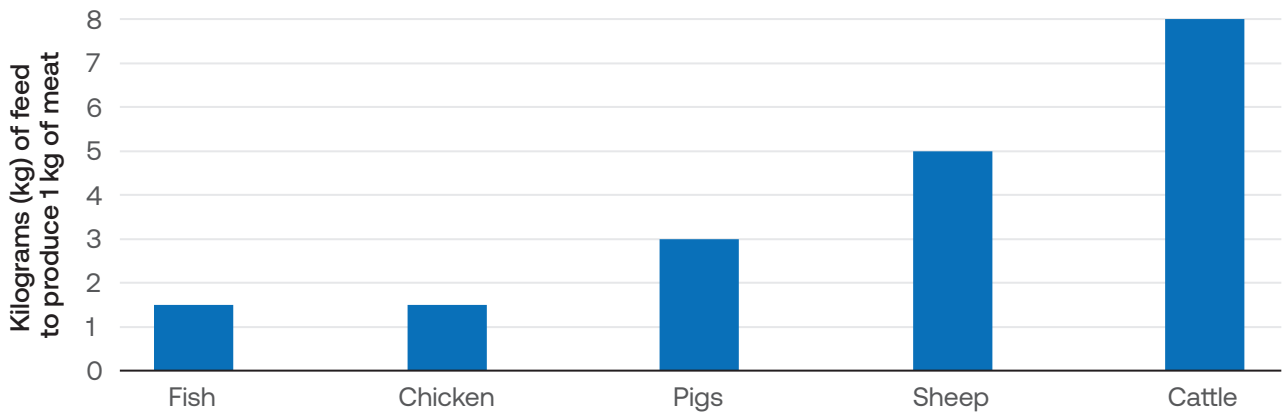
What's on the menu? The ingredients of animal feed

Animal feed is carefully formulated to maximise efficiency and nutritional value. The most common energy sources are corn, wheat and barley, while soybean meal is the dominant protein ingredient for poultry, pigs and cattle. In aquaculture, fish meal and fish oil have traditionally played a major role, though sustainability concerns are driving a shift towards plant-based and alternative protein sources. Byproducts such as wheat bran, rice bran and distillers' grains from ethanol production offer cost-effective feed options, while newer innovations like insect protein, algae and seaweed are gaining traction.

One of the more promising developments is the use of asparagopsis, a type of red seaweed, as a cattle feed additive. Research has shown that incorporating small amounts of asparagopsis into cattle diets can significantly reduce methane emissions, a major contributor to agricultural greenhouse gases. While asparagopsis remains the front-runner, other seaweed species are also being explored for their potential. If widely adopted, this could help improve the sustainability profile of livestock production.

Different animals need different amounts of feed to grow. Chickens and fish are the most efficient, needing around 1.5 kilograms of feed to produce 1 kilogram of meat. Pigs usually need about 3 kilograms, sheep around 4 to 6 and cattle can require anywhere from 6 to 10 kilograms depending on the system.

Feed conversion ratios by animal



Source: FAO, ANZ

Australia's role in the global feed supply chain

Australia is a major grain producer and while it is not a dominant global feed exporter, its high-quality feed grains play a critical role in both domestic and international livestock production. Australian barley, wheat and lupins are widely used in livestock feed, particularly in high-end beef and dairy markets. Australian feed grains support intensive livestock production, whether in feedlots in Queensland and New South Wales, where cattle are finished on grain for premium beef markets, or on dairy farms in Victoria, Tasmania and South Australia, where grain-based supplements help maintain year-round milk production.

At a global level, Australia has opportunities to expand its presence in the high-value feed sector, particularly in supplying non-GMO feed ingredients, sustainably grown grains and innovative feed alternatives to premium markets. As sustainability concerns grow, demand for traceable and environmentally friendly feed products is expected to rise, positioning Australia as a potential leader in this space.

The feed industry's big challenges

Like any critical industry, the animal feed sector faces major challenges, from climate volatility to economic pressures. Droughts in Australia and the US can significantly impact grain yields, pushing up feed prices and affecting the profitability of livestock production. When feed costs rise, meat, dairy and egg prices tend to follow, impacting both farmers and consumers.

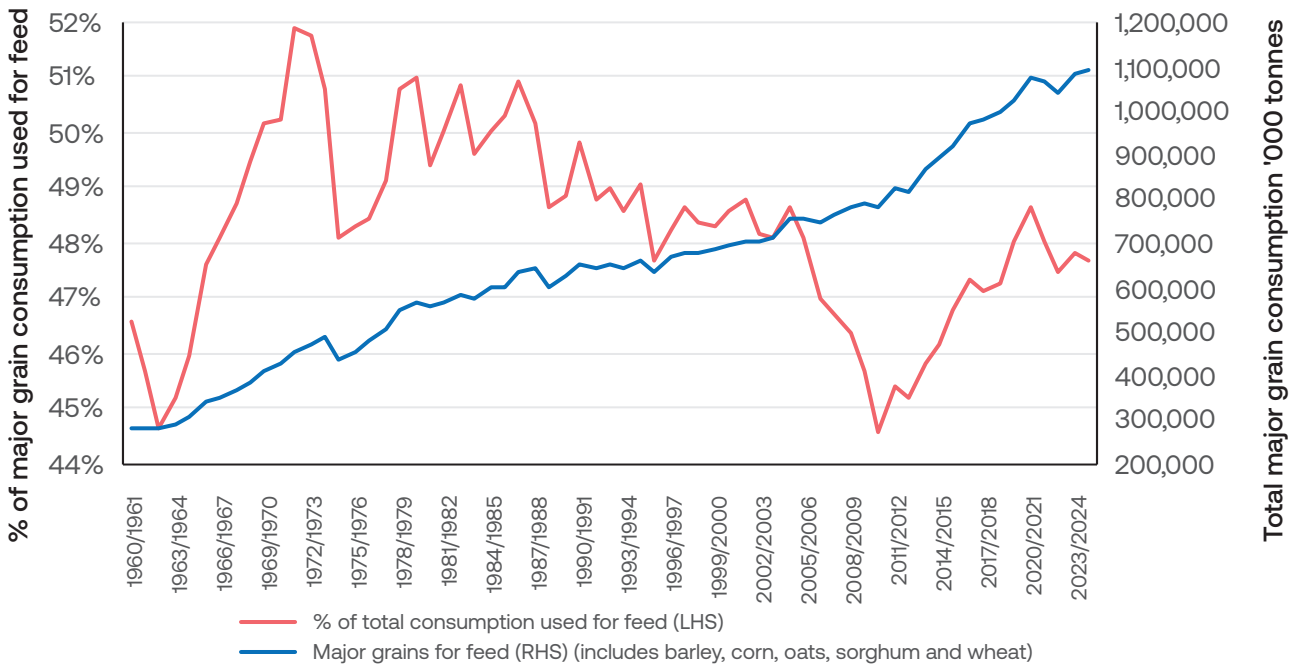
Geopolitical uncertainty continues to reshape global grain markets. The Ukraine conflict disrupted global wheat and corn supply chains, leading to price spikes and supply shortages. Meanwhile, ongoing trade tensions could cause major feed-importing countries to seek alternative sources, creating both risks and opportunities for exporters like Australia.

Feed is also usually the single largest cost in livestock production, sometimes accounting for 60 to 70 percent of total expenses. Price volatility in soybeans, corn and wheat makes long-term planning difficult for feed users, particularly in industries where margins are tight. Rising feed costs place significant financial pressure on livestock producers, making it harder to remain competitive.

Sustainability is another pressing issue. The expansion of soybean farming in the Amazon has been linked to deforestation, increasing pressure on the industry to adopt more responsible sourcing practices. Consumer expectations around ethical and sustainable meat production are also growing, forcing producers to rethink their supply chains.

Over the past two decades, feed has also found itself in competition with biofuels, particularly for grain supplies. Notably, in the initial surge of biofuel production around the early 2000s, the percentage of total major grains used for feed fell reasonably sharply, although a subsequent growth in grain production and expansion of feedlots contributed to this climbing again.

Major grains - global feed usage vs feed as % of total usage 1960/61 - 2024/25



Source: USDA, ANZ

The future of animal feed: what's next?

Despite these challenges, the feed industry is evolving rapidly, with new technologies and alternative feed sources reshaping the sector. The use of alternative proteins, including insects, algae and lab-grown feed ingredients, is expected to expand as companies look for more sustainable options. AI-powered precision feeding is helping farmers optimise livestock nutrition, reducing waste and improving efficiency. Sustainable sourcing is becoming a business necessity, with companies investing in carbon-neutral supply chains and regenerative farming practices.

Aquaculture, in particular, is emerging as a major driver of change, with increasing demand for plant-based fish meal alternatives and more efficient feed formulations to reduce reliance on wild-caught fish. Innovations such as bioengineered feed ingredients and tailored nutrition strategies are likely to play a growing role in the future of livestock and aquaculture feed.

> At its core, animal feed is not just about ensuring livestock are well-fed - it is a fundamental part of the food supply chain that affects global sustainability, economic stability and the future of agriculture.

As consumer preferences evolve and environmental pressures mount, the industry will continue to adapt. And as the next generation of feed innovations takes hold, the ingredients behind what we eat will keep evolving - whether that means farmed salmon thriving on insect protein or Wagyu cattle raised on algae.

Food security in 2025: navigating self-sufficiency and global trade

Why food security matters more than ever

Did you know that despite being one of the world's largest dairy exporters, Australia imported around $1.3 billion worth of dairy products last year? Or that despite having a strong livestock industry, nearly half of the pig meat Australians eat is imported – mostly from the US? These aren't just quirks of trade. They highlight a broader reality – food security isn't just about what a country produces, but whether it can reliably access the food its population needs.

To different degrees, food security is a challenge for every country. Some nations focus on self-sufficiency, producing as much food as possible within their borders. Others, like Australia, embrace global trade, exporting major commodities while relying on imports for food variety and efficiency. But in 2025, governments are re-evaluating these models. Geopolitical tensions, supply chain disruptions and climate volatility have made access to food a bigger concern than ever.

The United Nations Food and Agriculture Organisation (FAO) ranks countries by their self-sufficiency ratio, listing Australia, New Zealand and Canada among the top six. But while these nations produce far more food than they consume, they still import large amounts of food products, from fresh fruit to processed goods. No country is truly self-sufficient. The real question is not just whether a nation produces enough food – but whether it has the right mix of domestic production, strategic reserves and trade relationships to withstand future disruptions.

Supply chain disruptions – whether caused by wars, pandemics, trade disputes, or extreme weather – can quickly turn food security from an economic challenge into a political crisis. The biggest challenge for many countries is finding the right balance between domestic food production, imports and long-term strategic planning to ensure stable food access in an increasingly unpredictable world.

Australia: a food exporter, but not self-sufficient in everything

Australia's reliance on food imports extends well beyond dairy and pig meat. Despite having a vast coastline, Australia imports around 65 percent of its seafood, with frozen fish fillets, prawns and canned tuna among the most commonly imported products. The bulk of these imports come from Thailand, China, Vietnam and New

Zealand, reflecting both price competitiveness and consumer demand for year-round availability.

Fresh produce is another area of selective dependency. While Australia is largely self-sufficient in bananas and pineapples, processed forms of these fruits — like canned or dried products — are regularly imported to supplement local supply. Stone fruits, such as cherries and peaches, are also imported during the off-season to maintain year-round availability. Vegetables like garlic, onions and frozen processed varieties feature prominently in Australia's import mix. Similarly, Australia's love of coffee requires large imports of coffee beans, primarily from Brazil, Vietnam and Colombia.

Beyond raw agricultural goods, Australia imports a wide range of processed and frozen foods. Packaged meals, confectionery, snack foods and bakery products make up a significant share of food imports, often driven by cost efficiencies in large-scale offshore manufacturing. Frozen convenience foods, including pre-packaged pizza, ready-made pasta dishes and frozen vegetables, are routinely sourced from the United States, New Zealand and Europe. Much of the frozen garlic bread served with pasta, for example, comes from Europe, while the instant noodles filling pantries across the country are overwhelmingly imported from Thailand, Indonesia and South Korea. Even Anzac biscuits, one of Australia's most iconic treats, are sometimes imported from New Zealand rather than baked domestically.

Beyond food itself, Australia is also heavily reliant on imports for inputs critical to food production, such as fuel, fertilisers and agrochemicals. In fact, over 90 percent of Australia's fertiliser supply is imported, with nitrogen-based products sourced mainly from the Middle East and China. This means that disruptions in global trade, rising energy prices or political instability in supplier nations could threaten Australia's ability to maintain its agricultural output.

How the world is approaching food security

Different nations take different approaches to food security, shaped by geography, policy and economic priorities. Some prioritise self-sufficiency, heavily subsidising domestic production and stockpiling major commodities like wheat, corn and frozen meat. Others focus on trade and import security, ensuring stable access to food by diversifying suppliers and building strategic reserves. Many nations mix both approaches to reduce risk.

China and India, for example, aspire to self-sufficiency in staple grains like wheat and rice but rely on imports for soybeans, dairy and meat. Japan and South Korea secure food through long-term trade agreements rather than large-scale domestic production. Meanwhile, the Middle East, where agricultural production is limited, has invested in overseas farmland and cold chain logistics to ensure food supply stability. In recent years, Middle Eastern governments have made material investments in global agricultural trading companies to shore up supply – acquiring stakes in logistics networks, grain terminals and vertically integrated agri-exporters.

Each approach has trade-offs. Prioritising self-sufficiency can drive up food prices and lead to inefficiencies. High reliance on trade can leave countries exposed to supply chain disruptions. Many governments also impose tariffs on key imports to protect local producers, but these policies can increase food costs for consumers. Finding the right balance between domestic production, trade relationships and strategic reserves has become an increasing focus for governments worldwide.

Protectionism vs efficiency: the self-sufficiency trade-off

Governments employ a range of policies to secure their food supply, but every choice comes with a cost. Some protect local farmers with tariffs, subsidies and stockpiling, but these measures often make food more expensive and distort markets. Others, like Australia, prioritise market-driven efficiency, benefiting from global trade but risking supply chain disruptions.

Japan's heavy rice subsidies keep domestic production high, but they also inflate prices, making imported alternatives more attractive for consumers. India's minimum support price system ensures stable incomes for wheat and rice farmers, but it has led to massive stockpiles, some of which rot before reaching consumers. Meanwhile, Saudi Arabia and China maintain large food stockpiles, ensuring reserves during crises but at the cost of storage expenses and potential waste.

Australia, by contrast, takes a lean and efficient approach, relying on market forces to drive agricultural productivity and global competitiveness. This model has not only made it one of the world's leading agricultural exporters, but also resulted in having some of the world's most advanced farmers, given they have essentially no subsidies on which to rely. However,

it also means Australia does not prioritise food self-sufficiency beyond key essentials, leaving it exposed to disruptions in critical imports like fertilisers, fuel and processed foods.

Where to from here?

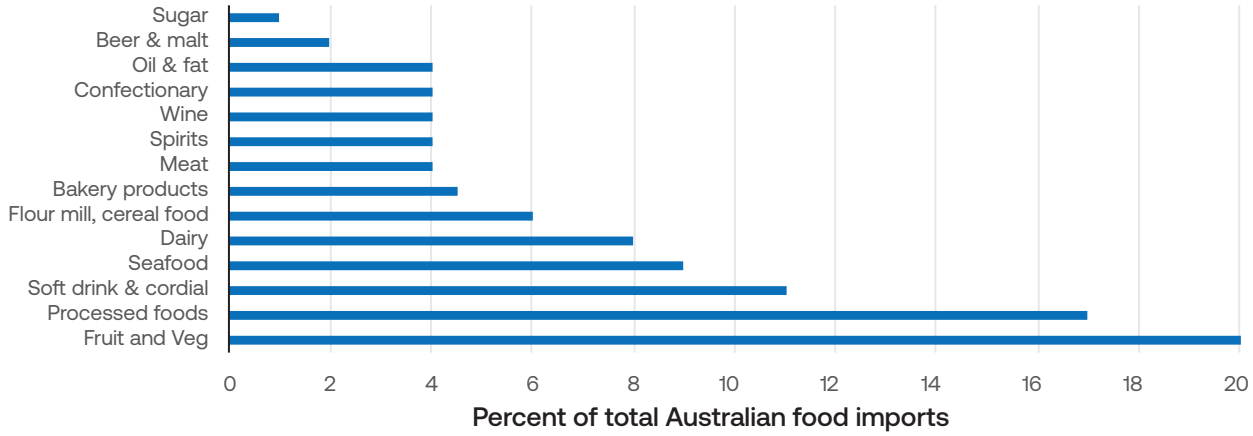
Food security in 2025 isn't just about growing enough food – it's about guaranteeing access despite a world of disruptions. Governments are intervening more, stockpiling essentials, tweaking trade policies and securing supply chains to prevent future crises. Competition for imports is heating up, making food exporters who can be trusted more valuable than ever.

Meanwhile, how food is produced is rapidly evolving. From lab-grown meat to drought-resistant crops, investment in food innovation is surging. Sustainability is also becoming a strategic concern – countries want carbon-neutral supply chains and ethically sourced food, not just for climate reasons, but to avoid trade restrictions and consumer backlash.

For Australia, the challenge isn't growing food – it's ensuring its open-market model keeps working. If more nations turn inward, stockpile resources, or tighten trade policies, Australia's reliance on global supply chains could be tested. As a result, there are growing calls for Australia's food security planning to be more closely aligned with national defence strategy – ensuring that in times of geopolitical disruption or conflict, core agricultural production and supply systems are protected.

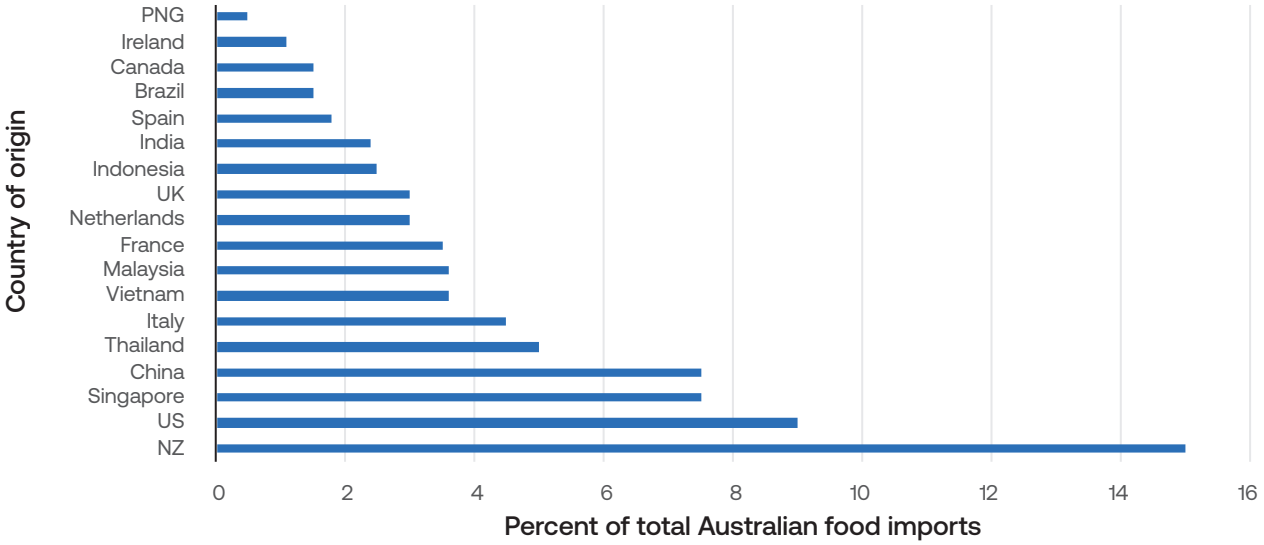
In this shifting landscape, those who can offer reliability, efficiency and innovation will lead the future of food security.

Main Australian food imports - share of total 2022/23



Source: Department of Agriculture, Fisheries and Forestry (Imported Food Inspection Data), ANZ

Sources of Australian food imports - share of total 2022/23



Source: Department of Agriculture, Fisheries and Forestry (Imported Food Inspection Data), ANZ

Legal disclaimer

This publication is published by Australia and New Zealand Banking Group Limited ABN 11 005 357 522, which holds an Australian Financial Services licence no. 234527 ("ANZBGL"). This publication is intended as thought-leadership material. It is not published with the intention of providing any direct or indirect recommendations relating to any financial product, asset class or trading strategy. The information in this publication is not intended to influence any person to make a decision in relation to a financial product or class of financial products. It is general in nature and does not take account of the circumstances of any individual or class of individuals. Nothing in this publication constitutes a recommendation, solicitation or offer by ANZBGL or its branches or subsidiaries (collectively "ANZ") to you to acquire a product or service, or an offer by ANZ to provide you with other products or services. All information contained in this publication is based on information available at the time of publication. While this publication has been prepared in good faith, no representation, warranty, assurance or undertaking is or will be made, and no responsibility or liability is or will be accepted by ANZ in relation to the accuracy or completeness of this publication or the use of information contained in this publication. ANZ does not provide any financial, investment, legal or taxation advice in connection with this publication. ANZ Group expressly disclaims any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense (**Liability**) arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise (including infringement of any third party rights) out of or in connection with this document and your use of it to the extent permissible under relevant law. The contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

Japan, Malaysia, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.

Hong Kong. This document is issued or distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this document have not been reviewed by any regulatory authority in Hong Kong. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

India. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (ANZ China). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. So, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC.

Singapore. To the extent that this document contains any statements of opinion and/or recommendations related to an investment product or class of investment product (as defined in the Financial Advisers Act 2001), this document is distributed in Singapore by ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act 2001 of Singapore). ANZ is licensed in Singapore under the Banking Act 1970 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act 2001 of Singapore. In respect of any matters arising from, or in connection with, the distribution of this document in Singapore, please speak to your usual ANZ contact in Singapore.

United Kingdom. This document is distributed in the United Kingdom by Australia and New Zealand Banking Group Limited (ANZ) solely for the information of persons who would come within the Financial Conduct Authority (FCA) definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the Prudential Regulation Authority (PRA) and the FCA. ANZ considers this document to constitute an Acceptable Minor Non-Monetary Benefits (AMNMB) under the relevant inducement rules of the FCA. ANZ is authorised in the United Kingdom by the PRA and is subject to regulation by the FCA and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request.

United States. Except where this is a FX-related document, this document is distributed in the United States by ANZ Securities, Inc. (ANZ SI) which is a member of the Financial Regulatory Authority (FINRA) (www.finra.org) and registered with the SEC. ANZSI's address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). ANZSI accepts responsibility for its content. Information on any securities referred to in this document may be obtained from ANZSI upon request. This document or material is intended for institutional use only – not retail. If you are an institutional customer wishing to effect transactions in any securities referred to in this document you must contact ANZSI, not its affiliates. ANZSI is authorised as a broker-dealer only for institutional customers, not for US Persons (as "US person" is defined in Regulation S under the US Securities Act of 1933, as amended) who are individuals. If you have registered to use our website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use our website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way. Non-U.S. analysts may not be associated persons of ANZSI and therefore may not be subject to FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts. Where this is a FX-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 916 0 Fax: +1 212 801 9163).

Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ.

Contacts

Sara McCluskey
Head of Diversified Industries - Institutional
sara.mccluskey@anz.com

Sherrie Banks
Head of Food, Beverage and Agribusiness International - Institutional
sherrie.banks@anz.com

Matthew Mann
Director - Research & Analysis
Food, Beverage and Agribusiness - Institutional
matthew.mann@anz.com

Gerry Karam
Head of Food, Beverage and Agribusiness - Institutional
gerius.karam@anz.com

Michael Whitehead
Executive Director - Food, Beverage and Agribusiness Insights - Institutional
michael.whitehead@anz.com

Preeti Rani
Associate - Institutional Client Insights & Solutions
preeti.rani@anz.com

anz.com