



FARMANCO

FARMANCO Facts

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Sharon Watt, 2025, Sheep

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MESSAGE FROM THE CEO

Amanda Bogunovich

Welcome to the 2025 Agribusiness edition of Farmanco Facts. This annual publication brings together articles published throughout the year and highlights key insights and practical strategies to help agribusinesses thrive in a dynamic environment.

Our consultants and team members continue to be excited to work with the farming community and industry across Australia to help drive profitability and tackle the challenges of running large rural businesses. The landscape continues to change with high input costs and rising land values, and we're committed to helping our clients navigate these pressures with confidence. Artificial Intelligence will bring numerous opportunities for industry and growers, from improved decision-making to operational efficiencies, but is likely to cause potential challenges for the rural workforce. At Farmanco, we believe it is critical to stay ahead of these developments so we can help manage both the opportunities and the risks as they arise.

It's been over a year since we moved into our Rivervale head office in Perth, and the location has proven to be a great decision with clients and industry able to meet in a central location while taking care of business in the city. Our team continues to grow too! Kate Witham recently joined Farmanco as Project Consultant, and we're excited about the fresh perspective, research agronomy experience and energy that she brings. Giles McMeiken also joined the team earlier this year as an


Agronomy Consultant and Precision Ag Specialist based in Perth, mainly servicing the York to Williams region and a bit further south as well as continuing to support growers in the Esperance region.

Farmanco continues to be strategic by choosing to align with projects that genuinely support the decisions our clients make, ensuring every initiative adds real value to their businesses and the wider industry.

One of the highlights this year was a series of carbon workshops presented by our ground facing management consultants and project team. With funding support from the Commonwealth of Australia via the Department of Climate, Change, Energy (DCCEEW) through the Carbon Outreach Program (COP) and lead by the Grower Group Alliance (GGA), this project provided Farmanco with the opportunity to use benchmarking data for farm production and emissions. Helping clients understand their carbon footprint and identify opportunities for improvement.

We believe our benchmarking capability is unique in the industry, and it positions us well to deliver high-quality project work.

I hope you enjoy the selection of articles curated for you in this special Agribusiness edition of Farmanco Facts.

To access the latest edition of Farmanco Facts subscribe to monthly emails via the Farmanco website or call our Rivervale office on (08) 9295 0940. 



WHAT MAKES A TOP PERFORMING BUSINESS

Written by [Rob Sands](#), Reviewed by [Eric Nankivell](#)

We have used the numbers from the 2025 Profit Series (currently being compiled) to look at what makes a top performing business. We have focused on the Medium Rainfall Zone (MRZ) and used the numbers for this zone. However, most conclusions drawn will also apply to crop dominant businesses in the Low and High Rainfall Zones (LRZ / HRZ).

The TOP 25% has been determined by ranking on their five year average Return on Assets Managed (ROAM) — as a percentage of Productive Assets (Land – Owned and Leased or Sharefarmed; Infrastructure; Livestock and Machinery). The return is the Operating Profit (earnings before Interest, Lease and Sharefarm Costs, and Tax).

KEY POINTS

Top Performers —

- Understand the profit drivers of their farming system which increases their WUE.
- They are uncompromising on getting the right timing, rate, and product for every situation.
- They get the job done more quickly, more efficiently, and at a lower cost.
- They keep a tight control on all costs.
- They own and lease more land.
- They buy land on performance and don't focus on rainfall alone.
- Adapt to changes rapidly.
- Pay for advice, then act decisively.
- Accumulate knowledge of their business and productive performance
- Understand logistics and that fewer enterprises mean fewer compromises.
- They keep it simple and do fewer things very well.

- Purchase the right machinery and carry out due diligence on reliability and total costs and negotiate hard on price.
- Employ the right people and look after them.

1. Top Performers Understand the Profit Drivers of their Farming System

The Top 25% performers understand that with the current climatic conditions and prices, cropping makes more money than livestock. Therefore, the Top 25% are crop dominant and don't compromise cropping operations to benefit the livestock enterprise (see **Table 1**).

They understand that scale will help lower the fixed costs of a business, which allows them to keep up with the latest technology in machinery. The Top 25% are expanding because they can extract higher margins which allows them to pay more for leases and more to purchase farmland (see **Table 1**).

Top Performers understand and implement strategies to achieve the best outcomes for the profit drivers, as described in **Table 2**. These strategies allow them to capture and store more pre-season rainfall, access deeper stored moisture, and make the most of the plant-available water to grow more grain (see **Figure 1**).

With higher WUE numbers they generate 27% more income with 12% less rain (see **Figure 2**).

Table 1: Top 25% versus the Rest in enterprise mix and scale.

	TOP 25%	The Rest
Cropping %	95%	79%
Effective Area Farmed	6,750	3,830

Table 2: Crop Profit Drivers

Crop Profit Drivers		
Increase Soil PAWC	Lime, Gypsum, Deep Ripping, Spading, Clayng	Maintain with CTF
Increase Stored Moisture	Stubble Retention, Min Till	Early spraying of weeds
Adapted Varieties and Stronger Plants	Balanced Nutrition, Control Root & Leaf Diseases and Insects	Higher NUE – with VRT Effective Rotations

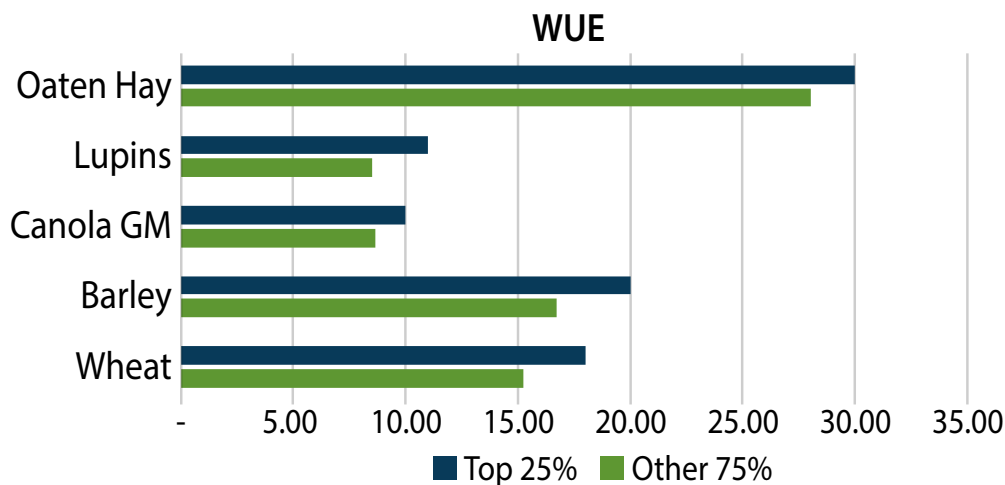


Figure 1: Top 25% versus the Rest in water use efficiency across major crops grown.

2. Top Performers are uncompromising on getting the Right Timing, Rate and Product for every situation

Nothing is allowed to get between a top farmer and their priority operation.

Top farmers don't take the easy option and "Recipe Farm".

They match the crop and pasture requirements with the most cost-effective product.

They are prepared to be wrong sometimes rather than always apply a prophylactic application, but they will act quickly if action is needed.

These decisions and attitudes result in a 6% saving in costs as a percentage of income and have a 16% lower cost of inputs than the rest (see Figure 3). This shows the benefit of maximising the potential impact of all applications.

3. Top Performers get the job done more quickly, more efficiently, and at a lower cost

The total cost of all machinery operations for a cropping enterprise is a significant portion of your total costs. A focus on reducing these costs as a percentage of Income is an important focus.

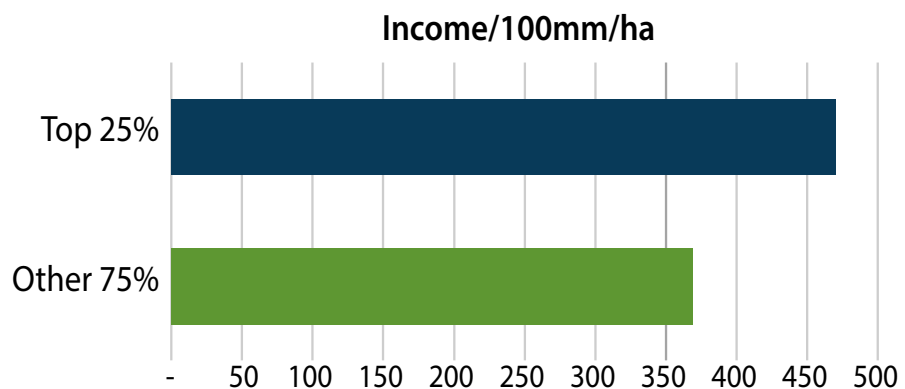


Figure 2: Top 25% versus the Rest in gross farm receipts per 100mm/hectare.

Top Performers:

- understand logistics
- keep it simple and do fewer things very well
- fewer enterprises mean fewer compromises
- purchase the right machinery
- do due diligence on reliability and total costs and negotiate hard on price; and
- employ the right people and look after them.

The Top 25% are always looking for more efficient ways to conduct machinery operations. They are



aware that investment into machinery or technology that will increase productivity, lower labour costs, improve timeliness, or improve efficiency of inputs will also reduce CPML costs as a percentage of Income (see **Figure 4**).

These decisions and attitudes result in a 5% saving in costs as a percentage of income with 16% lower CPML costs than the rest.

It is worth noting that this saving in CPML costs has not been achieved by spending less on machinery as **Figure 5** shows, with the top 25% spending slightly more than the rest.

4. Top Performers are tight on costs

They farm more land but don't spend any more than they need to on fixed costs.

They don't get comfortable and maintain their vigilance by paying less for the best service. They actively use negotiation and competition to drive down costs.

Top performers spend 2.7% less of their income on these costs (see **Figure 6**) and spend 27% less than the rest on these business costs.

5. Top Performers Own and Lease more Land

They understand the need for scale to spread costs over more hectares and to be able to afford the latest technology. They farm 70% more than their peers through owning and leasing more land (see **Figure 7**).

Remember that the ranking of the Top 25% on ROAM includes the market value of leased and sharefarmed land.

Inputs as a % of Income

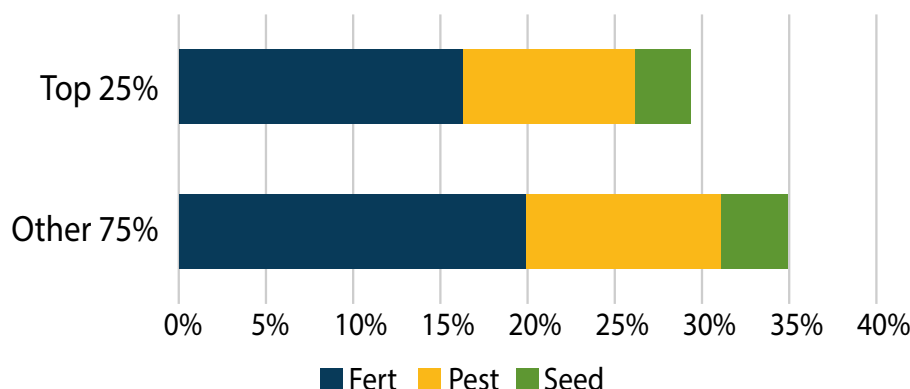


Figure 3: Top 25% versus the Rest in the percentage of receipts spent on fertiliser, pesticides and seed inputs (includes treatment and EPR).

CPML as a % of Income

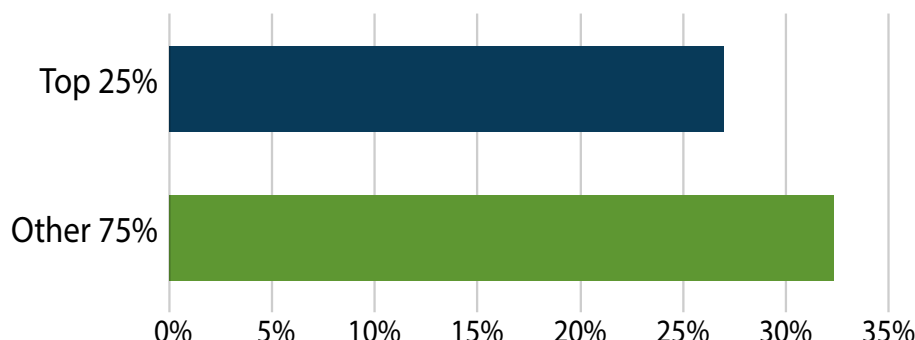


Figure 4: Top 25% versus the Rest in CPML percentage of Income. CPML includes Total Plant, Machinery, Labour, and Contract Costs.

Machinery Capital % of Income

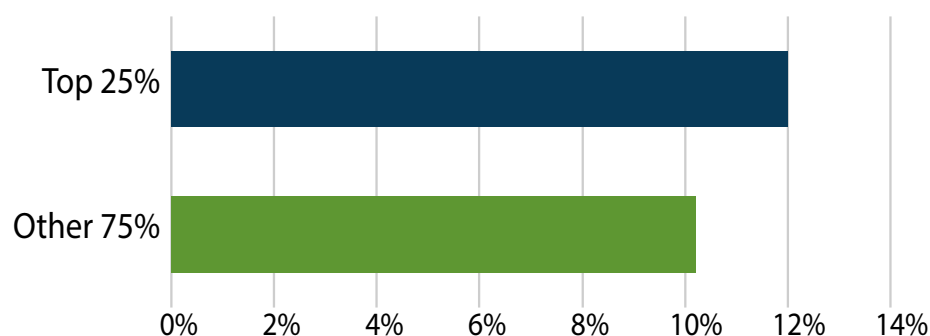


Figure 5: Top 25% versus the Rest in the machinery capital spend as a percentage of income.

6. Top Performers buy Land on Performance and Don't Focus on Rainfall Alone.

Top performers actively seek out potential land purchases or leases of productive land with good long-term potential, at times when the market is not overheated.

- They purchase the land with the best ROAM.
- They don't chase rainfall (see **Figure 8**).
- Soil type is key; and
- They understand that cheap land is cheap for a reason.

7. Top Performers Generate Close to Double the Operating Cash Surplus and Return on Assets Managed (ROAM) of the Rest.

Operating Cash Surplus is before the Interest and Lease or Sharefarm Costs. Therefore, these are the funds that can be used to buy farms, pay for leases, or invest off-farm.

The Top 25% are generating a surplus of 25% while the rest are generating a surplus of 14%.

The surplus after paying finance and lease or sharefarm costs is even more stark, with the

Overheads & Infrastructure as a % of Income

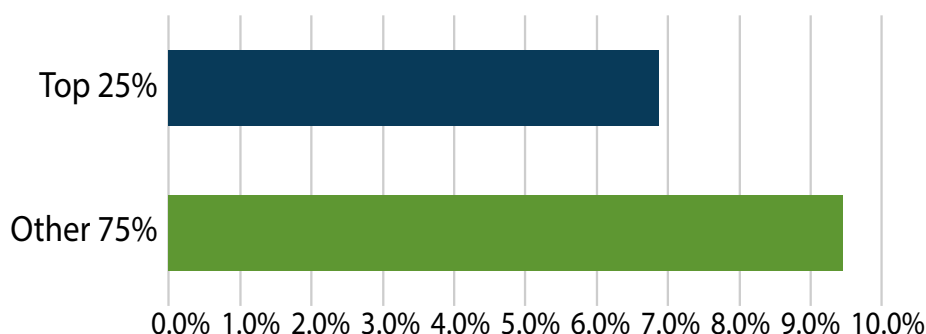


Figure 6: Top 25% spend less on overheads and infrastructure as a percentage of income.

Top 25% only paying 5% on finance and lease or sharefarm. Therefore, they have 20% to spend on debt reduction or to invest off farm. Meaning they will be in a better position to expand when the opportunity arises.

The rest are spending 9% on finance and lease or sharefarm and so only have 5% to spend on debt reduction or investing off farm (see **Figure 9**).

The Top 25% are generating double the ROAM percentage of the Rest, which is no surprise.

This ratio between the top 25% and the Rest has been around double for as long as I have been looking at farm benchmarking (see **Figure 10**).

Land Areas

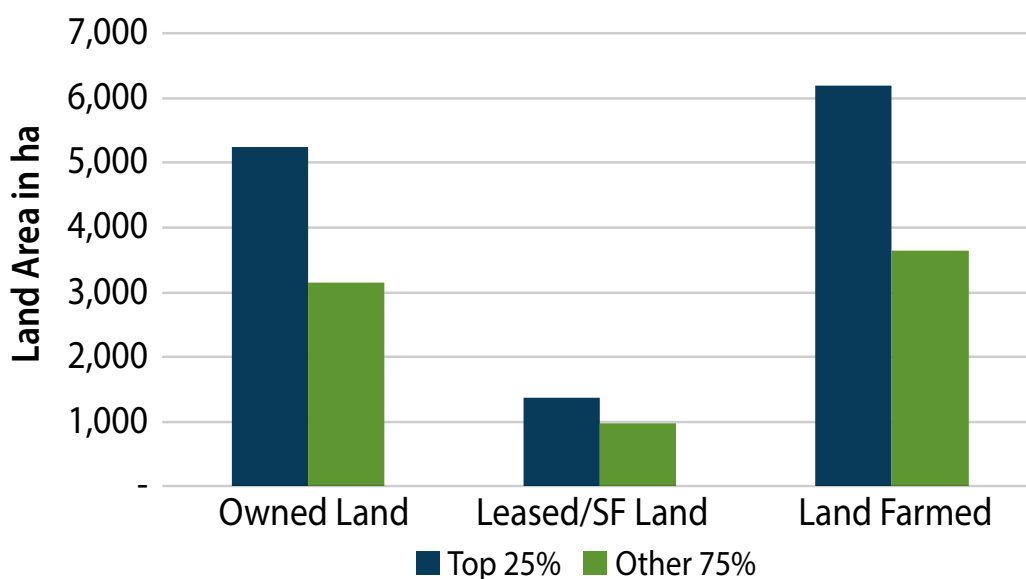


Figure 7: Top 25% versus the Rest in area farmed.

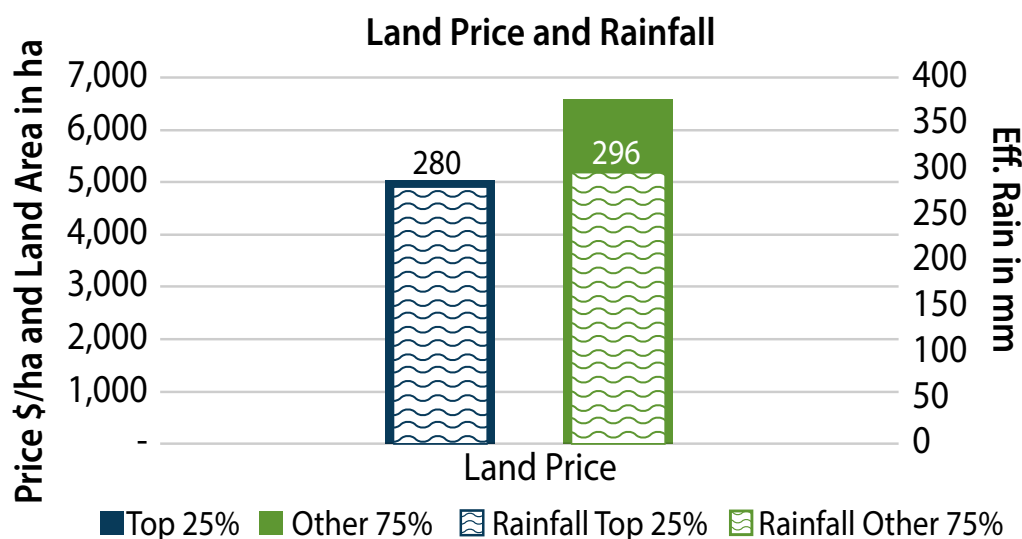


Figure 8: Top 25% versus the Rest in average land price and effective rainfall.

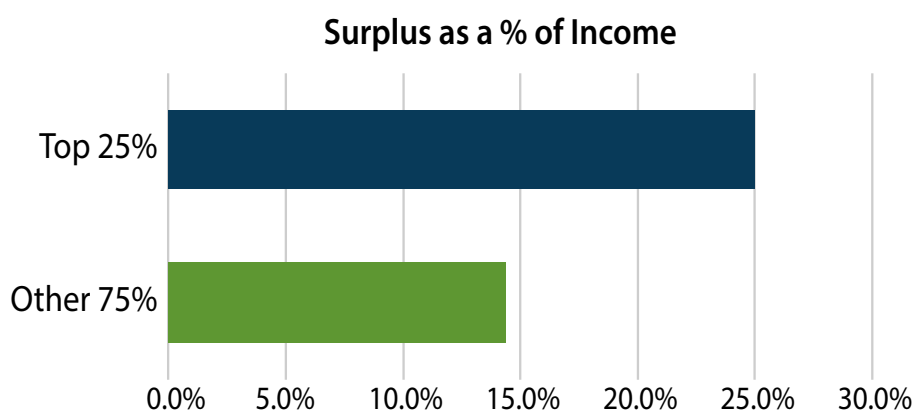


Figure 9: Top 25% versus the Rest for surplus as a percentage of income.

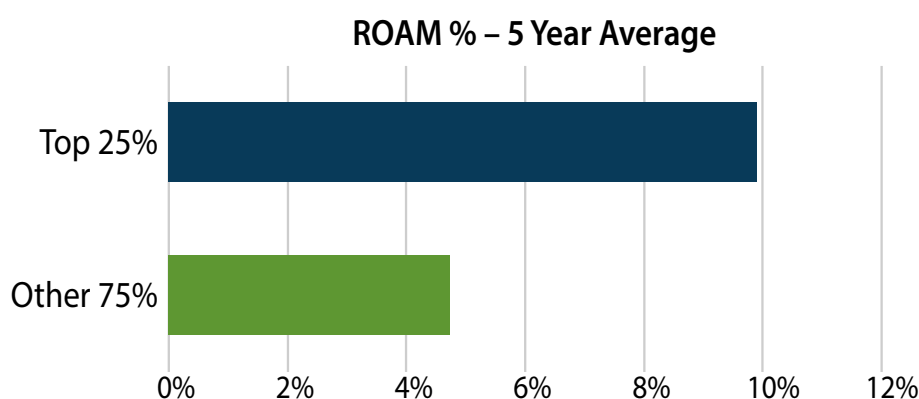


Figure 10: Top 25% versus the Rest for ROAM as a percentage of income.

LIVESTOCK CONTEXT

The key drivers here are predominantly crop focussed, given the predominance of crop in most businesses.

However, we note that more than half of the top 25% also have livestock in their business and a similar approach is required to achieve good outcomes in this part of their business.

These businesses necessarily work to reduce enterprise compromises and maximise returns from all enterprises.

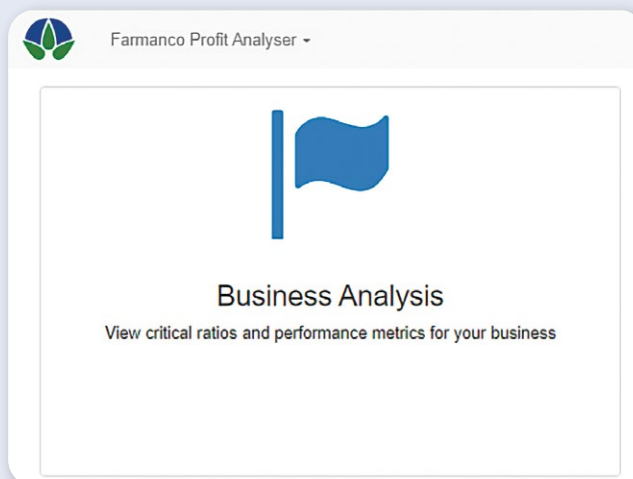
We should also note that this five-year period has generally been a much tougher one for livestock businesses.


While this might exacerbate the differences outlined in this article, it has not fundamentally changed the differences that have predominated since Farmanco's first benchmarking set, some 27 years ago.

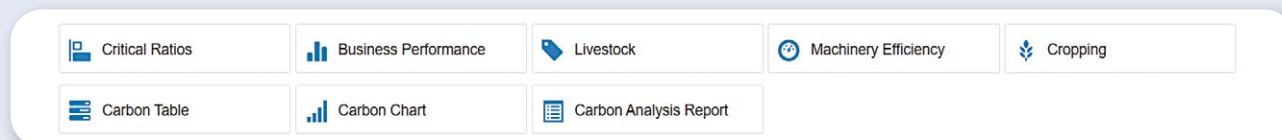


ACCESS PRELIMINARY BENCHMARK RESULTS

- For **subscribing clients**, the 2025 Profit Series preliminary benchmarking results can be viewed via the Profit Analyser platform.
- Note that averages (and your ranking) may change as we make final checks prior to printing of the publication.
- Go to <https://profit-analyser.aglytica.com/>. Login with your portal email address.
- Access preliminary tables and charts by clicking on the 'Business Analysis' tile.



- Once the page loads, click on 'Critical Ratios' to look at a series of charts for your business (compared to the benchmarks). The tables for each section can be found by clicking on the tiles (shown below). 



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PRECISION AGRICULTURE SOFTWARE IN AUSTRALIA: MAKING SENSE OF A COMPLEX LANDSCAPE

Written by [Giles McMeikan](#), Reviewed by [David Cameron](#)

INTRODUCTION

The last decade has seen enormous progress in the adoption of precision agriculture (PA) across Australian broadacre systems. From yield mapping and NDVI imagery to variable rate application and machine connectivity, the enabling technology has matured. What remains a sticking point for many growers and advisors, however, is the software layer—the systems that turn raw data into usable, actionable information.

While the hardware side of PA has consolidated into a handful of global machinery brands, the software landscape continues to evolve rapidly. Australian producers now have access to a range of platforms designed to manage data, generate prescription maps, integrate information across different machines, and connect on-farm activities to the cloud.

This article provides a practical overview of key software platforms (summary at **Table 1**) currently available to Australian growers, grouped by their primary role as **Enabling or Application** software. It also touches on emerging trends in connectivity and data sharing that are shaping how these tools fit together on-farm.

1. ENABLING SOFTWARE—TURNING INFORMATION INTO INSIGHT

These platforms focus on creating the foundation for precision decisions—analysing soil, yield, and remote-sensing data to define management zones and guide inputs.

PCT AgCloud

Established in 2001 as *Precision Cropping Technologies*, PCT AgCloud remains Australia's most comprehensive independent platform for managing precision-ag data. Its core strengths lie in **data cleaning, storage, and multi-layer analysis**, making it a mainstay among consultants and large growers.

Users can ingest yield data, EM and gamma surveys, soil tests and NDVI imagery to build robust management

zones and generate variable-rate prescriptions. PCT's mapping interface allows fine control and in-depth seasonal analysis.

The platform integrates with Agworld and major controller brands (MyJohnDeere, MyCNH), offering exports in standard formats recognizable by most controllers such as Shapefile. Local dealer networks in all cropping regions provide training and support. For growers managing multiple data layers or working with consultants, PCT AgCloud is a reliable, brand-neutral hub.

The interface also addresses a common concern among growers and precision agriculture providers—the ability to work collaboratively. Some desktop-based platforms can function as a “black box,” limiting grower involvement in the creation of prescriptions and their ability to monitor them throughout the season, whether scouting with an agronomist or when staff are performing operations such as spraying or spreading

SMS Advanced (Ag Leader)

Ag Leader's SMS Advanced software is one of the most established desktop analysis tools used by consultants worldwide. While a U.S. product, it has strong Australian adoption through local dealers. SMS Advanced provides comprehensive tools for **multi year data analysis**, yield comparison, NDVI import and analysis, and profit and loss mapping.

Users can layer multiple seasons of data to identify trends, apply statistical filters, and design management zones using soil and yield relationships. The software supports a wide array of import formats and exports directly to most display types. It also possesses the unique capacity to export monitor or controller setup files in many formats.

SMS Advanced operates on a perpetual licence with optional cloud features via AgFiniti. Its strength is the depth of analytical capability and independence from any machinery brand—a key benefit for growers or consultants managing mixed fleets.



DataFarming

Since its launch in 2017, Queensland-based DataFarming has captured a substantial share of the Australian market by focusing on accessibility and simplicity. The company estimates that more than 40 per cent of Australian farms have used its tools, largely driven by its **freemium model** and easy-to-use web interface.

The *Digital Agronomist* suite includes free satellite NDVI imagery updated every five days, with paid upgrades for higher-resolution analytics, yield zone creation, and prescription mapping. The workflow from imagery to variable-rate map can be completed in minutes, making it ideal for advisors or growers seeking fast, visually driven decisions.

It has also recently added the ability to dry hire its RapidEM™ technology. This electromagnetic survey tool can be attached to your own vehicle to survey farms for a fraction of the cost of traditional soil surveys. Data processing is automated back into the platform.

DataFarming's strengths lie in rapid adoption and low entry barriers. It has positioned itself as an "on-ramp" to precision agriculture for growers new to spatial data. The platform exports to most common file formats and connects via APIs to other cloud systems. Continued development is focusing on sustainability reporting and carbon mapping capabilities, reflecting grower demand for environmental benchmarking.

Spectare (VRT Solutions)

Western Australian company VRT Solutions has been conducting soil and sensor-based mapping for more than a decade. Its in-house software **Spectare** provides growers and consultants with a clean visualisation and analysis interface for electromagnetic (EM) and gamma radiometric survey data.

Spectare specialises in **zone creation and data layering**, allowing soil constraints, elevation, and crop performance to be combined into management zones. The software's emphasis on soil-driven decision-making makes it particularly relevant for the Western Australian wheatbelt, where variability in subsoil constraints often limits yield. It also provides **unique functionality**, such as easy access to geolocated soil core photos linked to sample sites.

This accessibility makes Spectare a valuable tool for growers and their agronomists to **quickly access and interpret field data**, helping them identify trends or diagnose in season crop issues. Spectare represents an important local innovation—a purpose built platform that brings high-resolution survey data into day-to-day agronomy workflows without the complexity of larger international systems.

2. APPLICATION SOFTWARE – TURNING PLANS INTO ACTION

These systems sit closer to the operational end of precision agriculture, managing the creation and execution of variable-rate maps and facilitating real-time decision-making in the paddock.

MyJohnDeere Operations Center + TELUS Prescription Creator

John Deere's Operations Center has become the backbone of the company's connected farm strategy, linking machinery, agronomic data, and advisory partners. Within the platform, the **TELUS Agronomy Prescription Creator** (formerly Agrian) enables users to design and send variable-rate prescriptions directly to compatible equipment.

While naturally optimised for John Deere machines, Operations Center also imports yield and boundary data from other brands via standard formats. The system automatically syncs machine data through JDLink and provides a clear visual record of completed field work, input usage, and machine performance.

The key advantage for growers already using Deere machinery is **integration and automation**—prescriptions can be transmitted wirelessly to field displays without manual file handling. For advisers, partner access permissions make collaboration straightforward while maintaining data security.

FieldOps (Case IH / New Holland)

Launched in 2024, FieldOps is CNH's unified web and mobile application for Case IH and New Holland customers. It brings together agronomic insights, machine telematics, and fleet management under one interface.

Unlike earlier manufacturer platforms, FieldOps is designed with **mixed-fleet compatibility** in mind, acknowledging the reality that most Australian farms operate equipment from several brands. It integrates with over 40 partner APIs globally and offers cloud data sharing with popular agronomy platforms.

Key features include automatic task recording, machine monitoring, and prescription upload. New CNH machines come with "Connectivity Included," meaning no additional subscription is required for base connectivity services. For growers operating red or blue equipment, FieldOps represents a long-awaited improvement in user experience and data accessibility.

Climate FieldView

Originally developed by The Climate Corporation (a Bayer subsidiary), FieldView has become one of the world's most widely adopted digital farming platforms, and its Australian user base continues to grow.



The system acts as a **hybrid between operations management and analytics**, combining in-field data capture with powerful cloud visualisation.

FieldView connects to almost any machinery brand using its **Drive plug-in module**, which streams live machine data—such as seeding, spraying, and yield—via Bluetooth directly to an iPad connected to the cloud. This makes it a practical option for growers running **mixed fleets** who want Deere-style automatic data logging without being tied to a single manufacturer.

The web dashboard and mobile app allow real-time mapping of operations, simple yield layer comparison, and annotation of field observations. Variable-rate prescriptions can be uploaded and exported in standard formats, and the platform's **API ecosystem** connects with other agronomic tools for zone creation or analysis.

While FieldView is subscription-based (with an annual fee per account), its ease of setup and near-universal compatibility make it a popular choice for growers or advisers looking to **centralise data capture and reporting across multiple brands of equipment**.

3. CONNECTIVITY OPTIONS – GETTING DATA TO WHERE IT MATTERS








Precision-ag software depends on reliable connectivity to synchronise data between machines, offices, and cloud servers. The available options vary across Australian regions:

- **Broadband / NBN:** Ideal for office-based analytics and uploading large yield datasets.
- **4G and 5G cellular:** Support real-time data exchange for in-field apps, machine monitoring, and cloud syncs.
- **LoRaWAN:** Used for low-power, long-range on-farm sensor networks such as soil moisture probes and weather stations.
- **Satellite connectivity:** Rapidly improving, with emerging services (e.g. Starlink) offering affordable solutions for remote or low-coverage areas.

The reality for many growers is a hybrid model: office broadband combined with cellular or satellite for mobile devices and machine connectivity. Each of the major platforms profiled here can operate offline when needed, with automatic data synchronisation once a connection is re-established.

4. PLATFORM COMPARISON SUMMARY

Table 1: Platform Comparison Summary

Platform	Developer / Company	Primary Function	Key Features	Integration / Ecosystem	Pricing / Access	Notes for Growers
	Precision Cropping Technologies (NSW)	Data management & analysis	Data cleaning, multi-layer mapping, VR creation	Links to Agworld, MyJohnDeere, MyCNH	Subscription (c/ha) / dealer-supported	Independent, consultant-friendly; strong AU dealer support
	DataFarming (Qld)	Remote-sensing analysis	NDVI imagery, zoning, quick VR maps	API connections to major platforms	Freemium + paid upgrades	Low-barrier entry; evolving sustainability tools
	VRT Solutions (WA)	Soil survey analysis & visualisation	EM / gamma integration, zone creation	Export in Shapefile format	Dealer / consultant access	Soil-driven focus; strong in WA contexts
	Ag Leader (USA / AU dealers)	Advanced desktop analysis & data management	Multi-year averaging, NDVI & profit maps, VRA creation	Works with most controllers	Perpetual licence	Deep analytical capability; brand-neutral
	John Deere + TELUS Ag Solutions	Cloud-based operations management	Live machine data, prescription creation, wireless sync	JDLink & third-party APIs	Free tier + partner modules	Can be integrated with other machinery via bridges; efficient data flow
	CNH Industrial (Case IH / New Holland)	Fleet & agronomy integration	Machine monitoring, task recording, prescription upload	40 + API partners	Included with new machines	Mixed-fleet friendly; strong mobile interface
	The Climate Corporation (Bayer)	Machine data capture + analytics	Plug-in Drive module for any brand, real-time maps, VRA support	Broad API ecosystem; links with major controllers and apps	Annual subscription	Mixed-fleet data capture without OEM lock-in; user-friendly mobile tools



5. MATCHING SOFTWARE TO FARMING GOALS

Choosing precision-ag software should start with identifying the **job you need to get done**, not the brand of tractor in the shed. While all platforms promise integration and analytics, their strengths differ.

- **For multi-layer analysis and consulting workflows:** PCT AgCloud and SMS Advanced offer the depth of tools needed to interrogate data and build detailed prescriptions.
- **For quick, visual zone mapping and monitoring:** DataFarming provides the easiest entry point, especially for farms just beginning to work with NDVI imagery.
- **For soil-driven management:** Spectare adds local capability by turning EM and gamma data into actionable layers.
- **For seamless machine integration:** MyJohnDeere Operations Center, FieldOps, and Climate FieldView deliver direct connectivity and operational insights across fleets.

The best outcomes often come from **combining platforms**—for example, using DataFarming imagery to create zones, or analytics in PCT AgCloud, and then pushing prescriptions to Operations Center or FieldOps for application.

6. LOOKING AHEAD

As precision agriculture continues to evolve, the line between enabling, application, and integration software is blurring. Cloud computing and open-API development are allowing data to move more freely, and grower expectations for seamless interoperability are rising.

Emerging opportunities include:

- **Automated analytics** that identify anomalies or trends across years of yield and soil data.
- **Sustainability reporting tools** aligned with supply-chain requirements.
- **Simplified data governance frameworks** that ensure data ownership stays with the farmer while improving compatibility between systems.

The challenge for the industry—and the opportunity for service providers—is to make these digital ecosystems as intuitive as the machinery that operates them. The focus should remain on helping growers turn data into decisions that deliver both profit and resilience.

CONCLUSION

Precision agriculture software has matured from niche tools for early adopters into mainstream management systems that underpin modern farm decisions. The platforms profiled here represent the core options available to Australian growers today—each suited to different scales, expertise levels, and operational goals.

For most businesses, success will come not from choosing a single system, but from building a **fit-for-purpose stack** of software that integrates data, supports sound agronomy, and fits the way the business works.

Industry members such as Farmanco and SPAA will continue to track developments in this space, helping members stay informed as new tools, integrations, and data-sharing standards emerge. 🌱

TILE DRAINAGE: MANAGING WATERLOGGING FOR PRODUCTIVITY

Written by [Greg Easton](#), Reviewed by [Mike Monaghan](#)

KEY POINTS

- Diagnose in wet conditions; install drains when dry.
- Always check the outfall before construction.
- Drain both the landscape and the soil.
- Undertake installation in stages.

- Ensure compliance with local, state, and federal environmental regulations.

It's not often that an agricultural investment delivers a one-year payback. During a Farmanco management and agronomy professional development tour of Esperance, we visited a site where subsoil drainage had been installed—with remarkable results.



Figure 1: Drainage in Operation.



Figure 2: Mole Drain.

Subsoil drainage, often called tile drainage, gets its name from the clay or concrete tiles once used to form underground pipelines before the 1970s. Today, modern systems use slotted plastic pipes to move excess water below the soil surface.

At the Esperance site, the cost of installation was recovered within the first year thanks to significantly improved canola yields—an outstanding outcome.

Further investigation revealed a GRDC-funded South Coast NRM trial that evaluated subsoil drainage over three years. The study confirmed that subsurface drains can provide a cost effective method for growers to manage soils prone to waterlogging, in the Esperance region of Western Australia.

The research found:

Breakeven time:	9 to 12 years.
Net present value:	\$2,000 to \$2,500 per hectare.
Return on investment:	31 to 68%.
Internal rate of return:	12 to 16%, well above current interest rates.

Two key factors determine the performance of a drainage system:

1. Water movement through the soil into the pipes (Drainage Intensity); and
2. Water movement through the pipe network (Drainage Coefficient).

Drainage intensity varies with soil type—faster in sandy soils and slower in clays. Sandy soils can drain larger areas effectively, while clay soils may require closely spaced drains or a combination of tile and mole drains (see **Figure 1**) to achieve results.

In heavy clay soils, the theoretical spacing for efficient drainage is often so narrow that it becomes uneconomic. Pairing tile drainage with mole drains can improve cost-effectiveness in these conditions.

When constructing a drainage system, always start at the lowest point—the outfall. This ensures an even gradient and reliable flow through the system. The outfall must remain clear and functional, as any collapse, blockage, or damage can compromise the entire drainage network.

Regular inspection and maintenance of the outfall are critical to protect your investment.

Caution is required in sodic soils, where dispersed clay particles can block soil pores and reduce infiltration and drainage. These particles are also highly susceptible to erosion, which can undermine the performance of the drainage system.

The Drainage Coefficient defines the system's ability to move water and depends on:

- Pipe size and slope.
- Drain spacing and depth; and
- Soil type and rainfall intensity.

A well-designed drainage system should have a capacity equal to or greater than the expected water removal needs.

Tile drainage can deliver substantial productivity and financial returns—but only when carefully designed, installed, and maintained. Understanding how water moves through your soil and landscape, combined with good planning and regular upkeep, will ensure long-term success. 🌱



IS LAND VALUE TOO HIGH TO MAKE PURCHASING VIABLE?

By [Ben Curtis](#), reviewed by [Greg Easton](#)

KEY POINTS:

- Land values have increased by more than 10% per annum over the last 20 years.
- Land values are expected to continue to grow.
- High rainfall farms generally grow in value at a faster rate than lower rainfall farms.
- Productive agricultural land is expected to continue to be in high demand in the future.
- Higher interest rates have made it harder to justify purchasing land for many growers.

INTRODUCTION

With the rapid increase in land prices, many growers are starting to question how sustainable these increases are and indeed if there is any sense in paying these high prices. At current interest rates most land cannot generate enough profit to pay the interest bill if all the funds for the purchase are borrowed. So why buy farming land?

DEMAND FOR LAND REMAINS HIGH

The fundamentals for agriculture are still strong. The demand for land remains high. The supply of agricultural land is diminishing as new land is not being made available and there are alternative pressures for this land being introduced such as carbon and biodiversity incentives.

I recently graphed the land value increase for clients on the south coast of Western Australia in order to

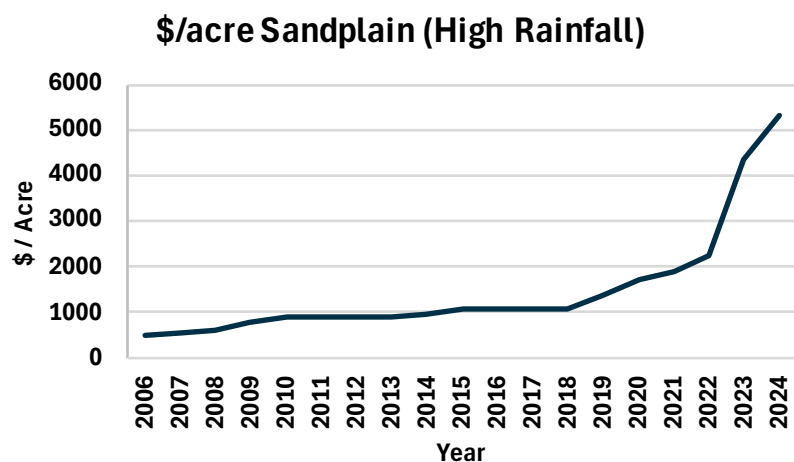


Figure 1: Increase in value per annum, Sandplain, Western Australia.

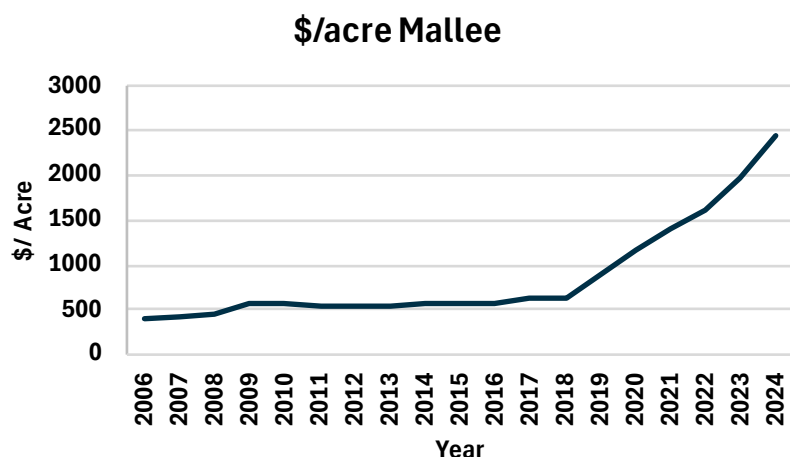


Figure 2: Increase in value per annum, Mallee, Western Australia.

quantify the historic increase in land prices.

Actual farm values (shown in **Figures 1 and 2**) show an increase in value of 16% per annum in the high rainfall sandplain and 11% per annum in the Mallee over an 18 year period.

Growth rates were both significantly higher in the latter part of this period.



How Many Hectares of existing farm need to pay off a hectare of new farm

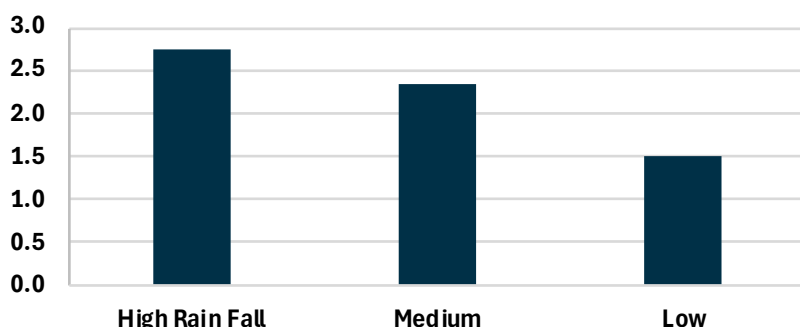


Figure 3: Number of Hectares required to generate income to pay Interest on New Farm Purchase.

LAND VALUE AT CURRENT PRICES

Many farmers are now asking the question about the value of land at these prices. At current interest rates it is not likely that you can generate enough profit from the land that you buy to pay the interest cost of buying this land. This assumes you borrowed all the funds.

For example, if you purchased a sandplain farm with an average profit of \$400 per hectare (after interest) owning this land would cost you \$638 per hectare per annum. Interest rates would need to fall to about 2.7% for the purchased hectares to breakeven.

Put another way; at 7% interest rate that land would cost you 4.3% to own.

It is important to understand that for cash buyers of farmland the 2.7% earned could be higher

than investing cash and there is the possibility of capital growth. There is significant difference in value depending on whether the purchase is cash or debt funded.

HOW MUCH EXTRA FARMING AREA

Most loans are taken out with the aim of paying them back over a pre-determined period. How much extra farming area would you need to generate enough income to pay off the interest of the new farm purchase and pay off the principal over a 15 year period? For the example I have given above, the answer is 2.8 hectares of extra farming land would be needed to purchase the new hectares over a

15 year period (**Figure 3**).

Interestingly the return on investment for lower rainfall farms is generally better. I have done the same exercise for a medium rainfall farm and a low rainfall farm (shown in **Table 1**). The hectares required to pay off an extra hectare is 2.3 in the medium rainfall and 1.5 in the lower rainfall zones.

This shows that with the higher returns achieved in the lower rainfall farms, at current prices expansion opportunities are more achievable from a cash perspective for lower rainfall farms. This presents the opportunity of a faster rate of expansion in the low rainfall.

Despite lower rainfall farms being “more affordable” this probably doesn’t mean they are going to grow in value at a faster rate than the higher value farms.

History suggests that higher rainfall farm capital

Table 1: Return on investment for a medium rainfall farm and a low rainfall farm.

	High Rainfall	Medium Rainfall	Low Rainfall
New Land Pricer per acre	\$6,000	\$4,000	\$2,000
New Land Pricer per hectare	\$14,827	\$9,884	\$4,942
Interest rate	7%	7%	7%
Interest Cost of owning land	\$1,038	\$692	\$346
Profit From Farming Land	\$400	\$300	\$200
Return on investment	2.70%	3.04%	4.05%
Profit/ (Loss) from Buying and farming	-\$638	-\$392	-\$146
How Many Hectare of other farm do I need pay off interst on new farm	1.6	1.3	0.7
Principal Repayment term	15	\$15	15
Principal Repayment	\$988	\$659	\$329
Average Interest Cost of payment period	\$519	\$346	\$173
Total Payment Required	\$1,507	\$1,005	\$502
Cash Loss after buying and paying off new farm	\$1,107	705	\$302
How Many Hectares of other farm need to pay off new farm	2.8	2.3	1.5

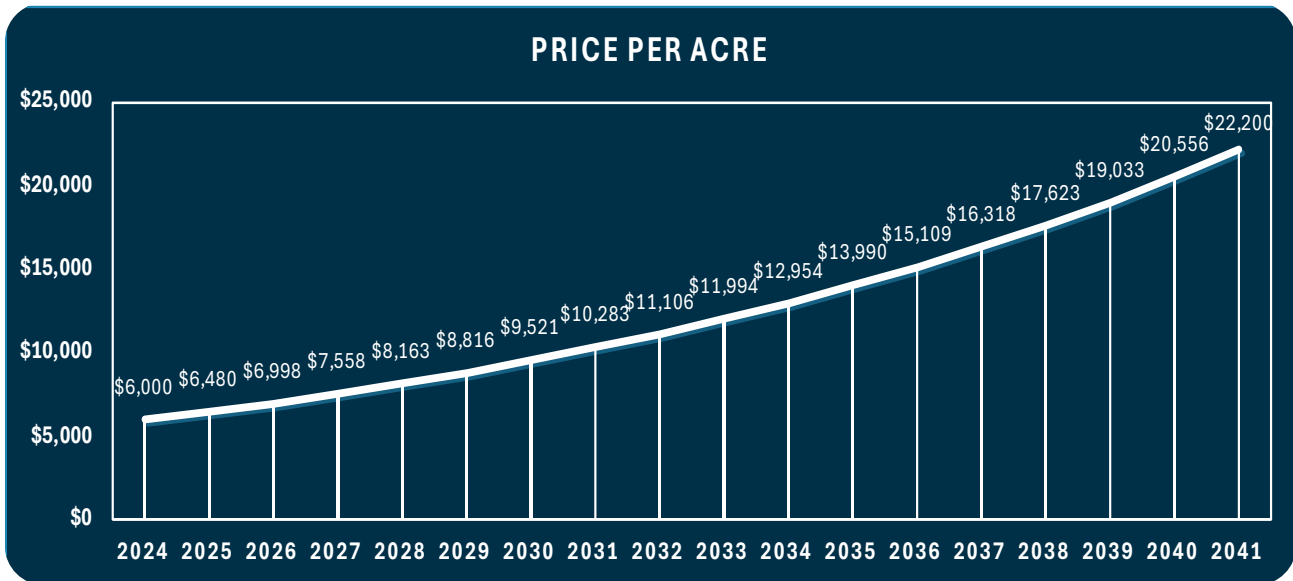


Figure 4: Price per acre high rainfall farm.

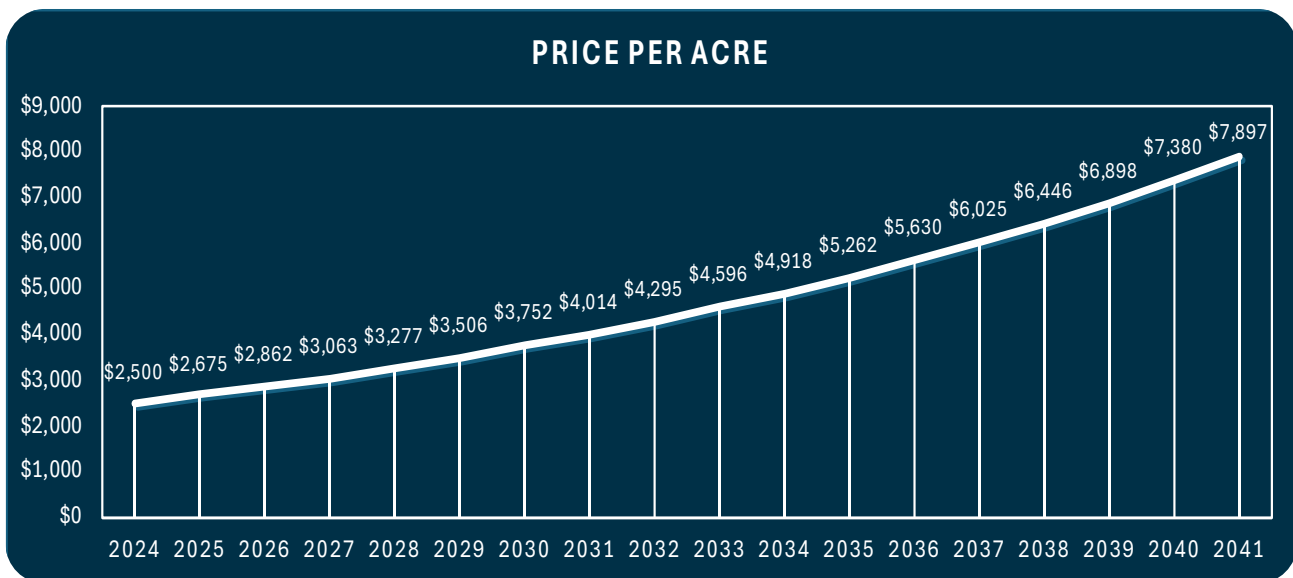


Figure 5: Price per acre low rainfall farm.

value grows at a faster rate than lower rainfall farms and there is nothing to suggest that this won't continue. Higher risk should generate higher returns and as the risk profile for low rainfall farms is higher than those with more reliable rainfall it is understandable that lower rainfall areas demand a higher return on investment.

If we assume that land growth rates continue at the same rate, then the value of farming land in the future becomes mind blowing. Even if we reduce capital growth back to 8% per annum for a high rainfall farm this would mean a \$6,000 per acre farm today would be worth \$25,000 per acre in 15 years (Figure 4).

Doing the same for a lower rainfall farm (Figure 5) worth \$2,500 per acre now and using a capital growth rate of 7% would mean that same farm would be worth \$8,000 per acre in 15 years.

CONCLUSION

The historic graphs at the beginning of this article show that capital growth does not follow an even curve. History also shows that there are times when land values can reduce, so despite being interesting these curves don't predict the future.

I think, however, that the fundamentals of agriculture remain strong and the demand for agricultural land will remain. This will continue to underpin capital growth into the future.

Buying farms can be stressful, especially as land prices continue to rise. It makes it more difficult for many growers to take this step.

Even though I think we can be optimistic about future land prices, investing in more land still needs to be done in a way that won't put your business under too much stress. 🌱



UREA COATINGS FOR IMPROVED NITROGEN EFFICIENCY

By [David Cameron](#), Reviewed by [Mark Lawrence](#)

KEY POINTS

- All fertiliser companies are actively coating urea.
- NBPT can reduce ammonia losses and is the most common product.
- Favourable results with NBPT are more likely on sandy soils.
- Nitrification inhibitors and polymers are suited for high rainfall environments.
- CSBP Sustain is now only NBPT based.

In recent years there has been a lot of activity with Enhanced Efficiency Fertilisers (EEFs) which aim to improve nitrogen utilisation with urea and UAN.

There are three groups of products in the market:

1. Urease inhibitors:

These inhibit the enzyme in the soil that converts urea to ammonia. This can reduce the ammonia volatilisation that occurs after spreading, when there has not been immediate incorporation.

NBPT (N-(n-butyl) thiophosphoric triamide) isn't the only product that can inhibit urease. However, it is the only one coming into broadacre cropping, because it is effective at low doses, is cost-effective to produce, and has a low environmental impact.

2. Nitrification inhibitors:

These inhibit Nitrosomonas bacteria, stopping the conversion of ammonium to nitrite. This keeps nitrogen in the ammonium form which is less prone to leaching.

DMPP (3,4-Dimethylpyrazole Phosphate) is more persistent in the soil than DCD (Dicyandiamide) which is more soluble. How these work in soils to deliver benefit is still being worked on. In WA, both nitrification inhibitors have been used in combination with NBPT.

3. Polymer coatings:

These are membranes designed to control the release of the urea granule contents over time.

ESN stands for Environmentally Sensitive Nitrogen. This is a polymer membrane that allows water to diffuse into the granule. The nitrogen dissolves and is slowly released through the polymer at a rate that matches plant growth, as determined by temperature and moisture.

All fertiliser companies are offering at least one NBPT urea coated product. See **Table 1** for what is available in 2025.

While some of these products are just being developed, there is some useful knowledge about how they are working and where to consider using them.

RECENT TRIAL OUTCOMES:

In 2022 and 2023, CSBP Sustain (NBPT and DMPP) averaged 5.6% higher wheat yield than untreated

Company	Urease Inhibitor	Nitrification Inhibitor		Polymer
	NBPT	DMPP	DCD	Polymer coating
CBH	Glaze Extend	X	X	X
CSBP	Sustain	X	X	X
Nutrien	Nitrain	X	X	ESN (Environmentally Sensitive Nitrogen)
Summit	N Shield NBPT	X	N Shield Dual (with NBPT) N Shield UAN Guard	X

Table 1: Enhanced Efficiency Fertilisers (EEFs) available in 2025.

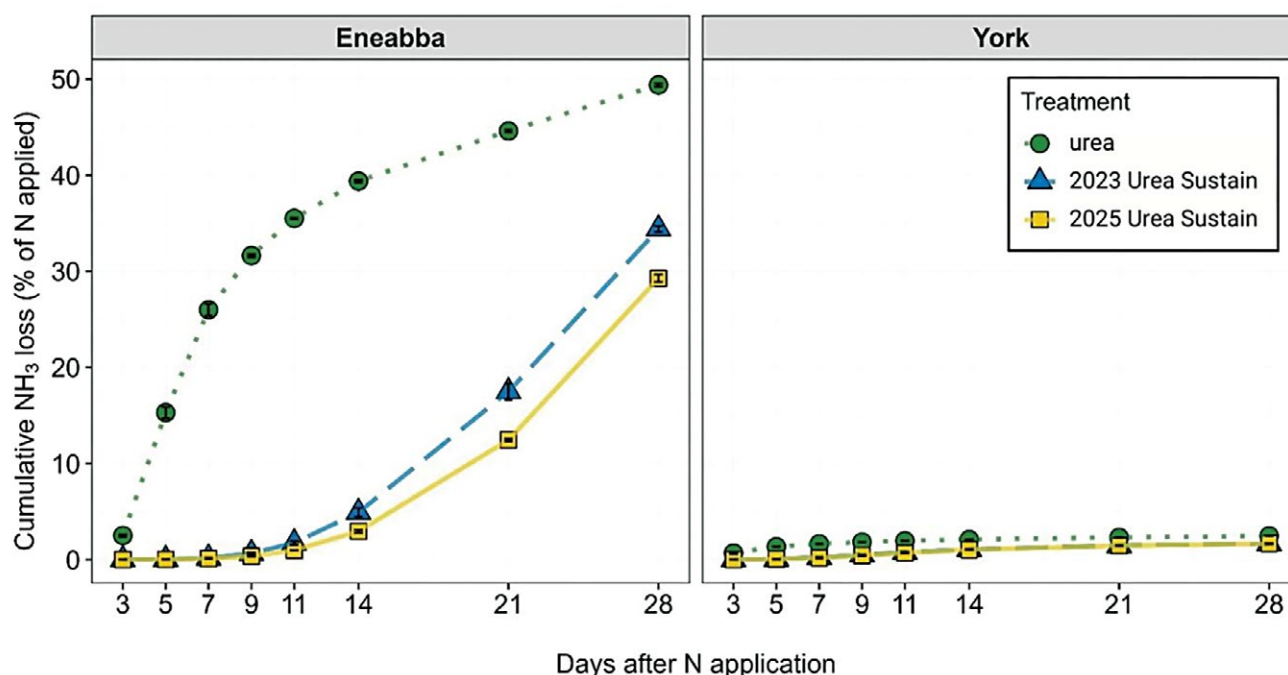


Figure 1: Laboratory measurements of cumulative ammonia volatilisation for sand from Eneabba and loam from York. (Treatments as a percentage of the nitrogen applied).

urea, but this was in two out of seven trials. There were no significant results in five sites.

In 2024 CSBP trialled their new Sustain (NBPT only) at Dandaragan, where it was spread onto wet soil six days ahead of rain and recorded a 7.5% increase in wheat yield over untreated urea.

In 2024 Summit trialled their products across 12 sites under a wide range of seasonal conditions. These showed N Shield Dual (NBPT and DCD) with a 5% higher wheat yield over untreated urea, and N Shield (NBPT) 3% over untreated urea. The conditions at Mingenew resulted in an extraordinarily large 47% yield response, lifting the average response of these trials.

Interestingly N Shield UAN Guard (DCD in UAN) showed no yield response and was significantly worse at three sites.

There were no significant results in six of the 12 trials, which highlights that conditions determine the outcome.

This means that in 20 trials over the last three years, just over half were not responsive (55%).

In 2025 CSBP undertook a laboratory study measuring ammonia losses from their new Sustain (NBPT only) their old Sustain (NBPT and DMPP) and untreated urea, on a sandy soil from Eneabba and a loamy soil from York. The results are presented in **Figure 1**.

WHERE DO EACH OF THESE PRODUCTS FIT?

Urease Inhibitors.

NBPT is used on all products other than Nutrien's ESN. It is a risk management product that provides protection against volatilisation for up to 28 days. It suits sandy soils where there is the potential for sub-optimal rainfall, such as is common in the low and medium rainfall zones.


Nitrification Inhibitors.

DCD with NBPT is available from Summit. However, DMPP will not be available in WA in 2025. These are products for the high rainfall zone where nitrogen is lost by leaching and denitrification (nitrous oxide gas is lost from wet areas).

Polymers.

Nutrien has ESN in the market. However, the price differential between this and other options means it is more suited to intensive agriculture. Keep watching this space.

CONCLUSION

The effectiveness of these products is determined by the environment at the time of application. For this reason, they are a risk management tool useful for practices such as spreading well ahead of the rain onto wet sandy soils, when there is an uncertain rainfall forecast. In the future there may be some sort of financial or marketing benefit relating to nitrogen efficiency and carbon accounting. 



THE OTHER TRADE WAR: NON-TARIFF TRADE BARRIERS

By Mae Connelly, edited by Ryan Duane

KEY POINTS

- Non-tariff barriers (NTBs) are trade restrictions like complex paperwork, shifting biosecurity standards, and inconsistent testing rules.
- NTBs are rising and now cost Australian agricultural exporters the equivalent of a 19% tariff.
- Grain Trade Australia (GTA) plays a key role in reducing NTBs and supporting technical market access.

INTRODUCTION

Last month in Farmanco Facts (May 2025), we looked at the big-picture trends in global trade and how a more polarised, protectionist world could affect Australian grain exports — and our prices

This month, we're digging deeper into one of the less visible but increasingly important issues: non tariff trade barriers.

A recent report from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), backed by Department of Agriculture (DAFF) data, finds that non-tariff barriers (NTBs) are costing Australian agricultural exporters the equivalent of a 19% tariff.

As traditional tariffs have fallen over recent decades, thanks to World Trade Organization (WTO) reforms and free trade agreements, non-tariff barriers have quietly taken their place.

This article discusses NTBs and their impact on our grain exports, and looks at how our industry body, Grain Trade Australia (GTA), can help reduce the burden on growers and exporters.

BENEFITS OF FREE TRADE FOR AUSTRALIAN AGRICULTURE

Australia's grain exporters have benefited from improved market access. Over the past few decades, the global reduction in tariffs — driven by WTO agreements and bilateral free trade deals — has opened new opportunities and supported efforts to diversify export markets.

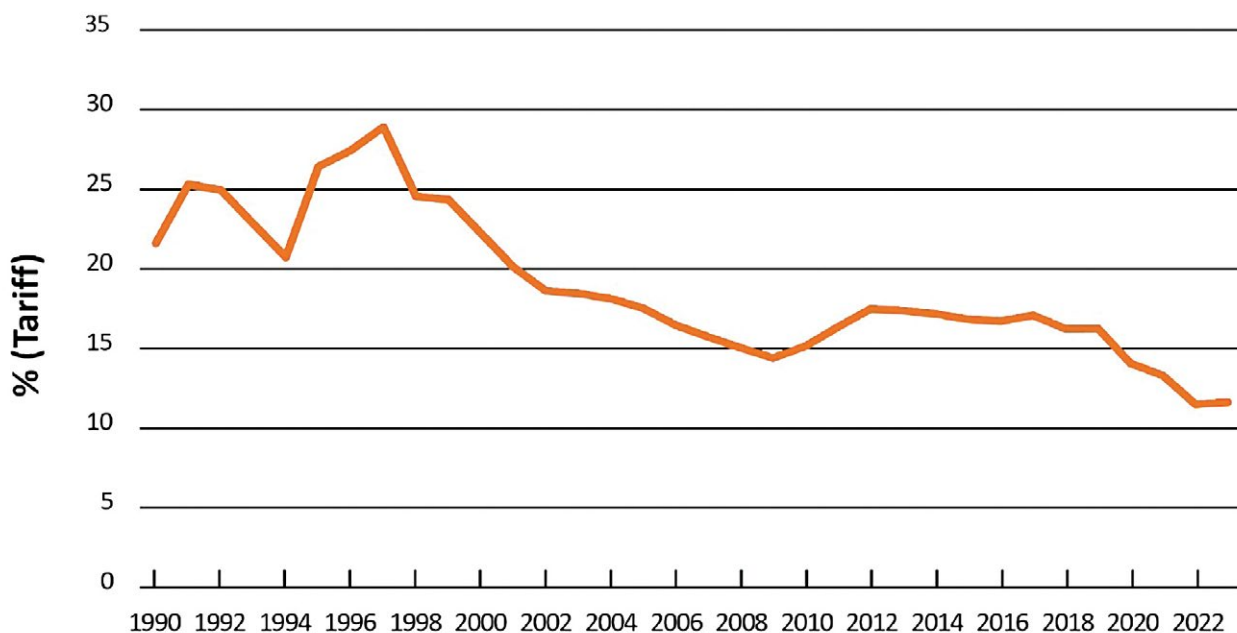


Figure 1: Average applied tariffs in global agricultural trade 1990 – 2022. Source: ABARES analysis of UNCTAD TRAINS tariff data available from WITS (2024), WTO ePing (2024), published in the DAFF/ABARES report “Non-tariff barriers: A multi-billion dollar burden” - <https://www.agriculture.gov.au/abares/products/insights/non-tariff-barriers>



As shown in **Figure 1**, average applied tariffs on agricultural products have steadily declined since the early 1990s, particularly following the Uruguay Round of WTO negotiations completed in 1994. This trend has been a major win for trade-dependent sectors like Australian grain.

However, as traditional tariff barriers have fallen, non-tariff barriers (NTBs) have become more prominent. This shift raises a crucial question: are NTBs now being used as a form of protectionism, effectively replacing tariffs?

WHAT ARE NON-TARIFF TRADE BARRIERS (NTBS)?

Non-tariff barriers (NTBs) are trade restrictions that don't involve traditional tariffs or quotas. Instead, they include a wide range of rules, standards, and procedures that can increase the cost and complexity of trade — limiting market access even when tariffs are low or zero.

While tariffs are easy to measure, NTBs are often buried in regulatory detail. They might be well intentioned, aiming to protect biosecurity or ensure food safety, but they can still act as powerful barriers to trade, particularly for agriculture.

Examples of NTBs:

- **Sanitary and Phytosanitary (SPS) Measures:** Rules around food safety, plant and animal health, and biosecurity (eg: pest control treatments or disease testing).
- **Technical Regulations and Standards (TBT):** Labelling laws, packaging rules, or requirements for product composition that differ across countries.
- **Administrative Procedures:** Licensing systems, customs delays, and complex paperwork can add significant costs to exports.
- **Quantity Restrictions (QR):** Quotas or volume-

based import limits can restrict access to key markets.

- **Government Procurement Rules:** Some countries favour local suppliers, making it harder for foreign businesses to compete.
- **Other Trade-Restrictive Measures:** Data storage or privacy regulations, for example, can affect supply chains and trade flow.

Figure 2 shows the types of NTBs facing agriculture versus other sectors globally. Most common are Sanitary and Phytosanitary (SPS) measures — such as disease testing, treatment requirements, or pest control standards — followed by Technical Barriers to Trade (TBTs) like labelling and product standards.

IMPACT ON AUSTRALIAN AGRICULTURAL EXPORTS

Australian agriculture is particularly vulnerable to non-tariff barriers (NTBs), which include food safety regulations, animal and plant health measures, and complex technical standards. These barriers significantly affect our global competitiveness by increasing costs, limiting market access, and adding layers of red tape that hinder exports.

The ABARES Insights report shows that NTBs are now imposing a burden equivalent to a 19% tariff on Australian agricultural exports. This is far greater than the average actual tariff of 6% in Australia's top 10 markets, and higher than the global average of 12% for agricultural goods.

Agricultural exports are more exposed to NTBs than non-agricultural goods. That's because of:

- Biosecurity risks (eg: pests, diseases).
- Food safety concerns.
- Political pressure from powerful farming lobbies in importing countries that favour local producers.

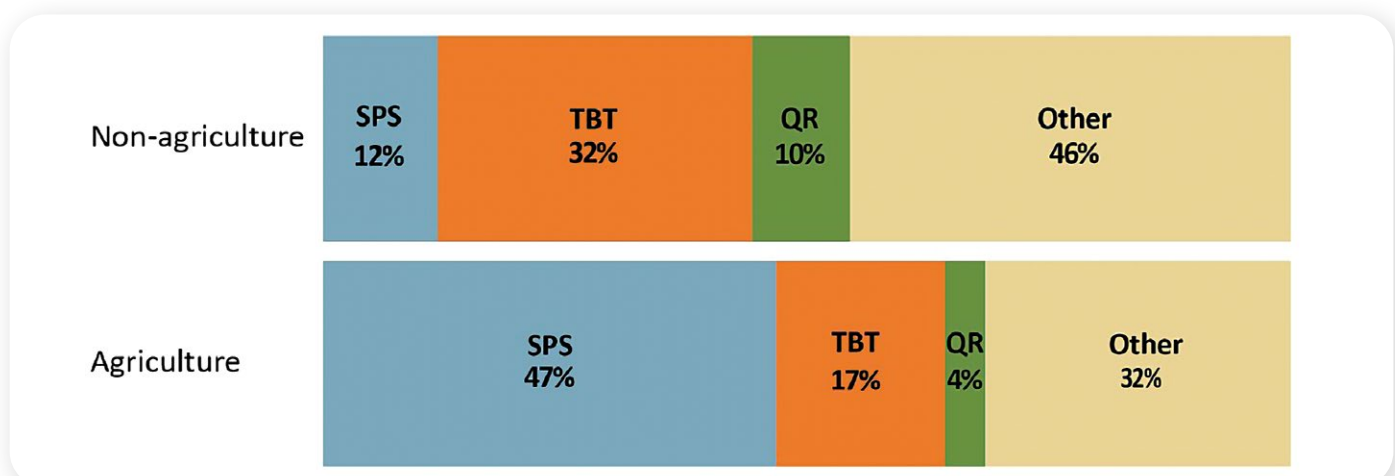


Figure 2: Types of NTBs facing agriculture vs other sectors globally. Source: ABARES analysis of UNCTAD 2024 data, published in the DAFF/ABARES report "Non-tariff barriers: A multi-billion dollar burden" - <https://www.agriculture.gov.au/abares/products/insights/non-tariff-barriers>



Grain exporters often feel the pain of NTBs most acutely in the form of technical compliance. For example:

- Is a fungicide or seed treatment registered and accepted in the destination market?
- Can the load prove zero residue levels of a banned chemical?
- Are weed seed levels or dockage thresholds met under strict import rules?

While some NTBs are legitimate (eg: to prevent outbreaks like foot-and-mouth disease), many function as protectionist tools in disguise. This dual nature complicates trade negotiations and limits the effectiveness of free trade agreements.

These hidden trade barriers:

- Act like a multi-billion-dollar tax on Australian agriculture.
- Increase compliance and certification costs.
- Delay or reduce shipments, even when demand exists.
- Act as a major structural constraint on export growth.
- Affect different parts of the supply chain.

Despite ongoing efforts through WTO mechanisms and free trade agreements, NTBs are harder to challenge than tariffs, and often evolve in unpredictable ways.

Figure 3 illustrates the rising cost of NTBs, expressed as a “tariff equivalent” since 2013. By 2022, the burden had risen to nearly 19%, up from under 2% a decade earlier.

This steep increase suggests that while formal tariffs have come down over recent decades, they are

increasingly being replaced by NTBs—particularly sanitary and phytosanitary (SPS) rules and technical barriers to trade (TBTs).

GRAIN TRADE AUSTRALIA ROLE

Formed in 1991, Grain Trade Australia (GTA) plays a central role in formalising grain trading standards, publishing trade rules, and standardising contracts across the Australian grain industry. Its mission is to foster an environment that is efficient, effective, and transparent.

Through its Trade and Market Access Committee, GTA works with both industry and government to:

- Influence global policy and standards.
- Push for science-based trade rules.
- Support market diversification by removing or reducing NTBs.

NTBs don’t show up on invoices, but they shape whether, how, and at what cost we can access export markets. They are often referred to as technical market access issues and are not typically resolved in standard trade negotiations focused on tariffs and quotas.

That’s why technical market access work is essential. In 2023–24, DAFF:

- Opened 10 new markets.
- Improved access to 44 existing markets.
- Defended access to 29 markets.
- Restored access to five previously closed markets.

The Australian Federal government also raised 13 NTB-related issues at WTO SPS and TBT committees, highlighting the importance of continued engagement at the international level.

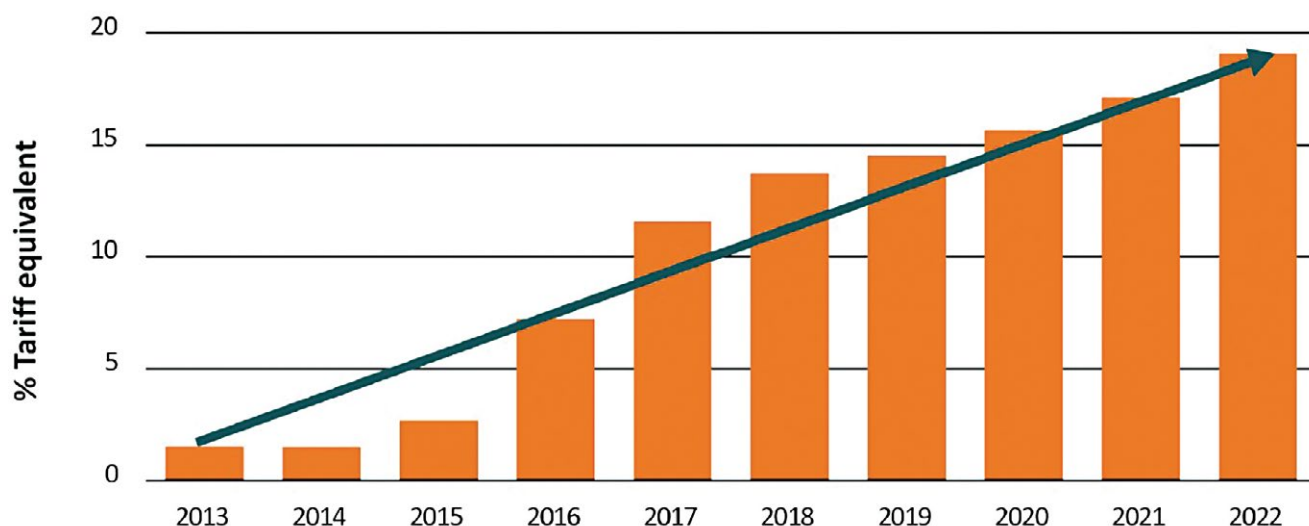


Figure 3: The average tariff-equivalent of NTBs faced by Australian agricultural exporters. Source: ABARES analysis, published in the DAFF/ABARES report “Non-tariff barriers: A multi-billion dollar burden” - <https://www.agriculture.gov.au/abares/products/insights/non-tariff-barriers>

With NTBs rising, targeted investment in technical market access is needed to unlock new opportunities for grain exporters. Together with government and industry, GTA's efforts help ensure Australian grain can trade freely, fairly and competitively, even in a world where red tape is the new form of protectionism.

CONCLUSION

While tariffs still grab headlines, the real trade battleground for Australian grain is increasingly hidden in the fine print — in the form of NTBs. These technical and regulatory trade restrictions are now costing our agricultural exporters the equivalent of a 19% tariff, and the burden is growing.

NTBs affect everything from pesticide approvals to dockage limits, making it harder — and more expensive — to access key markets. As tariffs fall, NTBs are becoming the new frontier of protectionism.

Working with government and industry partners, GTA supports technical market access efforts that open doors, reduce red tape, and keep our exports moving.

Tackling NTBs requires sustained investment, science-based standards, and close industry government collaboration. With strong support and coordination, Australia's grain industry can remain globally competitive — even in a world where trade is increasingly shaped by regulation, not just price.

FURTHER INFORMATION

- ABARES/DAFF Insight Report on Non-Tariff Trade Barriers - <https://www.agriculture.gov.au/abares/products/insights/non-tariff-barriers>
- Grain Trade Australia GTA website - <https://graintrade.org.au/>
- Farmanco Marketing are GTA members. 



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VRT: THE CONCEPT HASN'T CHANGED. HOW WE USE IT HAS

By [Giles McMeikan](#), Reviewed by [Eric Nankivell](#)

KEY POINTS

- **Same concept, smarter tools** – VRT is now powered by live data and powerful platforms.
- **Seamless connectivity** – Sync maps and adjust rates in real time.
- **Iterate to improve** – Trial, review, and refine each season.
- **Data-built zones** – Use soil, yield, protein or topography layers to guide inputs.

- **Start small, scale smart** – Begin with one input, expand with confidence

Variable Rate Technology (VRT) has been around for years — and the idea has never really changed. Get the right input, in the right place, at the right time

What *has* changed is the tech that enables it. Maps are sharper, systems are more connected, and the potential to make genuinely smart, paddock-level decisions is now more accessible than ever.



But like any tool, it only works if you build it into something useful.

WHY NOW? CONNECTIVITY HAS CAUGHT UP

Let's start here. VRT isn't new but for many, it still sits in the "too hard" basket. Part of the reason is clunky systems of the past — USBs, out-of-date shapefiles, maps made but never applied.

Now, with systems like MyJohnDeere, AFS Connect, and PCT AgCloud all talking to each other, it's never been easier to push a prescription map from the office to the machine without chasing the tractor around with a USB.

We're at a point now where data flows — not just between paddocks and offices, but between machines, platforms and seasons.

WHAT HASN'T CHANGED? WA'S VARIABILITY

Across Australian cropping zone the one thing we can count on is variability — in soils, in rainfall, in yield. VRT makes the most sense in exactly this kind of environment. We're not trying to get every hectare to yield the same. We're trying to get the *best return per hectare*, based on what it's actually capable of.

IT'S NOT JUST ABOUT SHINY MAPS

The power of VRT is in the layers — and I don't mean 30 different colours on a screen. I mean soil survey data (EM38, radiometrics) yield maps, protein maps, NDVI/SVI biomass imagery, elevation data — all layered to understand paddock performance.

Then we ground-truth it. Put in some trial strips. Look at how the crop actually responds. Adjust. Improve. Iterate.

It's not "set and forget" and that's the whole point. Every season teaches us something if we're set up to listen.

BUILDING FROM THE GROUND UP

If you want to do VRT right, you've got to have a good base. That starts with:

- **Baseline soil fertility:** Know your PBI, pH, CEC, OC, and sodium percentages for example. Correlate this with soil surveys where possible. This gives you the tools to predict responsiveness.
- **Historical yield and protein data:** Stacked over multiple seasons to pull out zones that are consistently poor or high-performing, regardless of the year.

ECONOMIC & AGRONOMIC GAINS



Cost Savings

Optimize inputs and reduce over-application in low-potential zones.



Yield Improvements

Place nutrients where they deliver the greatest return.



Risk Mitigation

Manage frost or waterlogging-prone and poor-performing areas effectively.



Farm-Specific Models

Build nutrient response curves unique to your operation.

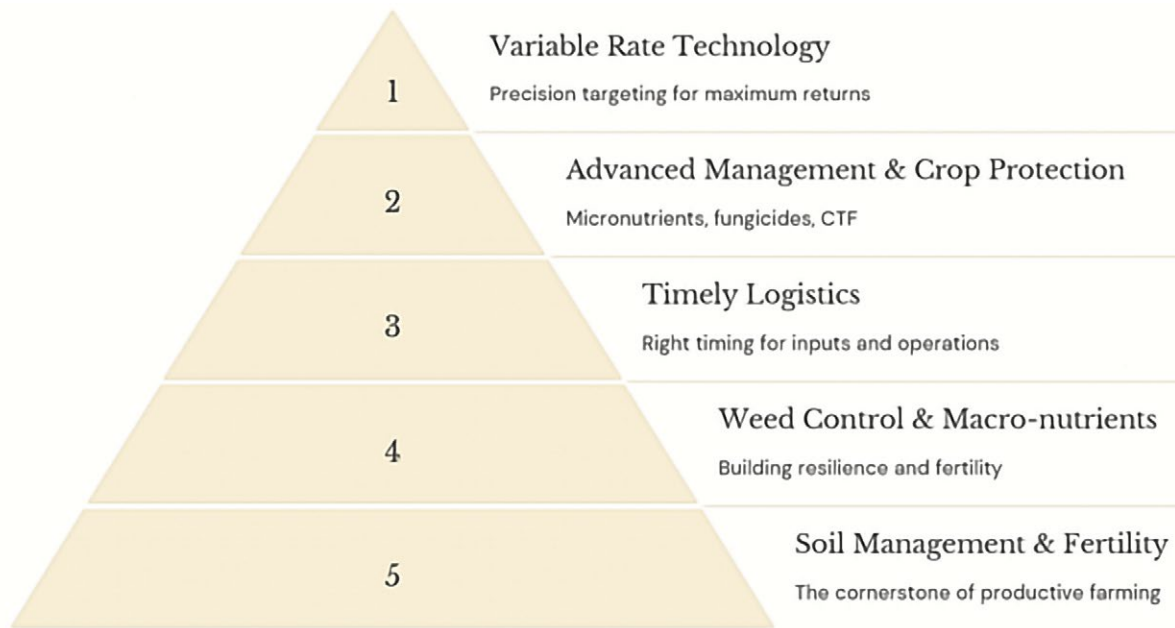


Figure 1: VRT is no silver bullet, the foundational building blocks of good management must be present. The above illustrates the blocks of a farming operation where VRT will have the best return on investment.

- **Topography and hydrology:** Frost, drainage and waterlogging can be defined here.
- **Strategic trial strips:** To measure real-world response and tweak future applications.

EXAMPLES THAT ARE WORKING

- **VR Lime:** Estimated pH maps allow you to move from blanket to targeted lime programs — saving money and avoiding over-liming.
- **VR Phosphorus:** P rates have increased along with compound prices stretching fertilizer budgets, the ability to maintain P levels strategically is key to maintaining profitability.
- **VR Potash:** Airborne Radiometrics (see **Figure 2**) give a free starting point for soil type and K targeting. Lighter soils with low K readings get topped up, while heavy country is skipped.
- **VR N:** Biomass and stacked yield maps can be a good starting point to build out N maps. The addition of protein maps can refine further.
- **VR Gypsum:** Sodicity layers from EM38 plus ESP soil cores used to map where the gypsum will actually pay for itself.

WHAT HAS CHANGED: LIVE DATA AND SCENARIO PLANNING

Running **pre-loaded application scenarios**, defined by management zones can allow for the adjusting of rates based on rainfall, budget, or time of year — all from the cab or the office.

For example:

- **Dry start?** Scale back N in the marginal areas.
- **Early break?** Push rates in the high potential zones.

Plus, connected machinery means more flexibility — allowing trials to be set up in real-time without the seeder driver even needing to know it's happening.

BARRIERS ARE DROPPING

- **Cost?** Payback on machinery setup is often within two to three seasons. Lime alone can make it worthwhile.
- **Complexity?** The software's catching up. Good platforms now let you visualise, test, and refine with less effort.
- **Compatibility?** Most machines post-2015 will run VRT with minimal changes.

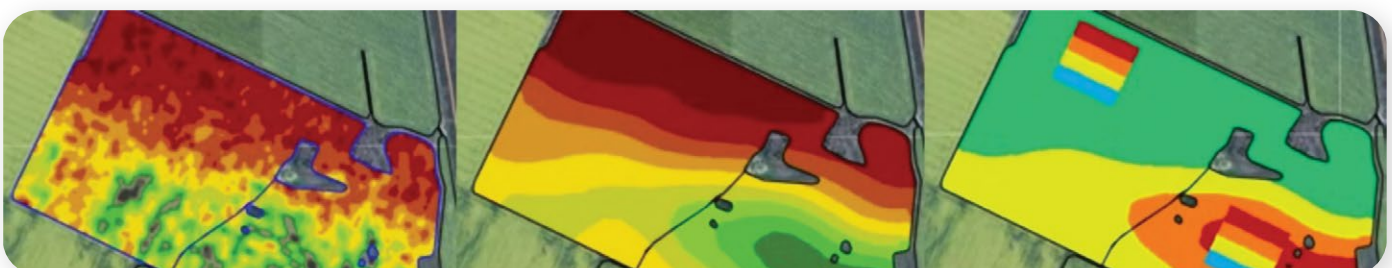


Figure 2: Example showing close correlation of results of ground driven radiometrics (left), airborne radiometrics (middle), and the resulting K map with trial strips embedded.



- **Mindset?** This is the big one. If you're waiting for someone to show you the perfect prescription, it'll never happen. Start messy. Learn. Adjust.

GETTING STARTED

If you're not using VRT now but want to — here's the simple approach:

1. **Pick one input** — lime or K are good starters.
2. **Pick one paddock** — with known variability.
3. **Gather your data** — the more the better, yield/historical biomass etc.
4. **Get a soil survey done** — radiometrics or EM38 plus some cores.
5. **Build a basic two-zone map** — high vs low.
6. **Put in a couple of strips** — run the header over it and learn from the result.

FINAL THOUGHTS

The concept hasn't changed — but the way we apply it has. VRT doesn't replace good agronomy — it scales it. If you know your farm, and you know your soils, and you're willing to test and learn, the returns are real.

We've moved beyond USBs and clunky maps. We're in an era where trial strips can be pulled from the cloud, responses tracked in real-time, and rates adjusted on the go.

The coming months are a great time to start the ball rolling, getting setup for lime and gypsum applications post-harvest.

So, if you've been waiting for a better time to get into VRT — it might be now. Get in touch to discuss whether VRT has a fit in your program. 🌱

NOT ALL GRAIN GOES ON A BOAT: WHY DOMESTIC DEMAND MATTERS

Written by [Mae Connelly](#), Reviewed by [Ryan Duane](#)

KEY POINTS

- Around 30% of Australia's grain is consumed domestically, with demand set to rise due to population growth and increased demand for grain-fed meats.
- Feedlots and poultry drive grain demand, with cattle-on-feed numbers and days on feed both increasing steadily.
- Western Australia and South Australia remain key grain exporters and supply backup during eastern droughts.
- Rising east coast domestic grain demand supports WA prices, even if the link isn't direct.

INTRODUCTION

In Western Australia, where grain production is heavily export-focused, it's easy to underestimate the scale and significance of Australia's domestic grain consumption. Yet on average, around 30% of the national crop is used within Australia each year — and that demand is expected to grow.

This article shifts the spotlight from offshore markets to our own backyard. It explores how domestic grain use underpins Australia's food, feed, and fuel sectors; how demand varies across regions; and why consumption is set to rise through to 2030.

With population growth, changing diets, and an expanding biofuel industry reshaping demand, a closer look at the domestic market is timely.

CURRENT LANDSCAPE OF DOMESTIC GRAIN CONSUMPTION

Overview of Major Grains Consumed Domestically

Wheat:

Australia consumed around 8 to 9 million tonnes of wheat in 2024/25, with around 30 to 40% of these tonnes used for flour milling and the remainder primarily for livestock feed. Especially in beef cattle feedlots. Wheat grown for domestic use is predominantly produced on the east coast, close to population centres and feed demand.

Table 1 presents USDA data on Australian wheat supply and demand from 2017/18 to 2024/25. Total



domestic consumption has remained relatively steady over the period, ranging from 7.8 to 9.2 million tonnes, with food, seed and industrial (FSI) use holding consistently around 3.5 million tonnes per year.

Feed use has been more variable, peaking at 5.7 million tonnes in 2018/19 — a major drought year — before settling at around 4.5 million tonnes from 2020/21 onward. Despite fluctuations in production and exports, domestic demand has remained a stable and significant component of Australia's wheat balance sheet.

Table 2 presents IGC estimates of Australian wheat domestic consumption from 2017/18 to 2025/26. The point of including both USDA and IGC estimates is to illustrate the challenge of accurately quantifying domestic grain use in Australia.

Unlike exports, which are reported through formal systems like the Australian Bureau of Statistics (ABS) domestic use is harder to track, especially in sectors like feedlotting and on farm use.

Barley:

Significant use in animal feed and malting industries. While exports have seen greater variability due to shifting international demand (particularly from China), domestic use continues to be a key demand

anchor, especially from the livestock feed sector and malting industry.

Table 3 shows Australian barley fundamentals for the last eight years. On average, about 40% of Australia's barley production is consumed domestically, with roughly three-quarters of that going to feed and the remainder to malting.

Sorghum:

Sorghum plays a specialised role in Australia's grain mix, mainly used for livestock feed and ethanol production in Queensland. Most of the crop is exported, primarily to China.

Domestically, it's used in feedlots and by the Dalby Bio-Refinery, which processes around 200,000 tonnes each year. While smaller in volume, sorghum adds value through its climate resilience as a summer crop and its contribution to industry diversity.

Oats, Pulses & Other:

These grains are used in both food products and animal feed, with growing interest in processing for plant protein and value-added foods like rolled oats. However, when it comes to major feed grain demand in Australia, wheat, barley, and sorghum dominate — and these are the focus of this article.

Table 1: USDA estimates of Australian wheat supply and demand, including domestic wheat consumption, from 2017/18 to 2024/25 (Data source: USDA)

Wheat (Metric Tonnes)	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Beginning Stocks	5,757,000	4,557,000	4,454,000	2,695,000	3,018,000	3,454,000	4,371,000	2,912,000
Production	20,941,000	17,594,000	14,480,000	31,923,000	36,237,000	40,545,000	25,960,000	34,110,000
Imports	183,000	501,000	897,000	198,000	210,000	197,000	220,000	200,000
Total Supply	26,881,000	22,656,000	19,831,000	34,816,000	39,465,000	44,196,000	30,551,000	37,222,000
Exports	13,849,000	9,002,000	9,136,000	23,773,000	27,511,000	31,825,000	19,839,000	25,500,000
Domestic Consumption – Feed	5,000,000	5,700,000	4,500,000	4,500,000	5,000,000	4,500,000	4,300,000	4,500,000
Domestic Consumption – Food, Seed, Industrial (FSI)	3,475,000	3,500,000	3,500,000	3,525,000	3,500,000	3,500,000	3,500,000	3,500,000
Domestic Consumption – Total	8,475,000	9,200,000	8,000,000	8,025,000	8,500,000	8,000,000	7,800,000	8,000,000
Ending Stocks	4,557,000	4,454,000	2,695,000	3,018,000	3,454,000	4,371,000	2,912,000	3,722,000

Table 2: IGC estimates of Australian domestic wheat consumption, from 2017/18 to 2025/26 (Data source: USDA)

Wheat (Million Metric Tonnes)	2017 /18	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26
Domestic Consumption – Food	2.2	2.2	2.2	2.4	2.5	2.5	2.6	2.6	2.6
Domestic Consumption – Industrial	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
Domestic Consumption – Feed	4.5	5.7	4.9	5.1	5.0	4.5	3.4	5.0	4.5
Domestic Consumption – Total	8.0	9.1	8.3	8.7	8.8	8.2	7.0	8.8	8.2



Table 3: USDA estimates of Australian domestic barley consumption, from 2017/18 to 2024/25 (Data source: USDA)

Barley (Metric Tonnes)	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Beginning Stocks	1,884,000	1,776,000	1,908,000	2,711,000	2,518,000	2,848,000	3,220,000	1,118,000
Production	9,254,000	8,819,000	10,127,000	14,649,000	14,337,000	14,137,000	10,800,000	13,265,000
Imports	-	-	-	-	-	-	-	-
Total Supply	11,138,000	10,595,000	12,035,000	17,360,000	16,855,000	16,982,000	14,020,000	14,383,000
Exports	5,662,000	3,687,000	3,324,000	8,342,000	8,007,000	7,765,000	7,102,000	7,000,000
Domestic Consumption - Feed	2,400,000	3,500,000	4,500,000	5,000,000	4,500,000	4,500,000	4,300,000	4,400,000
Domestic Consumption - Food, Seed, Industrial (FSI)	1,300,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Domestic Consumption - Total	3,700,000	5,000,000	6,000,000	6,500,000	6,000,000	6,000,000	5,800,000	5,900,000
Ending Stocks	1,776,000	1,908,000	2,711,000	2,518,000	2,848,000	3,220,000	1,118,000	1,483,000

Consumption by End Use

Human Consumption:

The flour milling industry uses around 3.5 million tonnes of wheat annually. Of the approximately 2.1 million tonnes of flour produced, roughly 1.5 million tonnes go to domestic food use, with another 440,000 tonnes used for industrial applications such as starch and gluten.

Animal Feed:

Cattle feedlots and poultry are the largest consumers of feed grains like wheat, sorghum and barley, accounting for around 35% and 30% of total feed demand, respectively.

Figure 1, provided by Lloyd George of Ag Scientia, shows feed grain demand by livestock sector from 2004/05 to 2025/26. The standout trend is the steady rise in demand from cattle feedlots, now exceeding four million tonnes annually. Poultry follows closely, with consistent growth driven by strong domestic consumption and feed efficiency.

Demand from pigs, dairy, and sheep has remained flat or declined.

Industrial Uses:

Grains like sorghum and wheat starch are also used in ethanol production, with the Dalby Bio Refinery in Queensland processing around 200,000 tonnes

Aust - Major Feed Grain Demand Kt

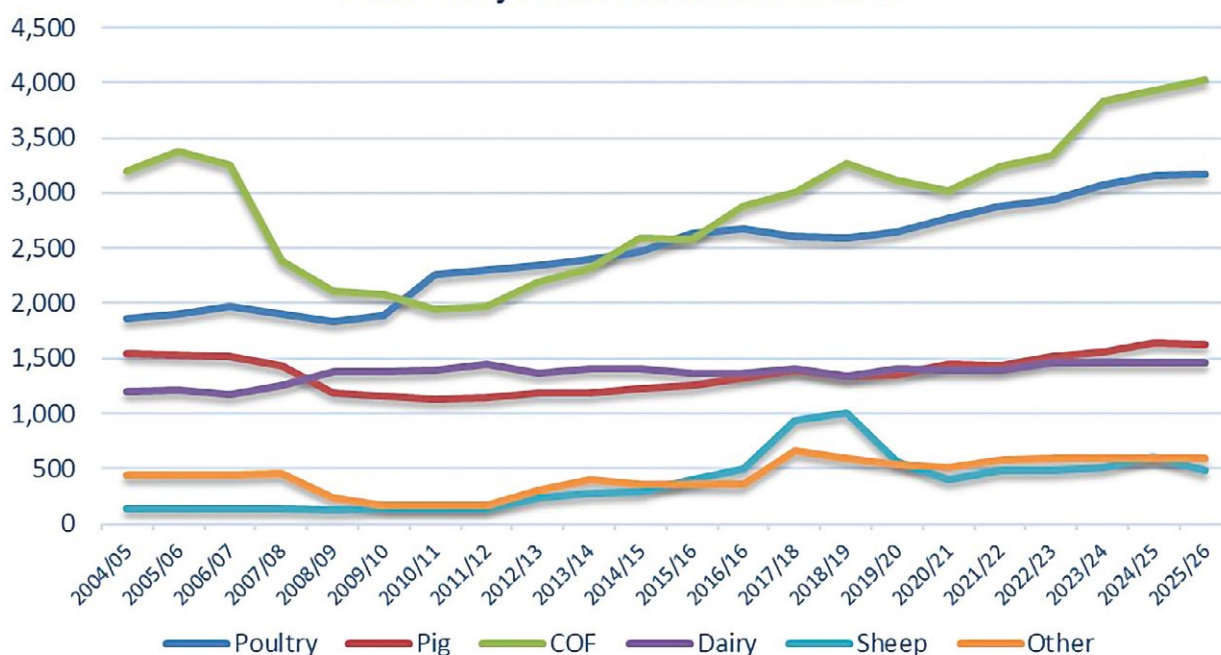


Figure 1: Australian feed grain (wheat, barley, and sorghum) demand by industry (COF = Cattle On Feed) from 2004/05 to 2025/26, ('000t). Source: Lloyd George, Ag Scientia

of sorghum annually.

Regional Differences

Eastern Australia:

The east coast is the heart of Australia's domestic grain demand, driven by high population density and intensive livestock industries. Wheat is the main grain consumed locally, both for food and feed, with feed use making up the majority.

While Australia exports much of its wheat, domestic consumption remains substantial — particularly in Queensland and New South Wales.

The region is also home to Australia's major flour milling operations. Key players include:

- Mauri (George Weston Foods), one of Australasia's largest cereal manufacturers, was established in 1870.
- Allied Pinnacle, owned by Japan's Nisshin Seifun Group, operates seven mills and four mixing sites across the country.
- Manildra Group, an Australian family business, runs four mills processing over one million tonnes of wheat annually, supplying both domestic and export markets.

Domestic Grain Consumption (Australia)

episode3

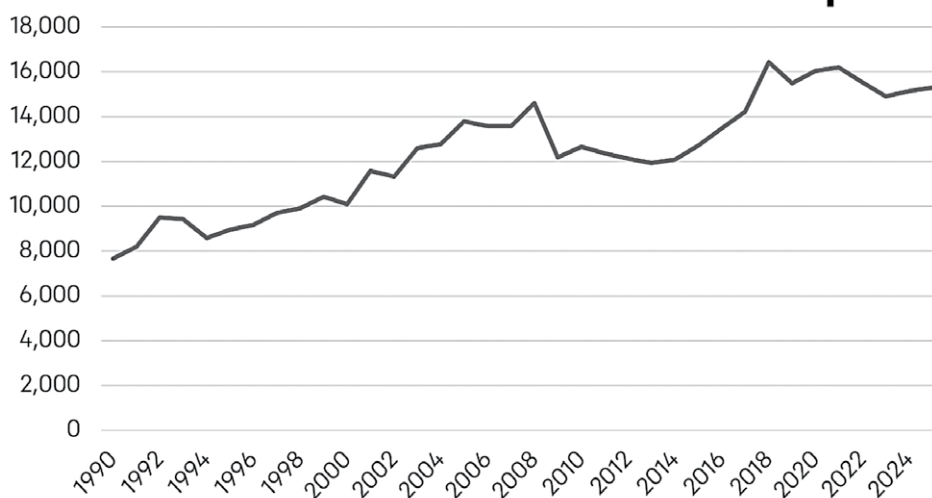


Figure 2: Total Australian domestic grain consumption from 1990 to 2024 (Source: episode3 - <https://episode3.net/>)

Western Australia and South Australia (particularly the Eyre Peninsula):

Lower domestic consumption with a focus on export markets.

The Big Picture

Figure 2 (from episode3) provides a long-term view of total Australian domestic grain consumption. Between 1990 and 2024, domestic use effectively doubled, rising from around eight million tonnes to roughly 16 million tonnes.

Figure 3 (from episode3) presents the same data as Figure 5 but expressed as a percentage of total Australian grain production.

Domestic Consumption as a % of production

episode3

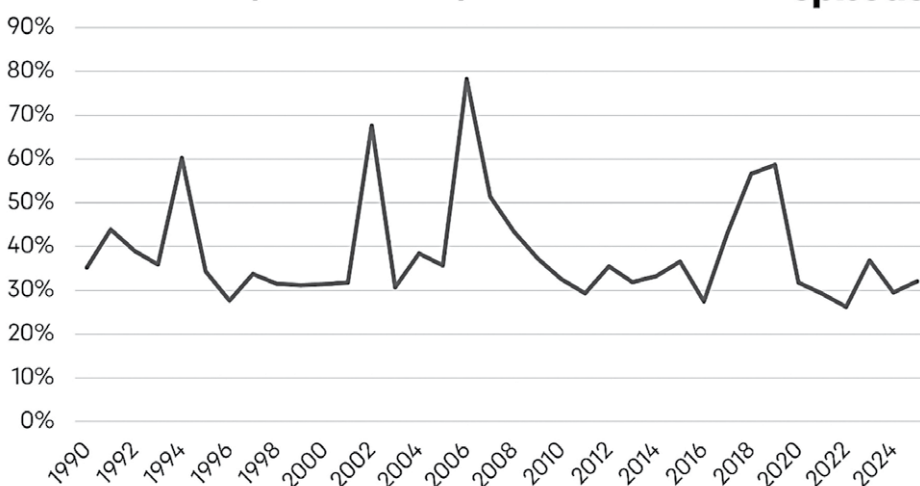


Figure 3: Total Australian domestic grain consumption from 1990 to 2024 as a percentage of production (Source: episode3 - <https://episode3.net/>)

While domestic grain consumption has doubled since 1990, its share of total production has remained relatively stable, averaging around 30%. The percentage tends to rise in years of lower national output, but overall the chart shows that growth in domestic use has largely kept pace with the expansion in national production.



East Coast Cattle on Feed



Figure 4: Australian feed grain demand by industry (COF = Cattle On Feed) from 2004/05 to 2025/26, ('000t). Source: Lloyd George, Ag Scientia

Future Outlook: Trends and Projections

Population Growth:

Australia's population is projected to grow from 27.4 million today to around 30 million by 2030 (Source: ABS) driving increased demand for food products and the grains used to produce them.

Livestock Industry Expansion:

Anticipated growth in meat production will require more feed grains. **Figure 4** (provided by Ag Scientia) shows cattle-on-feed numbers by state from 2010

to 2024. Queensland remains the dominant feedlot state, with numbers doubling to nearly 900,000 head. NSW has also grown strongly, reaching over 400,000 head, while Victoria's feedlot numbers have stayed comparatively stable.

This ongoing expansion, especially in Queensland and NSW, highlights a structural increase in feed grain demand.

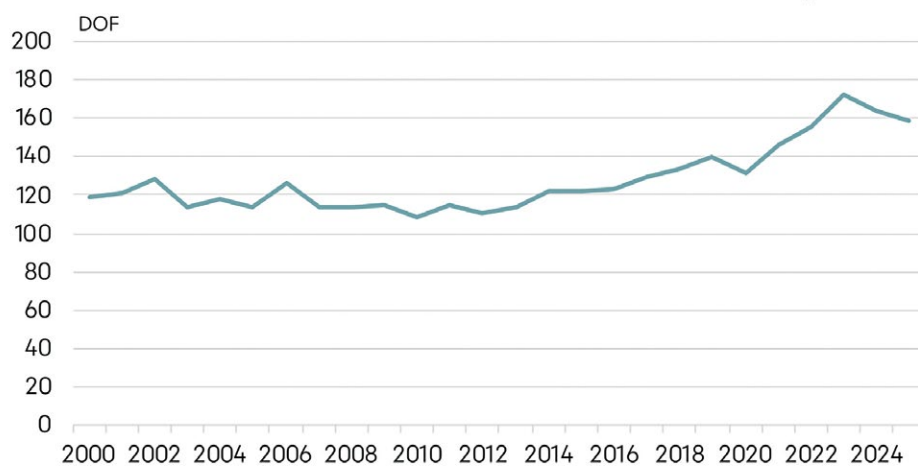
Figure 5 (from episode3) shows the rising average number of days cattle spend in Australian feedlots, a key trend alongside the growth in cattle-on-feed numbers shown in Figure 9.

Not only are more cattle being finished on grain, but they're also spending longer periods on feed. Together, these factors are driving sustained increases in feed grain demand from the feedlot sector — a trend expected to continue.

Figure 6 (from episode3) shows Australian cattle-on-feed numbers, feedlot capacity, and utilisation rates from 2012 to a 2025 projection. Cattle-on-feed is expected to approach 1.5 million head — nearly double early 2010s levels.

Grainfed - Average Days On Feed

episode3



Source: MLA, ALFA, EP3

Figure 5: Grain fed Australian cattle – Average days on feed 2000 to 2024 (Source: episode3 - <https://episode3.net/>)



Cattle On Feed, Feedlot Capacity & Utilisation

episode3

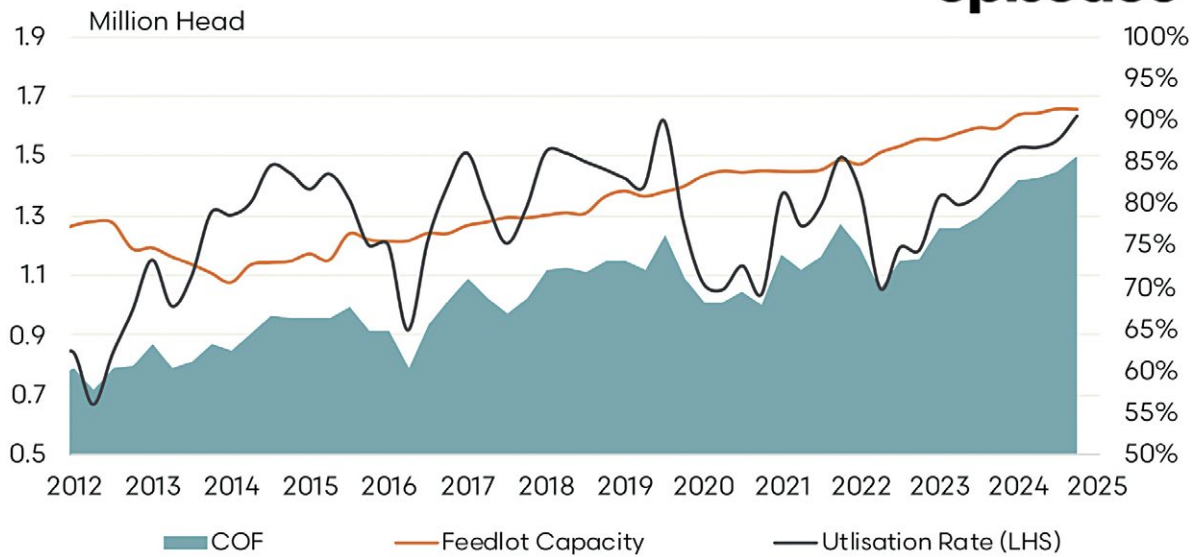


Figure 6: Cattle on feed, Feedlot capacity, and Utilisation rate 2012 to 2025, Australia (Source: episode3 - <https://episode3.net/>)

Capacity has grown steadily from just over 1.2 million to around 1.7 million head, while utilisation has risen to 90%, reflecting strong demand and improved efficiency.

This combination of more cattle, longer feeding periods, and higher capacity use underscores the feedlot sector's key role in driving domestic demand for feed grains like wheat, barley, and sorghum.

Biofuel Industry:

The expansion of Australia's biofuel industry presents a significant opportunity to increase domestic grain use.

Grains such as sorghum and wheat starch are already used in ethanol production, with facilities like the Dalby Bio-Refinery in Queensland processing around 200,000 tonnes of sorghum annually. Any future growth in ethanol blending mandates or transport fuel decarbonisation could lift domestic demand for feed grains.

Sustainable aviation fuel is emerging as a major new market, with pressure on airlines to cut carbon emissions. Australia is actively exploring SAF production, and there is growing industry discussion around using domestically grown feedstocks including canola.

CONCLUSION

Australia's domestic grain consumption is a driver of the national grain balance sheet, even if it doesn't always get much airtime here in export-focused Western Australia.

With the Australian population projected to increase by three million people by 2030, demand for food products is set to rise. At the same time, increasing appetite for grain-fed meat is pushing feed grain

use higher.

By 2030, feed grain demand alone is forecast to rise by over two million tonnes, alongside steady growth in flour, malt, and vegetable oil consumption. Most of this growth will be concentrated in eastern Australia, while WA and SA remain the backbone of the nation's exportable surplus.

In dry years on the east coast, the ability to move grain from WA and SA becomes critical. For WA growers who think the domestic market doesn't really matter, remember the price lift during the 2018 and 2019 droughts. Strong east coast demand helped push WA values higher. And if demand only stretches as far as SA, that's still one less competitor in the export market.

The takeaway? Growing east coast demand is good news for WA prices — even if the relationship isn't direct, the ripple effect still reaches your bottom line.

AUSTRALIAN FINANCIAL SERVICES LICENCE

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BUDGET PRICES 2026 WESTERN AUSTRALIA

HISTORIC AND FORECAST GRAIN PRICES \$/TONNE

NOTE: Prices shown are the average for the season. 2025/26 Provisional Prices reflect the average for the period to date in which prices have been available this season. Because prices can trade across a wide range during the season, these figures may not reflect current market levels. All prices are based on the Kwinana port zone.

Wheat										Prov.	Average		Forecast
Grade Prices (FIS)	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	5 Yr	10 Yr	26/27
H1 13.0%	\$290	\$295	\$317	\$339	\$337	\$330	\$428	\$408	\$387	\$381	\$387	\$351	\$360
H2 11.5%	\$280	\$285	\$312	\$332	\$330	\$325	\$420	\$402	\$383	\$376	\$381	\$345	\$355
ANW1	\$295	\$340	\$310	\$325	\$323	\$325	\$399	\$411	\$417	\$407	\$392	\$355	\$375
ANW2	\$275	\$302	\$295	\$308	\$308	\$305	\$355	\$363	\$363	\$357	\$348	\$323	\$335
APW1 10.5%	\$265	\$270	\$305	\$326	\$325	\$321	\$386	\$393	\$381	\$372	\$371	\$334	\$350
APW2 10%	\$262	\$260	\$305	\$320	\$316	\$311	\$385	\$382	\$370	\$366	\$363	\$328	\$340
ASW9 9.0% (Recent grade)							\$378	\$378	\$352	\$347	\$364	\$364	\$330
AWW1 (Replaces ASW1)	\$250	\$250	\$294	\$317	\$310	\$302	\$362	\$352	\$327	\$336	\$336	\$310	\$315
AWW2 (Replaces AGP1)	\$235	\$235	\$289	\$305	\$299	\$290	\$353	\$340	\$323	\$329	\$327	\$300	\$310
Feed	\$190	\$190	\$251	\$274	\$255	\$243	\$310	\$312	\$295	\$296	\$291	\$262	\$270
Grade Spreads to APW1										Prov.	Average		Forecast
	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	5 Yr	10 Yr	26/27
H1 13.0%	\$25	\$25	\$12	\$13	\$12	\$9	\$41	\$15	\$6	\$9	\$16	\$17	\$10
H2 11.5%	\$15	\$15	\$7	\$6	\$5	\$4	\$34	\$9	\$2	\$4	\$11	\$10	\$5
ANW1	\$30	\$70	\$5	(\$1)	(\$2)	\$4	\$12	\$18	\$36	\$36	\$21	\$21	\$25
ANW2	\$10	\$32	(\$10)	(\$18)	(\$17)	(\$16)	(\$32)	(\$30)	(\$18)	(\$15)	(\$22)	(\$11)	(\$15)
APW1 10.5%	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base
APW2 10%	(\$3)	(\$10)	\$0	(\$6)	(\$9)	(\$10)	(\$1)	(\$12)	(\$11)	(\$6)	(\$8)	(\$7)	(\$10)
ASW9 9.0%							(\$8)	(\$15)	(\$29)	(\$25)	(\$19)	(\$19)	(\$20)
AWW1 (Replaces ASW1)	(\$15)	(\$20)	(\$11)	(\$9)	(\$15)	(\$19)	(\$24)	(\$41)	(\$53)	(\$36)	(\$35)	(\$24)	(\$35)
AWW2 (Replaces AGP1)	(\$30)	(\$35)	(\$16)	(\$21)	(\$26)	(\$31)	(\$33)	(\$53)	(\$58)	(\$43)	(\$43)	(\$35)	(\$40)
Feed	(\$75)	(\$80)	(\$54)	(\$52)	(\$70)	(\$78)	(\$76)	(\$81)	(\$86)	(\$76)	(\$79)	(\$73)	(\$80)

Other Grains (FIS)										Prov.	Average		Forecast
	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	5 Yr	10 Yr	26/27
Barley Malt	\$230	\$275	\$295	\$265	\$266	\$279	\$361	\$380	\$342	\$337	\$340	\$303	\$310
Barley Feed	\$190	\$250	\$290	\$260	\$257	\$260	\$312	\$316	\$324	\$326	\$308	\$278	\$300
Lupin	\$270	\$300	\$350	\$345	\$375	\$325	\$338	\$383	\$447	\$400	\$379	\$353	\$375
Canola - non GM ISCC Can1	\$555	\$550	\$568	\$602	\$626	\$800	\$804	\$754	\$742	\$835	\$787	\$684	\$800
Canola - GM ISCC CAG1	\$515	\$510	\$520	\$529	\$555	\$750	\$765	\$737	\$693	\$750	\$739	\$632	\$700
OAT1	\$230	\$195	\$350	\$314	\$292	\$270	\$335	\$376	\$414	\$374	\$354	\$315	\$315
OAT2	\$190	\$175	\$335	\$296	\$280	\$250	\$315	\$360	\$399	\$358	\$336	\$296	\$300

NOTE: Using Max1 as most popular malt variety grown.

Hay — Delivered Processing Plant										Prov.	Average		Forecast
	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	5 Yr	10 Yr	26/27
Export Oaten Top Grade	\$230	\$180	\$300	\$350	\$280	\$170	\$300	\$330	\$290	\$300	\$278	\$273	\$275
Average Price All Grades	\$200	\$160	\$275	\$325	\$240	\$140	\$249	\$314	\$250	\$200	\$231	\$235	\$240

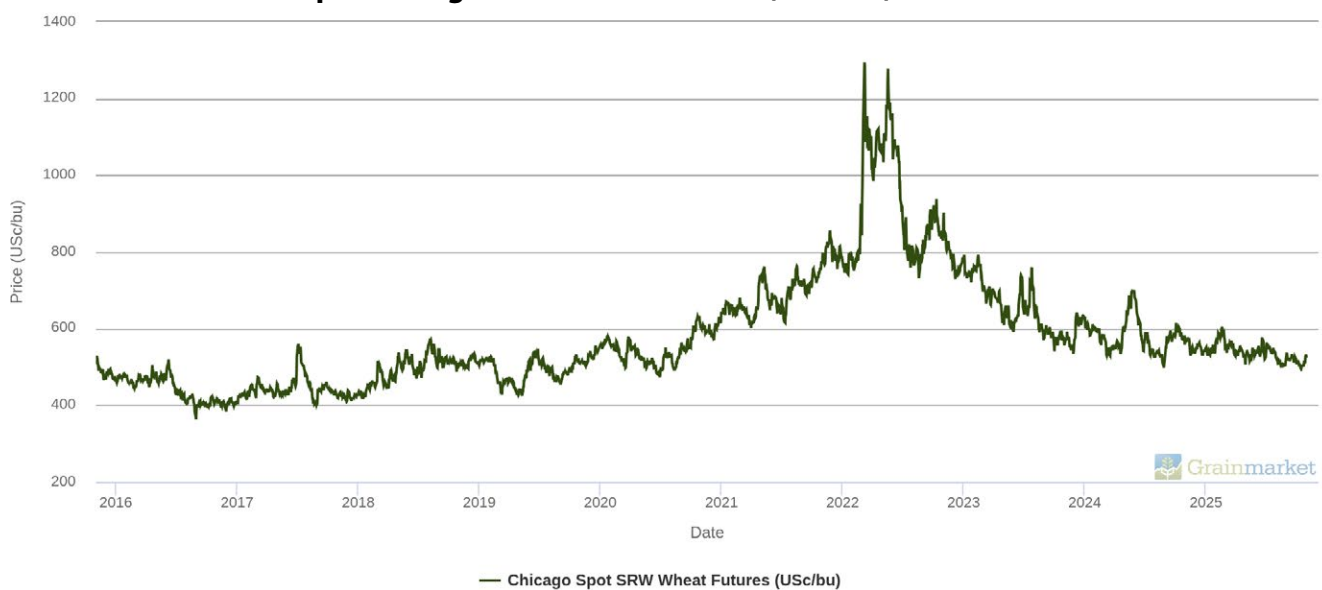


COMPONENTS OF FIS WHEAT PRICE - DETERMINING AN ESTIMATE FOR 2026/2027

Using the three key price components — wheat futures, exchange rate, and basis — along with the stocks-to-use ratio as an indicator of supply and demand pressure, Farmanco currently estimates an APW1 FIS price of around \$350/t (AUD) for the 2026/27 season. The exchange rate/wheat futures matrix can be used to identify a reasonable price range around this estimate. While wheat stocks among major exporters remain relatively low, global production rebounded in 2025, easing earlier tightness. However, with a weaker global economy weighing on consumption, demand growth may lag behind the rise in production. If that occurs, it could place downward pressure on prices through 2026.

MONTHLY NEARBY WHEAT (CBOT)

Spot Chicago SRW Wheat Futures (US c/bu) — 10 Years



HISTORICAL EXCHANGE RATE OF THE AUSTRALIAN DOLLAR AGAINST THE US DOLLAR

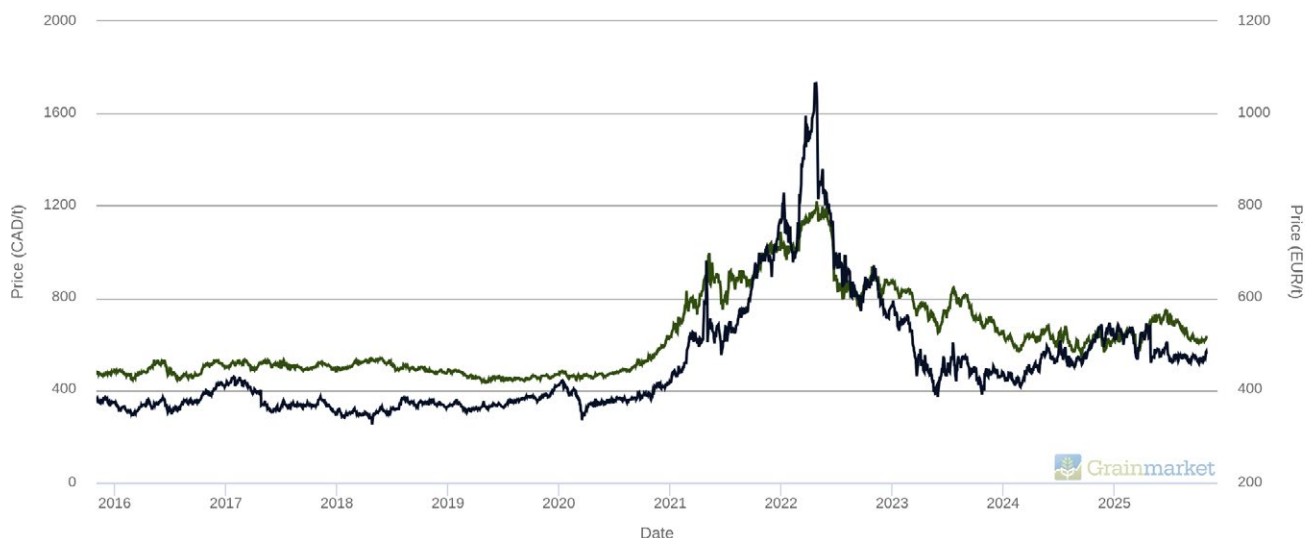
Spot AUD/USD Currency Exchange Rate — 10 Years





HISTORICAL CANADIAN AND EUROPEAN CANOLA FUTURES

Historical Canadian & EU Canola Futures— 10 Years



Historical FIS Basis												Average	Forecast
Crop Year	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	5 Yr Av	26/27
Chicago FIS Basis (A\$/mt) DEC	36	34	49	61	42	25	-20	-100	90	50	50	14	30
Chicago FIS Basis (A\$/mt) MAR	31	27	44	53	37	21	-25	-100	80	35	40	6	20
Global Wheat Stocks to Use	34%	35%	38%	39%	40%	37%	34%	35%	33%	32%	32%	34%	35%

Wheat Futures + FIS Basis c/bus	APW Wheat Estimated FIS Cash Price AUD\$/mt														
	Exchange Rate — Value of AUD in US Cents														
	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82
525	\$357	\$344	\$333	\$322	\$311	\$301	\$292	\$284	\$276	\$268	\$261	\$254	\$247	\$241	\$235
550	\$374	\$361	\$348	\$337	\$326	\$316	\$306	\$297	\$289	\$281	\$273	\$266	\$259	\$253	\$246
575	\$391	\$377	\$364	\$352	\$341	\$330	\$320	\$311	\$302	\$293	\$286	\$278	\$271	\$264	\$258
600	\$408	\$394	\$380	\$367	\$356	\$344	\$334	\$324	\$315	\$306	\$298	\$290	\$283	\$276	\$269
625	\$425	\$410	\$396	\$383	\$370	\$359	\$348	\$338	\$328	\$319	\$310	\$302	\$294	\$287	\$280
650	\$442	\$426	\$412	\$398	\$385	\$373	\$362	\$351	\$341	\$332	\$323	\$314	\$306	\$299	\$291
675	\$459	\$443	\$428	\$413	\$400	\$388	\$376	\$365	\$354	\$344	\$335	\$326	\$318	\$310	\$302
700	\$476	\$459	\$443	\$429	\$415	\$402	\$390	\$378	\$367	\$357	\$348	\$338	\$330	\$322	\$314
725	\$493	\$476	\$459	\$444	\$430	\$416	\$404	\$392	\$381	\$370	\$360	\$351	\$342	\$333	\$325
750	\$510	\$492	\$475	\$459	\$444	\$431	\$418	\$405	\$394	\$383	\$372	\$363	\$353	\$344	\$336
775	\$527	\$509	\$491	\$475	\$459	\$445	\$431	\$419	\$407	\$396	\$385	\$375	\$365	\$356	\$347



LIVESTOCK & WOOL PRICES FOR BUDGETS IN 2026

This is our current estimate of budget prices for 2026. These have been developed by looking back at historic prices and forward at world and domestic markets. Your individual situations **will** affect these estimates eg. freight, quality premiums/deductions so take these into consideration. If you have any queries, please give us a call.

Sheep Prices (gross)				
Class	Mar ¼	Jun ¼	Sep ¼	Dec ¼
CFA Ewes (1)	\$100	\$100	\$100	\$100
CFA Ewes (2)	\$150	\$150	\$150	\$150
Ewe Hoggets	\$165	\$165	\$165	\$165
Wether Hoggets	\$130	\$130	\$130	\$130
Shipper Wethers	\$140	\$140	\$140	\$140
Rams	\$100	\$100	\$100	\$100
Slaughter Lambs				
Prime Lambs (3)	\$165	\$165	\$165	\$165
Store Lambs (4)	\$120	\$120	\$120	\$120

(1) Slaughter Grade Ewes 50 kg lwt.

(2) Sound mouths. Suitable for breeding.

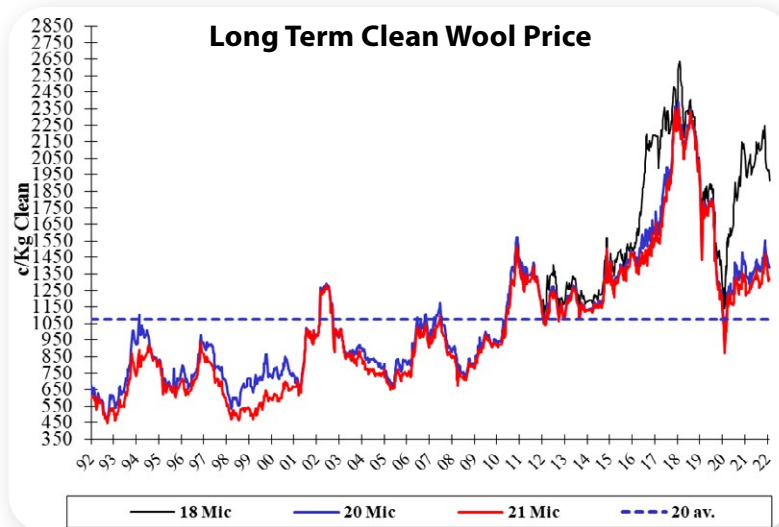
(3) \$/kg Carcass Weight on 20-22 kg Carcass.

(4) \$/kg Carcass Weight on 12-16 kg Carcass.

Note: These are gross prices. Selling costs of 5% need to be included as costs in cash flow.

		Wool Yield								
Micron		55%	57%	59%	61%	63%	65%	67%	69%	71%
	19.0	809	839	868	897	927	956	986	1,015	1,045
	19.5	746	773	800	827	854	881	908	935	962
	20.0	682	707	731	756	781	806	831	855	880
	20.5	664	688	712	736	760	784	808	832	857
	21.0	645	669	692	716	739	762	786	809	833
	21.5	537	557	577	596	616	635	655	674	694
	22.0	430	445	461	477	492	508	524	539	555
	22.5	405	420	435	450	464	479	494	508	523
	23.0	381	395	409	422	436	450	464	478	492
	23.5	356	369	382	395	408	421	434	447	460
	24.0	332	344	356	368	380	392	404	416	428

Note that wool prices are quoted on a cents per kilogram greasy price as this is the way it is recorded in most growers cashbooks. To this end you will need to ensure growers allow for selling costs (15c/kg) and wool tax (2% or around 10c/kg). Total costs around 25c/kg. **Note:** These prices assume 78% of the clip is fleece wool and that the remainder of the clip is worth 50% of the fleece price.



Cattle Prices (gross)			
Class	kg LW	\$/kg LW	\$/hd
Cull Cows	450	\$2.75	\$1,238
Breeders	500	\$3.00	\$1,500
Heifers	450	\$3.75	\$1,688
Bulls	600	\$2.75	\$1,650
For Slaughter	kg LW	\$/kg LW	\$/hd
Vealer Steer	250	\$4.75	\$1,188
Vealer Heifer	250	\$4.00	\$1,000
Yearling Steers	350	\$4.25	\$1,488
Yearling Heifers	350	\$3.75	\$1,313
Grown Steer	550	\$3.75	\$2,063



BUDGET PRICES 2026 NEW SOUTH WALES, VICTORIA AND SOUTH AUSTRALIA

Grain price outlooks are not as strong as the past five years. We expect to remain in the mid-range heading into 2026/27. Internationally, the season has been solid, although export supplies outside of China suggest potential upside if production is challenged or political problems arise. On the domestic front, there is likely to be adequate supply of grains for domestic and export markets. Higher input costs continue and businesses are more exposed than normal to adverse seasonal or price outcomes. Be sure to do your numbers around below-average yields and look to manage costs where you can to minimise the potential downside risks.

Note: Prices are 'delivered port'. Use GTA locational differentials as a guide to adjust back to silo based prices.

WHEAT (Delivered Port)											Average	Budget
		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
Newcastle	APH2	+\$38	+\$15	+\$15	+\$1	+\$14	+\$48	+\$40	+\$20	+\$10	+\$26	+\$26
	H2	+\$13	+\$5	+\$5	+\$2	+\$5	+\$29	+\$20	+\$10	+\$5	+\$14	+\$14
	APW1	\$290	\$430	\$400	\$292	\$280	\$326	\$375	\$360	\$320	\$332	\$330
	ASW	-\$16	-\$10	-\$10	-\$13	-\$12	-\$36	-\$30	-\$20	-\$20	-\$24	-\$24
	AGP	-\$35	-\$20	-\$15	-\$18	-\$21	-\$40	-\$40	-\$30	-\$25	-\$31	-\$31
	Feed	-\$77	-\$30	-\$25	-\$53	-\$50	-\$45	-\$50	-\$40	-\$50	-\$47	-\$47
Melbourne		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
	APH2	+\$40	+\$15	+\$15	+\$7	+\$17	+\$36	+\$40	+\$30	+\$10	+\$27	+\$27
	AH2	+\$22	+\$6	+\$6	+\$4	+\$8	+\$23	+\$20	+\$15	+\$5	+\$14	+\$14
	APW1	\$280	\$420	\$390	\$280	\$285	\$332	\$375	\$362	\$330	+\$337	\$340
	ASW	-\$13	-\$10	-\$10	-\$9	-\$10	-\$35	-\$30	-\$20	-\$20	-\$23	-\$23
	AGP	-\$35	-\$20	-\$15	-\$11	-\$18	-\$40	-\$40	-\$40	-\$25	-\$33	-\$33
	Feed	-\$70	-\$30	-\$25	-\$87	-\$60	-\$45	-\$50	-\$60	-\$40	-\$51	-\$51

BARLEY											Average	Budget
		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
Newcastle	Malt	\$280	\$430	\$360	\$240	\$210	\$290	\$330	\$357	\$300	\$297	\$340
	Feed	\$230	\$420	\$350	\$242	\$200	\$256	\$310	\$322	\$280	\$274	\$320
	Spread	-\$50	-\$10	-\$10	\$2	-\$30	-\$34	-\$20	-\$35	-\$20	-\$28	-\$30
Melbourne		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
	Malt	\$280	\$420	\$350	\$222	\$210	\$290	\$330	\$350	\$310	\$298	\$340
	Feed	\$230	\$410	\$340	\$223	\$200	\$254	\$300	\$320	\$290	\$273	\$320
	Spread	-\$50	-\$10	-\$10	\$1	-\$10	-\$36	-\$30	-\$30	-\$20	-\$25	-\$20

CANOLA — Note: Prices Quoted before Oil Bonification											Average	Budget
		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
Newcastle	Non GM	\$550	\$630	\$640	\$590	\$850	\$690	\$640	\$750	\$780	\$742	\$700
	GM	\$520	\$610	\$585	\$545	\$800	\$660	\$600	\$710	\$715	\$697	\$660
	Spread	-\$30	-\$20	-\$55	-\$45	-\$50	-\$30	-\$40	-\$40	-\$65	-\$45	-\$40
Melbourne		2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
	Non GM	\$550	\$610	\$640	\$588	\$850	\$710	\$660	\$770	\$790	\$756	\$700
	GM	\$520	\$590	\$585	\$545	\$800	\$680	\$620	\$725	\$725	\$710	\$660
	Spread	-\$30	-\$20	-\$55	-\$43	-\$50	-\$30	-\$40	-\$45	-\$65	-\$46	-\$40



OTHER GRAINS — Prices Quoted At Port (Melbourne)										Average	Budget
	2017	2018	2019	2020	2021	2022	2023	2024	2025	5 Yr Av	2026
Lupins	\$310	\$550	\$650	\$350	\$335	\$330	\$360	\$450	\$330	\$361	\$360
Field Peas	\$334	\$550	\$540	\$350	\$315	\$320	\$350	\$400	\$320	\$341	\$340
Faba Beans	\$300	\$800	\$800	\$350	\$330	\$330	\$370	\$450	\$370	\$370	\$370
Chickpeas	\$800	\$700	\$650	\$500	\$500	\$470	\$500	\$850	\$575	\$579	\$580
Lentils	\$500	\$550	\$420	\$550	\$850	\$875	\$890	\$900	\$760	\$855	\$800
Oats 1	\$160	\$400	\$500	\$250	\$200	\$230	\$260	\$280	\$310	\$256	\$280
Oats 2	\$140	\$380	\$480	\$200	\$180	\$210	\$240	\$260	\$290	\$236	\$260
Hay (First Grade)	\$170	\$450	\$300	\$200	\$200	\$200	\$225	\$230	\$275	\$226	\$240
Hay (All Grades)	\$150	\$425	\$265	\$170	\$175	\$175	\$200	\$200	\$240	\$198	\$220
Lucerne Hay	\$175	\$475	\$350	\$300	\$220	\$240	\$265	\$260	\$300	\$257	\$260
Sorghum	\$210	\$380	\$430	\$320	\$300	\$300	\$330	\$310	\$320	\$312	\$300
Maize/Corn	\$210	\$230	\$350	\$350	\$350	\$385	\$410	\$380	\$370	\$379	\$360
Cotton	\$539	\$547	\$500	\$530	\$500	\$643	\$600	\$650	\$585	\$596	\$570
Rice	\$527	\$540	\$411	\$470	\$550	\$432	\$500	\$475	\$475	\$486	\$500

Typical Local Silo Differentials

Based on GTA Locational Differentials

New South Wales			Victoria			South Australia		
Location	Natural Port	\$/t	Location	Natural Port	\$/t	Location	Natural Port	\$/t
Ardlethan	Port Kembla	\$42	Berriwillock	Melbourne	\$34	Ardrossan	Port Giles	\$12
Barmedman	Port Kembla	\$39	Charlton	Melbourne	\$27	Balaklava	Wallaroo	\$18
Brocklesby	Melbourne	\$35	Dimboola	Portland	\$28	Bordertown	Outer Harbour	\$37
Condobolin	Port Kembla	\$51	Elmore	Melbourne	\$21	Bowmans	Outer Harbour	\$14
Coolamon	Port Kembla	\$40	Hamilton	Portland	\$14	Coonalpyn	Outer Harbour	\$33
Deniliquin	Melbourne	\$31	Horsham	Portland	\$25	Cummins	Port Lincoln	\$12
Finley	Melbourne	\$31	Murchison East	Melbourne	\$20	Gladstone	Wallaroo	\$21
Forbes	Port Kembla	\$42	Murtoa	Portland	\$27	Jamestown	Wallaroo	\$29
Gilgandra	Newcastle	\$38	Ouyen	Melbourne	\$43	Maitland	Wallaroo	\$11
Henty West	Melbourne	\$39	Rainbow	Portland	\$33	Naracoorte	Portland	\$20
Junee Sub	Port Kembla	\$38	Sea Lake	Melbourne	\$36	Pinnaroo	Outer Harbour	\$38
Lockhart	Melbourne	\$41	St James	Melbourne	\$26	Roseworthy	Outer Harbour	\$12
Manildra	Port Kembla	\$36	Stawell	Geelong	\$25	Streaky Bay	Thevenard	\$18
Narrandera	Port Kembla	\$47	Warracknabeal	Portland	\$29	Wallaroo	Wallaroo	\$26
Oaklands	Melbourne	\$34	Westmere	Geelong	\$19	Witera	Thevenard	\$25
Parkes Sub	Port Kembla	\$40	Woomelang	Geelong	\$36	Wudinna	Port Lincoln	\$30
Rand	Melbourne	\$38	Yarrawonga	Melbourne	\$30	Yeelanna	Port Lincoln	\$15



Budget pricing for livestock has recovered remarkably from the previous year. Wool prices have been improving and the spread to lower micron has increased so refer your fleece stats when considering budget price. For budget purposes we have adopted a relatively conservative prices. Be sure to work through the prices in your situation and make adjustments accordingly.

LIVESTOCK PRICES FOR BUDGETS IN 2025

Cattle Prices (gross)			
Class	kg LW	\$/kg LW	\$/hd
Cull Cows	500	\$2.75	\$1,375
Breeders	500	\$2.75	\$1,375
Heifers	450	\$3.75	\$1,688
Bulls	700	\$3.25	\$2,275
For Slaughter	kg LW	\$/kg LW	\$/hd
Vealer Steer	250	\$4.25	\$1,063
Vealer Heifer	250	\$4.25	\$1,063
Yearling Steers	350	\$4.12	\$1,442
Yearling Heifers	350	\$3.99	\$1,396
Grown Steer	550	\$3.99	\$2,194

Sheep Prices (gross)				
Class	Mar ¼	Jun ¼	Sep ¼	Dec ¼
CFA Ewes (1)	\$100	\$100	\$100	\$100
CFA Ewes (2)	\$200	\$200	\$200	\$200
Ewe Hoggets	\$220	\$220	\$220	\$220
Wether Hoggets	\$130	\$130	\$130	\$130
Rams	\$100	\$100	\$100	\$100
Slaughter Lambs				
Prime Lambs (3)	\$200	\$200	\$200	\$200
Store Lambs (4)	\$130	\$130	\$130	\$130

WOOL PRICES (GROSS CENTS/KG GREASY — WHOLE CLIP)

		Wool Yield								
Micron		55%	57%	59%	61%	63%	65%	67%	69%	71%
	17.0	1,003	1,040	1,076	1,113	1,149	1,186	1,222	1,259	1,295
	17.5	977	1,012	1,048	1,083	1,119	1,154	1,190	1,225	1,261
	18.0	950	984	1,019	1,053	1,088	1,122	1,157	1,191	1,226
	18.5	908	941	974	1,007	1,040	1,073	1,106	1,139	1,172
	19.0	866	898	929	961	992	1,024	1,055	1,087	1,118
	19.5	842	873	903	934	964	995	1,026	1,056	1,087
	20.0	817	847	877	907	936	966	996	1,026	1,055
	20.5	813	842	872	901	931	960	990	1,019	1,049
	21.0	808	837	866	896	925	955	984	1,013	1,043
	21.5	800	829	859	888	917	946	975	1,004	1,033
	22.0	793	822	851	879	908	937	966	995	1,024

Note that wool prices are quoted on a cents per kilogram greasy price as this is the way it is recorded in most growers cashbooks. To this end you will need to allow for selling costs (15c/kg) and wool tax (2% or around 10c/kg). Total costs around 25c/kg.

Note: These prices assume 78% of the clip is fleece wool and that the remainder of the clip is worth 50% of the fleece price.

(1) Slaughter Grade Ewes 50 kg lwt.

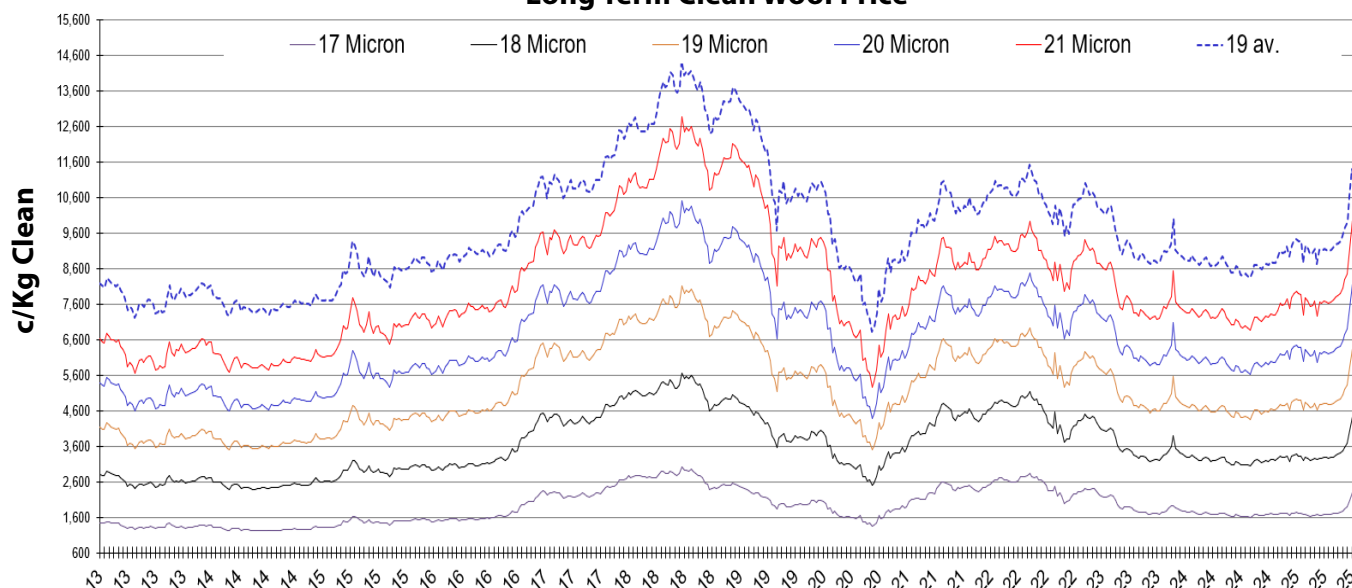
(2) Sound mouths. Suitable for breeding.

(3) \$/kg Carcass Weight on 20-22kg Carcass.

(4) \$/kg Carcass Weight on 12-16kg Carcass.

Note: These are gross prices. Selling costs of 5% need to be included as costs in cash flow.

Long Term Clean Wool Price



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