2025–26 Australian cotton industry gross margin
Notes & assumptions

For a complete guide to cotton management, see the ***Australian Cotton Production Manual 2025*.**

A gross margin represents the difference between gross income and the variable costs of producing a crop. Gross margin budgets do not take into account risk, overhead costs (including permanent labour) and do not calculate farm profit. An industry gross margin budget should be used only as a guide. They are designed to give an indication of operations and costs required to grow a cotton crop. A grower should create their own budgets to take into account individual field management plans, movements in crop and input prices and changes in seasonal conditions. In all instances, operations should be tailored to the requirements of individual fields. Following is an explanation of some terms and an outline of the assumptions used in the creation of the 2025–26 cotton industry gross margin budgets.

BALE: The industry term 'per bale', means a ginned 'lint' bale of 227kg. The budget assumes 4.5 lint bales per round module.

Bt: A licence fee is paid to Bayer for cotton seed that uses Bollgard® technology (Bt). The technology license fee for Bollgard3® stacked with Roundup Ready Flex® and XtendFlex®. The fully irrigated budgets use Bayer Cotton Choices® Option 1, which provides a discount on the technology license fees for up-front payment $405/ha. The semi-irrigated budget uses option 2, which includes the option of 'Late Crop Removal', $435 per green hectare. For crops expected to yield less than 4 bales/ha the End Point Royalty is the most cost-effective option. The raingrown budget uses Bayer Cotton Choices® Option 3, an end point royalty (EPR) of $55/bale ex GST. In the northern GMs the EPR is $35/bale ex GST which incorporates a development allowance to reflect the challenges of establishing a new cotton industry in the North. See http://cottonchoices.com.au to find the option that best suits your cropping situation.

CARTAGE: Cartage can vary significantly for different cotton growing regions. For the “southern” (Emerald to Hilston) gross margins, a cartage distance of 50km is assumed, with a road train carting 12 round modules per trip. For the northern gross margins, the irrigated gross margin cartage estimate assumes delivery to Kununurra gin (40km), Northern raingrown cartage estimate assumes delivery to Katherine gin (200km).

CHEMICALS: Always read chemical labels and follow directions, as it is your legal responsibility to do so. Use of a particular brand name or active ingredient are examples only and do NOT imply a recommendation. Chemical registrations vary between states.

CROP DESTRUCTION / PUPAE DESTRUCTION: To further mitigate resistance follow the specific guidelines in your licence agreement.

DEFOLIANT: Good conditions are required to get the best performance. The choice of defoliant and rate used depends on the moisture status of the plant, geographic location and seasonal conditions. Self propelled ground rig is used in some examples due to improved canopy penetration, however there can be trade-offs with damage to the crop.

FERTILISER REQUIREMENTS: All fertiliser strategies should include comprehensive soil testing prior to sowing. Cotton crop nutrition requirements are comprehensively covered in the Nutrition chapter in the Australian Cotton Production Manual.

GINNING: Some gins charge a 'base rate' per bale cost that also attract additional costs such as gas usage and low turnout surcharges. These cotton industry gross margins provide an example of flat rate ginning costs.

HERBICIDES: The cornerstone of weed management and managing herbicide resistance risks is controlling survivors and preventing new weed seeds from entering the seed bank. To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques. Chipping or spot spray can be used to control any surviving weeds as part of a robust Integrated Weed Management (IWM) plan. Aim to plant into clean fields. XtendFlex® varieties allow 'Over the Top' application of glyphosate, dicamba and glufosinate-ammonium herbicides under specific conditions. With a range of traits being grown this season, ensure all weed management strategies are trait specific. See the Herbicide Resistance Management Strategy (found in the Cotton Pest Management Guide) and Bayer's Roundup Ready Flex Cotton Weed Management Guide.

INSURANCE: Insurance premiums are influenced by a variety of factors such as; policy type, location, and estimated yield. Best practice is to get quotes from a couple of providers and to compare.

INTEGRATED PEST MANAGEMENT: Insecticides suggested in these budgets are examples only and strategies will vary with individual circumstances. Individual fields need careful monitoring to determine pest and beneficial insect populations. Use recommended thresholds for all pests. Avoid using broad spectrum sprays and continuously using chemicals from the same group. Follow the Insecticide Resistance Management Strategy (found in the Cotton Pest Management Guide) to protect the value of insecticide technologies for the future. Conserving and utilising beneficial insects is a key aspect of long-term effective pest management.

IRRIGATION: Individual water budgets will vary depending on irrigation system efficiency, and regional and seasonal variations in plant evapotranspiration and effective rainfall. The budget considers conveyance losses and includes the required water pumped from source (surface or groundwater).

Furrow Irrigated (southern): Grower Survey data shows a five year average (2019-20 and 2023-24) field applied water of 6.4 ML/ha correlating with a 12+ bale crop. Water application for refuge pigeon peas is estimated at 4.5 ML/ha, giving total cotton (1 ha) and refuge (0.025 ha) water use of 6.5 ML/ha. Average conveyance efficiency of 83% (NSW DPI 2020-21 and 2021-22) brings total sourced water to 7.8 ML/ha.

Overhead irrigation: Research and trials show that overhead irrigation systems can decrease water application by up to 30% compared to surface irrigation (see 2022 ACPM p29). A more conservative 15% has been applied to the 6.5 ML/ha furrow irrigation water use (see above), generating an applied water requirement of 5.5 ML/ha for overhead cotton plus refuge. Average conveyance efficiency of 83% brings total sourced water to 6.7 ML/ha.

Semi irrigated: Applied irrigation water of 3.5 ML is based on the target yield of 7 bales ha and 200mm plant available water content (PAWC) at planting. Applied water for refuge pigeon peas is estimated at 3.0 ML/ha, giving total cotton (1 ha) and refuge (0.025 ha) water use of 3.6 ML/ha. Average conveyance efficiency of 83% (NSW DPI Water Benchmarking 2 year average 2017-18 and 2021-22) brings total sourced water to 4.3 ML/ha.

Northern furrow irrigated: This budget assumes applied water of 8.5 ML/ha was based on typical usage in the Ord River scheme. Applied water for refuge pigeon peas is estimated at 4.5 ML/ha, giving total cotton (1 ha) and refuge (0.025 ha) water use of 8.6 ML/ha. Water is applied direct from source (no on-farm storage or storage losses) with 97% conduit efficiency (NSW DPI 2-year average 2017-18 and 2021-22) bringing total sourced water to 8.9 ML/ha.

LABOUR: With the exception of the contractor GM, labour is assumed to be an overhead cost and is not included in this budget.

LEVIES: The Research Levy ($2.25/bale) is a compulsory levy that is invoiced by the ginning organisation following ginning. The Cotton Research Development Corporation (CRDC) uses funds collected through this levy to finance vital industry research. The Cotton Australia Levy ($1.50/bale) is a voluntary levy, which funds

the peak industry body Cotton Australia that provides a valuable policy/advocacy role, farmer support and promotes the Australian cotton industry.

MACHINERY: The cost of each farming pass reflects variable costs only (fuel, repairs and maintenance). Labour and depreciation are considered overhead costs, so are not included in the budget.

Northern Australia: Northern Australia gross margin budgets were originally developed in 2021-22 to give an indication of the operations and costs required to grow a cotton crop in the emerging cotton regions in the North (QLD, NT & WA). There is a raingrown GM, and an irrigated GM. The GMs were based on inputs from farmers, researchers, agronomists and industry specialists across QLD, NT, and WA.

PLANTING RATE: Rates will vary from 10 to 18 kg/ha depending on location and seasonal conditions. Typically there are higher planting rates in the South and lower planting rates in the North.

PRICES: Input Prices

Chemical & fertiliser pricing information was collected across all cotton growing regions and averaged to give an indication of product pricing. Chemical prices in the northern gross margins include additional freight costs of approximately $12 per 20L drum. Fertilizer prices are for on-farm delivery. Northern fertiliser costs include additional freight of $412 per tonne.

Cotton seed price per kg will vary with the time of ordering and seed treatments chosen. Price quoted in the budgets is for a preseason order. Seed prices included in each budget are a weighted average varieties recommended in CSD's variety guide for irrigated, semi-irrigated, and raingrown cotton production. Northern seed prices include additional freight of $412 per tonne.

Output Prices

Lint The gross margin uses a multi-merchant average daily cash price for the 2026 crop.

Quality Discount Characteristics of cotton fibre can impact the quality of the final cotton product. Each merchant has a premium and discount sheet that reflects the desirability of these characteristics. A small quality discount has been applied to each gross margin to reflect this seasonal pricing influence.

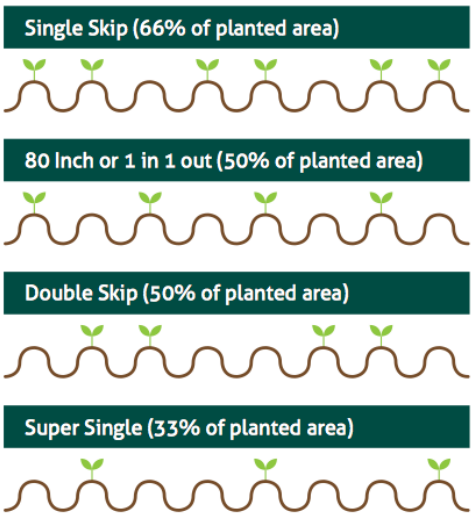
Seed The cotton seed price is given indicatively as a per bale value. $93/bale for seed (prior to ginning costs being subtracted) is the equivalent of $372/t, assuming an average of 250kg of cotton seed per bale of lint.

ROTATION: While cotton can be grown in various rotations, the Southern budgets assumes a two-year rotation of cotton—wheat—long fallow in the southern gross margins. The northern gross margins assumes a previous crop of sorghum, with 2 t/ha mulch cover retained.

ROW CONFIGURATION: In the southern GMs, fully irrigated furrow and overhead are configured as solid plant on 1m beds. Semi-irrigated assumes double skip and raingrown considers varied planting configurations. Northern gross margins are based on solid configuration 1m beds. See the image to the right to understand these options.

YIELD: Actual yields are a complex result of agronomic and environmental factors and as a result will vary between fields, farms and regions. Given yield potential and expected variability in yield across different seasons for some regions and systems of Northern Australia is not well understood, agronomist advice for your situation is advised.

Figure 1: Image source 'Getting the most out of skip row irrigated cotton', CSD 2009



Fully irrigated (southern): A yield of 12 bales/ha is achievable considering the long fallow, 'best practice' operations and the five-year average yield for the variety 746B3F in Cotton Seed Distributors (CSD) commercial trial results.

Overhead irrigated: A yield of 10.3 bales/ha is based on reported yields (overhead irrigation v furrow irrigation) in the 2021 CRDC Grower Survey. The differential may reflect the challenges of meeting crop water requirements (particularly high volumes) in a timely manner.

Semi irrigated: The yield of 7 bales per ha assumes 200mm plant available water content (PAWC) at planting and applied irrigation water of 3.5 ML/ha.

Raingrown: The yield differentials between the various row configurations are entirely weather and region dependant. The gross margin yields are based on the yield matrix (based on Ozcott modelling of the Darling Downs Region) from page 29 of the Australian Cotton Production Manual 2025.

Northern furrow irrigated: A yield of 11 bales/ha is based on five year average Cotton Yearbook yields for Western Australia (Ord River Scheme) and agronomist feedback.

Northern raingrown: A yield of 4 bales/ha is based on Douglas Daly/Tipperary raingrown crops of 3–6 bales/ha reported in *CRCNA, Broadacre Cropping in northern Australia Newsletter #2, January 2021* and *Rhebergen, T. and Yeates, S.J., 2023. Climate and soil-based constraints to rainfed cotton yield in the Northern Territory, Australia–A modelling approach using APSIM-OZCOT. European Journal of Agronomy, 151* as well as Cotton Yearbook average yields for the Northern Territory and consultation with northern growers and stakeholders regarding recent commercial yields.

REFUGE: Each grower is required to grow a refuge crop as part of preventative insect-resistance management. Refuge requirements remain a critical part of protecting the longevity of the Bt. With this in mind, refuge crop costs have been included as part of the gross margin budget. For the purposes of the irrigated budget examples, we have used irrigated pigeon peas at 2.5% of the Bt cotton area. Unsprayed conventional cotton at 5% of the Bt area is used for the raingrown budget. Ensure crop destruction and refuge removal is in line with *Resistance Management Plan* (RMP) requirements. Refer to the relevant RMP for more information on refuge crops and minimum requirements.

Disclaimer