

Gross Margin Budget: Furrow Irrigated Cotton

1m row spacing. Bollgard3®, XtendFlex®, Roundup Ready Flex®

INCOME:

12.0 bales/ha¹ @

Cotton lint	\$573 /bale (at gin)
(less quality discount)	-\$8 /bale (at gin)
Cotton seed	\$93 /bale (at gin)
	\$658 /bale (at gin)

Example
Budget
\$/ha

Your
Budget
\$/ha

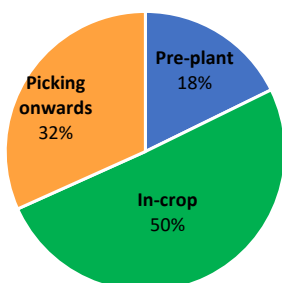
\$6,876
-\$96
\$1,115

A. TOTAL GROSS INCOME \$/ha:

\$7,895

VARIABLE COSTS:

See pg 2 for details



Fallow management	\$70
Farming: Pre-planting	\$65
Nutrition	\$989
Planting	\$145
Irrigation (6.5 ML applied ²)	\$551
Insurance	\$272
Crop protection, application & licence fee	\$906
Defoliation	\$131
Picking, cartage & ginning	\$1,332
Farming: Post-crop	\$120

B. TOTAL VARIABLE COSTS \$/ha:

\$4,580

GROSS MARGIN* (A-B) \$/ha:

\$3,315

GROSS MARGIN (A-B/ML sourced²) \$/ML:

\$422

Break even yield (bales/ha) based on lint & seed prices above:

5.5 bales/ha

Break even price (\$/bale incl. seed and discounts) based on 12 bales/ha:

\$361 /bale

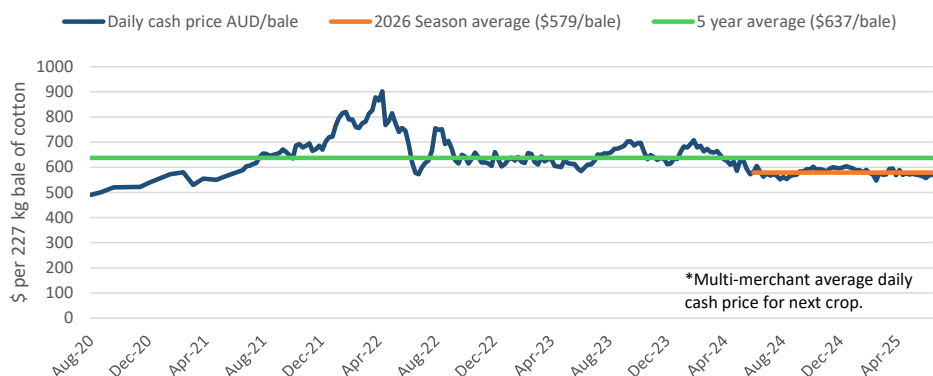
Note that break even yield & price are for variable costs only, overhead costs and labour are NOT considered

SENSITIVITY TABLE⁵

		PRICE (\$/bale incl. of seed & discounts)				
		558	608	658	708	758
227kg lint bales/ha	9.0	850	1284	1719	2153	2588
	10.0	1285	1768	2251	2734	3216
	11.0	1721	2252	2783	3314	3845
	12.0	2156	2736	3315	3894	4474
	13.0	2592	3219	3847	4475	5102
	14.0	3027	3703	4379	5055	5731
	15.0	3463	4187	4911	5635	6360

COTTON PRICE HISTORY & TRENDS

Australian cotton price* 2020 to 2025



This budget is designed to give an indication of operations and costs required to grow a cotton crop. Prices are estimates only. A grower should alter this budget to take account of 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 paddocks. For a complete guide to cotton management, see the **Australian Cotton Production Manual**.



Variable Costs by Operation			Machinery		Inputs			TOTAL	
			Total		Rate	Cost	Cost	Cost	
					/ha	Unit	\$/unit	\$/ha	\$/ha
Fallow management (long fallow) ⁴									
Fallow spray:	Glyphosate (450g/L)	Self Propelled	2.00	2.00	L	4.00	8.00	10	
Fallow spray:	Flumioxazin (500g/L)	with above		0.03	kg	147.00	4.41	4	
Fallow spray:	Paraquat (360g/L)	Self Propelled	2.00	2.00	L	5.00	10.00	12	
Fallow spray:	Flumioxazin (500g/L)	with above		0.03	kg	147.00	4.41	4	
Fallow spray:	Glufosinate-ammonium (200g/L)	Self Propelled	2.00	3.75	L	7.00	26.25	28	
Fallow spray:	Terbuthylazine (875g/kg)	with above		1.00	L	11.00	11.00	11	
Farming: Pre-planting									
Farming:	Discing	340 eng/HP	27.00					27	
Farming:	Hill up	340 eng/HP	17.00					17	
Farming:	Cultipacker	340 eng/HP	15.00					15	
Farming:	Steel drum / Rubber tyre roller	340 eng/HP	6.00					6	
Nutrition									
Fertiliser:	Soil nutrient testing		2.35					2	
Fertiliser:	MAP (16.5kg N, 36kg P, 2.5kg S applied) - spread pre plant	340 eng/HP	9.00	165	kg	1.56	257.73	267	
Fertiliser:	Potassium (50kg K applied) - spread pre plant	with above		100	kg	1.01	101.20	101	
Fertiliser:	Urea (117kg N applied) - drilled pre plant	340 eng/HP	16.00	255	kg	1.15	293.25	309	
Fertiliser:	Urea (117kg N applied) - side dress early-mid season	340 eng/HP	16.00	255	kg	1.15	293.25	309	
Planting									
Planting:	Precision planter	340 eng/HP	14.00					14	
Planting:	Seed: Bollgard3® Roundup Ready Flex or XtendFlex®	with above		13	kg	10.06	130.74	131	
Irrigation management ^{2,3}									
Irrigation:	Budgeted water (from source ²)			7.7	ML	68.07	525.02	525	
Other:	Soil moisture monitoring		8.75					9	
Farming:	Rotobuck/Knockdown (twice in season)	340 eng/HP	16.75					17	
Crop protection, application & licence fee ⁴									
Insecticide:	Sulfoxaflor (500g/kg), target: mirids	Self Propelled	2.00	0.14	kg	311.00	43.54	46	
Insecticide:	Fipronil (200g/L), target: mirids	Aerial	20.00	0.07	L	62.00	4.34	24	
Insecticide:	Spirotetramat (240g/L), target: SLW	Aerial	20.00	0.40	L	165.00	66.00	86	
Insecticide:	Acetamiprid (218g/L), Emamectin (32.5g/L) target: SLW, aphids, shield bugs	Aerial	20.00	0.30	L	83.00	24.90	45	
Herbicide:	Pendimethalin (455g/L)	Self Propelled	2.00	2.25	kg	18.00	40.50	43	
Herbicide:	Terbuthylazine (875g/L)	with above		1.20	L	11.00	13.20	13	
Herbicide:	XtendiMax® 2 (Dicamba 480g/L) (with XtendFlex® varieties only) ⁴	Self Propelled	2.00	1.17	L	20.00	23.40	25	
Herbicide:	Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	2.00	1.20	kg	9.00	10.80	13	
Herbicide:	S-metolachlor OTT (960g/L)	with above		1.00	L	9.00	9.00	9	
Herbicide:	Roundup Ready® Plantshield® (690g/kg Glyphosate)	Aerial	20.00	1.20	kg	9.00	10.80	31	
Farming:	Cultivation: Inter-row	340 eng/HP	15.00					15	
Other:	Chipping or Spot Spray		11.00					11	
Growth regulator:	Mepiquat (380g/L), growth regulator	Aerial	20.00	0.06	L	22.00	1.32	21	
Growth regulator:	Mepiquat (380g/L), growth regulator / cutout	Aerial	20.00	0.20	L	22.00	4.40	24	
Licence:	Bollgard 3® RRF Licence Fee: Price Discount							405	
Other:	Consultant	Contractor	75.00					75	
Refuge:	Refuge crop: Pigeon peas 2.5%, see page 3			0.1	ML			20	
Defoliation ⁴									
Defoliation:	Thidiazuron (500 g/L)	Aerial	20.00	0.15	L	26.00	3.90	24	
Defoliation:	Ethephon (900g/L)	with above		0.80	L	7.00	5.60	6	
Defoliation:	Spraying oil	with above		1.00	L	7.00	7.00	7	
Defoliation:	Thidiazuron + Diuron (240g + 120g/L)	Aerial	20.00	0.13	L	94.00	12.22	32	
Defoliation:	Ethephon (900g/L)	with above		2.00	L	7.00	14.00	14	
Defoliation:	Spraying oil	with above		1.00	L	7.00	7.00	7	
Defoliation:	Pyraflufen-ethyl (25g/L)	Aerial	20.00	0.08	L	87.00	6.96	27	
Defoliation:	Ethephon (900g/L)	with above		1.00	L	7.00	7.00	7	
Defoliation:	Spraying oil	with above		1.00	L	7.00	7.00	7	
Picking, cartage & ginning									
Picking:	Own plant: round baler (variable costs only, incl. fuel)	CP770	94.00	per ha				94	
Picking:	plus wrap		47.00	/ round bale		10.44 / lint bale		125	
Cartage:	Freight (incl. lift) 50 km from gin	costs related to yield	63.00	/ round bale		14.00 / lint bale		168	
Ginning:	Fibre processing		75.00	/ lint bale		75.00 / lint bale		900	
Levies:	Research levy & Cotton Australia levy		3.75	/ lint bale		3.75 / lint bale		45	
Farming: Post-crop									
Farming:	Mulcher	340 eng/HP	18.00					18	
Farming:	Pupae bust (check bt licence cultivation requirements)	340 eng/HP	24.00					24	
Farming:	Desilting & grading channels	Contractor	70.00					70	
Herbicide:	Sterilising channels	340 eng/HP	8.00					8	
Other									
Crop insurance:		Premium depends on various factors						272	
B. TOTAL VARIABLE COSTS \$/ha:									4580
Total irrigation water requirements (1ha cotton + .025ha refuge) from source ² ML/ha:				7.8	ML				



Variable Costs by Operation		Machinery		Inputs				TOTAL
		Total \$/ha		Rate /ha	Unit	Cost \$/unit	Cost \$/ha	Cost \$/ha
Fallow management (long fallow)⁴								
Fallow spray:	Glyphosate (450g/L)	Self Propelled	2.0	2.00	L	4.00	8.00	10
Fallow spray:	Flumioxazin (500g/L)	with above		0.03	L	147.00	4.41	4
Fallow spray:	Paraquat (360g/L)	Self Propelled	2.0	2.00	L	5.00	10.00	12
Fallow spray:	Flumioxazin (500g/L)	with above		0.03	L	147.00	4.41	4
Fallow spray:	Glufosinate-ammonium (200g/L)	Self Propelled	2.0	3.75	L	7.00	26.25	28
Fallow spray:	Terbutylazine (875g/kg)	with above		1.00	L	11.00	11.00	11
Farming								
Farming:	Discing	340 eng/HP	27.0					27
Farming:	Hill up	340 eng/HP	17.0					17
Farming:	Cultipacker	340 eng/HP	15.0					15
Farming:	Steel drum / Rubber tyre roller	340 eng/HP	6.0					6
Planting								
Planting:	Planter & seed: Pigeon pea	340 eng/HP	14.0	35.0	kg	5.50	192.50	207
Irrigation management^{2,3}								
Irrigation:	Budgeted water (from source ²)			4.50	ML	68.07	306.31	306
Herbicide & application								
Herbicide:	Pendimethalin (455g/L)	Self Propelled	2.0	2.00	kg	18.00	36.00	38
Herbicide:	Prometryn (500g/L)	with above		2.50	kg	21.00	52.50	53
Herbicide:	Glyphosate (450g/L)	Self Propelled	2.0	1.60	L	4.00	6.40	8
Farming:	Cultivation: Inter-row	340 eng/HP	15.0					15
Post-crop								
Farming:	Crop destruction (slashing)	340 eng/HP	18.0					18
Farming:	Pupae bust (check bt licence cultivation requirements)	340 eng/HP	24.0					24
B. TOTAL VARIABLE COSTS \$/ha:								804
Total irrigation water use ML/ha:				4.5 ML/ha				

2025-26 Cotton Gross Margins, brought to you by the cotton industry's joint extension program, CottonInfo.

Foot notes

***GM/Ha:** This gross margin represents the income and costs for 1 green hectare of cotton plus the required refuge crop of 0.025ha, resulting in a total gross margin area of 1.025 ha.

1. Yield: Actual yields are a complex result of agronomic and environmental factors. In this budget a yield of 12 bales/ha is appropriate considering the long fallow, fertiliser program and budgeted irrigation water.

2. Water: Budgeted water is the ML/ha pumped from sources (surface or groundwater). Grower Survey data shows a 5 year average (2019-20 to 2023-24) *field applied water* of 6.4 ML/ha. Water application for refuge pigeon peas is estimated at 3.7 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 (cost outlined on pg2). Individual water budgets will vary depending on irrigation system efficiency, and regional and seasonal variations in plant evapotranspiration and effective rainfall.

3. Cost of water: The cost of applied irrigation water varies considerably depending on: source (groundwater, surface water), number of times pumped to get to field, energy source of pumps, and relevant fees and charges. This budget assumes 79% surface water and 21% groundwater (2021-22 to 2022-23 Grower Surveys), with a total surfacewater cost of \$64/ML (extract and lift to storage) and a groundwater cost of \$83/ML (extract only), both including pump fuel and maintenance and water usage charges.

4. Chemicals: Registrations vary between states. Use of a particular brand name or active ingredient are examples only and do NOT imply a recommendation. Always read chemical labels and follow directions. 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.

5. Sensitivity tables: There are yield dependant costs included in these calculations.

Machinery costs: 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 this budget. Contractor rates encompass these costs and are outlined in a separate budget.

See the **Gross Margin Notes** for further details on assumptions.

Acknowledgements

We wish to acknowledge the efforts made by industry specialists and management during the development and review of the 2025 cotton gross margin budgets. Assistance was provided by retailers, agronomists, the CottonInfo team, CCA, and CSD.

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