



Income & Cost Budgets Winter Crops – 2024

A joint initiative between the
Bureau for Food and Agricultural Policy (BFAP)
and the
Protein Research Foundation (PRF)
and the
Oil & Protein Seeds Development Trust /
Oilseeds Advisory Committee
and
Grain South Africa

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INCOME & COST BUDGETS FOR WINTER CROPS – 2024 SEASON

Foreword

The Protein Research Foundation (PRF) strives to make a significant contribution to the promotion of local production of protein on a sustainable basis, in order to satisfy the growing demand for protein for animal production purposes as well as the optimal utilisation thereof, which will lead to an increase in the standard of living of all people in the Republic of South Africa. The main objectives of the Protein Research Foundation (PRF) are to replace imported protein used in animal feed with locally produced protein and to encourage the better utilisation of this protein. The objectives are promoted through research funding and technology transfer.

Historically, the Protein Research Foundation (PRF), Grain South Africa (GSA), the Bureau for Food and Agricultural Policy (BFAP) and agribusinesses have published their individual cost of production budgets which focusses on summer- and winter crops produced in South Africa's key agro-ecological zones, both under dryland- and irrigation cultivation. Given the existing activities associated within the organisations and the extent of the coverage of South African agricultural production, these initiatives are once again integrated to compile the 2024 winter crop budgets.

It is acknowledged that regional variation will occur and that estimates will differ from farm to farm. Whilst every care has been taken in preparing this report, it is advised to adjust the estimates according to the farm's respective location, yield potential, cultivation system and/or strategies.

Disclaimer

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Area coverage

Table 1 and Table 2 provide a summary of the area coverage for enterprise budgets that were generated for this report (dryland- and irrigated regions). The source of data and collaborators are also presented. The collaborators are sincerely grateful for the interaction and assistance with data, knowledge and other inputs from each organisation, agribusiness and farmers.

Table 1.1: Area coverage: Dryland

Area	Dryland Crops	Source & Collaborators
Southern Cape		
Caledon	Wheat, Barley, Canola, Oats & Lupines	Overberg Agri, GSA & BFAP
Bredasdorp	Wheat, Barley, Canola, Oats & Lupines	Overberg Agri, GSA & BFAP
Eastern Ruëns (high potential)	Wheat, Barley, Canola, Oats & Lupines	SSK, GSA & BFAP
Eastern Ruëns (normal potential)	Wheat, Barley, Canola, Oats & Lupines	SSK, GSA & BFAP
Eastern Ruëns (low potential)	Wheat, Barley, Canola, Oats & Lupines	SSK, GSA & BFAP
Western Cape		
Southern Swartland	Wheat & Canola	Kaap Agri, Overberg Agri, GSA & BFAP
Moorreesburg, Malmesbury & Porterville	Wheat, Canola & Oats	Kaap Agri, Overberg Agri, GSA & BFAP
Darling-vlakte – Hopefield	Wheat, Canola & Lupines	Kaap Agri, Overberg Agri, GSA & BFAP
Rooi Karoo	Wheat & Canola	Kaap Agri, Overberg Agri, GSA & BFAP
Free State		
Eastern Free State	Wheat	GSA / VKB / BFAP / Individual Farmers
Central Free State	Wheat	GSA / SENWES / BFAP / Individual Farmers

Table 1.2: Area coverage: Irrigation

Area	Irrigated Crops	Source & Collaborators
Northern Cape		
GWK Area	Wheat, Barley & Canola	GWK, GSA & BFAP
Free State		
Eastern Free State	Wheat	GSA / VKB / BFAP / Individual Farmers
Limpopo		
Britz / Northam / Koedoeskop	Wheat & Barley	GSA, Obaro & BFAP

Yield Assumptions

Table 1.3 illustrates descriptive statistics for yield trends over the period from 2005-2024 (2024 assumes trend yields). Figure 1.1 and Figure 1.2 reports the yield assumptions for dryland and irrigated crops. The yield assumptions represent target yields which were formulated in round table discussions and inputs provided by industry experts. These assumptions are re-evaluated and updated on a continuous basis. It is important to note that intra-regional variations will occur, and it is recommended that producers adjust their respective target yields based on their location and potential.

Table 1.3: Industry yield trends: 2005-2024

	Wheat: Winter area	Wheat: Summer area	Wheat: Irrigation	Barley: Winter area	Barley: Summer area	Canola
Mean (2005-2023)	2.70	3.09	6.32	2.86	6.45	1.43
3-year average (2022-2024)	3.00	4.01	6.95	3.06	7.00	1.81
5-year average (2020-2024)	3.17	4.30	6.83	3.26	6.98	1.93
Min	1.80	1.53	5.27	1.95	5.19	0.90
Median	2.61	2.78	6.40	3.04	6.53	1.32
Max	3.50	5.05	7.15	3.95	7.13	2.25

Source: BFAP, 2024

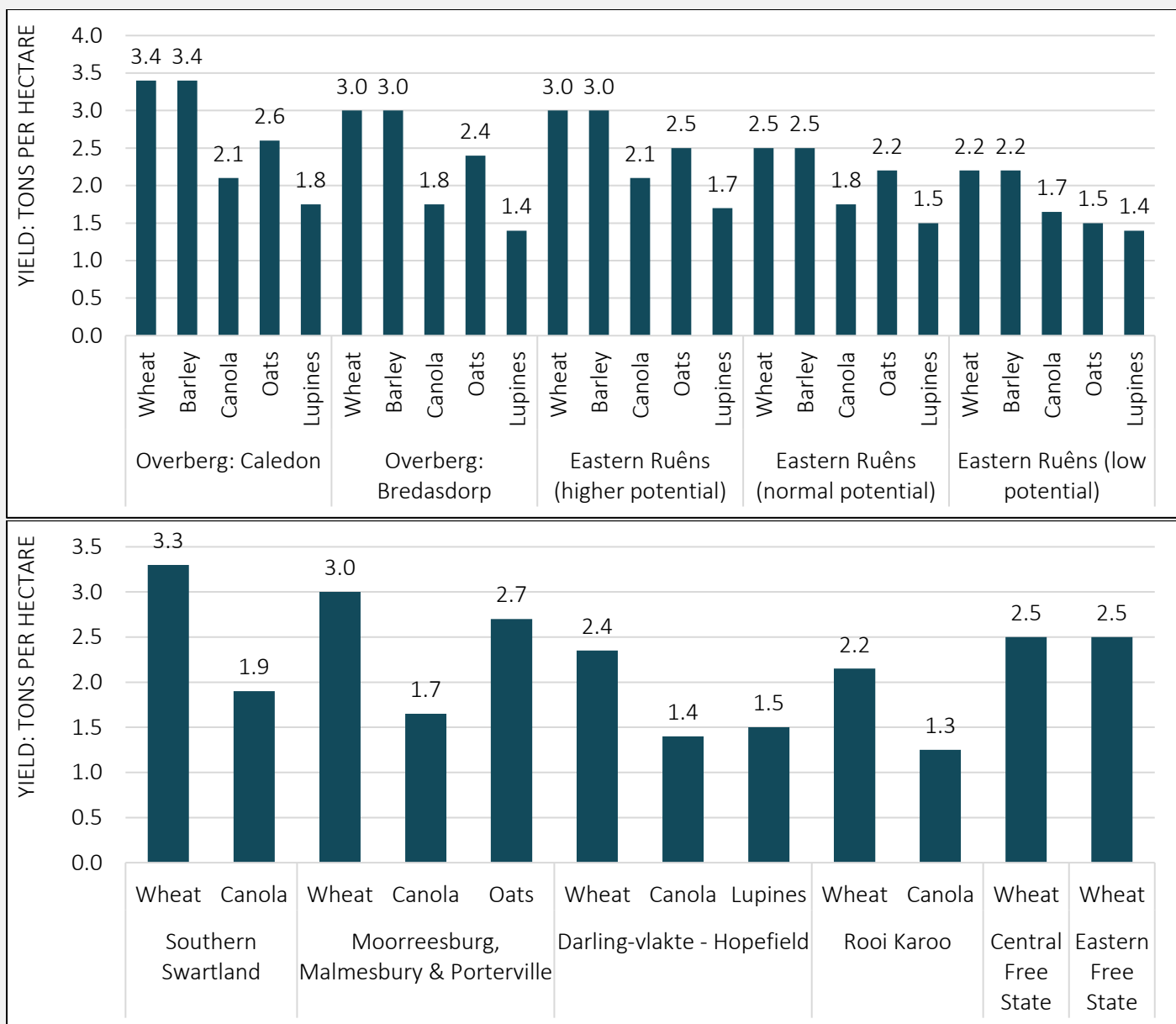


Figure 1.1: Yield assumptions: Dryland winter crops

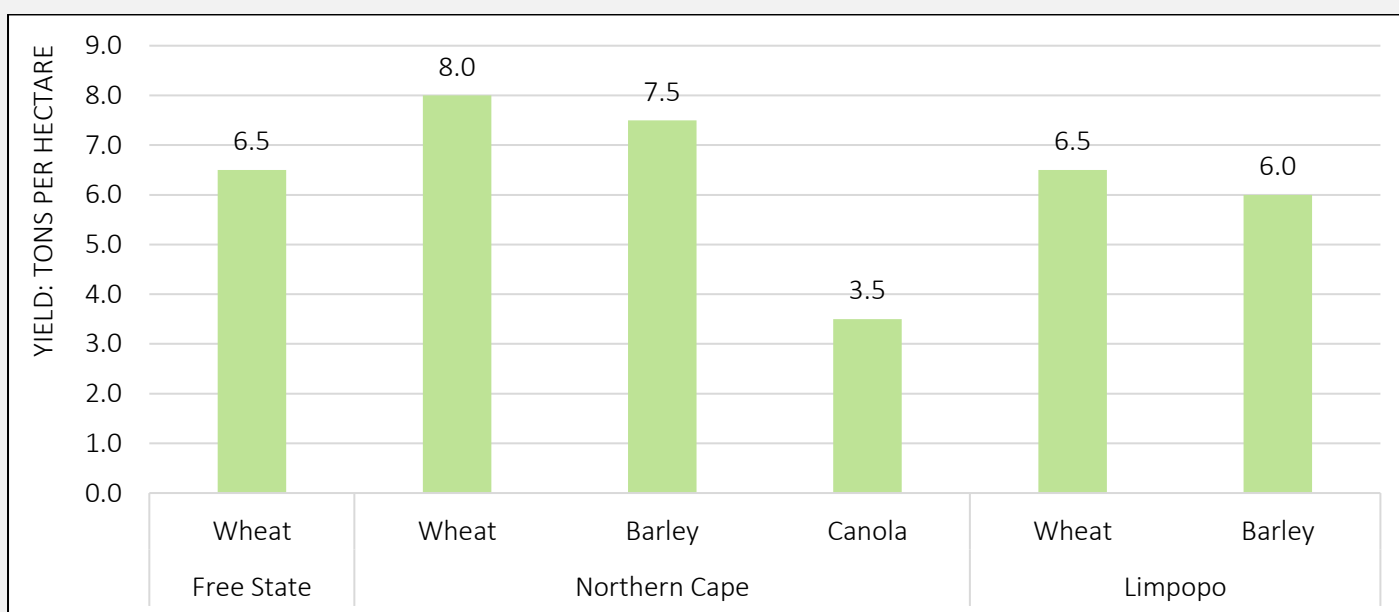


Figure 1.2: Yield assumptions: Irrigated winter crops

Crop Price Assumptions

Annually, the Bureau for Food and Agricultural Policy (BFAP) presents an outlook of agricultural production, consumption, prices and trade in South Africa over a 10-year period. The information presented is based on assumptions about a range of economic, technological, environmental, political, institutional, and social factors. The outlook is generated by the BFAP system of models. A number of critical assumptions have to be made for baseline projections. One of the most important assumptions is that normal weather conditions will prevail in Southern Africa and around the world; therefore, yields grow constantly over the baseline as technology improves. Assumptions regarding the outlook of macroeconomic conditions are based on a combination of projections developed by the International Monetary Fund (IMF), the World Bank and the Bureau for Economic Research (BER) at Stellenbosch University. Baseline projections for world commodity markets were generated by FAPRI at the University of Missouri. Once the critical assumptions are captured in the BFAP system of models, the Outlook for all commodities is simulated within a closed system of equations. This implies that, for example, any shocks in the grain sector are transmitted to the livestock sector and vice versa. Therefore, for each commodity, important components of supply and demand are identified, after which an equilibrium is established through balance sheet principles by equalling total demand to total supply.

Table 1.4 illustrates the standard deduction from the base SAFEX or derived price as presented in Figure 1.3. Figure 1.3 illustrates the commodity price assumptions for wheat, barley, canola and oats that were used as base price for the winter crop budgets for the 2024 production season. The sensitivity analysis in the respective crop budgets makes provision for variation in price and yield and indicates the gross margin under each price and yield combination.

Table 1.4: Deductions from SAFEX price to derive a farm gate price per region

	Wheat	Barley	Canola	Oats
SAFEX / Derived Price: 2024	X	X (adjusted with price link for Southern Cape & Northern producing regions)	X	X
- transport differential	X	X	X (for selective regions)	Standard wheat transport differential + transport to processing facilities (estimate R200-250 per ton)
- grade differential (BS, B1, B2, B3 & COW)	Based on historic averages; updated with new grading system	Assuming 5% of barley is downgraded to feed, and the remaining is delivered as malt barley	-	-
- silo, handling & administration costs	X	X	-	-
- statutory levies	X	X	X	X
+ price premiums	BS calculated at 2% premium	X	Back payment calculated at 10% of derived price	-

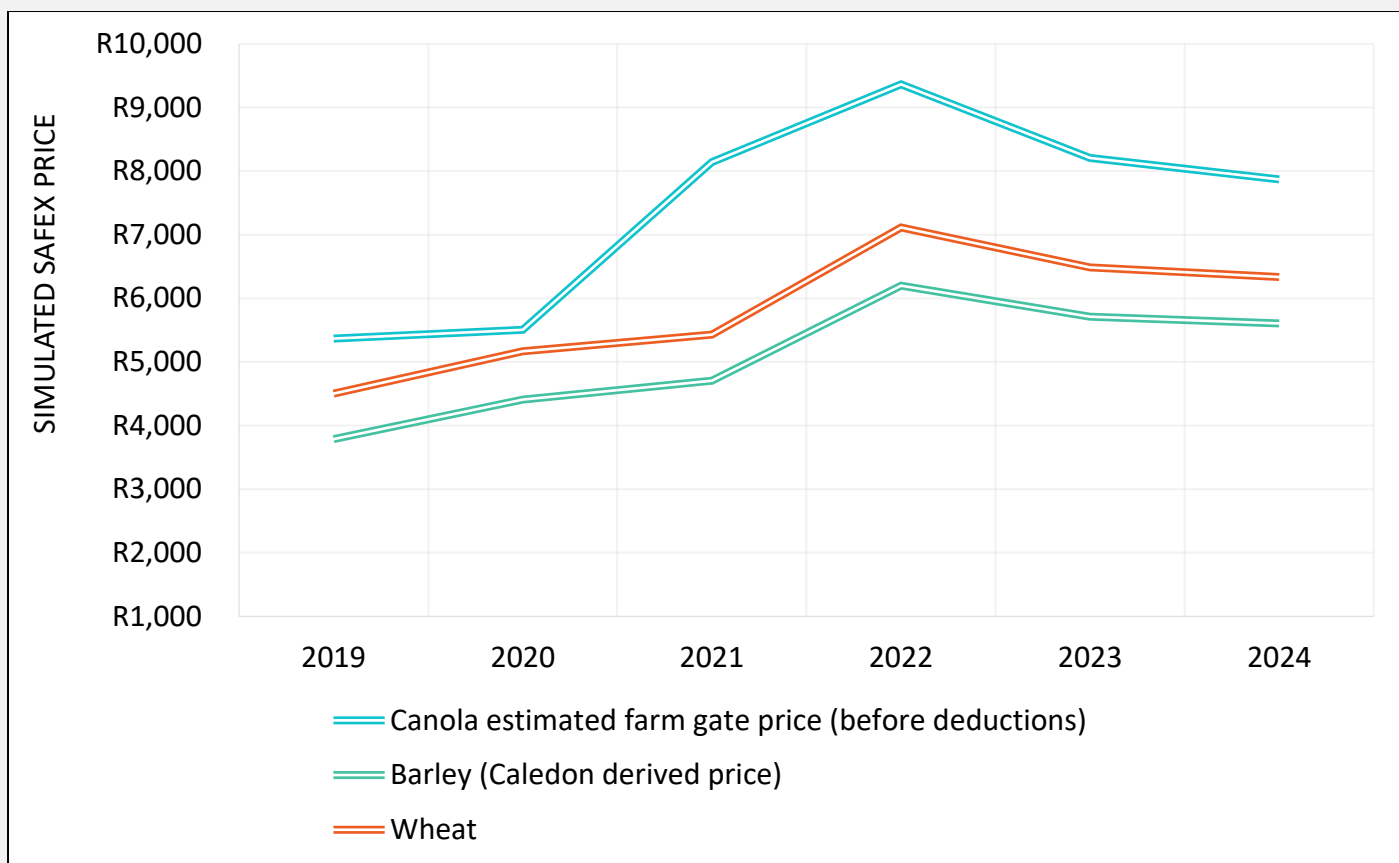


Figure 1.3: BFAP average annual commodity price trends: 2019-2024

Source: BFAP, 2024

Globally, supply has responded to high commodity prices following COVID and the Russia-Ukraine war which boosted commodity stock levels. As a result, commodity markets are in a consolidation phase implying lower prices, in some instances dipping below pre-COVID levels. Although uncertainty remains (e.g. Red Sea tension, weather and Russia's permanent withdrawal from the Black Sea Grain Initiative), volatility in markets is likely to continue throughout 2024. On the local front, the weaker exchange rate together with poor weather conditions in the summer-producing region has supported prices.

The international wheat price is expected to drop below the reference price, which will trigger the import tariff, and slightly support local prices. Furthermore, high shipping costs caused by the conflict in the Red Sea may further increase import parity prices. Canola prices are expected to realise a larger decline than wheat and barley prices, underpinned by the consolidation of the vegetable oil market.

Key Input Cost Trends

Figure 1.4 shows a calendar year-on-year percentage change for key agricultural inputs over the period from 2022 to 2024 (projected). Since the cost spike in 2020-2022, input costs have declined in 2023 and are generally expected to continue declining in 2024 (except for wages and electricity). The cost of fuel realised a marginal decline in 2023, but uncertainty and escalated tensions in the Red Sea region may increase price levels again with potentially higher shipping rates further contributing to potential price hikes in 2024. Since South Africa is a net importer of many agricultural inputs (e.g. fertilisers, chemicals and machinery), higher shipping costs could increase costs locally.

The weighted cost for fertiliser (a combination between nitrogen, phosphorus and potassium) has decreased by 31% in 2023, and is expected to continue declining, but at a slower rate of 19% in 2024. Despite the significant decline, fertiliser prices remain above the pre-COVID period. Furthermore, due to the weakening exchange rate, South Africa's fertiliser prices have not decreased at the same rate as international fertiliser prices. In 2024 urea and potassium are projected to decline by 24%, while LAN(28) and MAP are expected to decline by 8% and 19% respectively. The World Bank expects fertiliser costs to continue with its downward trend, by projecting a further decline of 16% in 2024 and 8% in 2025.

Plant protection chemicals marked a significant decline in the global market, with herbicide prices decreasing by 15% and insecticides by 21% from 2022 to 2023. International insecticide prices have dropped below the pre-Covid era. Chemicals are expected to decline further by 32% and 29% in 2024 respectively.

Projections from the South African Reserve Bank reveal a modest expected GDP growth rate of 1% in 2024, with other institutes such as the IMF only marginally better. The Rand also remains weak, reflecting global uncertainties, risk appetite, relative interest rates and inconsistent messaging on crucial domestic issues. The weak Rand contributes significantly to inflation, increasing the cost of imported products.

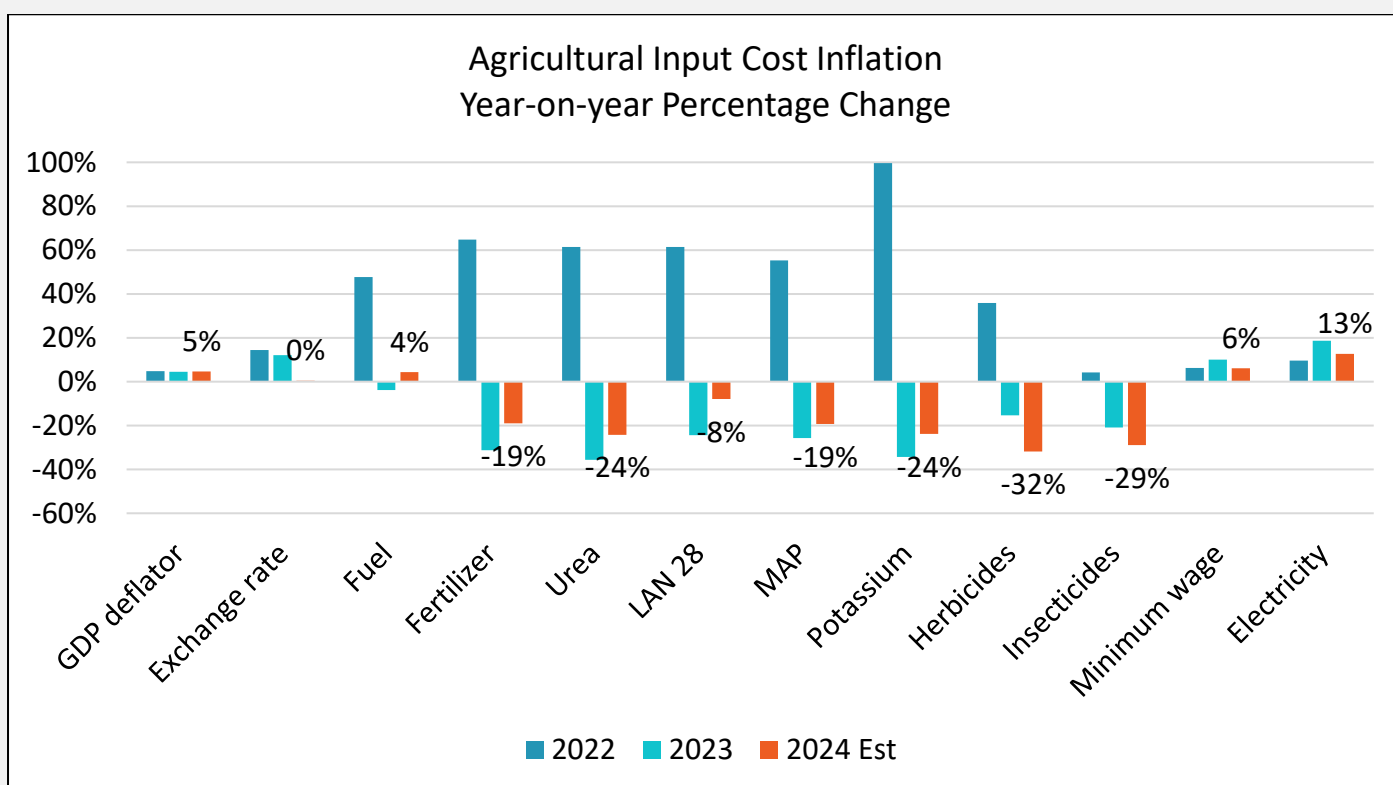


Figure 1.4: Agricultural input cost inflation: Calendar year-on-year percentage change for 2022, 2023 & 2024 (estimated)

Source: Grain SA & BFAP, updated April 2024

Methodology, Approach & Definitions

- ❖ A standard operating procedure was used across all crops and regions for generating the cost and income budgets for the 2024 winter production season.
- ❖ Deterministic or target yields are based on industry discussions which refer to a yield that should be obtained given a normal production season with normal weather in the respective agro-ecological production regions.
- ❖ The farm gate price for each crop is calculated by deducting transport differential, grade differential, handling fees, commission and levies (statutory for seed breeding and technology) from the BFAP simulated SAFEX price and adding price premiums, as discussed in Table 1.4.
- ❖ The gross production value is then calculated by multiplying the yield with the farm gate price.
- ❖ The direct costs are calculated by multiplying the cost per unit by the estimated quantity of input use or application rate.
- ❖ For the majority of the crops, it is assumed that own machinery is used, except for speciality operations that are coupled with economies of scale. In such cases, a contracting cost item is allocated.
- ❖ In the Western Cape, provision was made for fire and SASRIA crop insurance, and in the northern parts of South Africa, provision was made for hail insurance.
- ❖ Fertiliser and lime application will vary significantly in regions and across crops, however, an attempt was made to follow a standardised approach across the regions. Micro-elements and foliar feed for selective crops are included in the total fertiliser cost.
- ❖ The price for fertiliser nutrients (N, P & K) was calculated by using a weighted approach that accounts for 1) variation in discounts received from suppliers and 2) the time period when fertilisers were purchased.
- ❖ Fuel consumption is based on the prevalence production system in each region.
- ❖ For plant protection, herbicide, insecticide and fungicides are accounted for based on interaction with industry experts and producers. For instance, in certain regions provision was made for fungicide sprays, but for others where the practice is not common, fungicides were excluded from plant protection costs.
- ❖ Repairs and maintenance costs are calculated based on the production system operations and were consulted with industry experts and producers.
- ❖ An average seed price across various seed companies was used for calculating the cost of seed. The cost of seed per hectare is calculated by multiplying the cost per unit (either kilograms or plant population) by the application rate per hectare. For selective crops, seed treatment was included where relevant. For wheat and barley, the seed application rate was sub-divided according to own and purchased seed. For own seed use, a cost is allocated which is based on a realistic crop price (hence, opportunity cost) and seed preparation costs such as sifting and treatment.
- ❖ For irrigated crops, the cost of water and electricity is calculated according to typical irrigation application rates at their respective regional costs per millimetre water applied throughout a season. For instance, variations will occur in the cost for water in areas where predominantly boreholes are used compared to irrigation/water scheme areas.
- ❖ The gross margin was calculated by subtracting the direct cost from the gross production value.
- ❖ Overhead costs and production interest are not accounted for in the enterprise budgets.

INCOME & COST BUDGETS – DRYLAND PRODUCTION REGION

Southern Cape: Caledon

Table 2.1: Income & cost budgets for wheat, barley, canola, oats & lupines for Southern Cape (Caledon region) – Dryland

Southern Cape: Caledon						
Crop		Wheat	Barley	Canola	Oats	Lupines
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	3.40	3.40	2.10	2.60	1.75
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247	R7,476	R6,247	R4,916
Total deductions	R/TON	R1,115	R974	R172	R951	R198
- Transport differential	R/TON	R817	R817	R-	R827	R98
- Grade differential	R/TON	R176	R124	R-	R-	R-
- Marketing, handling & statutory levies	R/TON	R123	R33	R172	R124	R100
Price premiums / Canola back-payment	R/TON	R-	R71	R748	R-	R-
Net Farm Gate Price	R/TON	R5,132	R5,185	R8,051	R5,296	R4,718
GROSS INCOME	R/HA	R17,450	R17,630	R16,908	R13,771	R8,256
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R50	R51	R49	R40	R-
Fertilizer	R/HA	R3,425	R3,459	R3,350	R2,829	R1,286
Lime	R/HA	R227	R227	R227	R190	R190
Seed	R/HA	R873	R708	R1,445	R878	R1,174
Fuel	R/HA	R728	R748	R719	R708	R645
Herbicide	R/HA	R1,216	R888	R1,086	R847	R797
Insecticide	R/HA	R189	R165	R609	R140	R178
Fungicides	R/HA	R871	R1,279	R667	R509	R478
Marketing costs	R/HA	R118	R108	R21	R-	R-
Repairs and maintenance	R/HA	R858	R833	R858	R759	R471
Casual labour	R/HA	R11	R12	R13	R11	R7
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R157	R163	R152	R121	R121
TOTAL VARIABLE EXPENDITURE	R/HA	R8,725	R8,641	R9,195	R7,033	R5,347
TOTAL VARIABLE EXPENDITURE	R/TON	R2,566	R2,542	R4,379	R2,705	R3,055
3.1) GROSS MARGIN:	R/HA	R8,725	R8,989	R7,713	R6,738	R2,910
3.2) GROSS MARGIN:	R/TON	R2,566	R2,644	R3,673	R2,592	R1,663
Break-even yield	T/HA	1.70	1.67	1.14	1.33	1.13
Break-even price	R/TON	R2,566	R2,542	R4,379	R2,705	R3,055

Source: Overberg Agri, GSA & BFAP, updated April 2024

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): OVERBERG - CALEDON															
PRODUCERS YIELD (T/HA)															
PRICE		1.35		1.60		1.85		2.10		2.35		2.60		2.85	
R7,051	R	324	R	2,087	R	3,850	R	5,613	R	7,376	R	9,139	R	10,902	
R7,301	R	662	R	2,487	R	4,313	R	6,138	R	7,963	R	9,789	R	11,614	
R7,551	R	999	R	2,887	R	4,775	R	6,663	R	8,551	R	10,439	R	12,327	
R7,801	R	1,337	R	3,287	R	5,238	R	7,188	R	9,138	R	11,089	R	13,039	
R8,051	R	1,674	R	3,687	R	5,700	R	7,713	R	9,726	R	11,739	R	13,752	
R8,301	R	2,012	R	4,087	R	6,163	R	8,238	R	10,313	R	12,389	R	14,464	
R8,551	R	2,349	R	4,487	R	6,625	R	8,763	R	10,901	R	13,039	R	15,177	
R8,801	R	2,687	R	4,887	R	7,088	R	9,288	R	11,488	R	13,689	R	15,889	
R9,051	R	3,024	R	5,287	R	7,550	R	9,813	R	12,076	R	14,339	R	16,602	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): OVERBERG - CALEDON															
PRICE (R/TON)															
YIELD	R	7,301	R	7,551	R	7,801	R	8,051	R	8,301	R	8,551	R	8,801	
1.10	-R	9,888	-R	9,613	-R	9,338	-R	9,063	-R	8,788	-R	8,513	-R	8,238	
1.35	-R	8,063	-R	7,726	-R	7,388	-R	7,051	-R	6,713	-R	6,376	-R	6,038	
1.60	-R	6,238	-R	5,838	-R	5,438	-R	5,038	-R	4,638	-R	4,238	-R	3,838	
1.85	-R	4,412	-R	3,950	-R	3,487	-R	3,025	-R	2,562	-R	2,100	-R	1,637	
2.10	-R	2,587	-R	2,062	-R	1,537	-R	1,012	-R	487	R	38	R	563	
2.35	-R	762	-R	174	R	413	R	1,001	R	1,588	R	2,176	R	2,763	
2.60	R	1,064	R	1,714	R	2,364	R	3,014	R	3,664	R	4,314	R	4,964	
2.85	R	2,889	R	3,602	R	4,314	R	5,027	R	5,739	R	6,452	R	7,164	
3.10	R	4,714	R	5,489	R	6,264	R	7,039	R	7,814	R	8,589	R	9,364	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Southern Cape: Bredasdorp

Table 2.2: Income & cost budgets for wheat, barley, canola, oats & lupines for Southern Cape (Bredasdorp region) - Dryland

Southern Cape: Bredasdorp						
Crop		Wheat	Barley	Canola	Oats	Lupines
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	3.00	3.00	1.75	2.40	1.40
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247	R7,476	R6,247	R4,916
Total deductions	R/TON	R1,115	R974	R172	R951	R98
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- Grade differential	R/TON	R176	R124	R-	R-	R-
- Marketing, handling & statutory levies	R/TON	R123	R33	R172	R124	R100
Price premiums / Canola back-payment	R/TON	R-	R71	R748	R-	R-
Net Farm Gate Price	R/TON	R5,132	R5,185	R8,051	R5,296	R4,718
GROSS INCOME	R/HA	R15,397	R15,556	R14,090	R12,711	R6,605
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R44	R45	R40	R36	R-
Fertilizer	R/HA	R3,223	R3,086	R3,311	R2,594	R1,180
Lime	R/HA	R227	R227	R227	R190	R190
Seed	R/HA	R873	R654	R1,329	R878	R939
Fuel	R/HA	R716	R732	R710	R701	R637
Herbicide	R/HA	R1,482	R919	R921	R729	R869
Insecticide	R/HA	R188	R135	R590	R131	R157
Fungicides	R/HA	R858	R975	R678	R607	R408
Marketing costs	R/HA	R104	R96	R18	R-	R-
Repairs and maintenance	R/HA	R857	R775	R882	R826	R474
Casual labour	R/HA	R10	R12	R13	R11	R7
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R154	R156	R146	R37	R37
TOTAL VARIABLE EXPENDITURE	R/HA	R8,737	R7,811	R8,864	R6,741	R4,897
TOTAL VARIABLE EXPENDITURE	R/TON	R2,912	R2,604	R5,065	R2,809	R3,498
3.1) GROSS MARGIN:	R/HA	R6,660	R7,745	R5,226	R5,971	R1,708
3.2) GROSS MARGIN:	R/TON	R2,220	R2,582	R2,986	R2,488	R1,220
Break-even yield	T/HA	1.70	1.51	1.10	1.27	1.04
Break-even price	R/TON	R2,912	R2,604	R5,065	R2,809	R3,498

Source: Overberg Agri, GSA & BFAP, updated April 2024

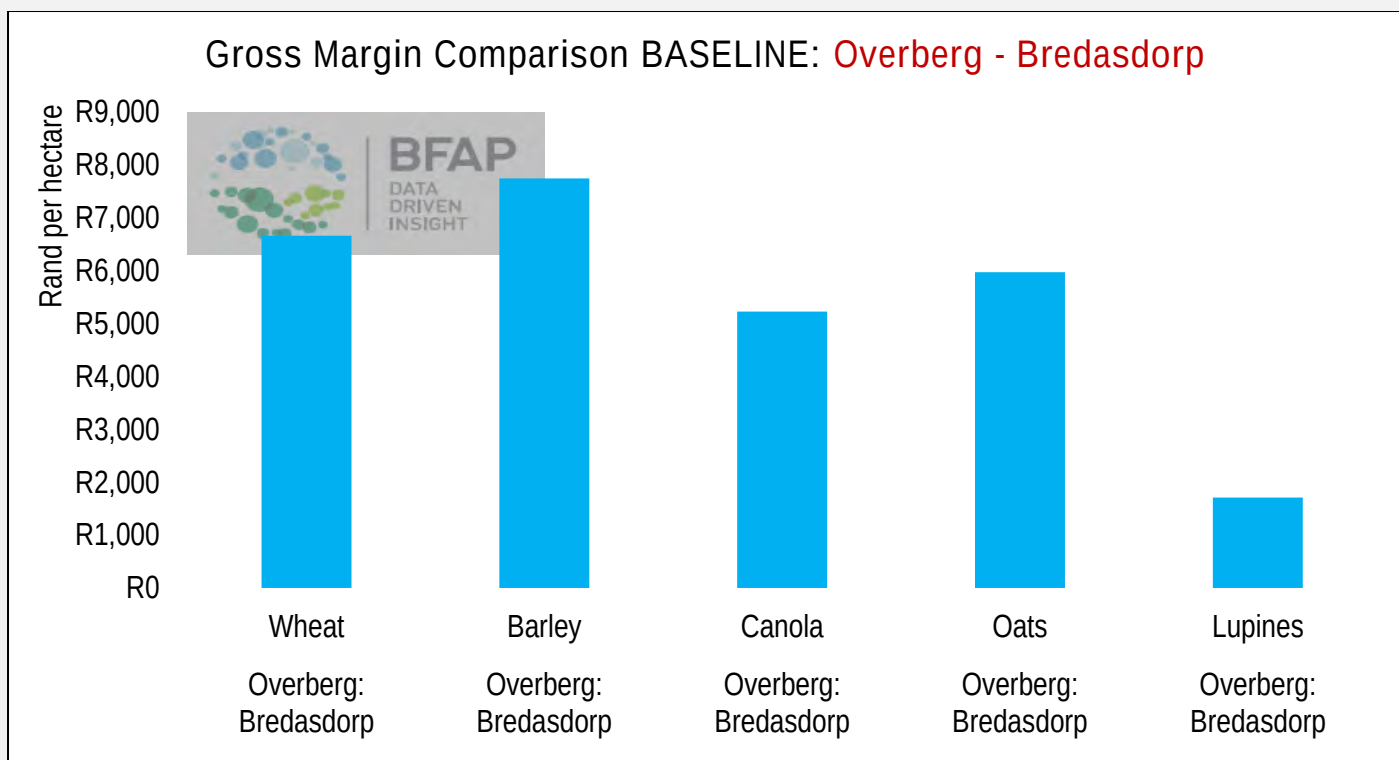


Figure 2.2: Gross margin comparison – Baseline: Southern Cape: Bredasdorp region

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): OVERBERG - BREDASDORP												
PRODUCERS YIELD (T/HA)												
PRICE	2.25		2.50		2.75		3.00		3.25		3.50	
R4,132	R	560	R	1,594	R	2,627	R	3,660	R	4,693	R	5,726
R4,382	R	1,123	R	2,219	R	3,314	R	4,410	R	5,505	R	6,601
R4,632	R	1,685	R	2,844	R	4,002	R	5,160	R	6,318	R	7,476
R4,882	R	2,248	R	3,469	R	4,689	R	5,910	R	7,130	R	8,351
R5,132	R	2,810	R	4,094	R	5,377	R	6,660	R	7,943	R	9,226
R5,382	R	3,373	R	4,719	R	6,064	R	7,410	R	8,755	R	10,101
R5,632	R	3,935	R	5,344	R	6,752	R	8,160	R	9,568	R	10,976
R5,882	R	4,498	R	5,969	R	7,439	R	8,910	R	10,380	R	11,851
R6,132	R	5,060	R	6,594	R	8,127	R	9,660	R	11,193	R	12,726
BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): OVERBERG - BREDASDORP												
PRODUCERS YIELD (T/HA)												
PRICE	2.25		2.50		2.75		3.00		3.25		3.50	
R4,185	R	1,606	R	2,652	R	3,699	R	4,745	R	5,791	R	6,838
R4,435	R	2,168	R	3,277	R	4,386	R	5,495	R	6,604	R	7,713
R4,685	R	2,731	R	3,902	R	5,074	R	6,245	R	7,416	R	8,588
R4,935	R	3,293	R	4,527	R	5,761	R	6,995	R	8,229	R	9,463
R5,185	R	3,856	R	5,152	R	6,449	R	7,745	R	9,041	R	10,338
R5,435	R	4,418	R	5,777	R	7,136	R	8,495	R	9,854	R	11,213
R5,685	R	4,981	R	6,402	R	7,824	R	9,245	R	10,666	R	12,088
R5,935	R	5,543	R	7,027	R	8,511	R	9,995	R	11,479	R	12,963
R6,185	R	6,106	R	7,652	R	9,199	R	10,745	R	12,291	R	13,838

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): OVERBERG - BREDASDORP															
PRODUCERS YIELD (T/HA)															
PRICE		1.15		1.40		1.65		1.75		1.90		2.15		2.40	
R7,051	-R	755	R	1,008	R	2,771	R	3,476	R	4,534	R	6,297	R	8,060	
R7,301	-R	467	R	1,358	R	3,184	R	3,914	R	5,009	R	6,834	R	8,660	
R7,551	-R	180	R	1,708	R	3,596	R	4,351	R	5,484	R	7,372	R	9,260	
R7,801	R	108	R	2,058	R	4,009	R	4,789	R	5,959	R	7,909	R	9,860	
R8,051	R	395	R	2,408	R	4,421	R	5,226	R	6,434	R	8,447	R	10,460	
R8,301	R	683	R	2,758	R	4,834	R	5,664	R	6,909	R	8,984	R	11,060	
R8,551	R	970	R	3,108	R	5,246	R	6,101	R	7,384	R	9,522	R	11,660	
R8,801	R	1,258	R	3,458	R	5,659	R	6,539	R	7,859	R	10,059	R	12,260	
R9,051	R	1,545	R	3,808	R	6,071	R	6,976	R	8,334	R	10,597	R	12,860	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): OVERBERG - BREDASDORP															
PRICE (R/TON)															
YIELD	R	7,301	R	7,551	R	7,801	R	8,051	R	8,301	R	8,551	R	8,801	
0.90	-R	8,952	-R	8,727	-R	8,502	-R	8,277	-R	8,052	-R	7,827	-R	7,602	
1.15	-R	7,127	-R	6,839	-R	6,552	-R	6,264	-R	5,977	-R	5,689	-R	5,402	
1.40	-R	5,301	-R	4,951	-R	4,601	-R	4,251	-R	3,901	-R	3,551	-R	3,201	
1.65	-R	3,476	-R	3,063	-R	2,651	-R	2,238	-R	1,826	-R	1,413	-R	1,001	
1.75	-R	2,746	-R	2,308	-R	1,871	-R	1,433	-R	996	-R	558	-R	121	
1.90	-R	1,651	-R	1,176	-R	701	-R	226	R	249	R	724	R	1,199	
2.15	R	175	R	712	R	1,250	R	1,787	R	2,325	R	2,862	R	3,400	
2.40	R	2,000	R	2,600	R	3,200	R	3,800	R	4,400	R	5,000	R	5,600	
2.65	R	3,825	R	4,488	R	5,150	R	5,813	R	6,475	R	7,138	R	7,800	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Southern Cape: Eastern Ruêns (high potential)

Table 2.3: Income & cost budgets for wheat, barley, canola, oats & lupines for Southern Cape (Eastern Ruêns – high potential) - Dryland

Southern Cape: Eastern Ruêns (high potential)						
Crop		Wheat	Barley	Canola	Oats	Lupines
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	3.00	3.00	2.10	2.50	1.70
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247	R7,476	R6,247	R4,916
Total deductions	R/TON	R1,115	R974	R172	R951	R198
- Transport differential	R/TON	R817	R817	R-	R827	R98
- Grade differential	R/TON	R176	R124	R-	R-	R-
- Marketing, handling & statutory levies	R/TON	R123	R33	R172	R124	R100
Price premiums / Canola back-payment	R/TON	R-	R71	R748	R-	R-
Net Farm Gate Price	R/TON	R5,132	R5,185	R8,051	R5,296	R4,718
GROSS INCOME	R/HA	R15,397	R15,556	R16,908	R13,241	R8,020
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R44	R45	R49	R38	R-
Fertilizer	R/HA	R3,020	R2,971	R3,582	R2,630	R1,381
Lime	R/HA	R227	R227	R227	R190	R-
Seed	R/HA	R790	R615	R1,445	R985	R1,114
Fuel	R/HA	R716	R732	R719	R705	R649
Herbicide	R/HA	R1,216	R888	R1,086	R847	R797
Insecticide	R/HA	R189	R165	R609	R140	R178
Fungicides	R/HA	R871	R1,279	R667	R509	R478
Marketing costs	R/HA	R74	R102	R43	R-	R-
Repairs and maintenance	R/HA	R739	R739	R798	R739	R400
Casual labour	R/HA	R11	R12	R13	R11	R7
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R154	R156	R146	R37	R37
TOTAL VARIABLE EXPENDITURE	R/HA	R8,052	R7,932	R9,383	R6,831	R5,041
TOTAL VARIABLE EXPENDITURE	R/TON	R2,684	R2,644	R4,468	R2,733	R2,966
3.1) GROSS MARGIN:	R/HA	R7,345	R7,625	R7,525	R6,410	R2,979
3.2) GROSS MARGIN:	R/TON	R2,448	R2,542	R3,583	R2,564	R1,752
Break-even yield	T/HA	1.57	1.53	1.17	1.29	1.07
Break-even price	R/TON	R2,684	R2,644	R4,468	R2,733	R2,966

Source: SSK, GSA & BFAP, updated April 2024

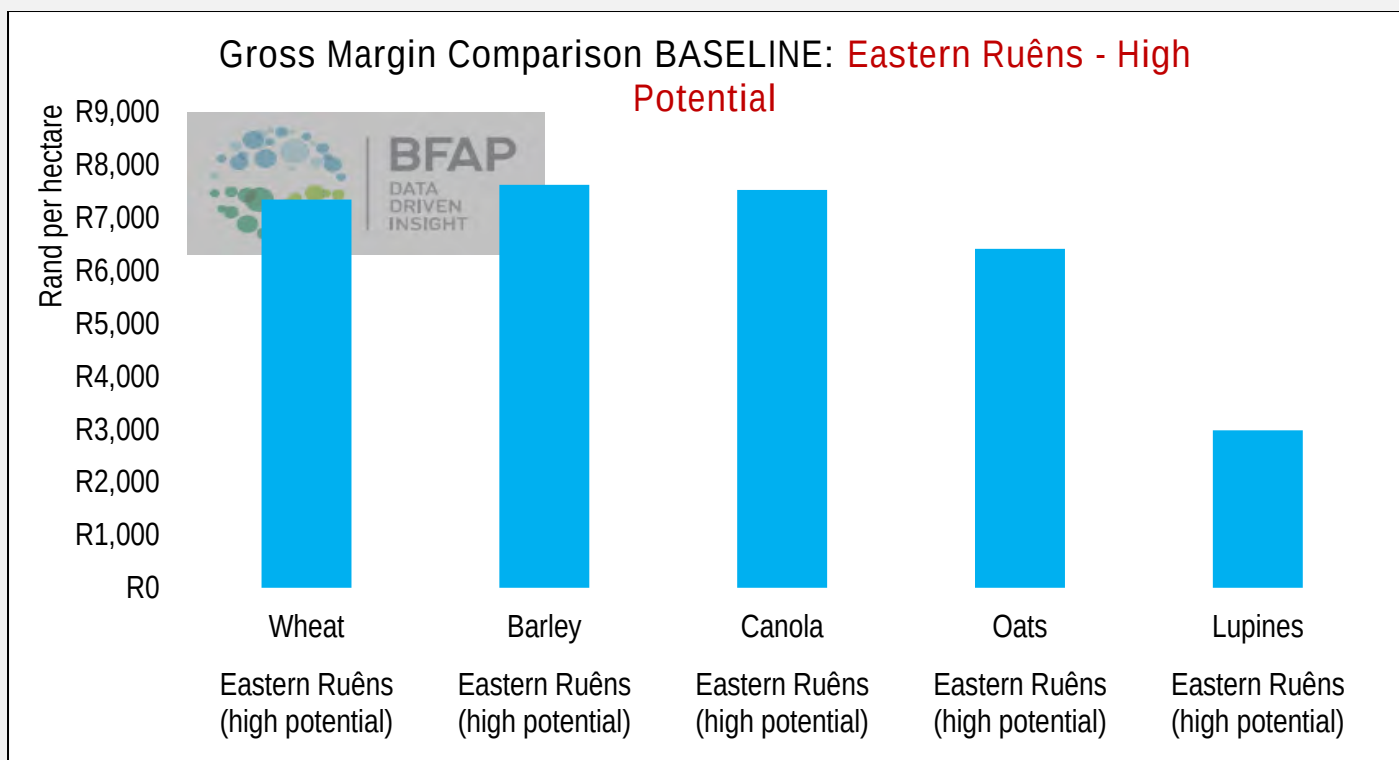


Figure 2.3: Gross margin comparison – Baseline: Southern Cape: Eastern Ruêns – High potential

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (HIGH POTENTIAL)												
PRODUCERS YIELD (T/HA)												
PRICE	2.25		2.50		2.75		3.00		3.25		3.50	
R4,132	R	1,246	R	2,279	R	3,312	R	4,345	R	5,378	R	7,444
R4,382	R	1,808	R	2,904	R	3,999	R	5,095	R	6,191	R	8,382
R4,632	R	2,371	R	3,529	R	4,687	R	5,845	R	7,003	R	9,319
R4,882	R	2,933	R	4,154	R	5,374	R	6,595	R	7,816	R	10,257
R5,132	R	3,496	R	4,779	R	6,062	R	7,345	R	8,628	R	11,194
R5,382	R	4,058	R	5,404	R	6,749	R	8,095	R	9,441	R	12,132
R5,632	R	4,621	R	6,029	R	7,437	R	8,845	R	10,253	R	13,069
R5,882	R	5,183	R	6,654	R	8,124	R	9,595	R	11,066	R	14,007
R6,132	R	5,746	R	7,279	R	8,812	R	10,345	R	11,878	R	14,944

BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (HIGH POTENTIAL)												
PRODUCERS YIELD (T/HA)												
PRICE	2.25		2.50		2.75		3.00		3.25		3.50	
R4,185	R	1,486	R	2,532	R	3,578	R	4,625	R	5,671	R	7,764
R4,435	R	2,048	R	3,157	R	4,266	R	5,375	R	6,484	R	8,701
R4,685	R	2,611	R	3,782	R	4,953	R	6,125	R	7,296	R	9,639
R4,935	R	3,173	R	4,407	R	5,641	R	6,875	R	8,109	R	10,576
R5,185	R	3,736	R	5,032	R	6,328	R	7,625	R	8,921	R	11,514
R5,435	R	4,298	R	5,657	R	7,016	R	8,375	R	9,734	R	12,451
R5,685	R	4,861	R	6,282	R	7,703	R	9,125	R	10,546	R	13,389
R5,935	R	5,423	R	6,907	R	8,391	R	9,875	R	11,359	R	14,326
R6,185	R	5,986	R	7,532	R	9,078	R	10,625	R	12,171	R	15,264

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUËNS (HIGH POTENTIAL)															
PRODUCERS YIELD (T/HA)															
PRICE		1.35		1.60		1.85		2.10		2.35		2.60		2.85	
R7,051	R	136	R	1,899	R	3,662	R	5,425	R	7,188	R	8,950	R	10,713	
R7,301	R	474	R	2,299	R	4,124	R	5,950	R	7,775	R	9,600	R	11,426	
R7,551	R	811	R	2,699	R	4,587	R	6,475	R	8,363	R	10,250	R	12,138	
R7,801	R	1,149	R	3,099	R	5,049	R	7,000	R	8,950	R	10,900	R	12,851	
R8,051	R	1,486	R	3,499	R	5,512	R	7,525	R	9,538	R	11,550	R	13,563	
R8,301	R	1,824	R	3,899	R	5,974	R	8,050	R	10,125	R	12,200	R	14,276	
R8,551	R	2,161	R	4,299	R	6,437	R	8,575	R	10,713	R	12,850	R	14,988	
R8,801	R	2,499	R	4,699	R	6,899	R	9,100	R	11,300	R	13,500	R	15,701	
R9,051	R	2,836	R	5,099	R	7,362	R	9,625	R	11,888	R	14,150	R	16,413	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): EASTERN RUËNS (HIGH POTENTIAL)															
PRICE (R/TON)															
YIELD	R	7,301	R	7,551	R	7,801	R	8,051	R	8,301	R	8,551	R	8,801	
1.10	-R	8,697	-R	8,422	-R	8,147	-R	7,872	-R	7,597	-R	7,322	-R	7,047	
1.35	-R	6,871	-R	6,534	-R	6,196	-R	5,859	-R	5,521	-R	5,184	-R	4,846	
1.60	-R	5,046	-R	4,646	-R	4,246	-R	3,846	-R	3,446	-R	3,046	-R	2,646	
1.85	-R	3,221	-R	2,758	-R	2,296	-R	1,833	-R	1,371	-R	908	-R	446	
2.10	-R	1,395	-R	870	-R	345	R	180	R	705	R	1,230	R	1,755	
2.35	R	430	R	1,018	R	1,605	R	2,193	R	2,780	R	3,368	R	3,955	
2.60	R	2,255	R	2,905	R	3,555	R	4,205	R	4,855	R	5,505	R	6,155	
2.85	R	4,081	R	4,793	R	5,506	R	6,218	R	6,931	R	7,643	R	8,356	
3.10	R	5,906	R	6,681	R	7,456	R	8,231	R	9,006	R	9,781	R	10,556	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Southern Cape: Eastern Ruêns (normal potential)

Table 2.4: Income & cost budgets for wheat, barley, canola, oats & lupines for Southern Cape (Eastern Ruêns – normal potential) - Dryland

Southern Cape: Eastern Ruêns (normal potential)						
Crop		Wheat	Barley	Canola	Oats	Lupines
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	2.50	2.50	1.75	2.20	1.50
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247	R7,476	R6,247	R4,916
Total deductions	R/TON	R1,115	R974	R172	R951	R198
- Transport differential	R/TON	R817	R817	R-	R827	R98
- Grade differential	R/TON	R176	R124	R-	R-	R-
- Marketing, handling & statutory levies	R/TON	R123	R33	R172	R124	R100
Price premiums / Canola back-payment	R/TON	R-	R71	R748	R-	R-
Net Farm Gate Price	R/TON	R5,132	R5,185	R8,051	R5,296	R4,718
GROSS INCOME	R/HA	R12,831	R12,964	R14,090	R11,652	R7,077
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R37	R37	R40	R33	R-
Fertilizer	R/HA	R2,506	R2,371	R3,368	R2,004	R1,161
Lime	R/HA	R227	R227	R227	R190	R-
Seed	R/HA	R677	R405	R1,329	R895	R955
Fuel	R/HA	R697	R712	R709	R692	R641
Herbicide	R/HA	R1,482	R919	R921	R729	R869
Insecticide	R/HA	R188	R135	R590	R131	R157
Fungicides	R/HA	R858	R975	R678	R607	R408
Marketing costs	R/HA	R62	R85	R36	R-	R-
Repairs and maintenance	R/HA	R675	R662	R730	R662	R382
Casual labour	R/HA	R10	R10	R12	R10	R7
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R154	R156	R146	R37	R37
TOTAL VARIABLE EXPENDITURE	R/HA	R7,572	R6,696	R8,786	R5,992	R4,617
TOTAL VARIABLE EXPENDITURE	R/TON	R3,029	R2,678	R5,021	R2,723	R3,078
3.1) GROSS MARGIN:	R/HA	R5,258	R6,268	R5,304	R5,660	R2,460
3.2) GROSS MARGIN:	R/TON	R2,103	R2,507	R3,031	R2,573	R1,640
Break-even yield	T/HA	1.48	1.29	1.09	1.13	0.98
Break-even price	R/TON	R3,029	R2,678	R5,021	R2,723	R3,078

Source: SSK, GSA & BFAP, updated April 2024

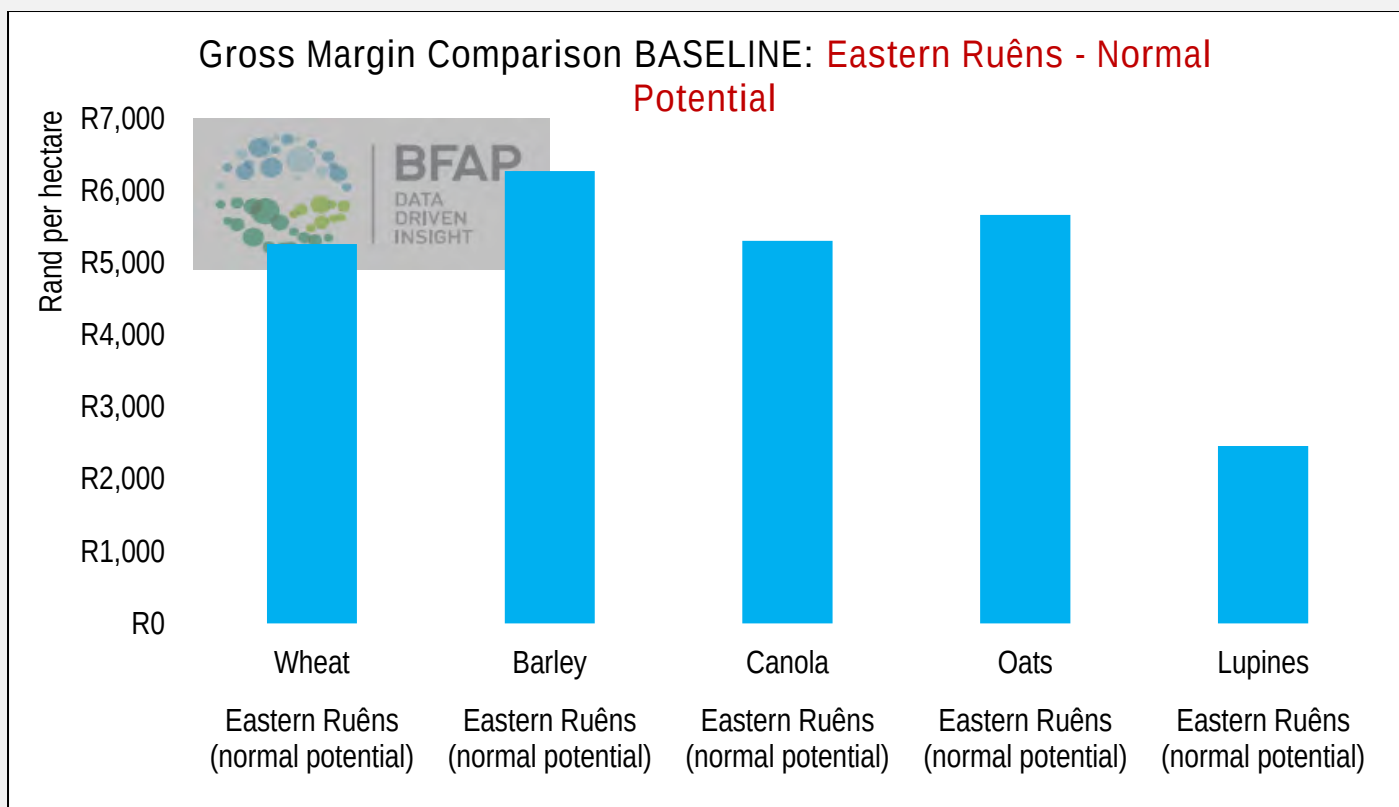


Figure 2.4: Gross margin comparison – Baseline: Southern Cape: Eastern Ruêns – Normal potential

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (NORMAL POTENTIAL)												
PRODUCERS YIELD (T/HA)												
PRICE	1.75	2.00	2.25	2.50	2.75	3.00	3.25					
R4,132	R 341	R 692	R 1,725	R 2,758	R 3,792	R 4,825	R 5,858					
R4,382	R 97	R 1,192	R 2,288	R 3,383	R 4,479	R 5,575	R 6,670					
R4,632	R 534	R 1,692	R 2,850	R 4,008	R 5,167	R 6,325	R 7,483					
R4,882	R 972	R 2,192	R 3,413	R 4,633	R 5,854	R 7,075	R 8,295					
R5,132	R 1,409	R 2,692	R 3,975	R 5,258	R 6,542	R 7,825	R 9,108					
R5,382	R 1,847	R 3,192	R 4,538	R 5,883	R 7,229	R 8,575	R 9,920					
R5,632	R 2,284	R 3,692	R 5,100	R 6,508	R 7,917	R 9,325	R 10,733					
R5,882	R 2,722	R 4,192	R 5,663	R 7,133	R 8,604	R 10,075	R 11,545					
R6,132	R 3,159	R 4,692	R 6,225	R 7,758	R 9,292	R 10,825	R 12,358					

BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (NORMAL POTENTIAL)												
PRODUCERS YIELD (T/HA)												
PRICE	1.75	2.00	2.25	2.50	2.75	3.00	3.25					
R4,185	R 629	R 1,675	R 2,722	R 3,768	R 4,814	R 5,861	R 6,907					
R4,435	R 1,066	R 2,175	R 3,284	R 4,393	R 5,502	R 6,611	R 7,720					
R4,685	R 1,504	R 2,675	R 3,847	R 5,018	R 6,189	R 7,361	R 8,532					
R4,935	R 1,941	R 3,175	R 4,409	R 5,643	R 6,877	R 8,111	R 9,345					
R5,185	R 2,379	R 3,675	R 4,972	R 6,268	R 7,564	R 8,861	R 10,157					
R5,435	R 2,816	R 4,175	R 5,534	R 6,893	R 8,252	R 9,611	R 10,970					
R5,685	R 3,254	R 4,675	R 6,097	R 7,518	R 8,939	R 10,361	R 11,782					
R5,935	R 3,691	R 5,175	R 6,659	R 8,143	R 9,627	R 11,111	R 12,595					
R6,185	R 4,129	R 5,675	R 7,222	R 8,768	R 10,314	R 11,861	R 13,407					

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUËNS (NORMAL POTENTIAL)															
PRODUCERS YIELD (T/HA)															
PRICE		1.00		1.25		1.50		1.75		2.00		2.25		2.50	
R7,051	-R	1,735	R	28	R	1,791	R	3,554	R	5,317	R	7,079	R	8,842	
R7,301	-R	1,485	R	341	R	2,166	R	3,991	R	5,817	R	7,642	R	9,467	
R7,551	-R	1,235	R	653	R	2,541	R	4,429	R	6,317	R	8,204	R	10,092	
R7,801	-R	985	R	966	R	2,916	R	4,866	R	6,817	R	8,767	R	10,717	
R8,051	-R	735	R	1,278	R	3,291	R	5,304	R	7,317	R	9,329	R	11,342	
R8,301	-R	485	R	1,591	R	3,666	R	5,741	R	7,817	R	9,892	R	11,967	
R8,551	-R	235	R	1,903	R	4,041	R	6,179	R	8,317	R	10,454	R	12,592	
R8,801	R	15	R	2,216	R	4,416	R	6,616	R	8,817	R	11,017	R	13,217	
R9,051	R	265	R	2,528	R	4,791	R	7,054	R	9,317	R	11,579	R	13,842	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): EASTERN RUËNS (NORMAL POTENTIAL)															
PRICE (R/TON)															
YIELD	R	7,301	R	7,551	R	7,801	R	8,051	R	8,301	R	8,551	R	8,801	
0.75	-R	8,569	-R	8,381	-R	8,194	-R	8,006	-R	7,819	-R	7,631	-R	7,444	
1.00	-R	6,743	-R	6,493	-R	6,243	-R	5,993	-R	5,743	-R	5,493	-R	5,243	
1.25	-R	4,918	-R	4,605	-R	4,293	-R	3,980	-R	3,668	-R	3,355	-R	3,043	
1.50	-R	3,093	-R	2,718	-R	2,343	-R	1,968	-R	1,593	-R	1,218	-R	843	
1.75	-R	1,267	-R	830	-R	392	R	45	R	483	R	920	R	1,358	
2.00	R	558	R	1,058	R	1,558	R	2,058	R	2,558	R	3,058	R	3,558	
2.25	R	2,383	R	2,946	R	3,508	R	4,071	R	4,633	R	5,196	R	5,758	
2.50	R	4,209	R	4,834	R	5,459	R	6,084	R	6,709	R	7,334	R	7,959	
2.75	R	6,034	R	6,722	R	7,409	R	8,097	R	8,784	R	9,472	R	10,159	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Southern Cape: Eastern Ruêns (low potential)

Table 2.4: Income & cost budgets for wheat, barley, canola, oats & lupines for Southern Cape (Eastern Ruêns – low potential) - Dryland

Southern Cape: Eastern Ruêns (low potential)						
Crop		Wheat	Barley	Canola	Oats	Lupines
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	2.20	2.20	1.65	1.50	1.40
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247	R7,476	R6,247	R4,916
Total deductions	R/TON	R1,115	R974	R172	R951	R198
- Transport differential	R/TON	R817	R817	R-	R827	R98
- Grade differential	R/TON	R176	R124	R-	R-	R-
- Marketing, handling & statutory levies	R/TON	R123	R33	R172	R124	R100
Price premiums / Canola back-payment	R/TON	R-	R71	R748	R-	R-
Net Farm Gate Price	R/TON	R5,132	R5,185	R8,051	R5,296	R4,718
GROSS INCOME	R/HA	R11,291	R11,408	R13,285	R7,945	R6,605
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R32	R33	R38	R23	R-
Fertilizer	R/HA	R2,364	R2,252	R2,880	R1,915	R1,010
Lime	R/HA	R227	R227	R227	R190	R-
Seed	R/HA	R677	R512	R1,329	R895	R955
Fuel	R/HA	R685	R700	R703	R665	R637
Herbicide	R/HA	R1,241	R593	R806	R738	R806
Insecticide	R/HA	R163	R47	R374	R131	R148
Fungicides	R/HA	R595	R1,164	R638	R250	R381
Marketing costs	R/HA	R55	R75	R34	R-	R-
Repairs and maintenance	R/HA	R612	R585	R662	R585	R363
Casual labour	R/HA	R8	R7	R9	R7	R5
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R154	R156	R146	R37	R37
TOTAL VARIABLE EXPENDITURE	R/HA	R6,812	R6,352	R7,845	R5,436	R4,343
TOTAL VARIABLE EXPENDITURE	R/TON	R3,097	R2,887	R4,755	R3,624	R3,102
3.1) GROSS MARGIN:	R/HA	R4,479	R5,056	R5,439	R2,509	R2,262
3.2) GROSS MARGIN:	R/TON	R2,036	R2,298	R3,297	R1,673	R1,616
		R-	R-	R-	R-	R-
Break-even yield	T/HA	1.33	1.22	0.97	1.03	0.92
Break-even price	R/TON	R3,097	R2,887	R4,755	R3,624	R3,102

Source: SSK, GSA & BFAP, updated April 2024

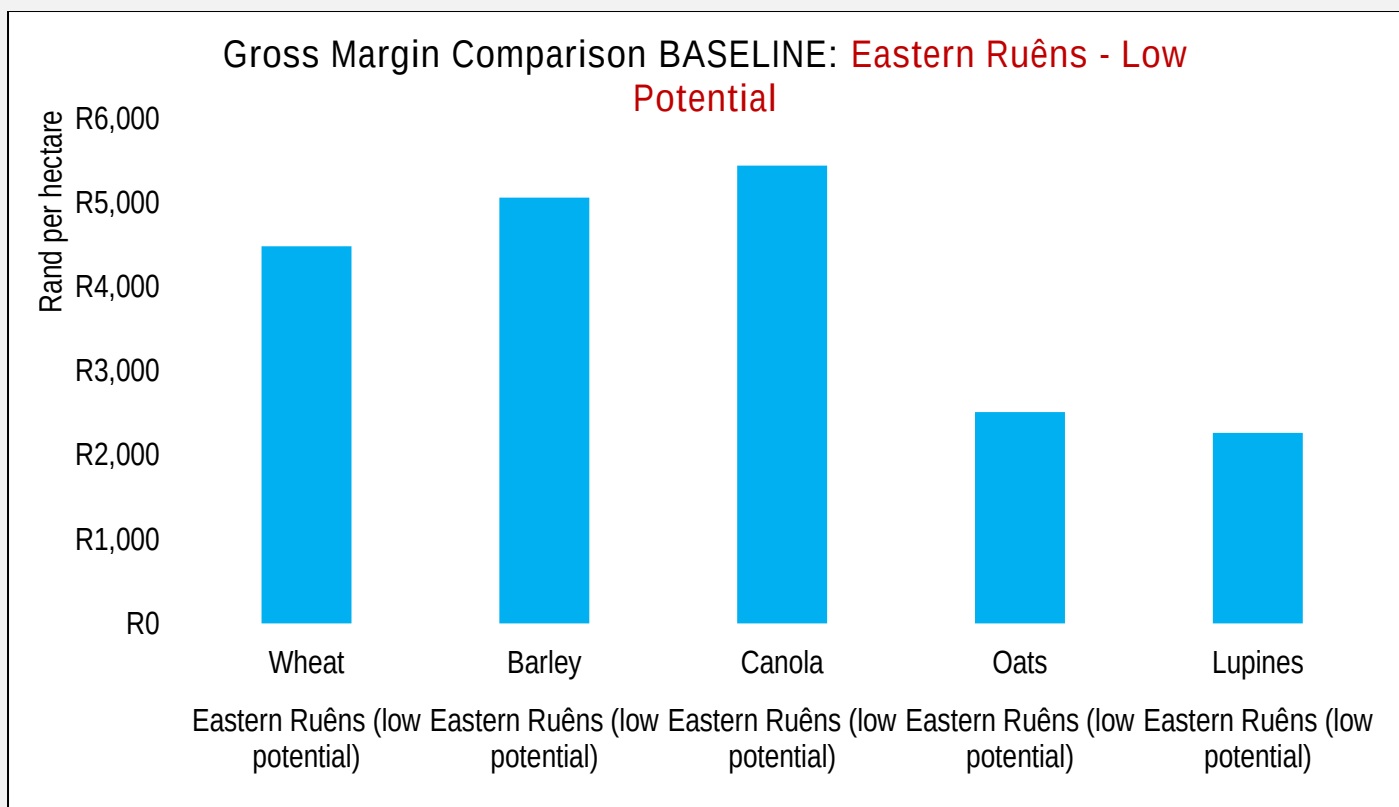


Figure 2.4: Gross margin comparison – Baseline: Southern Cape: Eastern Ruêns – Low potential

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (LOW POTENTIAL)										
PRODUCERS YIELD (T/HA)										
PRICE	1.45		1.70		1.95		2.20		2.45	
R4,132	R 821	R	213	R	1,246	R	2,279	R	3,312	R
R4,382	R 458	R	638	R	1,733	R	2,829	R	3,924	R
R4,632	R 96	R	1,063	R	2,221	R	3,379	R	4,537	R
R4,882	R 267	R	1,488	R	2,708	R	3,929	R	5,149	R
R5,132	R 629	R	1,913	R	3,196	R	4,479	R	5,762	R
R5,382	R 992	R	2,338	R	3,683	R	5,029	R	6,374	R
R5,632	R 1,354	R	2,763	R	4,171	R	5,579	R	6,987	R
R5,882	R 1,717	R	3,188	R	4,658	R	6,129	R	7,599	R
R6,132	R 2,079	R	3,613	R	5,146	R	6,679	R	8,212	R

BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUÊNS (LOW POTENTIAL)										
PRODUCERS YIELD (T/HA)										
PRICE	1.45		1.70		1.95		2.20		2.45	
R4,185	R 283	R	764	R	1,810	R	2,856	R	3,903	R
R4,435	R 80	R	1,189	R	2,297	R	3,406	R	4,515	R
R4,685	R 442	R	1,614	R	2,785	R	3,956	R	5,128	R
R4,935	R 805	R	2,039	R	3,272	R	4,506	R	5,740	R
R5,185	R 1,167	R	2,464	R	3,760	R	5,056	R	6,353	R
R5,435	R 1,530	R	2,889	R	4,247	R	5,606	R	6,965	R
R5,685	R 1,892	R	3,314	R	4,735	R	6,156	R	7,578	R
R5,935	R 2,255	R	3,739	R	5,222	R	6,706	R	8,190	R
R6,185	R 2,617	R	4,164	R	5,710	R	7,256	R	8,803	R

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN RUËNS (LOW POTENTIAL)														
PRODUCERS YIELD (T/HA)														
PRICE	0.90		1.15		1.40		1.65		1.90		2.15		2.40	
R7,051	-R	1,499	R	264	R	2,027	R	3,789	R	5,552	R	7,315	R	9,078
R7,301	-R	1,274	R	551	R	2,377	R	4,202	R	6,027	R	7,853	R	9,678
R7,551	-R	1,049	R	839	R	2,727	R	4,614	R	6,502	R	8,390	R	10,278
R7,801	-R	824	R	1,126	R	3,077	R	5,027	R	6,977	R	8,928	R	10,878
R8,051	-R	599	R	1,414	R	3,427	R	5,439	R	7,452	R	9,465	R	11,478
R8,301	-R	374	R	1,701	R	3,777	R	5,852	R	7,927	R	10,003	R	12,078
R8,551	-R	149	R	1,989	R	4,127	R	6,264	R	8,402	R	10,540	R	12,678
R8,801	R	76	R	2,276	R	4,477	R	6,677	R	8,877	R	11,078	R	13,278
R9,051	R	301	R	2,564	R	4,827	R	7,089	R	9,352	R	11,615	R	13,878
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): EASTERN RUËNS (LOW POTENTIAL)														
PRICE (R/TON)														
YIELD	R	7,301	R	7,551	R	7,801	R	8,051	R	8,301	R	8,551	R	8,801
0.65	-R	7,578	-R	7,416	-R	7,253	-R	7,091	-R	6,928	-R	6,766	-R	6,603
0.90	-R	5,753	-R	5,528	-R	5,303	-R	5,078	-R	4,853	-R	4,628	-R	4,403
1.15	-R	3,928	-R	3,640	-R	3,353	-R	3,065	-R	2,778	-R	2,490	-R	2,203
1.40	-R	2,102	-R	1,752	-R	1,402	-R	1,052	-R	702	-R	352	-R	2
1.65	-R	277	R	136	R	548	R	961	R	1,373	R	1,786	R	2,198
1.90	R	1,549	R	2,024	R	2,499	R	2,974	R	3,449	R	3,924	R	4,399
2.15	R	3,374	R	3,911	R	4,449	R	4,986	R	5,524	R	6,061	R	6,599
2.40	R	5,199	R	5,799	R	6,399	R	6,999	R	7,599	R	8,199	R	8,799
2.65	R	7,025	R	7,687	R	8,350	R	9,012	R	9,675	R	10,337	R	11,000

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Western Cape: Southern Swartland

Table 2.5: Income & cost budgets for wheat & canola for Southern Swartland - Dryland

Southern Swartland			
Crop		Wheat	Canola
Production System		Dryland	Dryland
1) INCOME			
Yield: Deterministic	T/HA	3.30	1.90
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R7,476
Total deductions	R/TON	R1,100	R28
- Transport differential	R/TON	R817	R-
- Grade differential	R/TON	R176	R-
- Marketing, handling & statutory levies	R/TON	R107	R28
Price premiums / Canola back-payment	R/TON	R-	R748
Net Farm Gate Price	R/TON	R5,148	R8,195
GROSS INCOME	R/HA	R16,987	R15,571
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R-	R-
Crop insurance	R/HA	R49	R45
Fertilizer	R/HA	R4,160	R3,836
Lime	R/HA	R227	R227
Seed	R/HA	R1,270	R1,445
Fuel	R/HA	R694	R532
Herbicide	R/HA	R1,216	R1,086
Insecticide	R/HA	R189	R609
Fungicides	R/HA	R871	R667
Marketing costs	R/HA	R72	R22
Repairs and maintenance	R/HA	R875	R756
Casual labour	R/HA	R11	R13
Aerial spray	R/HA	R-	R-
Other expenditure	R/HA	R101	R90
TOTAL VARIABLE EXPENDITURE	R/HA	R9,735	R9,327
TOTAL VARIABLE EXPENDITURE	R/TON	R2,950	R4,909
3.1) GROSS MARGIN:	R/HA	R7,251	R6,244
3.2) GROSS MARGIN:	R/TON	R2,197	R3,286
Break-even yield	T/HA	1.89	1.14
Break-even price	R/HA	R2,950	R4,909

Source: Kaap Agri, GSA & BFAP, updated April 2024

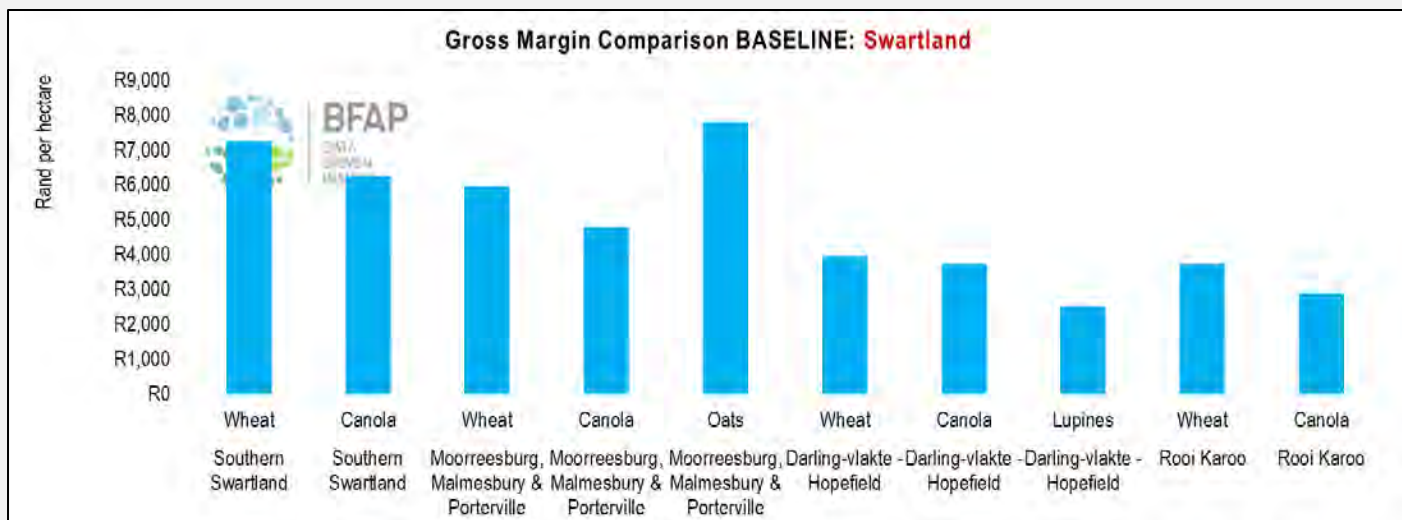


Figure 2.5: Gross margin comparison – Baseline: Western Cape: Swartland

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): SOUTHERN SWARTLAND															
PRODUCERS YIELD (T/HA)															
PRICE		2.50		2.75		3.00		3.30		3.50		3.75		4.00	
R4,148	R	633	R	1,670	R	2,707	R	3,951	R	4,781	R	5,818	R	6,855	
R4,398	R	1,258	R	2,358	R	3,457	R	4,776	R	5,656	R	6,755	R	7,855	
R4,648	R	1,883	R	3,045	R	4,207	R	5,601	R	6,531	R	7,693	R	8,855	
R4,898	R	2,508	R	3,733	R	4,957	R	6,426	R	7,406	R	8,630	R	9,855	
R5,148	R	3,133	R	4,420	R	5,707	R	7,251	R	8,281	R	9,568	R	10,855	
R5,398	R	3,758	R	5,108	R	6,457	R	8,076	R	9,156	R	10,505	R	11,855	
R5,648	R	4,383	R	5,795	R	7,207	R	8,901	R	10,031	R	11,443	R	12,855	
R5,898	R	5,008	R	6,483	R	7,957	R	9,726	R	10,906	R	12,380	R	13,855	
R6,148	R	5,633	R	7,170	R	8,707	R	10,551	R	11,781	R	13,318	R	14,855	
CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): SOUTHERN SWARTLAND															
PRODUCERS YIELD (T/HA)															
PRICE		1.15		1.40		1.65		1.90		2.15		2.40		2.65	
R7,195	-R	1,053	R	746	R	2,545	R	4,344	R	6,143	R	7,942	R	9,740	
R7,445	-R	765	R	1,096	R	2,958	R	4,819	R	6,680	R	8,542	R	10,403	
R7,695	-R	478	R	1,446	R	3,370	R	5,294	R	7,218	R	9,142	R	11,065	
R7,945	-R	190	R	1,796	R	3,783	R	5,769	R	7,755	R	9,742	R	11,728	
R8,195	R	97	R	2,146	R	4,195	R	6,244	R	8,293	R	10,342	R	12,390	
R8,445	R	385	R	2,496	R	4,608	R	6,719	R	8,830	R	10,942	R	13,053	
R8,695	R	672	R	2,846	R	5,020	R	7,194	R	9,368	R	11,542	R	13,715	
R8,945	R	960	R	3,196	R	5,433	R	7,669	R	9,905	R	12,142	R	14,378	
R9,195	R	1,247	R	3,546	R	5,845	R	8,144	R	10,443	R	12,742	R	15,040	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): SOUTHERN SWARTLAND															
PRICE (R/TON)															
YIELD	R	7,445	R	7,695	R	7,945	R	8,195	R	8,445	R	8,695	R	8,945	
0.75	-R	10,995	-R	10,807	-R	10,620	-R	10,432	-R	10,245	-R	10,057	-R	9,870	
1.15	-R	8,017	-R	7,729	-R	7,442	-R	7,154	-R	6,867	-R	6,579	-R	6,292	
1.40	-R	6,155	-R	5,805	-R	5,455	-R	5,105	-R	4,755	-R	4,405	-R	4,055	
1.65	-R	4,294	-R	3,881	-R	3,469	-R	3,056	-R	2,644	-R	2,231	-R	1,819	
1.90	-R	2,433	-R	1,958	-R	1,483	-R	1,008	-R	533	-R	58	R	417	
2.15	-R	571	-R	34	R	504	R	1,041	R	1,579	R	2,116	R	2,654	
2.40	R	1,290	R	1,890	R	2,490	R	3,090	R	3,690	R	4,290	R	4,890	
2.65	R	3,151	R	3,814	R	4,476	R	5,139	R	5,801	R	6,464	R	7,126	
2.50	R	2,035	R	2,660	R	3,285	R	3,910	R	4,535	R	5,160	R	5,785	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for producers to allocate them individually.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- Marketing cost assumes that approximately 15% of the wheat, barley and canola crop requires drying
- The cost of fertiliser reflects a combination of nitrogen, phosphorous, potassium and other macro- and micro nutrients.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Western Cape: Moorreesburg, Malmesbury & Porterville

Table 2.6: Income & cost budgets for wheat, canola & oats for Moorreesburg, Malmesbury & Porterville - Dryland

Moorreesburg, Malmesbury & Porterville				
Crop		Wheat	Canola	Oats
Production System		Dryland	Dryland	Dryland
1) INCOME				
Yield: Deterministic	T/HA	3.00	1.65	2.70
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R7,476	R6,247
Total deductions	R/TON	R1,100	R28	R860
- Transport differential	R/TON	R817	R-	R827
- Grade differential	R/TON	R176	R-	R-
- Marketing, handling & statutory levies	R/TON	R107	R28	R33
Price premiums / Canola back-payment	R/TON	R-	R748	R-
Net Farm Gate Price	R/TON	R5,148	R8,195	R5,387
GROSS INCOME	R/HA	R15,443	R13,522	R14,546
2) VARIABLE EXPENDITURES				
Contracting	R/HA	R-	R-	R-
Crop insurance	R/HA	R44	R39	R42
Fertilizer	R/HA	R3,733	R3,410	R2,717
Lime	R/HA	R227	R190	R233
Seed	R/HA	R1,213	R1,445	R739
Fuel	R/HA	R683	R590	R642
Herbicide	R/HA	R1,482	R921	R847
Insecticide	R/HA	R188	R590	R140
Fungicides	R/HA	R858	R678	R509
Marketing costs	R/HA	R65	R19	R-
Repairs and maintenance	R/HA	R868	R754	R782
Casual labour	R/HA	R10	R13	R11
Aerial spray	R/HA	R-	R-	R-
Other expenditure	R/HA	R101	R90	R90
TOTAL VARIABLE EXPENDITURE	R/HA	R9,471	R8,738	R6,752
TOTAL VARIABLE EXPENDITURE	R/TON	R3,157	R5,295	R2,501
3.1) GROSS MARGIN:				
	R/HA	R5,971	R4,785	R7,794
3.2) GROSS MARGIN:				
	R/TON	R1,990	R2,900	R2,887
Break-even yield	T/HA	1.84	1.07	1.25
Break-even price	R/TON	R3,157	R5,295	R2,501

Source: Kaap Agri, Overberg Agri, GSA & BFAP, updated April 2024

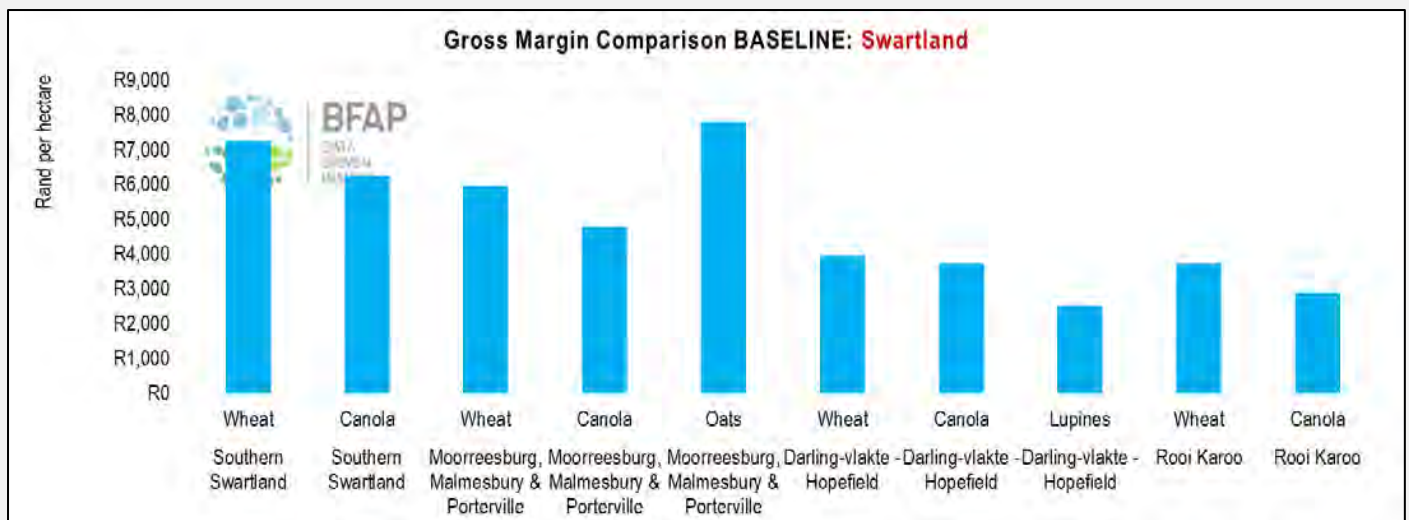


Figure 2.6: Gross margin comparison – Baseline: Swartland

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MOORREESBURG, MALMESBURY & PORTERVILLE															
PRODUCERS YIELD (T/HA)															
PRICE		2.25		2.50		2.75		3.00		3.25		3.50		3.75	
R4,148	-R	139	R	898	R	1,934	R	2,971	R	4,008	R	5,045	R	6,082	
R4,398	R	423	R	1,523	R	2,622	R	3,721	R	4,821	R	5,920	R	7,019	
R4,648	R	986	R	2,148	R	3,309	R	4,471	R	5,633	R	6,795	R	7,957	
R4,898	R	1,548	R	2,773	R	3,997	R	5,221	R	6,446	R	7,670	R	8,894	
R5,148	R	2,111	R	3,398	R	4,684	R	5,971	R	7,258	R	8,545	R	9,832	
R5,398	R	2,673	R	4,023	R	5,372	R	6,721	R	8,071	R	9,420	R	10,769	
R5,648	R	3,236	R	4,648	R	6,059	R	7,471	R	8,883	R	10,295	R	11,707	
R5,898	R	3,798	R	5,273	R	6,747	R	8,221	R	9,696	R	11,170	R	12,644	
R6,148	R	4,361	R	5,898	R	7,434	R	8,971	R	10,508	R	12,045	R	13,582	
CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MOORREESBURG, MALMESBURY & PORTERVILLE															
PRODUCERS YIELD (T/HA)															
PRICE		1.00		1.25		1.50		1.65		1.75		2.00		2.25	
R7,195	-R	1,542	R	257	R	2,055	R	3,135	R	3,854	R	5,653	R	7,452	
R7,445	-R	1,292	R	569	R	2,430	R	3,547	R	4,292	R	6,153	R	8,014	
R7,695	-R	1,042	R	882	R	2,805	R	3,960	R	4,729	R	6,653	R	8,577	
R7,945	-R	792	R	1,194	R	3,180	R	4,372	R	5,167	R	7,153	R	9,139	
R8,195	-R	542	R	1,507	R	3,555	R	4,785	R	5,604	R	7,653	R	9,702	
R8,445	-R	292	R	1,819	R	3,930	R	5,197	R	6,042	R	8,153	R	10,264	
R8,695	-R	42	R	2,132	R	4,305	R	5,610	R	6,479	R	8,653	R	10,827	
R8,945	R	208	R	2,444	R	4,680	R	6,022	R	6,917	R	9,153	R	11,389	
R9,195	R	458	R	2,757	R	5,055	R	6,435	R	7,354	R	9,653	R	11,952	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): MOORREESBURG, MALMESBURY & PORTERVILLE															
PRICE (R/TON)															
YIELD		R 7,445		R 7,695		R 7,945		R 8,195		R 8,445		R 8,695		R 8,945	
0.50	-R	10,986	-R	10,861	-R	10,736	-R	10,611	-R	10,486	-R	10,361	-R	10,236	
1.00	-R	7,264	-R	7,014	-R	6,764	-R	6,514	-R	6,264	-R	6,014	-R	5,764	
1.25	-R	5,402	-R	5,090	-R	4,777	-R	4,465	-R	4,152	-R	3,840	-R	3,527	
1.50	-R	3,541	-R	3,166	-R	2,791	-R	2,416	-R	2,041	-R	1,666	-R	1,291	
1.65	-R	2,424	-R	2,012	-R	1,599	-R	1,187	-R	774	-R	362	R	51	
1.75	-R	1,680	-R	1,242	-R	805	-R	367	R	70	R	508	R	945	
2.00	R	182	R	682	R	1,182	R	1,682	R	2,182	R	2,682	R	3,182	
2.25	R	2,043	R	2,606	R	3,168	R	3,731	R	4,293	R	4,856	R	5,418	
2.50	R	3,904	R	4,529	R	5,154	R	5,779	R	6,404	R	7,029	R	7,654	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Western Cape: Darling-vlakte – Hopefield

Table 2.7: Income & cost budgets for wheat, canola & lupines for Darling-vlakte – Hopefield - Dryland

Darling-vlakte – Hopefield (Sandveld region)				
Crop		Wheat	Canola	Lupines
Production System		Dryland	Dryland	Dryland
1) INCOME				
Yield: Deterministic	T/HA	2.35	1.40	1.50
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R7,476	R4,916
Total deductions	R/TON	R1,100	R28	R133
- Transport differential	R/TON	R817	R-	R98
- Grade differential	R/TON	R176	R-	R-
- Marketing, handling & statutory levies	R/TON	R107	R28	R35
Price premiums / Canola back-payment	R/TON	R-	R748	R-
Net Farm Gate Price	R/TON	R5,148	R8,195	R4,783
GROSS INCOME	R/HA	R12,097	R11,473	R7,174
2) VARIABLE EXPENDITURES				
Contracting	R/HA	R-	R-	R-
Crop insurance	R/HA	R35	R33	R-
Fertilizer	R/HA	R3,188	R2,983	R987
Lime	R/HA	R159	R159	R227
Seed	R/HA	R1,097	R1,445	R704
Fuel	R/HA	R696	R494	R501
Herbicide	R/HA	R1,241	R806	R797
Insecticide	R/HA	R163	R374	R178
Fungicides	R/HA	R595	R638	R478
Marketing costs	R/HA	R51	R16	R-
Repairs and maintenance	R/HA	R800	R680	R700
Casual labour	R/HA	R10	R12	R7
Aerial spray	R/HA	R-	R-	R-
Other expenditure	R/HA	R101	R90	R90
TOTAL VARIABLE EXPENDITURE	R/HA	R8,136	R7,730	R4,668
TOTAL VARIABLE EXPENDITURE	R/TON	R3,462	R5,521	R3,112
3.1) GROSS MARGIN:	R/HA	R3,961	R3,744	R2,506
3.2) GROSS MARGIN:	R/TON	R1,686	R2,674	R1,671
Break-even yield	T/HA	1.58	0.94	0.98
Break-even price	R/TON	R3,462	R5,521	R3,112

Source: Kaap Agri, Overberg Agri, GSA & BFAP, updated April 2024

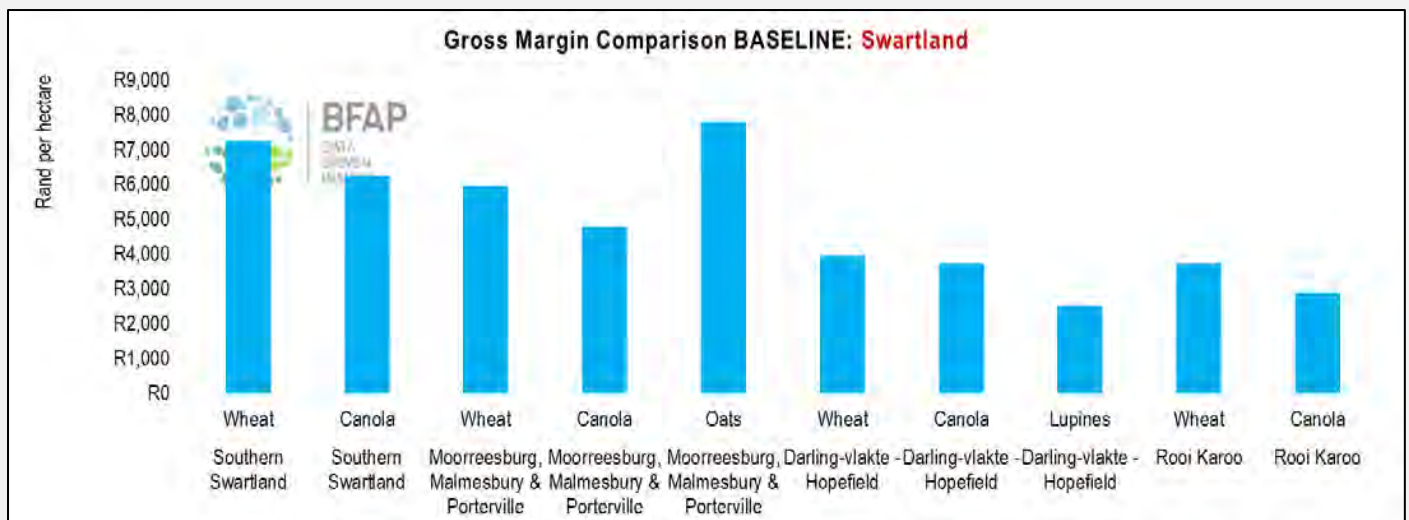


Figure 2.7: Gross margin comparison – Baseline: Swartland

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): Darling-vlakte - Hopefield															
PRODUCERS YIELD (T/HA)															
PRICE		1.50		1.75		2.00		2.35		2.50		2.75		3.00	
R4,148	-R	1,914	-R	878	R	159	R	1,611	R	2,233	R	3,270	R	4,307	
R4,398	-R	1,539	-R	440	R	659	R	2,198	R	2,858	R	3,957	R	5,057	
R4,648	-R	1,164	-R	3	R	1,159	R	2,786	R	3,483	R	4,645	R	5,807	
R4,898	-R	789	R	435	R	1,659	R	3,373	R	4,108	R	5,332	R	6,557	
R5,148	-R	414	R	872	R	2,159	R	3,961	R	4,733	R	6,020	R	7,307	
R5,398	-R	39	R	1,310	R	2,659	R	4,548	R	5,358	R	6,707	R	8,057	
R5,648	R	336	R	1,747	R	3,159	R	5,136	R	5,983	R	7,395	R	8,807	
R5,898	R	711	R	2,185	R	3,659	R	5,723	R	6,608	R	8,082	R	9,557	
R6,148	R	1,086	R	2,622	R	4,159	R	6,311	R	7,233	R	8,770	R	10,307	
CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): Darling-vlakte - Hopefield															
PRODUCERS YIELD (T/HA)															
PRICE		0.70		0.95		1.20		1.40		1.70		1.95		2.20	
R7,195	-R	2,693	-R	894	R	905	R	2,344	R	4,502	R	6,301	R	8,100	
R7,445	-R	2,518	-R	657	R	1,205	R	2,694	R	4,927	R	6,788	R	8,650	
R7,695	-R	2,343	-R	419	R	1,505	R	3,044	R	5,352	R	7,276	R	9,200	
R7,945	-R	2,168	-R	182	R	1,805	R	3,394	R	5,777	R	7,763	R	9,750	
R8,195	-R	1,993	R	56	R	2,105	R	3,744	R	6,202	R	8,251	R	10,300	
R8,445	-R	1,818	R	293	R	2,405	R	4,094	R	6,627	R	8,738	R	10,850	
R8,695	-R	1,643	R	531	R	2,705	R	4,444	R	7,052	R	9,226	R	11,400	
R8,945	-R	1,468	R	768	R	3,005	R	4,794	R	7,477	R	9,713	R	11,950	
R9,195	-R	1,293	R	1,006	R	3,305	R	5,144	R	7,902	R	10,201	R	12,500	
CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): Darling-vlakte - Hopefield															
PRICE (R/TON)															
YIELD	R	7,445	R	7,695	R	7,945	R	8,195	R	8,445	R	8,695	R	8,945	
0.25	-R	9,829	-R	9,767	-R	9,704	-R	9,642	-R	9,579	-R	9,517	-R	9,454	
0.70	-R	6,479	-R	6,304	-R	6,129	-R	5,954	-R	5,779	-R	5,604	-R	5,429	
0.95	-R	4,618	-R	4,380	-R	4,143	-R	3,905	-R	3,668	-R	3,430	-R	3,193	
1.20	-R	2,756	-R	2,456	-R	2,156	-R	1,856	-R	1,556	-R	1,256	-R	956	
1.40	-R	1,267	-R	917	-R	567	-R	217	R	133	R	483	R	833	
1.70	R	966	R	1,391	R	1,816	R	2,241	R	2,666	R	3,091	R	3,516	
1.95	R	2,828	R	3,315	R	3,803	R	4,290	R	4,778	R	5,265	R	5,753	
2.20	R	4,689	R	5,239	R	5,789	R	6,339	R	6,889	R	7,439	R	7,989	
2.25	R	5,061	R	5,624	R	6,186	R	6,749	R	7,311	R	7,874	R	8,436	

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Western Cape: Rooi Karoo

Table 2.8: Income & cost budgets for wheat & canola for Rooi Karoo - Dryland

Rooi Karoo			
Crop		Wheat	Canola
Production System		Dryland	Dryland
1) INCOME			
Yield: Deterministic	T/HA	2.15	1.25
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R7,476
Total deductions	R/TON	R1,100	R81
- Transport differential	R/TON	R817	R53
- Grade differential	R/TON	R176	R-
- Marketing, handling & statutory levies	R/TON	R107	R28
Price premiums / Canola back-payment	R/TON	R-	R748
Net Farm Gate Price	R/TON	R5,148	R8,142
GROSS INCOME	R/HA	R11,067	R10,178
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R-	R-
Crop insurance	R/HA	R32	R29
Fertilizer	R/HA	R2,479	R2,393
Lime	R/HA	R170	R170
Seed	R/HA	R1,039	R1,445
Fuel	R/HA	R659	R533
Herbicide	R/HA	R1,241	R806
Insecticide	R/HA	R163	R374
Fungicides	R/HA	R595	R638
Marketing costs	R/HA	R47	R14
Repairs and maintenance	R/HA	R795	R795
Casual labour	R/HA	R10	R12
Aerial spray	R/HA	R-	R-
Other expenditure	R/HA	R101	R90
TOTAL VARIABLE EXPENDITURE	R/HA	R7,331	R7,300
TOTAL VARIABLE EXPENDITURE	R/TON	R3,410	R5,840
3.1) GROSS MARGIN:	R/HA	R3,737	R2,878
3.2) GROSS MARGIN:	R/TON	R1,738	R2,302
Break-even yield	T/HA	1.42	0.90
Break-even price	R/TON	R3,410	R5,840

Source: Kaap Agri, Overberg Agri, GSA & BFAP, updated April 2024

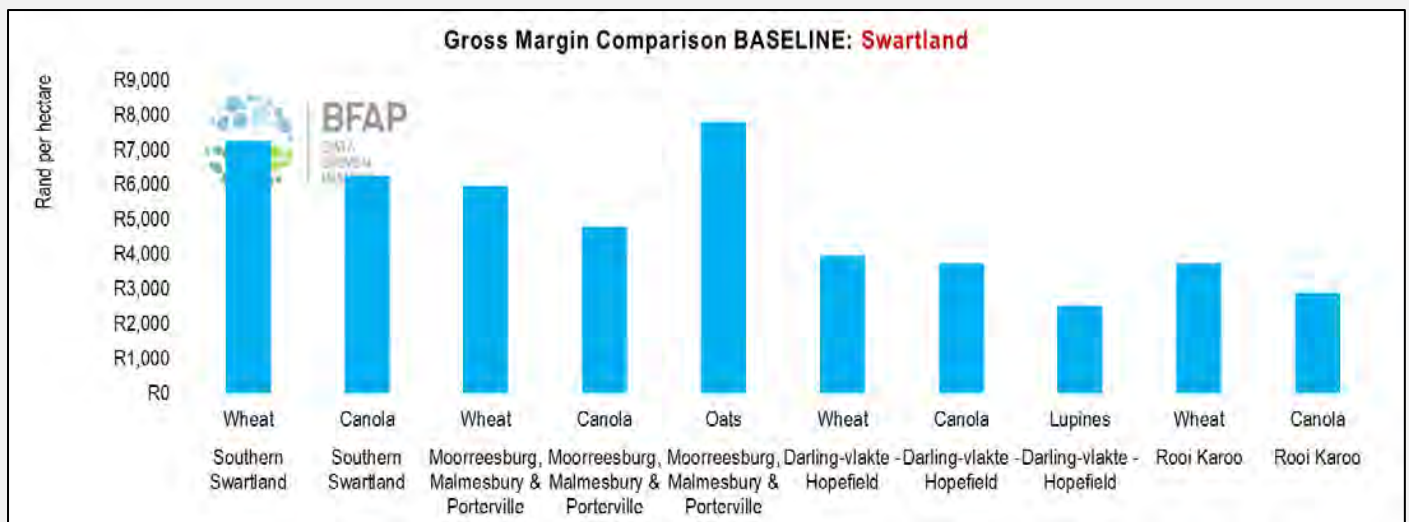


Figure 2.8: Gross margin comparison – Baseline: Swartland

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): ROOI KAROO												
PRODUCERS YIELD (T/HA)												
PRICE	1.50		1.75		2.00		2.15		2.25		2.50	2.75
R4,148	-R 1,109	-R	73	R	964	R	1,587	R	2,001	R	3,038	R 4,075
R4,398	-R 734	R	365	R	1,464	R	2,124	R	2,564	R	3,663	R 4,763
R4,648	-R 359	R	802	R	1,964	R	2,662	R	3,126	R	4,288	R 5,450
R4,898	R 16	R	1,240	R	2,464	R	3,199	R	3,689	R	4,913	R 6,138
R5,148	R 391	R	1,677	R	2,964	R	3,737	R	4,251	R	5,538	R 6,825
R5,398	R 766	R	2,115	R	3,464	R	4,274	R	4,814	R	6,163	R 7,513
R5,648	R 1,141	R	2,552	R	3,964	R	4,812	R	5,376	R	6,788	R 8,200
R5,898	R 1,516	R	2,990	R	4,464	R	5,349	R	5,939	R	7,413	R 8,888
R6,148	R 1,891	R	3,427	R	4,964	R	5,887	R	6,501	R	8,038	R 9,575

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): ROOI KAROO												
PRODUCERS YIELD (T/HA)												
PRICE	0.65		0.90		1.15		1.25		1.40		1.65	1.90
R7,142	-R 2,657	-R	872	R	914	R	1,628	R	2,699	R	4,485	R 6,271
R7,392	-R 2,495	-R	647	R	1,201	R	1,941	R	3,049	R	4,898	R 6,746
R7,642	-R 2,332	-R	422	R	1,489	R	2,253	R	3,399	R	5,310	R 7,221
R7,892	-R 2,170	-R	197	R	1,776	R	2,566	R	3,749	R	5,723	R 7,696
R8,142	-R 2,007	R	28	R	2,064	R	2,878	R	4,099	R	6,135	R 8,171
R8,392	-R 1,845	R	253	R	2,351	R	3,191	R	4,449	R	6,548	R 8,646
R8,642	-R 1,682	R	478	R	2,639	R	3,503	R	4,799	R	6,960	R 9,121
R8,892	-R 1,520	R	703	R	2,926	R	3,816	R	5,149	R	7,373	R 9,596
R9,142	-R 1,357	R	928	R	3,214	R	4,128	R	5,499	R	7,785	R 10,071

CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): ROOI KAROO												
PRICE (R/TON)												
YIELD	R 7,392	R	7,642	R	7,892	R	8,142	R	8,392	R	8,642	R 8,892
0.25	-R 9,188	-R	9,126	-R	9,063	-R	9,001	-R	8,938	-R	8,876	-R 8,813
0.65	-R 6,231	-R	6,069	-R	5,906	-R	5,744	-R	5,581	-R	5,419	-R 5,256
0.90	-R 4,383	-R	4,158	-R	3,933	-R	3,708	-R	3,483	-R	3,258	-R 3,033
1.15	-R 2,535	-R	2,248	-R	1,960	-R	1,673	-R	1,385	-R	1,098	-R 810
1.25	-R 1,796	-R	1,483	-R	1,171	-R	858	-R	546	-R	233	R 79
1.40	-R 687	-R	337	R	13	R	363	R	713	R	1,063	R 1,413
1.65	R 1,161	R	1,574	R	1,986	R	2,399	R	2,811	R	3,224	R 3,636
1.90	R 3,009	R	3,484	R	3,959	R	4,434	R	4,909	R	5,384	R 5,859
2.00	R 3,748	R	4,248	R	4,748	R	5,248	R	5,748	R	6,248	R 6,748

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Free State

Table 2.9: Income & cost budgets for wheat for Eastern & Central Free State - Dryland

		Eastern Free State	Central Free State
Crop		Wheat	Wheat
Production System		Dryland	Dryland
1) INCOME			
Yield: Deterministic	T/HA	2.50	2.50
SAFEX SIMULATED / DERIVED PRICE: 2024	R/TON	R6,247	R6,247
Total deductions	R/TON	R831	R813
- Transport differential	R/TON	R385	R367
- Grade differential	R/TON	R352	R352
- Marketing, handling & statutory levies	R/TON	R94	R94
Price premiums / Canola back-payment	R/TON	R-	R-
Net Farm Gate Price	R/TON	R5,417	R5,435
GROSS INCOME	R/HA	R13,541	R13,586
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R950	R950
Crop insurance	R/HA	R420	R1,087
Fertilizer	R/HA	R2,780	R2,363
Lime	R/HA	R487	R603
Seed	R/HA	R699	R699
Fuel	R/HA	R870	R1,234
Herbicide	R/HA	R758	R682
Insecticide	R/HA	R117	R241
Fungicides	R/HA	R-	R-
Marketing costs	R/HA	R50	R50
Repairs and maintenance	R/HA	R763	R763
Casual labour	R/HA	R-	R-
Aerial spray	R/HA	R-	R-
Other expenditure	R/HA	R34	R-
TOTAL VARIABLE EXPENDITURE	R/HA	R7,928	R8,671
TOTAL VARIABLE EXPENDITURE	R/TON	R3,171	R3,468
3.1) GROSS MARGIN:	R/HA	R5,613	R4,915
3.2) GROSS MARGIN:	R/TON	R2,245	R1,966
Break-even yield	T/HA	1.46	1.60
Break-even price	R/TON	R3,171	R3,468

Source: VKB, GSA & BFAP, updated April 2024

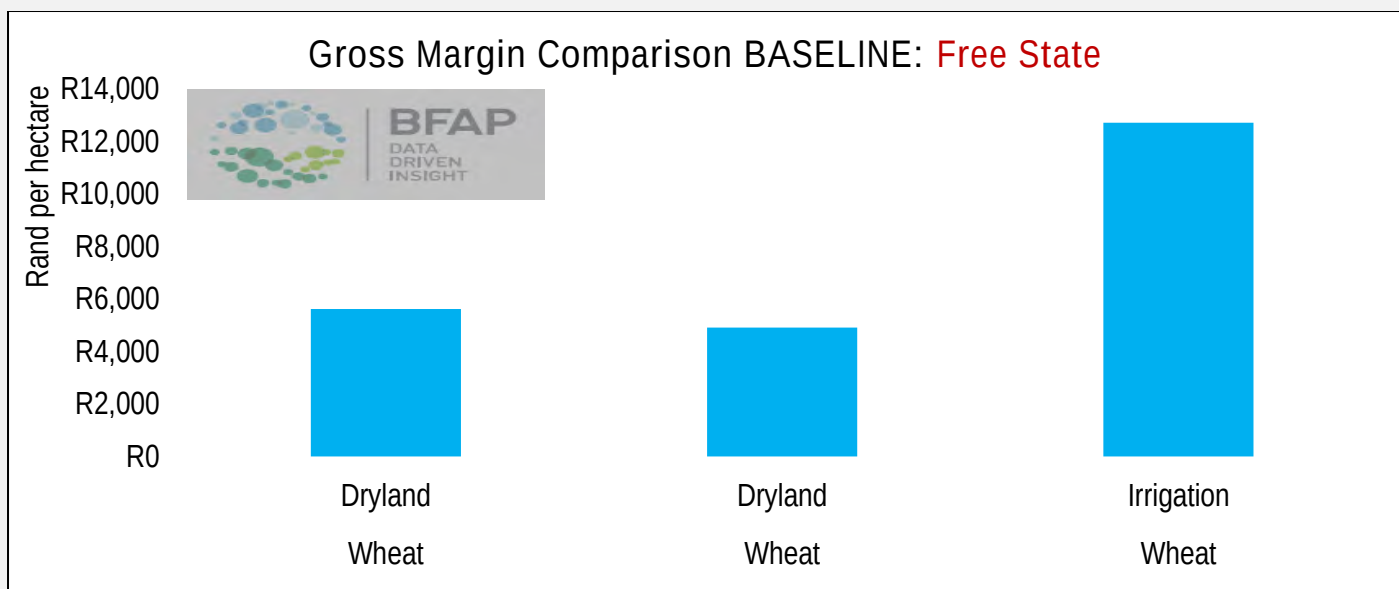


Figure 2.9: Gross margin comparison – Baseline: Free State (Eastern & Central regions)

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): CENTRAL FREE STATE														
PRODUCERS YIELD (T/HA)														
PRICE		1.75		2.00		2.25		2.50		2.75		3.00		3.25
R4,417	-R	199	R	905	R	2,009	R	3,113	R	4,217	R	5,321	R	6,425
R4,667	R	238	R	1,405	R	2,571	R	3,738	R	4,905	R	6,071	R	7,238
R4,917	R	676	R	1,905	R	3,134	R	4,363	R	5,592	R	6,821	R	8,050
R5,167	R	1,113	R	2,405	R	3,696	R	4,988	R	6,280	R	7,571	R	8,863
R5,417	R	1,551	R	2,905	R	4,259	R	5,613	R	6,967	R	8,321	R	9,675
R5,667	R	1,988	R	3,405	R	4,821	R	6,238	R	7,655	R	9,071	R	10,488
R5,917	R	2,426	R	3,905	R	5,384	R	6,863	R	8,342	R	9,821	R	11,300
R6,167	R	2,863	R	4,405	R	5,946	R	7,488	R	9,030	R	10,571	R	12,113
R6,417	R	3,301	R	4,905	R	6,509	R	8,113	R	9,717	R	11,321	R	12,925
WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN FREE STATE														
PRODUCERS YIELD (T/HA)														
PRICE		1.75		2.00		2.25		2.50		2.75		3.00		3.25
R4,435	-R	910	R	198	R	1,307	R	2,415	R	3,524	R	4,633	R	5,741
R4,685	-R	473	R	698	R	1,869	R	3,040	R	4,212	R	5,383	R	6,554
R4,935	-R	35	R	1,198	R	2,432	R	3,665	R	4,899	R	6,133	R	7,366
R5,185	R	402	R	1,698	R	2,994	R	4,290	R	5,587	R	6,883	R	8,179
R5,435	R	840	R	2,198	R	3,557	R	4,915	R	6,274	R	7,633	R	8,991
R5,685	R	1,277	R	2,698	R	4,119	R	5,540	R	6,962	R	8,383	R	9,804
R5,935	R	1,715	R	3,198	R	4,682	R	6,165	R	7,649	R	9,133	R	10,616
R6,185	R	2,152	R	3,698	R	5,244	R	6,790	R	8,337	R	9,883	R	11,429
R6,435	R	2,590	R	4,198	R	5,807	R	7,415	R	9,024	R	10,633	R	12,241

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

INCOME & COST BUDGETS – IRRIGATION

Northern Cape

Table 3.1: Income & cost budgets for wheat, barley & canola for Northern Cape - Irrigation

Area		Northern Cape: Irrigation		
Crop		Wheat	Barley	Canola
Production System		Irrigation	Irrigation	Irrigation
1) INCOME				
Yield: Deterministic	T/HA	8.00	7.50	3.50
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2024	R/TON	R6,247	R6,247	R7,476
Total deductions	R/TON	R993	R899	R156
- Transport differential	R/TON	R650	R650	R128
- Grade differential	R/TON	R239	R173	R-
- Marketing, handling & statutory levies	R/TON	R104	R75	R28
Price premiums / Canola back- payment	R/TON	R-	R71	R748
Net Farm Gate Price	R/TON	R5,254	R5,094	R8,067
GROSS INCOME	R/HA	R42,033	R38,207	R28,236
2) VARIABLE EXPENDITURES				
Contracting	R/HA	R1,250	R1,250	R1,476
Crop insurance	R/HA	R2,606	R2,369	R1,129
Fertilizer	R/HA	R12,105	R9,637	R6,553
Lime	R/HA	R1,297	R1,297	R-
Seed	R/HA	R2,330	R1,800	R1,683
Fuel	R/HA	R1,460	R1,422	R1,161
Herbicide	R/HA	R376	R376	R1,534
Insecticide	R/HA	R1,354	R274	R381
Fungicides	R/HA	R367	R251	R647
Marketing costs	R/HA	R232	R253	R40
Repairs and maintenance	R/HA	R1,128	R1,128	R1,106
Casual labour	R/HA	R-	R-	R-
Irrigation: Water	R/HA	R1,206	R1,231	R1,146
Irrigation: Electricity	R/HA	R4,854	R4,611	R4,611
Aerial spray	R/HA	R1,350	R450	R-
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R1,271	R1,214	R1,214
TOTAL VARIABLE EXPENDITURE	R/HA	R33,187	R27,563	R22,682
TOTAL VARIABLE EXPENDITURE	R/TON	R4,148	R3,675	R6,480
3.1) GROSS MARGIN:	R/HA	R8,847	R10,643	R5,554
3.2) GROSS MARGIN:	R/TON	R1,106	R1,419	R1,587
Break-even yield	T/HA	6.32	5.41	2.81
Break-even price	R/TON	R4,148	R3,675	R6,480

Source: GWK, GSA & BFAP, updated April 2024

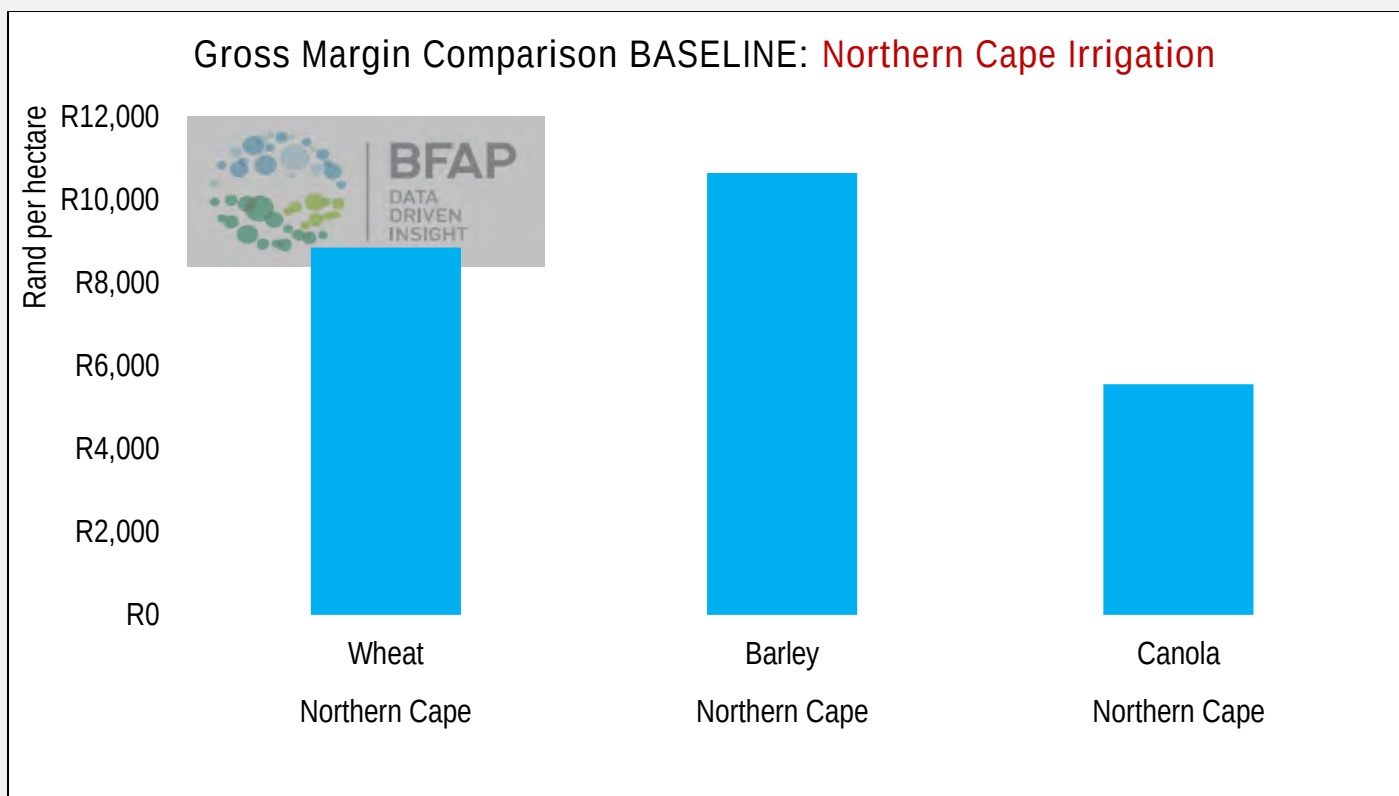


Figure 3.1: Gross margin comparison – Baseline: Northern Cape Irrigation

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE - IRRIGATION

PRODUCERS YIELD (T/HA)												
PRICE	7.25		7.50		7.75		8.00		8.25		8.50	
R4,254	R	2,344	R	1,281	R	217	R	847	R	1,910	R	2,974
R4,504	R	532	R	594	R	1,720	R	2,847	R	3,973	R	5,099
R4,754	R	1,281	R	2,469	R	3,658	R	4,847	R	6,035	R	7,224
R5,004	R	3,093	R	4,344	R	5,595	R	6,847	R	8,098	R	9,349
R5,254	R	4,906	R	6,219	R	7,533	R	8,847	R	10,160	R	11,474
R5,504	R	6,718	R	8,094	R	9,470	R	10,847	R	12,223	R	13,599
R5,754	R	8,531	R	9,969	R	11,408	R	12,847	R	14,285	R	15,724
R6,004	R	10,343	R	11,844	R	13,345	R	14,847	R	16,348	R	17,849
R6,254	R	12,156	R	13,719	R	15,283	R	16,847	R	18,410	R	19,974

BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE - IRRIGATION

PRODUCERS YIELD (T/HA)												
PRICE	6.75		7.00		7.25		7.50		7.75		8.00	
R4,094	R	73	R	1,096	R	2,120	R	3,143	R	4,167	R	5,190
R4,344	R	1,760	R	2,846	R	3,932	R	5,018	R	6,104	R	7,190
R4,594	R	3,448	R	4,596	R	5,745	R	6,893	R	8,042	R	9,190
R4,844	R	5,135	R	6,346	R	7,557	R	8,768	R	9,979	R	11,190
R5,094	R	6,823	R	8,096	R	9,370	R	10,643	R	11,917	R	13,190
R5,344	R	8,510	R	9,846	R	11,182	R	12,518	R	13,854	R	15,190
R5,594	R	10,198	R	11,596	R	12,995	R	14,393	R	15,792	R	17,190
R5,844	R	11,885	R	13,346	R	14,807	R	16,268	R	17,729	R	19,190
R6,094	R	13,573	R	15,096	R	16,620	R	18,143	R	19,667	R	21,190

CANOLA SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE - IRRIGATION

PRODUCERS YIELD (T/HA)															
PRICE		2.75		3.00		3.25		3.50		3.75		4.00		4.25	
R7,067	-R	3,246	-R	1,480	R	287	R	2,054	R	3,821	R	5,588	R	7,355	
R7,317	-R	2,559	-R	730	R	1,100	R	2,929	R	4,758	R	6,588	R	8,417	
R7,567	-R	1,871	R	20	R	1,912	R	3,804	R	5,696	R	7,588	R	9,480	
R7,817	-R	1,184	R	770	R	2,725	R	4,679	R	6,633	R	8,588	R	10,542	
R8,067	-R	496	R	1,520	R	3,537	R	5,554	R	7,571	R	9,588	R	11,605	
R8,317	R	191	R	2,270	R	4,350	R	6,429	R	8,508	R	10,588	R	12,667	
R8,567	R	879	R	3,020	R	5,162	R	7,304	R	9,446	R	11,588	R	13,730	
R8,817	R	1,566	R	3,770	R	5,975	R	8,179	R	10,383	R	12,588	R	14,792	
R9,067	R	2,254	R	4,520	R	6,787	R	9,054	R	11,321	R	13,588	R	15,855	

CANOLA MARGIN ABOVE / BELOW WHEAT (GROSS MARGIN PER HECTARE): NORTHERN CAPE - IRRIGATION

PRICE (R/TON)														
YIELD	R	7,317	R	7,567	R	7,817	R	8,067	R	8,317	R	8,567	R	8,817
3.00	-R	9,576	-R	8,826	-R	8,076	-R	7,326	-R	6,576	-R	5,826	-R	5,076
2.75	-R	11,405	-R	10,718	-R	10,030	-R	9,343	-R	8,655	-R	7,968	-R	7,280
3.00	-R	9,576	-R	8,826	-R	8,076	-R	7,326	-R	6,576	-R	5,826	-R	5,076
3.25	-R	7,747	-R	6,934	-R	6,122	-R	5,309	-R	4,497	-R	3,684	-R	2,872
3.50	-R	5,917	-R	5,042	-R	4,167	-R	3,292	-R	2,417	-R	1,542	-R	667
3.75	-R	4,088	-R	3,151	-R	2,213	-R	1,276	-R	338	R	599	R	1,537
4.00	-R	2,259	-R	1,259	-R	259	R	741	R	1,741	R	2,741	R	3,741
4.25	-R	429	R	633	R	1,696	R	2,758	R	3,821	R	4,883	R	5,946
5.00	R	5,059	R	6,309	R	7,559	R	8,809	R	10,059	R	11,309	R	12,559

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Table 3.2: Income & cost budgets for wheat & barley for Limpopo - Irrigation

Limpopo: Irrigation			
Area			
Crop		Wheat	Barley
Production System		Irrigation	Irrigation
1) INCOME			
Yield: Deterministic	T/HA	6.50	6.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2024	R/TON	R6,247	R6,247
Total deductions	R/TON	R695	R601
- Transport differential	R/TON	R352	R352
- Grade differential	R/TON	R239	R173
- Marketing, handling & statutory levies	R/TON	R104	R75
Price premiums / Canola back- payment	R/TON	R-	R71
Net Farm Gate Price	R/TON	R5,552	R5,374
GROSS INCOME	R/HA	R36,089	R32,246
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R850	R850
Crop insurance	R/HA	R2,021	R1,806
Fertilizer	R/HA	R6,307	R5,352
Lime	R/HA	R702	R702
Seed	R/HA	R2,498	R2,025
Fuel	R/HA	R1,560	R1,547
Herbicide	R/HA	R376	R529
Insecticide	R/HA	R119	R282
Fungicides	R/HA	R-	R-
Marketing costs	R/HA	R141	R152
Repairs and maintenance	R/HA	R905	R789
Casual labour	R/HA	R-	R-
Irrigation: Water	R/HA	R1,810	R1,542
Irrigation: Electricity	R/HA	R4,320	R3,680
Aerial spray	R/HA	R320	R320
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R1,134	R983
TOTAL VARIABLE EXPENDITURE	R/HA	R23,063	R20,558
TOTAL VARIABLE EXPENDITURE	R/TON	R3,548	R3,426
3.1) GROSS MARGIN:	R/HA	R13,025	R11,688
3.2) GROSS MARGIN:	R/TON	R2,004	R1,948
Break-even yield	T/HA	4.15	3.83
Break-even price	R/TON	R3,548	R3,426

Source: GSA, BFAP & Obaro, updated April 2024

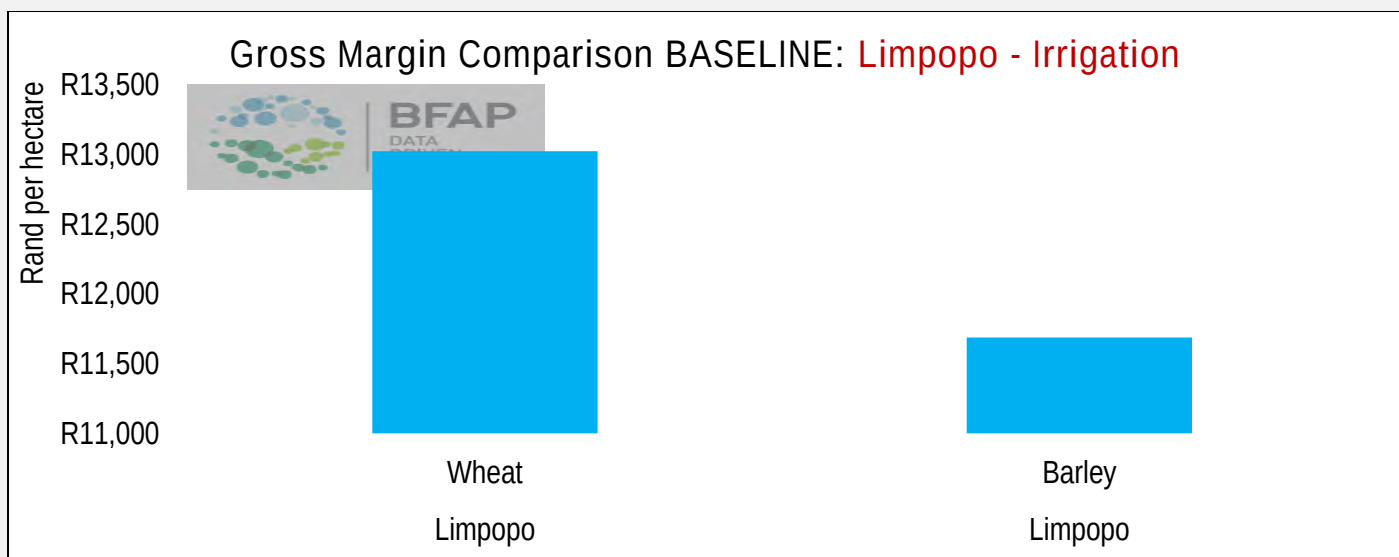


Figure 3.2: Gross margin comparison – Baseline: Limpopo Irrigation

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): LIMPOPO - IRRIGATION												
PRODUCERS YIELD (T/HA)												
PRICE	5.75		6.00		6.25		6.50		6.75		7.00	
R4,552	R	3,111	R	4,249	R	5,387	R	6,525	R	7,664	R	8,802
R4,802	R	4,549	R	5,749	R	6,950	R	8,150	R	9,351	R	10,552
R5,052	R	5,986	R	7,249	R	8,512	R	9,775	R	11,039	R	12,302
R5,302	R	7,424	R	8,749	R	10,075	R	11,400	R	12,726	R	14,052
R5,552	R	8,861	R	10,249	R	11,637	R	13,025	R	14,414	R	15,802
R5,802	R	10,299	R	11,749	R	13,200	R	14,650	R	16,101	R	17,552
R6,052	R	11,736	R	13,249	R	14,762	R	16,275	R	17,789	R	19,302
R6,302	R	13,174	R	14,749	R	16,325	R	17,900	R	19,476	R	21,052
R6,552	R	14,611	R	16,249	R	17,887	R	19,525	R	21,164	R	22,802
BARLEY SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): LIMPOPO - IRRIGATION												
PRODUCERS YIELD (T/HA)												
PRICE	5.25		5.50		5.75		6.00		6.25		6.50	
R4,374	R	2,407	R	3,500	R	4,594	R	5,688	R	6,781	R	7,875
R4,624	R	3,719	R	4,875	R	6,032	R	7,188	R	8,344	R	9,500
R4,874	R	5,032	R	6,250	R	7,469	R	8,688	R	9,906	R	11,125
R5,124	R	6,344	R	7,625	R	8,907	R	10,188	R	11,469	R	12,750
R5,374	R	7,657	R	9,000	R	10,344	R	11,688	R	13,031	R	14,375
R5,624	R	8,969	R	10,375	R	11,782	R	13,188	R	14,594	R	16,000
R5,874	R	10,282	R	11,750	R	13,219	R	14,688	R	16,156	R	17,625
R6,124	R	11,594	R	13,125	R	14,657	R	16,188	R	17,719	R	19,250
R6,374	R	12,907	R	14,500	R	16,094	R	17,688	R	19,281	R	20,875

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Eastern Free State

Table 3.3: Income & cost budgets for wheat for Eastern Free State - Irrigation

Area	Eastern Free State: Irrigation	
Crop		Wheat
Production System		Irrigation
1) INCOME		
Yield: Deterministic	T/HA	6.50
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2024	R/TON	R6,247
Total deductions	R/TON	R813
- Transport differential	R/TON	R367
- Grade differential	R/TON	R352
- Marketing, handling & statutory levies	R/TON	R94
Price premiums / Canola back-payment	R/TON	R-
Net Farm Gate Price	R/TON	R5,435
GROSS INCOME	R/HA	R35,325
2) VARIABLE EXPENDITURES		
Contracting	R/HA	R1,250
Crop insurance	R/HA	R2,826
Fertilizer	R/HA	R7,621
Lime	R/HA	R487
Seed	R/HA	R2,796
Fuel	R/HA	R1,055
Herbicide	R/HA	R229
Insecticide	R/HA	R690
Fungicides	R/HA	R-
Marketing costs	R/HA	R131
Repairs and maintenance	R/HA	R1,559
Casual labour	R/HA	R-
Irrigation: Water	R/HA	R731
Irrigation: Electricity	R/HA	R3,198
Aerial spray	R/HA	R-
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R34
TOTAL VARIABLE EXPENDITURE	R/HA	R22,608
TOTAL VARIABLE EXPENDITURE	R/TON	R3,478
3.1) GROSS MARGIN:	R/HA	R12,717
3.2) GROSS MARGIN:	R/TON	R1,956
Break-even yield	T/HA	4.16
Break-even price	R/TON	R3,478

Source: VKB, GSA & BFAP, updated April 2024

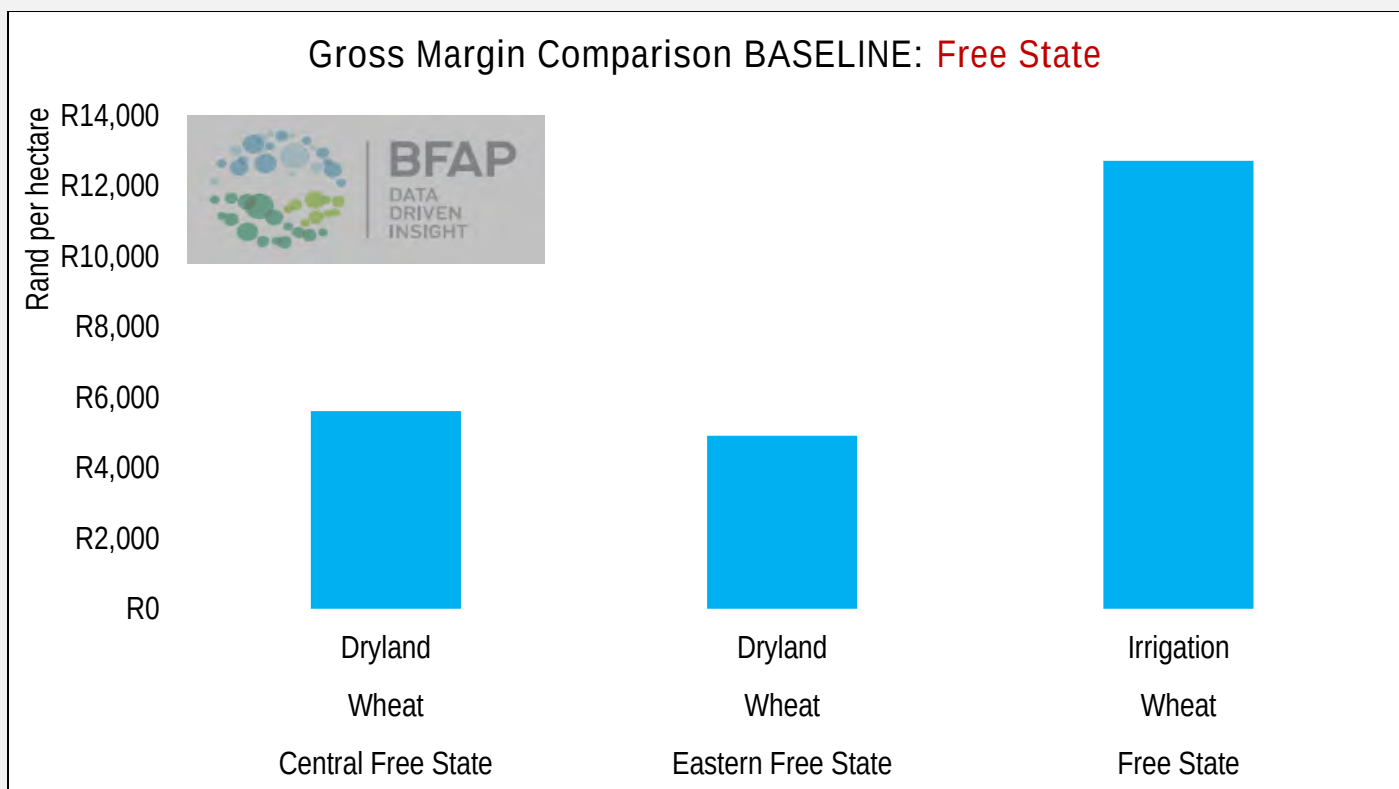


Figure 3.3: Gross margin comparison – Baseline: Limpopo Irrigation

WHEAT SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): FREE STATE IRRIGATION											
PRODUCERS YIELD (T/HA)											
PRICE	5.75	6.00	6.25	6.50	6.75	7.00	7.25				
R4,435	R 2,891	R 4,000	R 5,108	R 6,217	R 7,326	R 8,434	R 9,543				
R4,685	R 4,328	R 5,500	R 6,671	R 7,842	R 9,013	R 10,184	R 11,355				
R4,935	R 5,766	R 7,000	R 8,233	R 9,467	R 10,701	R 11,934	R 13,168				
R5,185	R 7,203	R 8,500	R 9,796	R 11,092	R 12,388	R 13,684	R 14,980				
R5,435	R 8,641	R 10,000	R 11,358	R 12,717	R 14,076	R 15,434	R 16,793				
R5,685	R 10,078	R 11,500	R 12,921	R 14,342	R 15,763	R 17,184	R 18,605				
R5,935	R 11,516	R 13,000	R 14,483	R 15,967	R 17,451	R 18,934	R 20,418				
R6,185	R 12,953	R 14,500	R 16,046	R 17,592	R 19,138	R 20,684	R 22,230				
R6,435	R 14,391	R 16,000	R 17,608	R 19,217	R 20,826	R 22,434	R 24,043				

Notes:

- Please refer to **Methodology, Approach & Definitions** for in-depth interpretation of enterprise budgets.
- The canola back-payment assumes 10% of contracted price.
- The cost items reflect the input allocation based on the target yield for the respective crops.
- Although some expenditure items are zero, it is reflected in the budgets to allow for individual inclusion.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The costs for wheat, barley & oats seeds reflect a combination of own- and purchased seed.
- It is important to note that overhead costs are not included and should be accounted for. Overhead costs such as interest on production loans, labour, management and administration will vary to a large extent from producer to producer. Producers will therefore have to deduct the farm business' overhead cost from the gross margins as stipulated in the tables and figures to calculate the net income per crop.

Summary: 2024 Income & Cost Budgets

Figures 4.1 provides a summary of the gross margin performance of dryland crops over the period from 2018 (adjusted to account for actual yields and crop prices, 2023 using preliminary results) to 2025 (2024 and 2025 are projected). It is important to note that the gross margins only consider direct costs and exclude overhead costs, and that the presented gross margins will differ based on the timing when producers have purchased agricultural inputs (fertilisers, fuel & chemicals) and when marketing takes place.

Winter dryland crop profitability has declined since the high margins in 2021. 2023 was a challenging season with high input costs and volatile weather. Wheat and canola gross margins remain above 2019 levels, with canola outperforming wheat, but barley dropping to 2019 profitability levels.

Assuming trend yields and quality, wheat and barley's gross margins are expected to recover in 2024, but remain below 2020 to 2022 gross margin levels. Canola margins are projected to decline in 2024, underpinned by the consolidation in vegetable oil markets.

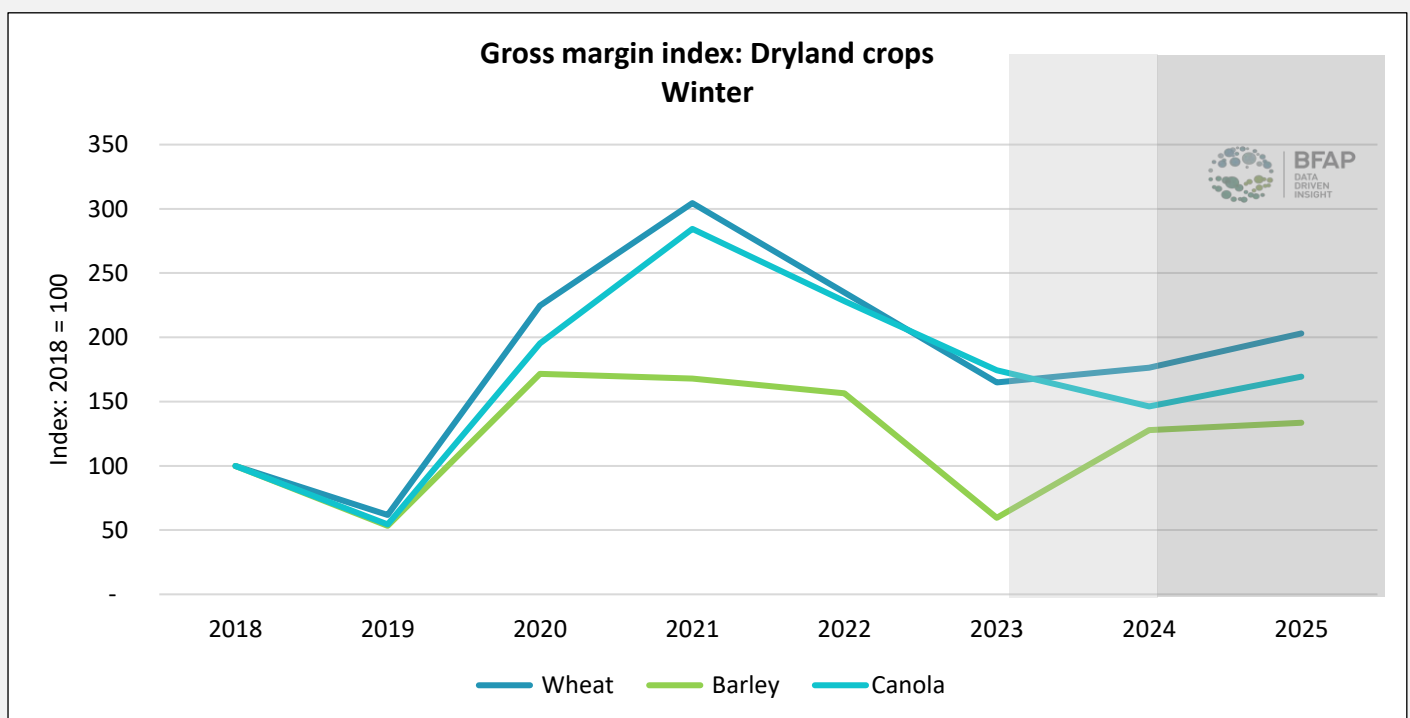


Figure 4.1: Gross margin index between winter dryland wheat, barley and canola: 2018-2025