

Income & Cost Budgets

Summer Crops – 2024/25

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

October 2024



INCOME & COST BUDGETS FOR SUMMER CROPS – 2024/25 SEASON

Foreword

The Protein Research Foundation (PRF) aims to make a meaningful contribution to the promotion of sustainable local protein production to meet the increasing demand for protein in animal production. This initiative also seeks to ensure the optimal use of locally produced protein, which will, in turn, contribute to improving the standard of living for all citizens of the Republic of South Africa. The PRF's primary objectives are to replace imported protein in animal feed with locally produced alternatives and to promote the more efficient utilization of these resources. These goals are advanced through research funding and the transfer of relevant technologies.

The collaboration between the PRF, Grain South Africa, the Bureau for Food and Agricultural Policy (BFAP), and various agribusinesses operating in key production regions across South Africa enhances this effort by drawing on the specialized knowledge and resources of each partner. Together, they focus on production systems and commodity enterprise budgets. This report presents the regional commodity enterprise budgets for the 2024/25 summer crop season.

It is important to note that variations within regions are expected, and enterprise budgets will differ from farm to farm. While this report has been prepared with care, adjustments should be made based on specific factors such as location, yield potential, cultivation practices, and strategic considerations.

Disclaimer

The views expressed in this document reflect those of BFAP and do not constitute any specific advice as to decisions or actions that should be taken. Whilst every care has been taken in preparing this document, no representation, warranty, or undertaking (expressed or implied) is given and no responsibility or liability is accepted by BFAP as to the accuracy or completeness of the information contained herein. In addition, BFAP accepts no responsibility or liability for any damages of whatsoever nature which any person may suffer as a result of any decision or action taken on the basis of the information contained herein. All opinions and estimates contained in this report may be changed after publication at any time without notice

Area coverage

Table 1.1 and Table 1.2 provides an overview of the area of coverage for dryland and irrigated summer crops in South Africa's key agro-ecological producing regions. The coordinators of this initiative 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
KwaZulu-Natal		
Bloedrivier	Maize & Soybeans	GSA / BFAP / Individual Farmers
Mpumalanga		
Middelburg / Trichardt	Maize, Soybeans & Grain Sorghum	GSA / BFAP / Individual Farmers
Ermelo	Maize & Soybeans	GSA / BFAP / Individual Farmers
Eastern Free State		
Reitz region	Maize, soybeans, sunflower & dry beans	GSA / VKB / BFAP / Individual Farmers
Northern Free State		
Northern Free State – Water table soils / higher potential	Maize	GSA / Senwes / BFAP
Northern Free State – Normal potential	Maize	GSA / Senwes / BFAP
Northern Free State	Maize, soybeans, sunflower, ground nuts & grain sorghum	GSA / Senwes / BFAP
North West		
Koster	Maize, soybeans & sunflower	GSA / NWK / BFAP / Individual Farmers
Lichtenburg	Maize, soybeans, sunflower & ground nuts	GSA / NWK / BFAP / Individual Farmers

Table 1.2: Area coverage: Irrigation

Area	Irrigated Crops	Source & Collaborators
Northern Cape		
GWK Area	Maize, soybeans, ground nuts & sunflower	GWK, GSA & BFAP
KwaZulu-Natal		
Bergville	Maize & soybeans	GSA & Individual Farmers
North West		
Brits / Northam / Koedoeskop	Maize, soybeans, sunflower & sorghum	GSA, NWK & Individual Farmers
Limpopo		
Loskop Irrigation Scheme	Maize & Soybeans	GSA & Individual Farmers

Model Assumptions

The Bureau for Food and Agricultural Policy (BFAP) annually provides a baseline outlook on agricultural production, consumption, prices, and trade in South Africa over a 10-year horizon. This outlook is developed using the BFAP system of models and is grounded in a coherent set of assumptions regarding a range of economic, technological, environmental, political, institutional, and social factors. Among these critical assumptions, one of the most significant is the expectation that stable weather conditions will prevail in Southern Africa and globally, allowing for consistent yield growth as technology advances. Therefore, the outlook is not a forecast but rather a plausible future scenario based on fundamental market drivers. It serves as a projection of a potential future equilibrium, providing a benchmark against which further analyses can be evaluated.

The assumptions regarding the future macroeconomic environment are based on a combination of projections from the International Monetary Fund (IMF), the World Bank, and the Bureau for Economic Research (BER) at Stellenbosch University. Baseline projections for global commodity markets are sourced from the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri and the Food and Agriculture Organization (FAO) of the United Nations. Once these assumptions are integrated into the BFAP system of models, the outlook for all commodities is simulated within a closed system of equations. This process captures the interconnections between sectors—so that, for instance, shocks in the grain sector are transmitted to the livestock sector, and vice versa. For each commodity, key components of supply and demand are identified, and equilibrium is established through balance sheet principles, ensuring that total demand equals total supply.

Yield Assumptions

Figure 1.1 and Figure 1.2 indicate the yield assumptions for dryland and irrigated crops. These assumptions represent target yields which were formulated in round table discussions. These levels are based on crop potential in the respective regions, historic trends and expert opinions. It is important to note that intra-regional variations will occur, and it is recommended that producers adjust their target yields based on their location and potential.

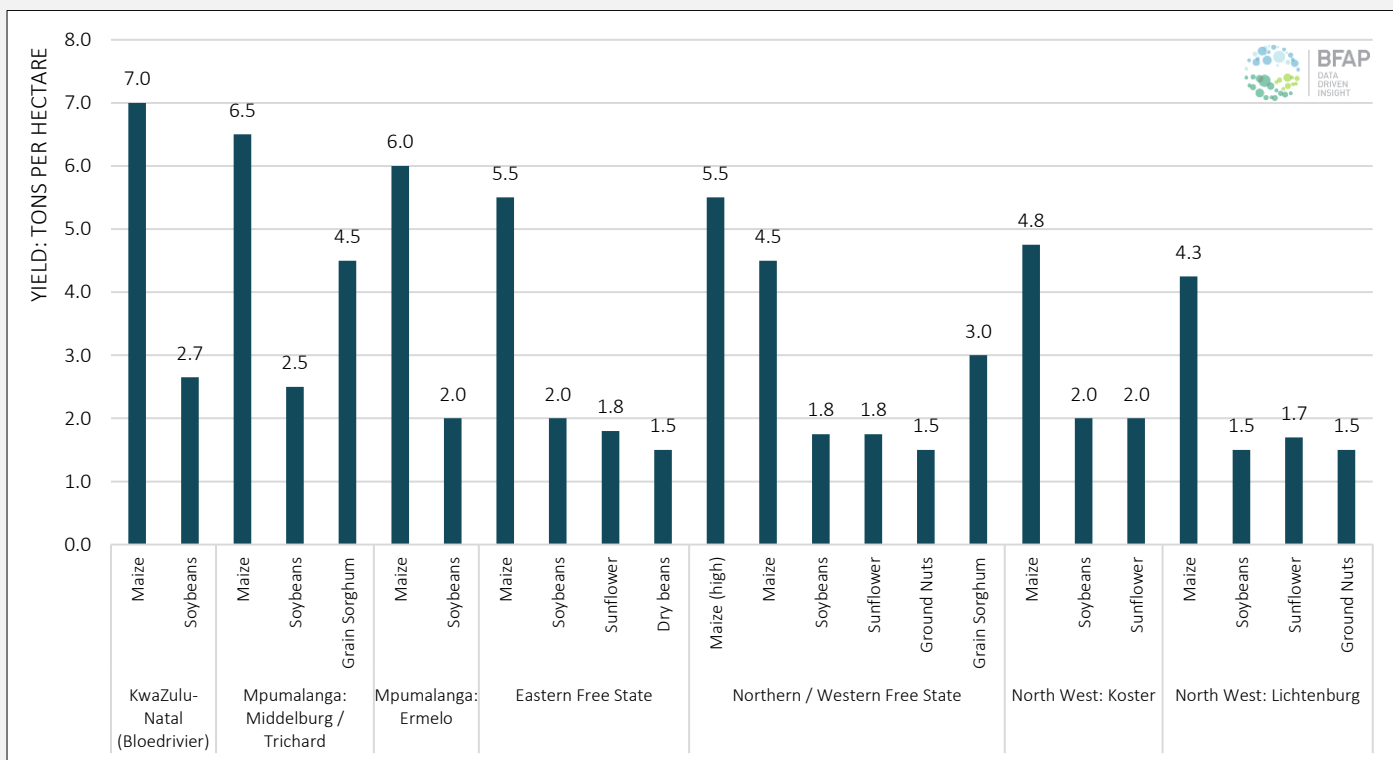


Figure 1.1: Dryland crops yield assumptions

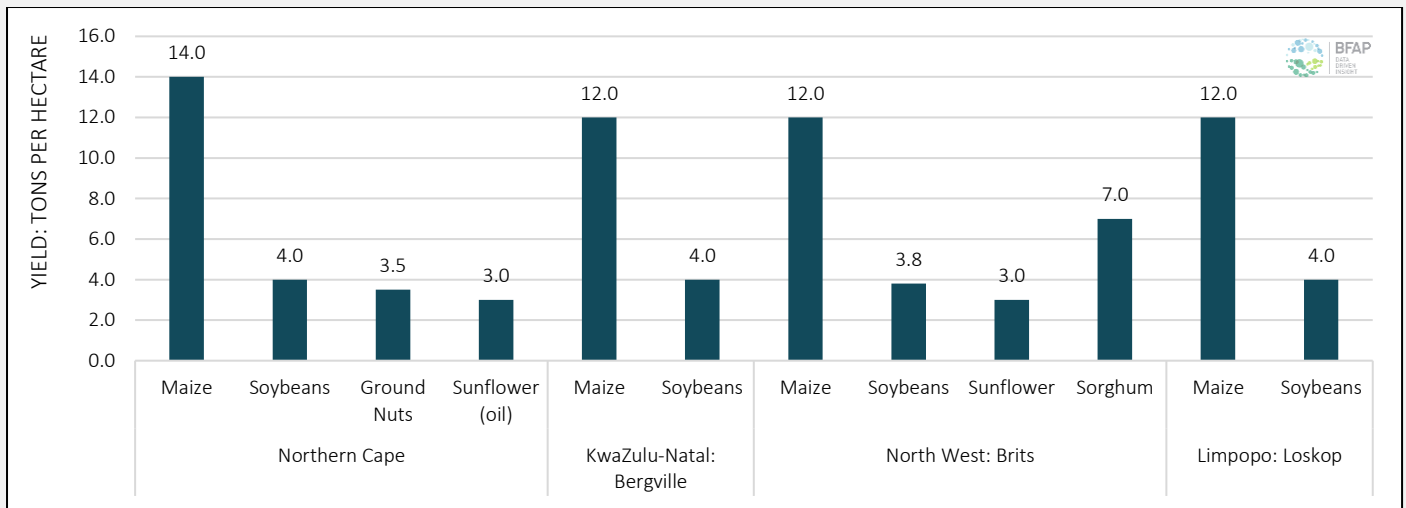


Figure 1.2: Irrigated crops yield assumptions

Crop Price Assumptions

Figure 1.3 illustrates the key commodity price assumptions for white maize and yellow maize, sorghum, sunflower and soybeans that were used in the summer crop budgets for the 2024/25 production season. Further deductions were made to calculate a farm gate price for each agro-ecological producing region. 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.

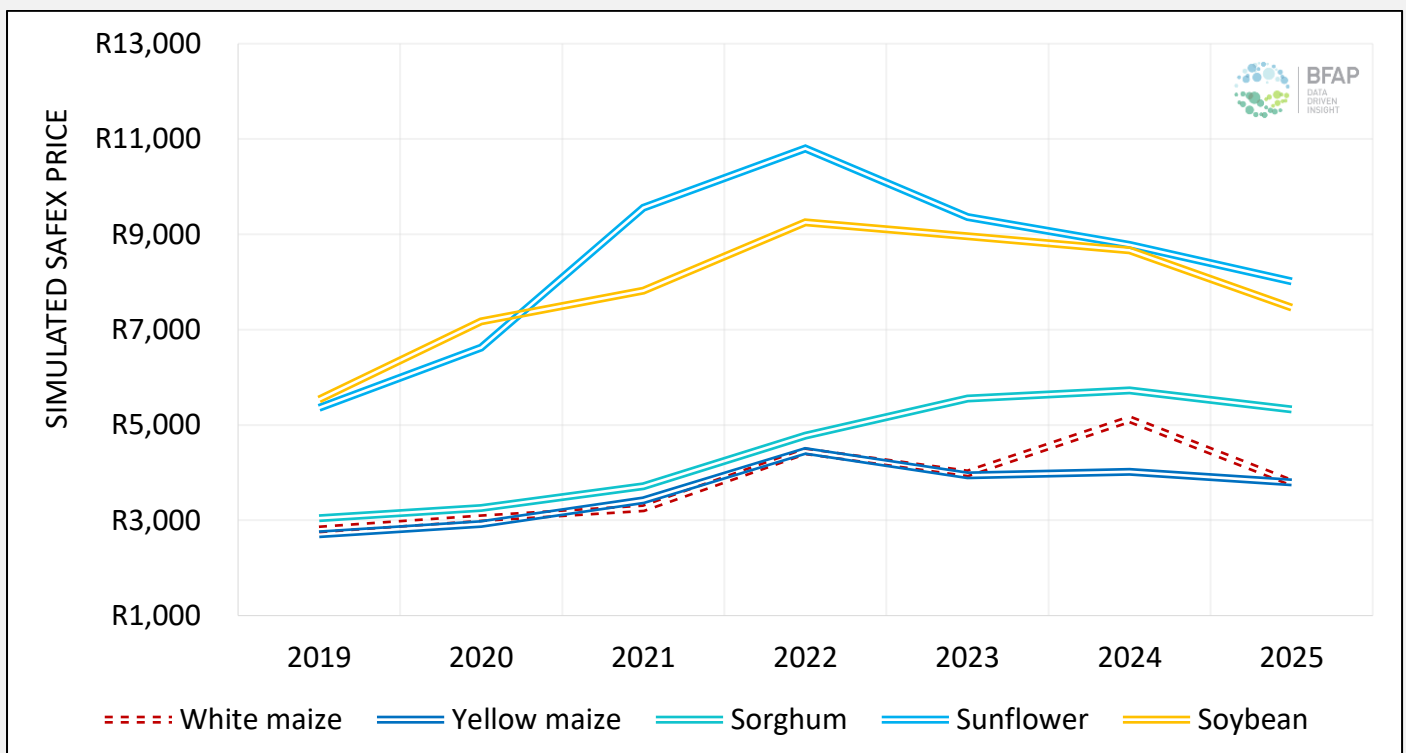


Figure 1.3: BFAP average annual commodity price projections: 2019-2025

Source: BFAP, October 2024

Key Input Cost Trends

Figure 1.4 illustrates the cost trends for fuel and fertilisers over the period from January 2021 to September 2024. Input costs have declined following the Covid-19 pandemic and the Russia-Ukrainian war, but not to their pre-disruption levels, as fertilisers and herbicides remain between 35-58% higher than 2019 levels.

Following a 48% surge in 2022, fuel prices have only seen a modest decline of 7% over 2023 and 2024. The cost of fuel remains closely tied to crude oil prices, which have stayed elevated due to production cuts by OPEC+ in response to limited demand. This reduced demand has been further impacted by several factors, including the conflict in the Middle East, a decline in Chinese imports due to weaker economic performance, a potential rise in Indian imports, and the growing uncertainty around U.S. summer crops due to intensifying hurricanes. According to the latest report from the energy agency, global oil demand is projected to slow in the coming years as investments in electric and energy-efficient vehicles increase (The Economic Times, 2024).

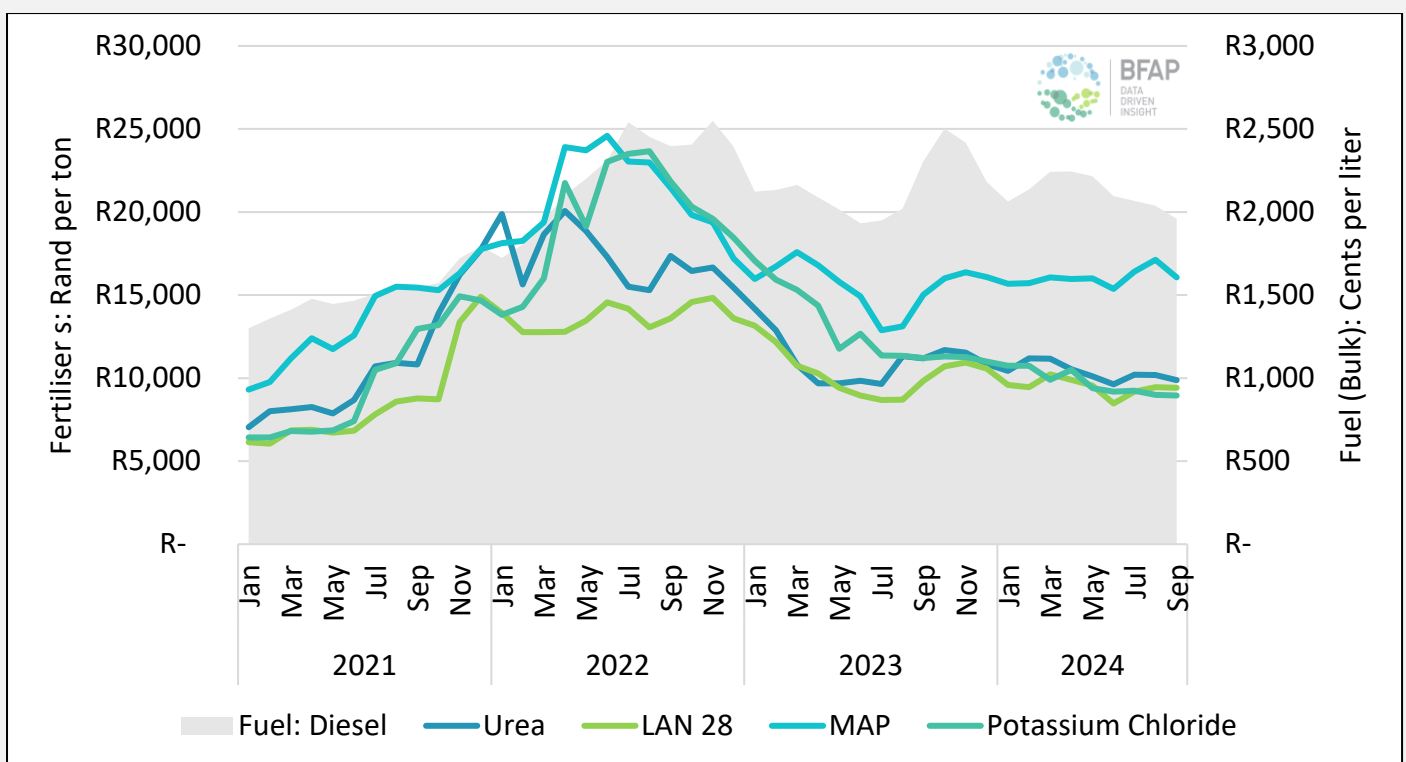


Figure 1.4: Fertiliser & fuel cost trends: January 2021 to September 2024

Source: Grain SA, September 2024

Figure 1.5 presents an overview of the average year-on-year (calendar) percentage changes for key agricultural inputs over the period from 2022 to 2025 (estimate). The figure also highlights the sharp rise in energy, fertilizer, and chemical costs in 2022, followed by a more gradual decline in 2023 and 2024. While these costs are expected to continue decreasing in 2025, they are projected to remain elevated compared to 2019 levels.

Although minimum wage and electricity costs did not experience as dramatic an increase in 2022, they have continued to trend upward, exceeding CPI inflation and, in some cases, surpassing the cost of imported agricultural inputs. Additionally, Eskom has recently applied for a 36% tariff increase, set to take effect in April 2025, pending a decision by NERSA.

For the first time since 2021, the exchange rate is expected to improve, with the Rand strengthening due to South Africa's positive economic outlook, influenced by the formation of a Government of National Unity and a weakening U.S. dollar, potentially triggered by monetary easing by the Federal Reserve Bank. While this could reduce the cost of imported inputs, it may negatively impact domestic crop prices. Moreover, ongoing disruptions in the Red Sea—particularly recent attacks on vessels near Yemen and escalating tensions—are affecting shipping routes and driving up freight rates, which could further increase the cost of imported goods.

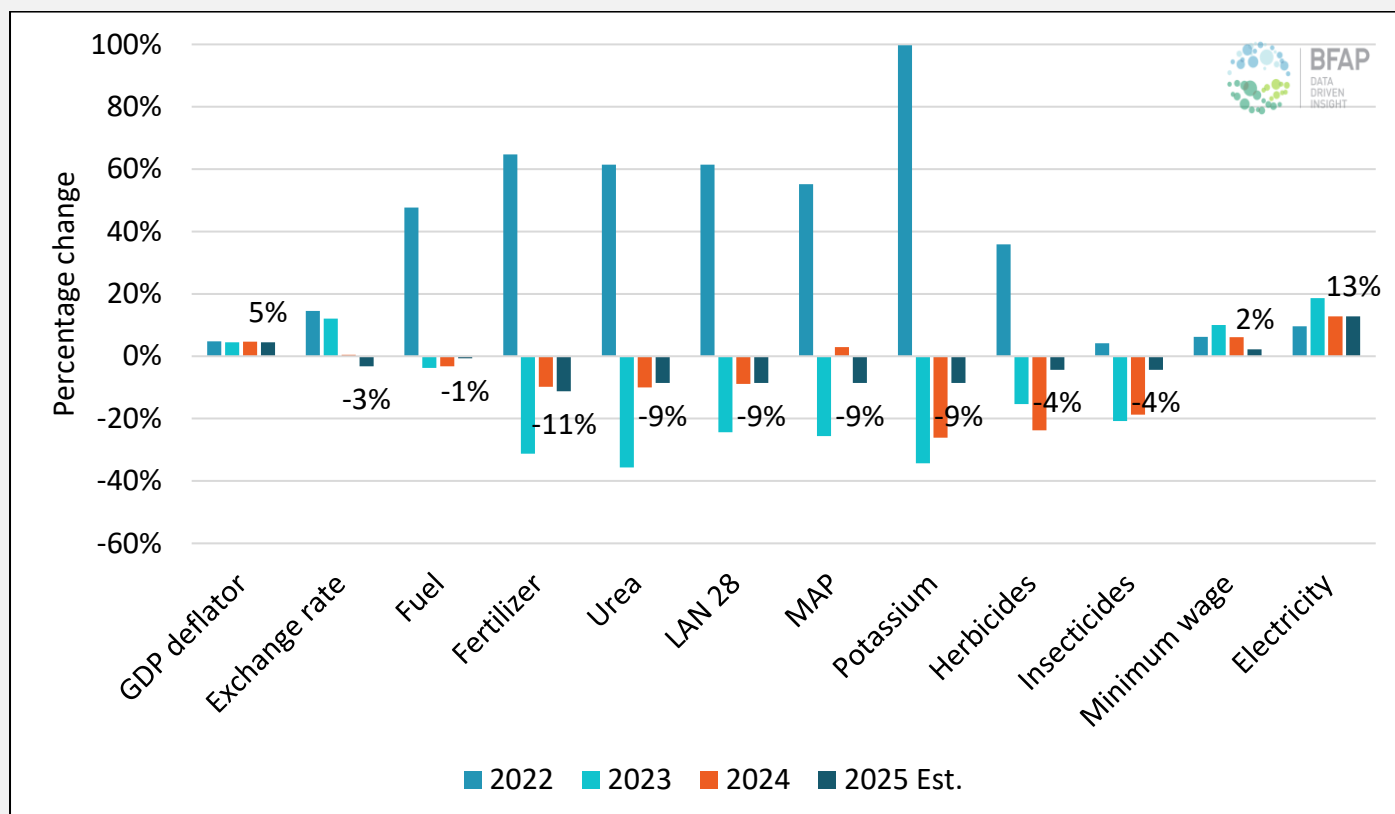


Figure 1.5: Agricultural input cost inflation: Year-on-year (calendar) percentage change from 2022 – 2025
Source: BFAP & Grain SA, September 2024

Methodology, Approach & Definitions

- ❖ A standard operating procedure was used across all crops and regions for generating the cost and income budgets for the 2024/25 production season.
- ❖ Deterministic or target yields were based on industry discussions which refers 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 was calculated by deducting transport differential, grade differential, handling fees, commission and levies (statutory for seed breeding and technology) from the simulated SAFEX price. For white- and yellow maize, industry averages for grade discounts were used to calculate grade differentials.
- ❖ 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 was assumed that own machinery was used, except for speciality operations that is coupled with economies of scale. In such cases, a contracting cost item was allocated. For all crops, 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. The fuel price does not take agricultural rebate into account.
- ❖ 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 practise is not common, fungicides were excluded from plant protection costs.
- ❖ Repairs and maintenance costs are calculated based on the production system operations.
- ❖ For seed, an assumption was made in terms of the majority of crop type area that is cultivated in each region. For instance, the cost of maize seed in Northern-Natal, Mpumalanga and Eastern Free State is based on the assumption that the majority of the area under maize cultivation is yellow maize whereas for the western producing regions, white maize was assumed. An average seed price across various seed companies was used for 1) conventional seeds and 2) GM-technology. 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 predominantly oilseeds production, the seed application rate was sub-divided according to own and purchased seed. For own seed use, a cost was also 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 was calculated according to typical irrigation application rates at their respective regional costs per millimetre. 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.

2024/25 INCOME & COST BUDGETS – DRYLAND PRODUCTION REGIONS

KwaZulu-Natal

Table 2.1: Income & cost budgets for maize & soybeans for KwaZulu-Natal (Bloedrivier Region) – Dryland

KwaZulu-Natal: Bloedrivier			
Crop		Maize	Soybeans
Production System		Dryland	Dryland
1) INCOME			
Yield: Deterministic	T/HA	7.00	2.65
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520
Total deductions	R/TON	R550	R382
- Transport differential	R/TON	R465	R257
- Grade differential	R/TON	R19	R-
- Handling & commission	R/TON	R66	R65
- Seed breeding & technology levy	R/TON	R-	R60
Price premiums	R/TON	R-	R-
Net Farm Gate Price	R/TON	R3,248	R7,138
GROSS INCOME	R/HA	R22,738	R18,915
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R-	R-
Crop insurance	R/HA	R864	R2,308
Fertilizer	R/HA	R5,289	R2,390
Lime	R/HA	R786	R-
Seed	R/HA	R4,015	R1,943
Fuel	R/HA	R1,421	R862
Herbicide	R/HA	R1,219	R1,025
Insecticide/Fungicide	R/HA	R703	R824
Marketing costs	R/HA	R-	R-
Repairs and maintenance	R/HA	R767	R482
Casual labour	R/HA	R335	R-
Aerial spray	R/HA	R-	R-
Other expenditure	R/HA	R-	R-
TOTAL VARIABLE EXPENDITURE	R/HA	R15,401	R9,835
TOTAL VARIABLE EXPENDITURE	R/TON	R2,200	R3,711
3.1) GROSS MARGIN:	R/HA	R7,338	R9,081
3.2) GROSS MARGIN:	R/TON	R1,048	R3,427
BREAK-EVEN YIELD	T/HA	4.74	1.38
BREAK-EVEN PRICE	R/TON	R2,200	R3,711

Source: BFAP, GSA & Individual Farmers, 2024

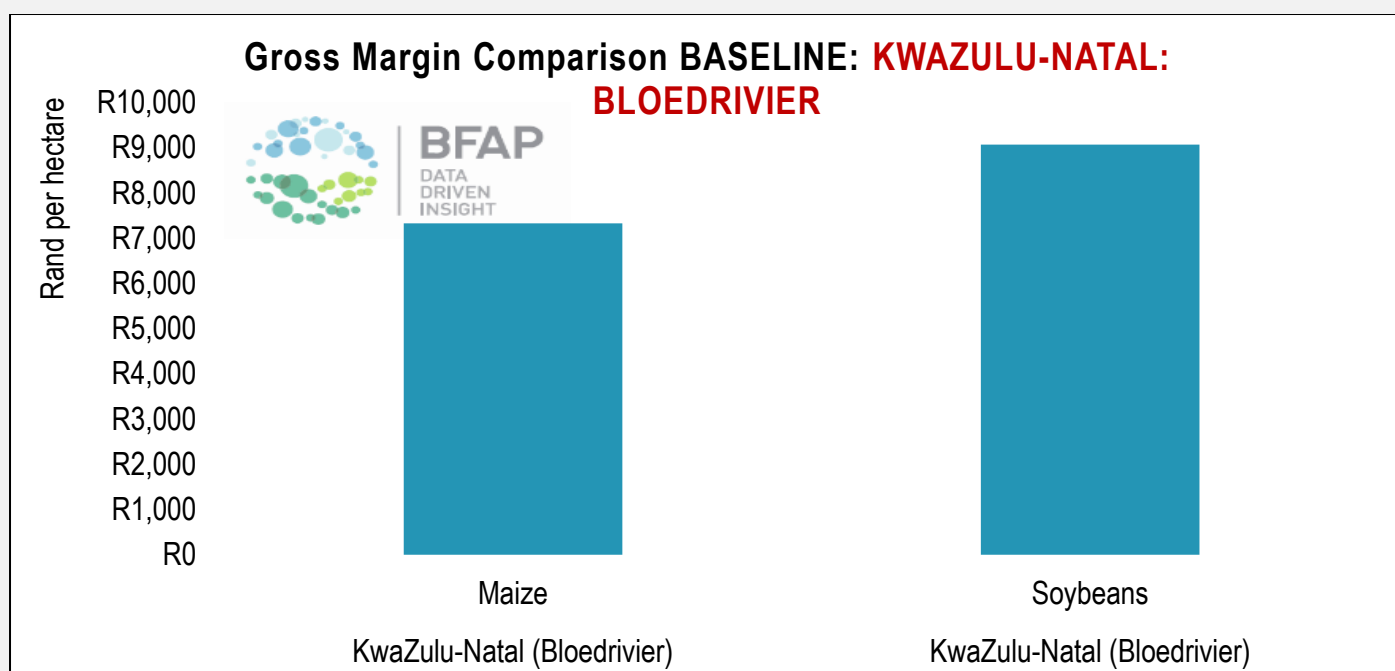


Figure 2.1: Gross margin comparison – Baseline: KwaZulu-Natal (Bloedrivier Region)

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): KWAZULU-NATAL: BLOEDRIVIER										
PRODUCERS YIELD (T/HA)										
PRICE	5.50	6.00	6.50	7.00	7.50	8.00	8.50			
R2,848	R 265	R 1,690	R 3,114	R 4,538	R 5,962	R 7,386	R 8,810			
R2,948	R 815	R 2,290	R 3,764	R 5,238	R 6,712	R 8,186	R 9,660			
R3,048	R 1,365	R 2,890	R 4,414	R 5,938	R 7,462	R 8,986	R 10,510			
R3,148	R 1,915	R 3,490	R 5,064	R 6,638	R 8,212	R 9,786	R 11,360			
R3,248	R 2,465	R 4,090	R 5,714	R 7,338	R 8,962	R 10,586	R 12,210			
R3,348	R 3,015	R 4,690	R 6,364	R 8,038	R 9,712	R 11,386	R 13,060			
R3,448	R 3,565	R 5,290	R 7,014	R 8,738	R 10,462	R 12,186	R 13,910			
R3,548	R 4,115	R 5,890	R 7,664	R 9,438	R 11,212	R 12,986	R 14,760			
R3,648	R 4,665	R 6,490	R 8,314	R 10,138	R 11,962	R 13,786	R 15,610			

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): KWAZULU-NATAL: BLOEDRIVIER										
PRODUCERS YIELD (T/HA)										
PRICE	1.80	2.05	2.30	2.65	3.00	3.25	3.50			
R6,738	R 2,294	R 3,978	R 5,663	R 8,021	R 10,379	R 12,064	R 13,748			
R6,838	R 2,474	R 4,183	R 5,893	R 8,286	R 10,679	R 12,389	R 14,098			
R6,938	R 2,654	R 4,388	R 6,123	R 8,551	R 10,979	R 12,714	R 14,448			
R7,038	R 2,834	R 4,593	R 6,353	R 8,816	R 11,279	R 13,039	R 14,798			
R7,138	R 3,014	R 4,798	R 6,583	R 9,081	R 11,579	R 13,364	R 15,148			
R7,238	R 3,194	R 5,003	R 6,813	R 9,346	R 11,879	R 13,689	R 15,498			
R7,338	R 3,374	R 5,208	R 7,043	R 9,611	R 12,179	R 14,014	R 15,848			
R7,438	R 3,554	R 5,413	R 7,273	R 9,876	R 12,479	R 14,339	R 16,198			
R7,538	R 3,734	R 5,618	R 7,503	R 10,141	R 12,779	R 14,664	R 16,548			

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): KWAZULU-NATAL: BLOEDRIVIER										
PRICE (R/TON)										
YIELD	R 6,838	R 6,938	R 7,038	R 7,138	R 7,238	R 7,338	R 7,438			
1.65	-R 5,890	-R 5,725	-R 5,560	-R 5,395	-R 5,230	-R 5,065	-R 4,900			
1.90	-R 4,180	-R 3,990	-R 3,800	-R 3,610	-R 3,420	-R 3,230	-R 3,040			
2.15	-R 2,471	-R 2,256	-R 2,041	-R 1,826	-R 1,611	-R 1,396	-R 1,181			
2.40	-R 761	-R 521	-R 281	-R 41	R 199	R 439	R 679			
2.65	R 948	R 1,213	R 1,478	R 1,743	R 2,008	R 2,273	R 2,538			
2.90	R 2,658	R 2,948	R 3,238	R 3,528	R 3,818	R 4,108	R 4,398			
3.15	R 4,367	R 4,682	R 4,997	R 5,312	R 5,627	R 5,942	R 6,257			
3.40	R 6,076	R 6,416	R 6,756	R 7,096	R 7,436	R 7,776	R 8,116			
3.65	R 7,786	R 8,151	R 8,516	R 8,881	R 9,246	R 9,611	R 9,976			

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

Mpumalanga

Table 2.2: Income & cost budgets for maize, soybeans & grain sorghum for Mpumalanga - Dryland

Middelburg / Trichardt					Ermelo	
Crop		Maize	Soybeans	Grain Sorghum	Maize	Soybeans
Production System		Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME						
Yield: Deterministic	T/HA	6.50	2.50	4.50	6.00	2.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520	R5,324	R3,798	R7,520
Total deductions	R/TON	R417	R192	R69	R482	R278
- Transport differential	R/TON	R332	R67	R-	R397	R153
- Grade differential	R/TON	R19	R-	R-	R19	R-
- Handling & commission	R/TON	R66	R65	R69	R66	R65
- Seed breeding & technology levy	R/TON	R-	R60	R-	R-	R60
Price premiums	R/TON	R-	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,381	R7,328	R5,255	R3,316	R7,242
GROSS INCOME	R/HA	R21,979	R18,320	R23,646	R19,898	R14,484
2) VARIABLE EXPENDITURES						
Contracting	R/HA	R-	R-	R-	R-	R-
Crop insurance	R/HA	R835	R1,502	R709	R756	R1,188
Fertilizer	R/HA	R4,753	R1,532	R2,827	R4,532	R1,389
Lime	R/HA	R786	R-	R786	R786	R-
Seed	R/HA	R3,614	R1,700	R906	R3,212	R1,579
Fuel	R/HA	R1,400	R862	R1,331	R1,378	R835
Herbicide	R/HA	R987	R1,279	R1,537	R987	R1,236
Insecticide/Fungicide	R/HA	R703	R811	R595	R703	R811
Marketing costs	R/HA	R-	R-	R-	R-	R-
Repairs and maintenance	R/HA	R960	R733	R760	R862	R731
Casual labour	R/HA	R311	R-	R107	R287	R-
Aerial spray	R/HA	R-	R-	R-	R-	R-
Other expenditure	R/HA	R-	R-	R-	R-	R-
TOTAL VARIABLE EXPENDITURE	R/HA	R14,350	R8,419	R9,560	R13,503	R7,768
TOTAL VARIABLE EXPENDITURE	R/TON	R2,208	R3,367	R2,124	R2,251	R3,884
3.1) GROSS MARGIN:	R/HA	R7,629	R9,901	R14,087	R6,395	R6,716
3.2) GROSS MARGIN:	R/TON	R1,174	R3,960	R3,130	R1,066	R3,358
BREAK-EVEN YIELD	T/HA	4.24	1.15	1.82	4.07	1.07
BREAK-EVEN PRICE	R/TON	R2,208	R3,367	R2,124	R2,251	R3,884

Source: BFAP, GSA & Individual Farmers, 2024

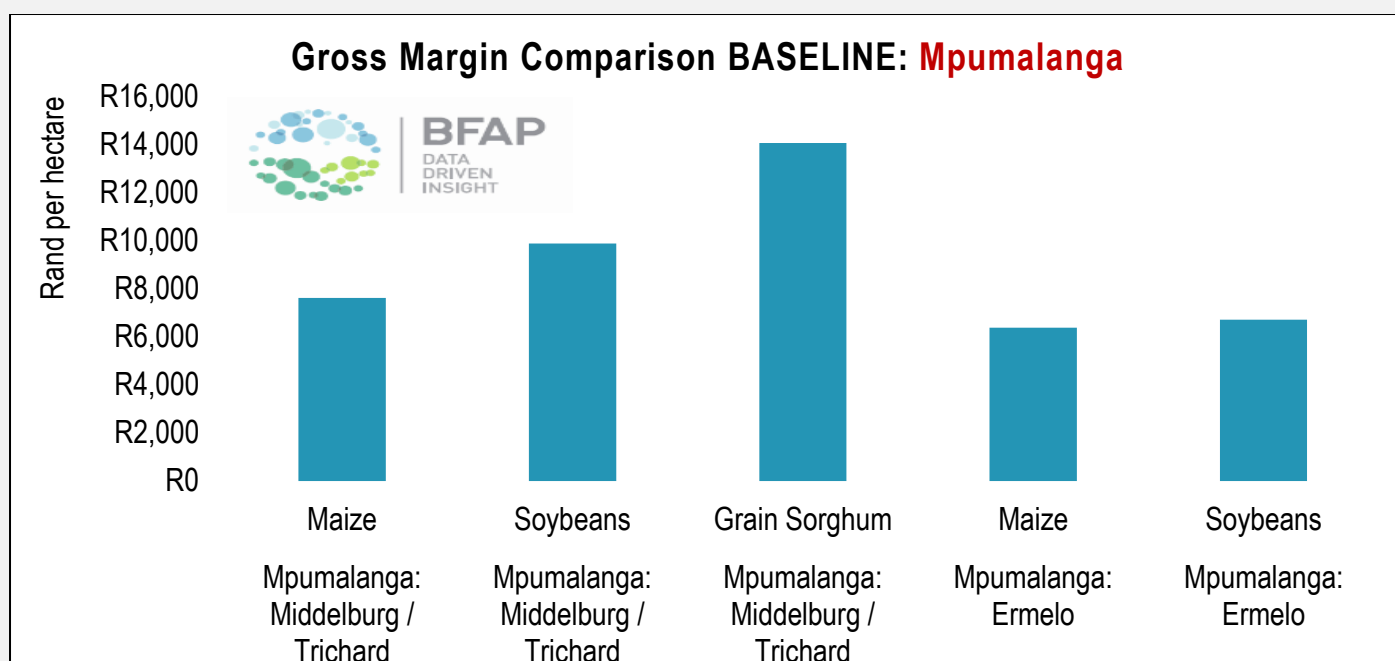


Figure 2.2: Gross margin comparison – Baseline: Mpumalanga

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MPUMALANGA: MIDDELBURG / TRICHARD												
PRODUCERS YIELD (T/HA)												
PRICE	5.00	5.50	6.00	6.50	7.00	7.50	8.00					
R2,981	R 557	R 2,047	R 3,538	R 5,029	R 6,519	R 8,010	R 9,501					
R3,081	R 1,057	R 2,597	R 4,138	R 5,679	R 7,219	R 8,760	R 10,301					
R3,181	R 1,557	R 3,147	R 4,738	R 6,329	R 7,919	R 9,510	R 11,101					
R3,281	R 2,057	R 3,697	R 5,338	R 6,979	R 8,619	R 10,260	R 11,901					
R3,381	R 2,557	R 4,247	R 5,938	R 7,629	R 9,319	R 11,010	R 12,701					
R3,481	R 3,057	R 4,797	R 6,538	R 8,279	R 10,019	R 11,760	R 13,501					
R3,581	R 3,557	R 5,347	R 7,138	R 8,929	R 10,719	R 12,510	R 14,301					
R3,681	R 4,057	R 5,897	R 7,738	R 9,579	R 11,419	R 13,260	R 15,101					
R3,781	R 4,557	R 6,447	R 8,338	R 10,229	R 12,119	R 14,010	R 15,901					

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MPUMALANGA: MIDDELBURG / TRICHARD												
PRODUCERS YIELD (T/HA)												
PRICE	1.75	2.00	2.25	2.50	2.75	3.00	3.25					
R6,928	R 3,705	R 5,437	R 7,169	R 8,901	R 10,633	R 12,365	R 14,097					
R7,028	R 3,880	R 5,637	R 7,394	R 9,151	R 10,908	R 12,665	R 14,422					
R7,128	R 4,055	R 5,837	R 7,619	R 9,401	R 11,183	R 12,965	R 14,747					
R7,228	R 4,230	R 6,037	R 7,844	R 9,651	R 11,458	R 13,265	R 15,072					
R7,328	R 4,405	R 6,237	R 8,069	R 9,901	R 11,733	R 13,565	R 15,397					
R7,428	R 4,580	R 6,437	R 8,294	R 10,151	R 12,008	R 13,865	R 15,722					
R7,528	R 4,755	R 6,637	R 8,519	R 10,401	R 12,283	R 14,165	R 16,047					
R7,628	R 4,930	R 6,837	R 8,744	R 10,651	R 12,558	R 14,465	R 16,372					
R7,728	R 5,105	R 7,037	R 8,969	R 10,901	R 12,833	R 14,765	R 16,697					

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MPUMALANGA: ERMELO												
PRODUCERS YIELD (T/HA)												
PRICE	4.50	5.00	5.50	6.00	6.50	7.00	7.50					
R2,916	R 380	R 1,079	R 2,537	R 3,995	R 5,453	R 6,911	R 8,369					
R3,016	R 70	R 1,579	R 3,087	R 4,595	R 6,103	R 7,611	R 9,119					
R3,116	R 520	R 2,079	R 3,637	R 5,195	R 6,753	R 8,311	R 9,869					
R3,216	R 970	R 2,579	R 4,187	R 5,795	R 7,403	R 9,011	R 10,619					
R3,316	R 1,420	R 3,079	R 4,737	R 6,395	R 8,053	R 9,711	R 11,369					
R3,416	R 1,870	R 3,579	R 5,287	R 6,995	R 8,703	R 10,411	R 12,119					
R3,516	R 2,320	R 4,079	R 5,837	R 7,595	R 9,353	R 11,111	R 12,869					
R3,616	R 2,770	R 4,579	R 6,387	R 8,195	R 10,003	R 11,811	R 13,619					
R3,716	R 3,220	R 5,079	R 6,937	R 8,795	R 10,653	R 12,511	R 14,369					

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): MPUMALANGA: ERMELO

PRODUCERS YIELD (T/HA)															
PRICE		1.25		1.50		1.75		2.00		2.25		2.50		2.75	
R6,842	R	784	R	2,495	R	4,205	R	5,916	R	7,626	R	9,337	R	11,047	
R6,942	R	909	R	2,645	R	4,380	R	6,116	R	7,851	R	9,587	R	11,322	
R7,042	R	1,034	R	2,795	R	4,555	R	6,316	R	8,076	R	9,837	R	11,597	
R7,142	R	1,159	R	2,945	R	4,730	R	6,516	R	8,301	R	10,087	R	11,872	
R7,242	R	1,284	R	3,095	R	4,905	R	6,716	R	8,526	R	10,337	R	12,147	
R7,342	R	1,409	R	3,245	R	5,080	R	6,916	R	8,751	R	10,587	R	12,422	
R7,442	R	1,534	R	3,395	R	5,255	R	7,116	R	8,976	R	10,837	R	12,697	
R7,542	R	1,659	R	3,545	R	5,430	R	7,316	R	9,201	R	11,087	R	12,972	
R7,642	R	1,784	R	3,695	R	5,605	R	7,516	R	9,426	R	11,337	R	13,247	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): MPUMALANGA: MIDDELBURG / TRICHARD

PRICE (R/TON)														
YIELD	R	7,028	R	7,128	R	7,228	R	7,328	R	7,428	R	7,528	R	7,628
1.50	-R	5,506	-R	5,356	-R	5,206	-R	5,056	-R	4,906	-R	4,756	-R	4,606
1.75	-R	3,749	-R	3,574	-R	3,399	-R	3,224	-R	3,049	-R	2,874	-R	2,699
2.00	-R	1,992	-R	1,792	-R	1,592	-R	1,392	-R	1,192	-R	992	-R	792
2.25	-R	235	-R	10	R	215	R	440	R	665	R	890	R	1,115
2.50	R	1,522	R	1,772	R	2,022	R	2,272	R	2,522	R	2,772	R	3,022
2.75	R	3,279	R	3,554	R	3,829	R	4,104	R	4,379	R	4,654	R	4,929
3.00	R	5,036	R	5,336	R	5,636	R	5,936	R	6,236	R	6,536	R	6,836
3.25	R	6,793	R	7,118	R	7,443	R	7,768	R	8,093	R	8,418	R	8,743
3.50	R	8,550	R	8,900	R	9,250	R	9,600	R	9,950	R	10,300	R	10,650

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): MPUMALANGA: ERMELO

PRICE (R/TON)														
YIELD	R	6,942	R	7,042	R	7,142	R	7,242	R	7,342	R	7,442	R	7,542
1.00	-R	7,221	-R	7,121	-R	7,021	-R	6,921	-R	6,821	-R	6,721	-R	6,621
1.25	-R	5,485	-R	5,360	-R	5,235	-R	5,110	-R	4,985	-R	4,860	-R	4,735
1.50	-R	3,750	-R	3,600	-R	3,450	-R	3,300	-R	3,150	-R	3,000	-R	2,850
1.75	-R	2,014	-R	1,839	-R	1,664	-R	1,489	-R	1,314	-R	1,139	-R	964
2.00	-R	279	-R	79	R	121	R	321	R	521	R	721	R	921
2.25	R	1,456	R	1,681	R	1,906	R	2,131	R	2,356	R	2,581	R	2,806
2.50	R	3,192	R	3,442	R	3,692	R	3,942	R	4,192	R	4,442	R	4,692
2.75	R	4,927	R	5,202	R	5,477	R	5,752	R	6,027	R	6,302	R	6,577
3.00	R	6,663	R	6,963	R	7,263	R	7,563	R	7,863	R	8,163	R	8,463

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

Eastern Free State

Table 2.3: Income & cost budgets for maize, soybeans, sunflower & dry beans for Eastern Free State - Dryland

Eastern Free State					
Crop		Maize	Soybeans	Sunflower	Dry beans
Production System		Dryland	Dryland	Dryland	Dryland
1) INCOME					
Yield: Deterministic	T/HA	5.50	2.00	1.80	1.50
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520	R8,180	R22,693
Total deductions	R/TON	R488	R333	R400	R564
- Transport differential	R/TON	R403	R204	R298	R-
- Grade differential	R/TON	R19	R-	R-	R-
- Handling & commission	R/TON	R66	R69	R102	R564
- Seed breeding & technology levy	R/TON	R-	R60	R-	R-
Price premiums	R/TON	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,310	R7,187	R7,781	R22,128
GROSS INCOME	R/HA	R18,207	R14,373	R14,005	R33,192
2) VARIABLE EXPENDITURES					
Contracting	R/HA	R-	R-	R-	R1,410
Crop insurance	R/HA	R655	R1,610	R602	R2,323
Fertilizer	R/HA	R3,848	R1,590	R1,545	R3,073
Lime	R/HA	R741	R-	R-	R630
Seed	R/HA	R2,248	R1,700	R930	R4,839
Fuel	R/HA	R1,461	R1,154	R1,105	R940
Herbicide	R/HA	R1,118	R1,127	R985	R825
Insecticide/Fungicide	R/HA	R718	R250	R345	R2,798
Marketing costs	R/HA	R-	R-	R-	R-
Repairs and maintenance	R/HA	R1,081	R850	R864	R815
Casual labour	R/HA	R263	R-	R-	R2,200
Aerial spray	R/HA	R-	R-	R-	R-
Other expenditure	R/HA	R-	R-	R-	R125
TOTAL VARIABLE EXPENDITURE	R/HA	R12,135	R8,281	R6,377	R19,979
TOTAL VARIABLE EXPENDITURE	R/TON	R2,206	R4,141	R3,543	R13,319
3.1) GROSS MARGIN:	R/HA	R6,072	R6,092	R7,629	R13,214
3.2) GROSS MARGIN:	R/TON	R1,104	R3,046	R4,238	R8,809
BREAK-EVEN YIELD	T/HA	3.67	1.15	0.82	0.90
BREAK-EVEN PRICE	R/TON	R2,206	R4,141	R3,543	R13,319

Source: BFAP, GSA, VKB & Individual Farmers, 2024

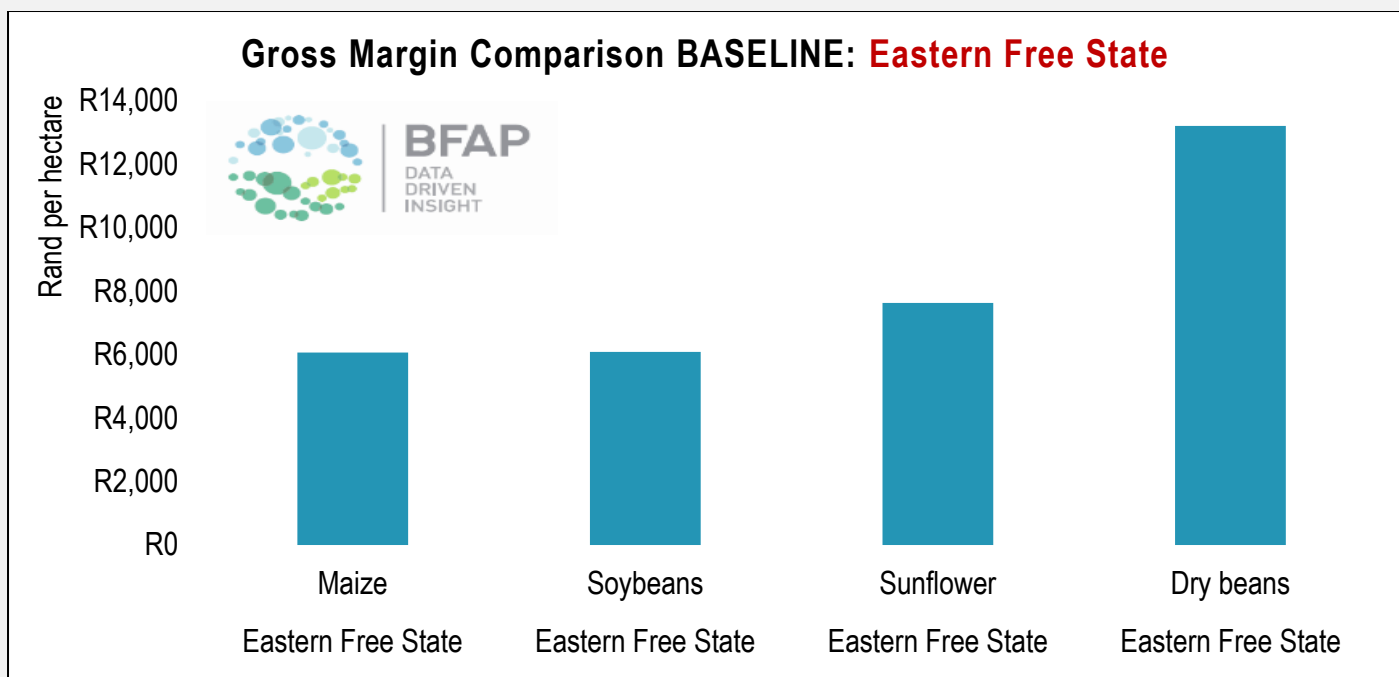


Figure 2.3: Gross margin comparison – Baseline: Eastern Free State

MAIZE SENSIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN FREE STATE														
PRODUCERS YIELD (T/HA)														
PRICE	4.00		4.50		5.00		5.50		6.00		6.50		7.00	
R2,910	-R	493	R	962	R	2,417	R	3,872	R	5,328	R	6,783	R	8,238
R3,010	-R	93	R	1,412	R	2,917	R	4,422	R	5,928	R	7,433	R	8,938
R3,110	R	307	R	1,862	R	3,417	R	4,972	R	6,528	R	8,083	R	9,638
R3,210	R	707	R	2,312	R	3,917	R	5,522	R	7,128	R	8,733	R	10,338
R3,310	R	1,107	R	2,762	R	4,417	R	6,072	R	7,728	R	9,383	R	11,038
R3,410	R	1,507	R	3,212	R	4,917	R	6,622	R	8,328	R	10,033	R	11,738
R3,510	R	1,907	R	3,662	R	5,417	R	7,172	R	8,928	R	10,683	R	12,438
R3,610	R	2,307	R	4,112	R	5,917	R	7,722	R	9,528	R	11,333	R	13,138
R3,710	R	2,707	R	4,562	R	6,417	R	8,272	R	10,128	R	11,983	R	13,838

SOYBEANS SENSIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN FREE STATE														
PRODUCERS YIELD (T/HA)														
PRICE	1.25		1.50		1.75		2.00		2.25		2.50		2.75	
R6,787	R	202	R	1,899	R	3,595	R	5,292	R	6,989	R	8,685	R	10,382
R6,887	R	327	R	2,049	R	3,770	R	5,492	R	7,214	R	8,935	R	10,657
R6,987	R	452	R	2,199	R	3,945	R	5,692	R	7,439	R	9,185	R	10,932
R7,087	R	577	R	2,349	R	4,120	R	5,892	R	7,664	R	9,435	R	11,207
R7,187	R	702	R	2,499	R	4,295	R	6,092	R	7,889	R	9,685	R	11,482
R7,287	R	827	R	2,649	R	4,470	R	6,292	R	8,114	R	9,935	R	11,757
R7,387	R	952	R	2,799	R	4,645	R	6,492	R	8,339	R	10,185	R	12,032
R7,487	R	1,077	R	2,949	R	4,820	R	6,692	R	8,564	R	10,435	R	12,307
R7,587	R	1,202	R	3,099	R	4,995	R	6,892	R	8,789	R	10,685	R	12,582

SUNFLOWER SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): EASTERN FREE STATE

PRODUCERS YIELD (T/HA)															
PRICE		1.00		1.25		1.50		1.80		2.00		2.25		2.50	
R7,381	R	1,004	R	2,849	R	4,694	R	6,909	R	8,385	R	10,230	R	12,075	
R7,481	R	1,104	R	2,974	R	4,844	R	7,089	R	8,585	R	10,455	R	12,325	
R7,581	R	1,204	R	3,099	R	4,994	R	7,269	R	8,785	R	10,680	R	12,575	
R7,681	R	1,304	R	3,224	R	5,144	R	7,449	R	8,985	R	10,905	R	12,825	
R7,781	R	1,404	R	3,349	R	5,294	R	7,629	R	9,185	R	11,130	R	13,075	
R7,881	R	1,504	R	3,474	R	5,444	R	7,809	R	9,385	R	11,355	R	13,325	
R7,981	R	1,604	R	3,599	R	5,594	R	7,989	R	9,585	R	11,580	R	13,575	
R8,081	R	1,704	R	3,724	R	5,744	R	8,169	R	9,785	R	11,805	R	13,825	
R8,181	R	1,804	R	3,849	R	5,894	R	8,349	R	9,985	R	12,030	R	14,075	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): EASTERN FREE STATE

PRICE (R/TON)														
YIELD	R	6,887	R	6,987	R	7,087	R	7,187	R	7,287	R	7,387	R	7,487
1.00	-R	7,467	-R	7,367	-R	7,267	-R	7,167	-R	7,067	-R	6,967	-R	6,867
1.25	-R	5,745	-R	5,620	-R	5,495	-R	5,370	-R	5,245	-R	5,120	-R	4,995
1.50	-R	4,024	-R	3,874	-R	3,724	-R	3,574	-R	3,424	-R	3,274	-R	3,124
1.75	-R	2,302	-R	2,127	-R	1,952	-R	1,777	-R	1,602	-R	1,427	-R	1,252
2.00	-R	580	-R	380	-R	180	R	20	R	220	R	420	R	620
2.25	R	1,141	R	1,366	R	1,591	R	1,816	R	2,041	R	2,266	R	2,491
2.50	R	2,863	R	3,113	R	3,363	R	3,613	R	3,863	R	4,113	R	4,363
2.75	R	4,584	R	4,859	R	5,134	R	5,409	R	5,684	R	5,959	R	6,234
3.00	R	6,306	R	6,606	R	6,906	R	7,206	R	7,506	R	7,806	R	8,106

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

Northern Free State

Table 2.4: Income & cost budgets for maize, soybeans, sunflower, ground nuts & grain sorghum for Western / Northern Free State - Dryland

Area		Western / Northern Free State					
Crop		Maize: Higher potential	Maize: Normal potential	Soybean	Sun- flower	Ground Nuts	Grain Sorghum
Production System		Dryland	Dryland	Dryland	Dryland	Dryland	Dryland
1) INCOME							
Yield: Deterministic	T/HA	5.50	4.50	1.75	1.75	1.50	3.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R3,817	R7,520	R8,180	R16,350	R5,324
Total deductions	R/TON	R478	R402	R404	R420	R69	R69
- Transport differential	R/TON	R390	R306	R275	R310	R-	R-
- Grade differential	R/TON	R19	R27	R-	R-	R-	R-
- Handling & commission	R/TON	R69	R69	R69	R110	R69	R69
- Seed breeding & technology levy	R/TON	R-	R-	R60	R-	R-	R-
Price premiums	R/TON	R-	R-	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,320	R3,414	R7,116	R7,761	R16,281	R5,255
GROSS INCOME	R/HA	R18,260	R15,364	R12,452	R13,581	R24,422	R15,764
2) VARIABLE EXPENDITURES							
Contracting	R/HA	R-	R-	R-	R-	R-	R-
Crop insurance	R/HA	R201	R169	R610	R381	R382	R504
Fertilizer	R/HA	R3,555	R2,812	R1,079	R1,723	R1,612	R2,637
Lime	R/HA	R359	R359	R-	R-	R198	R210
Seed	R/HA	R1,937	R1,254	R1,360	R663	R2,301	R453
Fuel	R/HA	R1,514	R1,500	R1,072	R1,169	R2,059	R1,392
Herbicide	R/HA	R862	R785	R1,289	R883	R1,262	R1,199
Insecticide/Fungicide	R/HA	R686	R686	R250	R345	R1,075	R789
Marketing costs	R/HA	R-	R-	R-	R-	R-	R-
Repairs and maintenance	R/HA	R1,066	R925	R895	R801	R1,004	R778
Casual labour	R/HA	R263	R216	R-	R-	R564	R71
Aerial spray	R/HA	R-	R-	R-	R-	R-	R-
Other expenditure	R/HA	R-	R-	R-	R-	R354	R-
TOTAL VARIABLE EXPENDITURE	R/HA	R10,443	R8,706	R6,554	R5,965	R10,810	R8,034
TOTAL VARIABLE EXPENDITURE	R/TON	R1,899	R1,935	R3,745	R3,409	R7,207	R2,678
3.1) GROSS MARGIN:	R/HA	R7,817	R6,658	R5,898	R7,616	R13,611	R7,730
3.2) GROSS MARGIN:	R/TON	R1,421	R1,480	R3,370	R4,352	R9,074	R2,577
BREAK-EVEN YIELD	T/HA	3.15	2.55	0.92	0.77	0.66	1.53
BREAK-EVEN PRICE	R/TON	R1,899	R1,935	R3,745	R3,409	R7,207	R2,678

Source: BFAP, GSA & Senwes, 2024

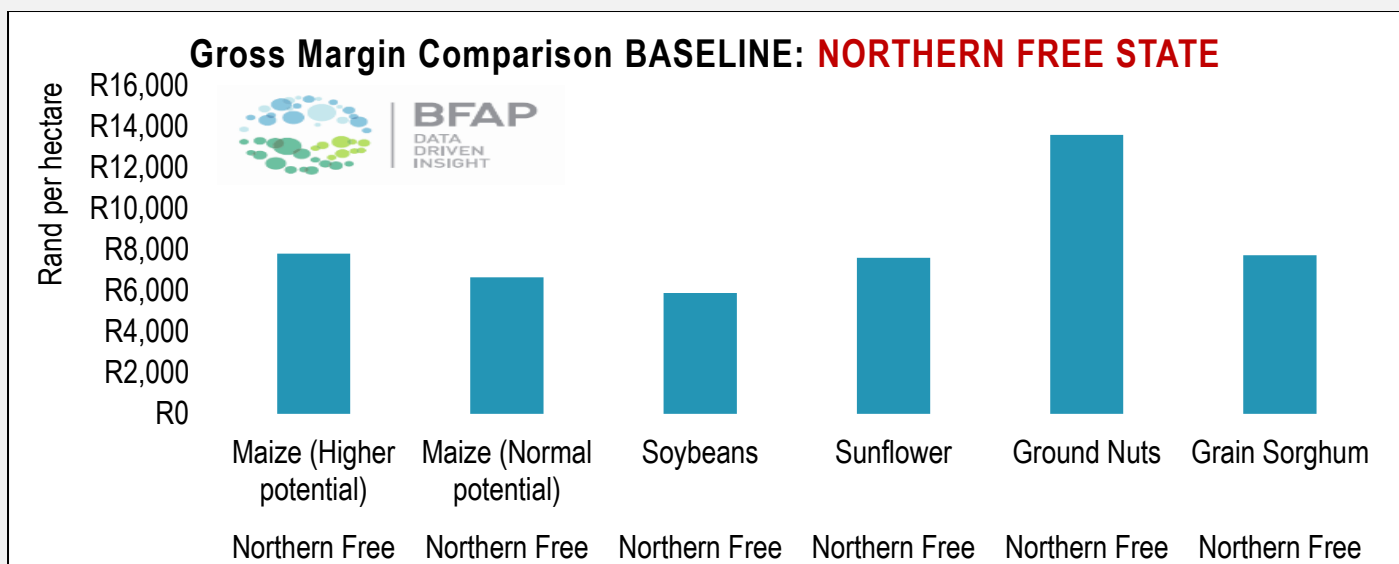


Figure 2.4: Gross margin comparison – Baseline: Western / Northern Free State

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN FREE STATE HIGHER POTENTIAL SOILS												
PRODUCERS YIELD (T/HA)												
PRICE	4.00		4.50		5.00		5.50		6.00		6.50	
R2,920	R	1,237	R	2,697	R	4,157	R	5,617	R	7,077	R	8,537
R3,020	R	1,637	R	3,147	R	4,657	R	6,167	R	7,677	R	9,187
R3,120	R	2,037	R	3,597	R	5,157	R	6,717	R	8,277	R	9,837
R3,220	R	2,437	R	4,047	R	5,657	R	7,267	R	8,877	R	10,487
R3,320	R	2,837	R	4,497	R	6,157	R	7,817	R	9,477	R	11,137
R3,420	R	3,237	R	4,947	R	6,657	R	8,367	R	10,077	R	11,787
R3,520	R	3,637	R	5,397	R	7,157	R	8,917	R	10,677	R	12,437
R3,620	R	4,037	R	5,847	R	7,657	R	9,467	R	11,277	R	13,087
R3,720	R	4,437	R	6,297	R	8,157	R	10,017	R	11,877	R	13,737

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN FREE STATE NORMAL POTENTIAL SOILS												
PRODUCERS YIELD (T/HA)												
PRICE	1.00		1.25		1.50		1.75		2.00		2.25	
R6,716	R	162	R	1,840	R	3,519	R	5,198	R	6,877	R	8,556
R6,816	R	262	R	1,965	R	3,669	R	5,373	R	7,077	R	8,781
R6,916	R	362	R	2,090	R	3,819	R	5,548	R	7,277	R	9,006
R7,016	R	462	R	2,215	R	3,969	R	5,723	R	7,477	R	9,231
R7,116	R	562	R	2,340	R	4,119	R	5,898	R	7,677	R	9,456
R7,216	R	662	R	2,465	R	4,269	R	6,073	R	7,877	R	9,681
R7,316	R	762	R	2,590	R	4,419	R	6,248	R	8,077	R	9,906
R7,416	R	862	R	2,715	R	4,569	R	6,423	R	8,277	R	10,131
R7,516	R	962	R	2,840	R	4,719	R	6,598	R	8,477	R	10,356

SUNFLOWER SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN FREE STATE												
PRODUCERS YIELD (T/HA)												
PRICE	1.00		1.25		1.50		1.75		2.00		2.25	
R7,361	R	1,396	R	3,236	R	5,076	R	6,916	R	8,756	R	10,597
R7,461	R	1,496	R	3,361	R	5,226	R	7,091	R	8,956	R	10,822
R7,561	R	1,596	R	3,486	R	5,376	R	7,266	R	9,156	R	11,047
R7,661	R	1,696	R	3,611	R	5,526	R	7,441	R	9,356	R	11,272
R7,761	R	1,796	R	3,736	R	5,676	R	7,616	R	9,556	R	11,497
R7,861	R	1,896	R	3,861	R	5,826	R	7,791	R	9,756	R	11,722
R7,961	R	1,996	R	3,986	R	5,976	R	7,966	R	9,956	R	11,947
R8,061	R	2,096	R	4,111	R	6,126	R	8,141	R	10,156	R	12,172
R8,161	R	2,196	R	4,236	R	6,276	R	8,316	R	10,356	R	12,397

GROUND NUTS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN FREE STATE

PRODUCERS YIELD (T/HA)															
PRICE		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
R15,881	R	1,775	R	5,971	R	10,166	R	14,361	R	18,556	R	22,752	R	26,947	
R15,981	R	1,850	R	6,071	R	10,291	R	14,511	R	18,731	R	22,952	R	27,172	
R16,081	R	1,925	R	6,171	R	10,416	R	14,661	R	18,906	R	23,152	R	27,397	
R16,181	R	2,000	R	6,271	R	10,541	R	14,811	R	19,081	R	23,352	R	27,622	
R16,281	R	2,075	R	6,371	R	10,666	R	14,961	R	19,256	R	23,552	R	27,847	
R16,381	R	2,150	R	6,471	R	10,791	R	15,111	R	19,431	R	23,752	R	28,072	
R16,481	R	2,225	R	6,571	R	10,916	R	15,261	R	19,606	R	23,952	R	28,297	
R16,581	R	2,300	R	6,671	R	11,041	R	15,411	R	19,781	R	24,152	R	28,522	
R16,681	R	2,375	R	6,771	R	11,166	R	15,561	R	19,956	R	24,352	R	28,747	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): NORTHERN FREE STATE

PRICE (R/TON)														
YIELD	R	6,816	R	6,916	R	7,016	R	7,116	R	7,216	R	7,316	R	7,416
0.75	-R	9,259	-R	9,184	-R	9,109	-R	9,034	-R	8,959	-R	8,884	-R	8,809
1.00	-R	7,555	-R	7,455	-R	7,355	-R	7,255	-R	7,155	-R	7,055	-R	6,955
1.25	-R	5,852	-R	5,727	-R	5,602	-R	5,477	-R	5,352	-R	5,227	-R	5,102
1.50	-R	4,148	-R	3,998	-R	3,848	-R	3,698	-R	3,548	-R	3,398	-R	3,248
1.75	-R	2,444	-R	2,269	-R	2,094	-R	1,919	-R	1,744	-R	1,569	-R	1,394
2.00	-R	740	-R	540	-R	340	-R	140	R	60	R	260	R	460
2.25	R	964	R	1,189	R	1,414	R	1,639	R	1,864	R	2,089	R	2,314
2.50	R	2,668	R	2,918	R	3,168	R	3,418	R	3,668	R	3,918	R	4,168
2.75	R	4,372	R	4,647	R	4,922	R	5,197	R	5,472	R	5,747	R	6,022

Notes:

- The Northern Free State high potential maize budget represents the cultivation of yellow maize under high potential conditions such as water table soils.
- Farm gate price for ground nuts is calculated according to assumptions based on the share of the crop that is graded according to selection grade (40/50-60/70 & 70/80), diverse and crush (human & oil).
- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

North West: Koster

Table 2.5: Income & cost budgets for maize, soybeans & sunflower for North West: Koster region - Dryland

Area		North West: Koster		
Crop		Maize	Soybeans	Sunflower
Production System		Dryland	Dryland	Dryland
1) INCOME				
Yield: Deterministic	T/HA	4.75	2.00	2.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,817	R7,520	R8,180
Total deductions	R/TON	R312	R147	R336
- Transport differential	R/TON	R216	R18	R234
- Grade differential	R/TON	R27	R-	R-
- Handling & commission	R/TON	R69	R69	R102
- Seed breeding & technology levy	R/TON	R-	R60	R-
Price premiums	R/TON	R-	R-	R-
Net Farm Gate Price	R/TON	R3,504	R7,373	R7,845
GROSS INCOME	R/HA	R16,645	R14,745	R15,689
2) VARIABLE EXPENDITURES				
Contracting	R/HA	R-	R-	R-
Crop insurance	R/HA	R351	R1,651	R455
Fertilizer	R/HA	R3,269	R1,354	R1,880
Lime	R/HA	R408	R-	R-
Seed	R/HA	R1,197	R1,117	R814
Fuel	R/HA	R1,381	R1,133	R1,126
Herbicide	R/HA	R921	R1,141	R1,063
Insecticide/Fungicide	R/HA	R686	R897	R496
Marketing costs	R/HA	R-	R-	R-
Repairs and maintenance	R/HA	R1,046	R847	R970
Casual labour	R/HA	R228	R-	R-
Aerial spray	R/HA	R-	R-	R-
Other expenditure	R/HA	R-	R-	R-
TOTAL VARIABLE EXPENDITURE	R/HA	R9,487	R8,140	R6,804
TOTAL VARIABLE EXPENDITURE	R/TON	R1,997	R4,070	R3,402
3.1) GROSS MARGIN:				
	R/HA	R7,159	R6,605	R8,885
3.2) GROSS MARGIN:				
	R/TON	R1,507	R3,303	R4,443
BREAK-EVEN YIELD				
	T/HA	2.71	1.10	0.87
BREAK-EVEN PRICE				
	R/TON	R1,997	R4,070	R3,402

Source: BFAP, GSA, NWK & Individual Farmers, 2024

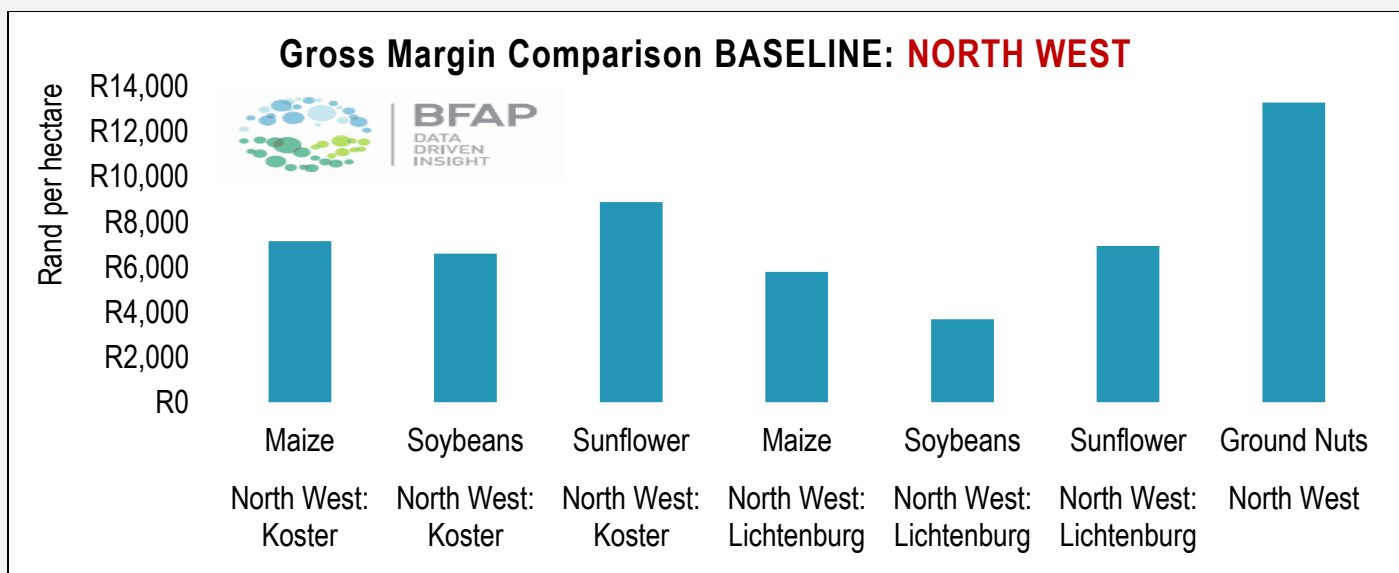


Figure 2.5: Gross margin comparison – Baseline: North West: Koster & Lichtenburg

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST KOSTER										
PRODUCERS YIELD (T/HA)										
PRICE	3.25		3.75		4.25		4.75		5.25	
R3,104	R	602	R	2,154	R	3,707	R	5,259	R	6,811
R3,204	R	927	R	2,529	R	4,132	R	5,734	R	7,336
R3,304	R	1,252	R	2,904	R	4,557	R	6,209	R	7,861
R3,404	R	1,577	R	3,279	R	4,982	R	6,684	R	8,386
R3,504	R	1,902	R	3,654	R	5,407	R	7,159	R	8,911
R3,604	R	2,227	R	4,029	R	5,832	R	7,634	R	9,436
R3,704	R	2,552	R	4,404	R	6,257	R	8,109	R	9,961
R3,804	R	2,877	R	4,779	R	6,682	R	8,584	R	10,486
R3,904	R	3,202	R	5,154	R	7,107	R	9,059	R	11,011

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST KOSTER										
PRODUCERS YIELD (T/HA)										
PRICE	1.25		1.50		1.75		2.00		2.25	
R6,973	R	576	R	2,319	R	4,062	R	5,805	R	7,548
R7,073	R	701	R	2,469	R	4,237	R	6,005	R	7,773
R7,173	R	826	R	2,619	R	4,412	R	6,205	R	7,998
R7,273	R	951	R	2,769	R	4,587	R	6,405	R	8,223
R7,373	R	1,076	R	2,919	R	4,762	R	6,605	R	8,448
R7,473	R	1,201	R	3,069	R	4,937	R	6,805	R	8,673
R7,573	R	1,326	R	3,219	R	5,112	R	7,005	R	8,898
R7,673	R	1,451	R	3,369	R	5,287	R	7,205	R	9,123
R7,773	R	1,576	R	3,519	R	5,462	R	7,405	R	9,348

SUNFLOWER SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST KOSTER										
PRODUCERS YIELD (T/HA)										
PRICE	1.25		1.50		1.75		2.00		2.25	
R7,445	R	2,502	R	4,363	R	6,224	R	8,085	R	9,946
R7,545	R	2,627	R	4,513	R	6,399	R	8,285	R	10,171
R7,645	R	2,752	R	4,663	R	6,574	R	8,485	R	10,396
R7,745	R	2,877	R	4,813	R	6,749	R	8,685	R	10,621
R7,845	R	3,002	R	4,963	R	6,924	R	8,885	R	10,846
R7,945	R	3,127	R	5,113	R	7,099	R	9,085	R	11,071
R8,045	R	3,252	R	5,263	R	7,274	R	9,285	R	11,296
R8,145	R	3,377	R	5,413	R	7,449	R	9,485	R	11,521
R8,245	R	3,502	R	5,563	R	7,624	R	9,685	R	11,746

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): NORTH WEST KOSTER

PRICE (R/TON)														
YIELD	R	7,073	R	7,173	R	7,273	R	7,373	R	7,473	R	7,573	R	7,673
1.00	-R	8,226	-R	8,126	-R	8,026	-R	7,926	-R	7,826	-R	7,726	-R	7,626
1.25	-R	6,458	-R	6,333	-R	6,208	-R	6,083	-R	5,958	-R	5,833	-R	5,708
1.50	-R	4,690	-R	4,540	-R	4,390	-R	4,240	-R	4,090	-R	3,940	-R	3,790
1.75	-R	2,922	-R	2,747	-R	2,572	-R	2,397	-R	2,222	-R	2,047	-R	1,872
2.00	-R	1,153	-R	953	-R	753	-R	553	-R	353	-R	153	R	47
2.25	R	615	R	840	R	1,065	R	1,290	R	1,515	R	1,740	R	1,965
2.50	R	2,383	R	2,633	R	2,883	R	3,133	R	3,383	R	3,633	R	3,883
2.75	R	4,151	R	4,426	R	4,701	R	4,976	R	5,251	R	5,526	R	5,801
3.00	R	5,919	R	6,219	R	6,519	R	6,819	R	7,119	R	7,419	R	7,719

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

North West: Lichtenburg

Table 2.6: Income & cost budgets for maize, soybeans & sunflower for North West: Lichtenburg region - Dryland

Area		North West: Lichtenburg			
Crop		Maize	Soybeans	Sunflower	Ground Nuts
Production System		Dryland	Dryland	Dryland	Dryland
1) INCOME					
Yield: Deterministic	T/HA	4.25	1.50	1.70	1.50
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,817	R7,520	R8,180	R16,350
Total deductions	R/TON	R383	R218	R393	R69
- Transport differential	R/TON	R287	R89	R291	R-
- Grade differential	R/TON	R27	R-	R-	R-
- Handling & commission	R/TON	R69	R69	R102	R69
- Seed breeding & technology levy	R/TON	R-	R60	R-	R-
Price premiums	R/TON	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,433	R7,302	R7,788	R16,281
GROSS INCOME	R/HA	R14,591	R10,952	R13,239	R24,422
2) VARIABLE EXPENDITURES					
Contracting	R/HA	R-	R-	R-	R-
Crop insurance	R/HA	R219	R1,226	R371	R391
Fertilizer	R/HA	R2,939	R1,181	R1,547	R1,606
Lime	R/HA	R408	R-	R-	R224
Seed	R/HA	R1,083	R875	R814	R2,026
Fuel	R/HA	R1,363	R1,089	R1,107	R2,095
Herbicide	R/HA	R921	R1,141	R1,023	R1,399
Insecticide/Fungicide	R/HA	R626	R897	R455	R1,123
Marketing costs	R/HA	R-	R-	R-	R-
Repairs and maintenance	R/HA	R1,041	R852	R973	R978
Casual labour	R/HA	R204	R-	R-	R564
Aerial spray	R/HA	R-	R-	R-	R-
Other expenditure	R/HA	R-	R-	R-	R354
TOTAL VARIABLE EXPENDITURE	R/HA	R8,804	R7,261	R6,290	R11,105
TOTAL VARIABLE EXPENDITURE	R/TON	R2,072	R4,840	R3,700	R7,403
3.1) GROSS MARGIN:					
	R/HA	R5,787	R3,692	R6,949	R13,317
3.2) GROSS MARGIN:					
	R/TON	R1,362	R2,461	R4,088	R8,878
BREAK-EVEN YIELD					
	T/HA	2.56	0.99	0.81	0.68
BREAK-EVEN PRICE					
	R/TON	R2,072	R4,840	R3,700	R7,403

Source: BFAP, GSA, NWK & Individual Farmers, 2024

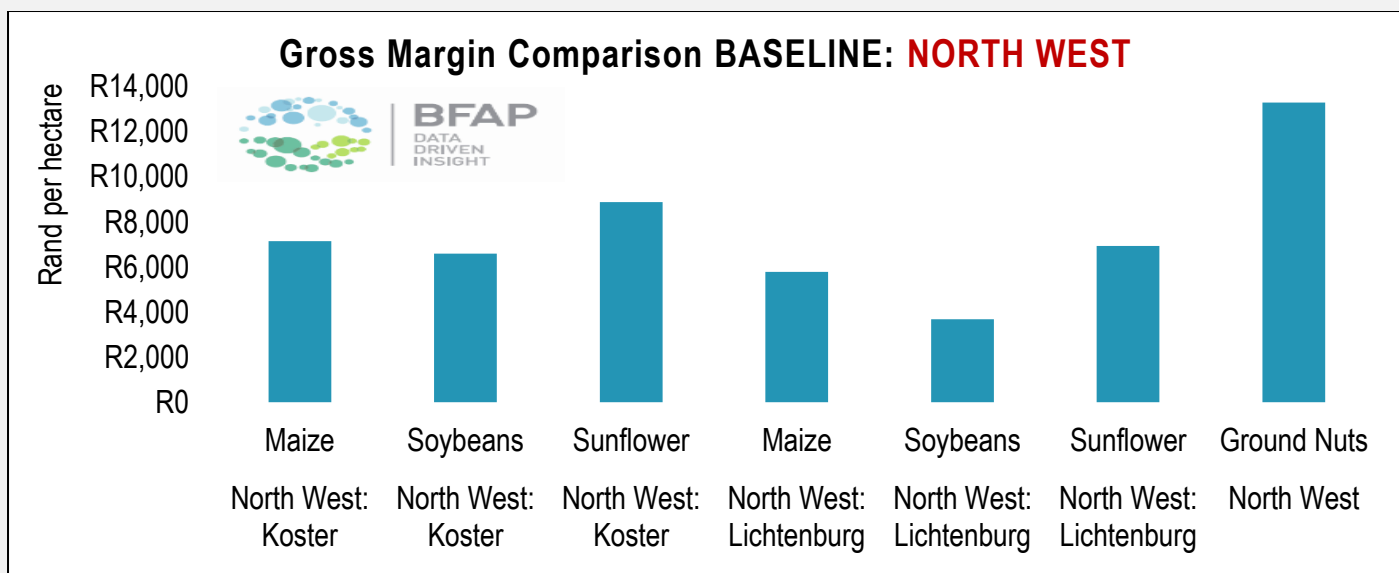


Figure 2.6: Gross margin comparison – Baseline: North West: Koster & Lichtenburg

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST LICHTENBURG

PRODUCERS YIELD (T/HA)															
PRICE		2.75		3.25		3.75		4.25		4.75		5.25		5.75	
R3,033	-R	463	R	1,054	R	2,571	R	4,087	R	5,604	R	7,121	R	8,637	
R3,133	-R	188	R	1,379	R	2,946	R	4,512	R	6,079	R	7,646	R	9,212	
R3,233	R	87	R	1,704	R	3,321	R	4,937	R	6,554	R	8,171	R	9,787	
R3,333	R	362	R	2,029	R	3,696	R	5,362	R	7,029	R	8,696	R	10,362	
R3,433	R	637	R	2,354	R	4,071	R	5,787	R	7,504	R	9,221	R	10,937	
R3,533	R	912	R	2,679	R	4,446	R	6,212	R	7,979	R	9,746	R	11,512	
R3,633	R	1,187	R	3,004	R	4,821	R	6,637	R	8,454	R	10,271	R	12,087	
R3,733	R	1,462	R	3,329	R	5,196	R	7,062	R	8,929	R	10,796	R	12,662	
R3,833	R	1,737	R	3,654	R	5,571	R	7,487	R	9,404	R	11,321	R	13,237	

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST LICHTENBURG

PRODUCERS YIELD (T/HA)															
PRICE		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
R6,902	-R	2,085	-R	359	R	1,366	R	3,092	R	4,817	R	6,542	R	8,268	
R7,002	-R	2,010	-R	259	R	1,491	R	3,242	R	4,992	R	6,742	R	8,493	
R7,102	-R	1,935	-R	159	R	1,616	R	3,392	R	5,167	R	6,942	R	8,718	
R7,202	-R	1,860	-R	59	R	1,741	R	3,542	R	5,342	R	7,142	R	8,943	
R7,302	-R	1,785	R	41	R	1,866	R	3,692	R	5,517	R	7,342	R	9,168	
R7,402	-R	1,710	R	141	R	1,991	R	3,842	R	5,692	R	7,542	R	9,393	
R7,502	-R	1,635	R	241	R	2,116	R	3,992	R	5,867	R	7,742	R	9,618	
R7,602	-R	1,560	R	341	R	2,241	R	4,142	R	6,042	R	7,942	R	9,843	
R7,702	-R	1,485	R	441	R	2,366	R	4,292	R	6,217	R	8,142	R	10,068	

SUNFLOWER SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST LICHTENBURG

PRODUCERS YIELD (T/HA)															
PRICE		1.00		1.25		1.50		1.70		2.00		2.25		2.50	
R7,388	R	1,098	R	2,945	R	4,791	R	6,269	R	8,485	R	10,332	R	12,179	
R7,488	R	1,198	R	3,070	R	4,941	R	6,439	R	8,685	R	10,557	R	12,429	
R7,588	R	1,298	R	3,195	R	5,091	R	6,609	R	8,885	R	10,782	R	12,679	
R7,688	R	1,398	R	3,320	R	5,241	R	6,779	R	9,085	R	11,007	R	12,929	
R7,788	R	1,498	R	3,445	R	5,391	R	6,949	R	9,285	R	11,232	R	13,179	
R7,888	R	1,598	R	3,570	R	5,541	R	7,119	R	9,485	R	11,457	R	13,429	
R7,988	R	1,698	R	3,695	R	5,691	R	7,289	R	9,685	R	11,682	R	13,679	
R8,088	R	1,798	R	3,820	R	5,841	R	7,459	R	9,885	R	11,907	R	13,929	
R8,188	R	1,898	R	3,945	R	5,991	R	7,629	R	10,085	R	12,132	R	14,179	

GROUND NUTS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST

PRODUCERS YIELD (T/HA)															
PRICE		0.75		1.00		1.25		1.50		1.75		2.00		2.25	
R15,881	R	1,481	R	5,677	R	9,872	R	14,067	R	18,262	R	22,458	R	26,653	
R15,981	R	1,556	R	5,777	R	9,997	R	14,217	R	18,437	R	22,658	R	26,878	
R16,081	R	1,631	R	5,877	R	10,122	R	14,367	R	18,612	R	22,858	R	27,103	
R16,181	R	1,706	R	5,977	R	10,247	R	14,517	R	18,787	R	23,058	R	27,328	
R16,281	R	1,781	R	6,077	R	10,372	R	14,667	R	18,962	R	23,258	R	27,553	
R16,381	R	1,856	R	6,177	R	10,497	R	14,817	R	19,137	R	23,458	R	27,778	
R16,481	R	1,931	R	6,277	R	10,622	R	14,967	R	19,312	R	23,658	R	28,003	
R16,581	R	2,006	R	6,377	R	10,747	R	15,117	R	19,487	R	23,858	R	28,228	
R16,681	R	2,081	R	6,477	R	10,872	R	15,267	R	19,662	R	24,058	R	28,453	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): NORTH WEST LICHTENBURG

PRICE (R/TON)														
YIELD	R	7,002	R	7,102	R	7,202	R	7,302	R	7,402	R	7,502	R	7,602
0.50	-R	9,547	-R	9,497	-R	9,447	-R	9,397	-R	9,347	-R	9,297	-R	9,247
0.75	-R	7,797	-R	7,722	-R	7,647	-R	7,572	-R	7,497	-R	7,422	-R	7,347
1.00	-R	6,046	-R	5,946	-R	5,846	-R	5,746	-R	5,646	-R	5,546	-R	5,446
1.25	-R	4,296	-R	4,171	-R	4,046	-R	3,921	-R	3,796	-R	3,671	-R	3,546
1.50	-R	2,546	-R	2,396	-R	2,246	-R	2,096	-R	1,946	-R	1,796	-R	1,646
1.75	-R	795	-R	620	-R	445	-R	270	-R	95	R	80	R	255
2.00	R	955	R	1,155	R	1,355	R	1,555	R	1,755	R	1,955	R	2,155
2.25	R	2,705	R	2,930	R	3,155	R	3,380	R	3,605	R	3,830	R	4,055
2.50	R	4,456	R	4,706	R	4,956	R	5,206	R	5,456	R	5,706	R	5,956

Notes:

- Farm gate price for ground nuts is calculated according to assumptions based on the share of the crop that is graded according to selection grade (40/50-60/70 & 70/80), diverse and crush (human & oil).
- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

2024/25 INCOME & COST BUDGETS – IRRIGATION

Northern Cape

Table 3.1: Income & cost budgets for maize, soybeans, ground nuts & sunflower (oil) for Northern Cape - Irrigation

Area		Northern Cape: Irrigation			
Crop		Maize	Soybeans	Ground Nuts	Sunflower
Production System		Irrigation	Irrigation	Irrigation	Irrigation
1) INCOME					
Yield: Deterministic	T/HA	14.00	4.00	3.50	3.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520	R17,550	R8,180
Total deductions	R/TON	R594	R468	R69	R683
- Transport differential	R/TON	R511	R339	R-	R573
- Grade differential	R/TON	R14	R-	R-	R-
- Handling & commission	R/TON	R69	R69	R69	R110
- Seed breeding & technology levy	R/TON	R-	R60	R-	R-
Price premiums	R/TON	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,205	R7,052	R18,981	R7,498
GROSS INCOME	R/HA	R44,864	R28,206	R67,934	R22,493
2) VARIABLE EXPENDITURES					
Contracting	R/HA	R1,100	R1,250	R3,560	R1,100
Crop insurance	R/HA	R449	R1,692	R679	R675
Fertilizer	R/HA	R11,917	R7,230	R9,357	R6,609
Lime	R/HA	R912	R-	R518	R-
Seed	R/HA	R7,227	R2,563	R4,225	R1,011
Fuel	R/HA	R1,431	R1,000	R1,560	R1,522
Herbicide	R/HA	R869	R632	R1,178	R671
Insecticide/Fungicide	R/HA	R3,422	R1,877	R3,741	R290
Marketing costs	R/HA	R-	R-	R-	R-
Repairs and maintenance	R/HA	R725	R226	R1,066	R1,168
Casual labour	R/HA	R671	R-	R248	R-
Aerial spray	R/HA	R533	R-	R-	R-
Irrigation Electricity	R/HA	R6,293	R6,293	R6,475	R4,469
Water	R/HA	R1,242	R1,242	R1,278	R882
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R1,386	R1,386	R3,523	R1,017
TOTAL VARIABLE EXPENDITURE	R/HA	R38,177	R25,391	R37,409	R19,413
TOTAL VARIABLE EXPENDITURE	R/TON	R2,727	R6,348	R10,688	R6,471
3.1) GROSS MARGIN:	R/HA	R6,686	R2,815	R30,525	R3,080
3.2) GROSS MARGIN:	R/TON	R478	R704	R8,721	R1,027
BREAK-EVEN YIELD	T/HA	11.91	3.60	1.97	2.59
BREAK-EVEN PRICE	R/TON	R2,727	R6,348	R10,688	R6,471

Source: BFAP, GSA & GWK, 2024

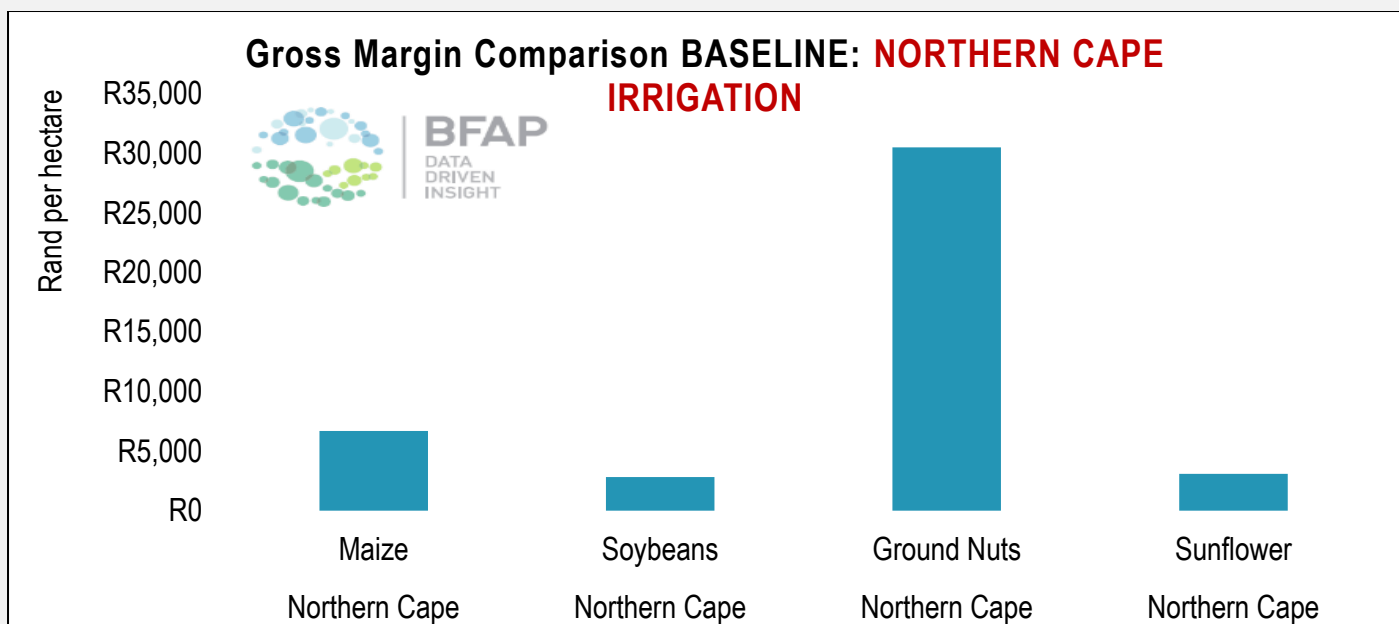


Figure 3.1: Gross margin comparison – Baseline: Northern Cape Irrigation

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE IRRIGATION												
PRODUCERS YIELD (T/HA)												
PRICE	12.50	13.00	13.50	14.00	14.50	15.00	15.50					
R2,805 -R	3,120 -R	1,718 -R	316 R	1,086 R	2,489 R	3,891 R	5,293 R					
R2,905 -R	1,870 -R	418 R	1,034 R	2,486 R	3,939 R	5,391 R	6,843 R					
R3,005 -R	620 R	882 R	2,384 R	3,886 R	5,389 R	6,891 R	8,393 R					
R3,105 R	630 R	2,182 R	3,734 R	5,286 R	6,839 R	8,391 R	9,943 R					
R3,205 R	1,880 R	3,482 R	5,084 R	6,686 R	8,289 R	9,891 R	11,493 R					
R3,305 R	3,130 R	4,782 R	6,434 R	8,086 R	9,739 R	11,391 R	13,043 R					
R3,405 R	4,380 R	6,082 R	7,784 R	9,486 R	11,189 R	12,891 R	14,593 R					
R3,505 R	5,630 R	7,382 R	9,134 R	10,886 R	12,639 R	14,391 R	16,143 R					
R3,605 R	6,880 R	8,682 R	10,484 R	12,286 R	14,089 R	15,891 R	17,693 R					

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE IRRIGATION												
PRODUCERS YIELD (T/HA)												
PRICE	3.25	3.50	3.75	4.00	4.25	4.50	4.75					
R6,652 -R	3,773 -R	2,110 -R	448 R	1,215 R	2,878 R	4,541 R	6,204 R					
R6,752 -R	3,448 -R	1,760 -R	73 R	1,615 R	3,303 R	4,991 R	6,679 R					
R6,852 -R	3,123 -R	1,410 R	302 R	2,015 R	3,728 R	5,441 R	7,154 R					
R6,952 -R	2,798 -R	1,060 R	677 R	2,415 R	4,153 R	5,891 R	7,629 R					
R7,052 -R	2,473 -R	710 R	1,052 R	2,815 R	4,578 R	6,341 R	8,104 R					
R7,152 -R	2,148 -R	360 R	1,427 R	3,215 R	5,003 R	6,791 R	8,579 R					
R7,252 -R	1,823 -R	10 R	1,802 R	3,615 R	5,428 R	7,241 R	9,054 R					
R7,352 -R	1,498 R	340 R	2,177 R	4,015 R	5,853 R	7,691 R	9,529 R					
R7,452 -R	1,173 R	690 R	2,552 R	4,415 R	6,278 R	8,141 R	10,004 R					

GROUND NUTS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE IRRIGATION												
PRODUCERS YIELD (T/HA)												
PRICE	2.75	3.00	3.25	3.50	4.00	4.50	5.00					
R18,581 R	15,751 R	20,584 R	25,417 R	30,250 R	39,915 R	49,581 R	59,246 R					
R18,681 R	16,026 R	20,884 R	25,742 R	30,600 R	40,315 R	50,031 R	59,746 R					
R18,781 R	16,301 R	21,184 R	26,067 R	30,950 R	40,715 R	50,481 R	60,246 R					
R18,881 R	16,576 R	21,484 R	26,392 R	31,300 R	41,115 R	50,931 R	60,746 R					
R18,981 R	16,851 R	21,784 R	26,717 R	31,650 R	41,515 R	51,381 R	61,246 R					
R19,081 R	17,126 R	22,084 R	27,042 R	32,000 R	41,915 R	51,831 R	61,746 R					
R19,181 R	17,401 R	22,384 R	27,367 R	32,350 R	42,315 R	52,281 R	62,246 R					
R19,281 R	17,676 R	22,684 R	27,692 R	32,700 R	42,715 R	52,731 R	62,746 R					
R19,381 R	17,951 R	22,984 R	28,017 R	33,050 R	43,115 R	53,181 R	63,246 R					

SUNFLOWER OIL SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTHERN CAPE IRRIGATION

PRODUCERS YIELD (T/HA)															
PRICE		2.25		2.50		2.75		3.00		3.50		4.00		4.50	
R7,098	-R	3,443	-R	1,668	R	106	R	1,880	R	5,429	R	8,978	R	12,527	
R7,198	-R	3,218	-R	1,418	R	381	R	2,180	R	5,779	R	9,378	R	12,977	
R7,298	-R	2,993	-R	1,168	R	656	R	2,480	R	6,129	R	9,778	R	13,427	
R7,398	-R	2,768	-R	918	R	931	R	2,780	R	6,479	R	10,178	R	13,877	
R7,498	-R	2,543	-R	668	R	1,206	R	3,080	R	6,829	R	10,578	R	14,327	
R7,598	-R	2,318	-R	418	R	1,481	R	3,380	R	7,179	R	10,978	R	14,777	
R7,698	-R	2,093	-R	168	R	1,756	R	3,680	R	7,529	R	11,378	R	15,227	
R7,798	-R	1,868	R	82	R	2,031	R	3,980	R	7,879	R	11,778	R	15,677	
R7,898	-R	1,643	R	332	R	2,306	R	4,280	R	8,229	R	12,178	R	16,127	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): NORTHERN CAPE IRRIGATION

PRICE (R/TON)														
YIELD	R	6,752	R	6,852	R	6,952	R	7,052	R	7,152	R	7,252	R	7,352
3.00	-R	11,823	-R	11,523	-R	11,223	-R	10,923	-R	10,623	-R	10,323	-R	10,023
3.25	-R	10,135	-R	9,810	-R	9,485	-R	9,160	-R	8,835	-R	8,510	-R	8,185
3.50	-R	8,447	-R	8,097	-R	7,747	-R	7,397	-R	7,047	-R	6,697	-R	6,347
3.75	-R	6,759	-R	6,384	-R	6,009	-R	5,634	-R	5,259	-R	4,884	-R	4,509
4.00	-R	5,071	-R	4,671	-R	4,271	-R	3,871	-R	3,471	-R	3,071	-R	2,671
4.25	-R	3,383	-R	2,958	-R	2,533	-R	2,108	-R	1,683	-R	1,258	-R	833
4.50	-R	1,695	-R	1,245	-R	795	-R	345	R	105	R	555	R	1,005
4.75	-R	7	R	468	R	943	R	1,418	R	1,893	R	2,368	R	2,843
5.00	R	1,680	R	2,180	R	2,680	R	3,180	R	3,680	R	4,180	R	4,680

Notes:

- Farm gate price for ground nuts is calculated according to assumptions based on the share of the crop that is graded according to selection grade (40/50-60/70 & 70/80), diverse and crush (human & oil).
- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

KwaZulu-Natal: Bergville

Table 3.2: Income & cost budgets for maize & soybeans for KwaZulu-Natal: Berggrivier - Irrigation

Area		KwaZulu-Natal: Berggrivier	
Crop		Maize	Soybeans
Production System		Irrigation	Irrigation
1) INCOME			
Yield: Deterministic	T/HA	12.00	4.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520
Total deductions	R/TON	R543	R217
- Transport differential	R/TON	R464	R92
- Grade differential	R/TON	R14	R-
- Handling & commission	R/TON	R66	R65
- Seed breeding & technology levy	R/TON	R-	R60
Price premiums	R/TON	R-	R-
Net Farm Gate Price	R/TON	R3,255	R7,303
GROSS INCOME	R/HA	R39,058	R29,212
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R-	R-
Crop insurance	R/HA	R1,484	R3,564
Fertilizer	R/HA	R9,136	R3,270
Lime	R/HA	R786	R-
Seed	R/HA	R5,782	R2,454
Fuel	R/HA	R1,885	R1,897
Herbicide	R/HA	R1,162	R1,025
Insecticide/Fungicide	R/HA	R703	R824
Marketing costs	R/HA	R-	R-
Repairs and maintenance	R/HA	R897	R605
Casual labour	R/HA	R575	R-
Aerial spray	R/HA	R-	R-
Irrigation Electricity	R/HA	R3,677	R3,129
Water	R/HA	R1,754	R1,493
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R980	R851
TOTAL VARIABLE EXPENDITURE	R/HA	R28,823	R19,112
TOTAL VARIABLE EXPENDITURE	R/TON	R2,402	R4,778
3.1) GROSS MARGIN:	R/HA	R10,235	R10,099
3.2) GROSS MARGIN:	R/TON	R853	R2,525
BREAK-EVEN YIELD	T/HA	8.86	2.62
BREAK-EVEN PRICE	R/TON	R2,402	R4,778

Source: BFAP, GSA & Individual Farmers, 2024

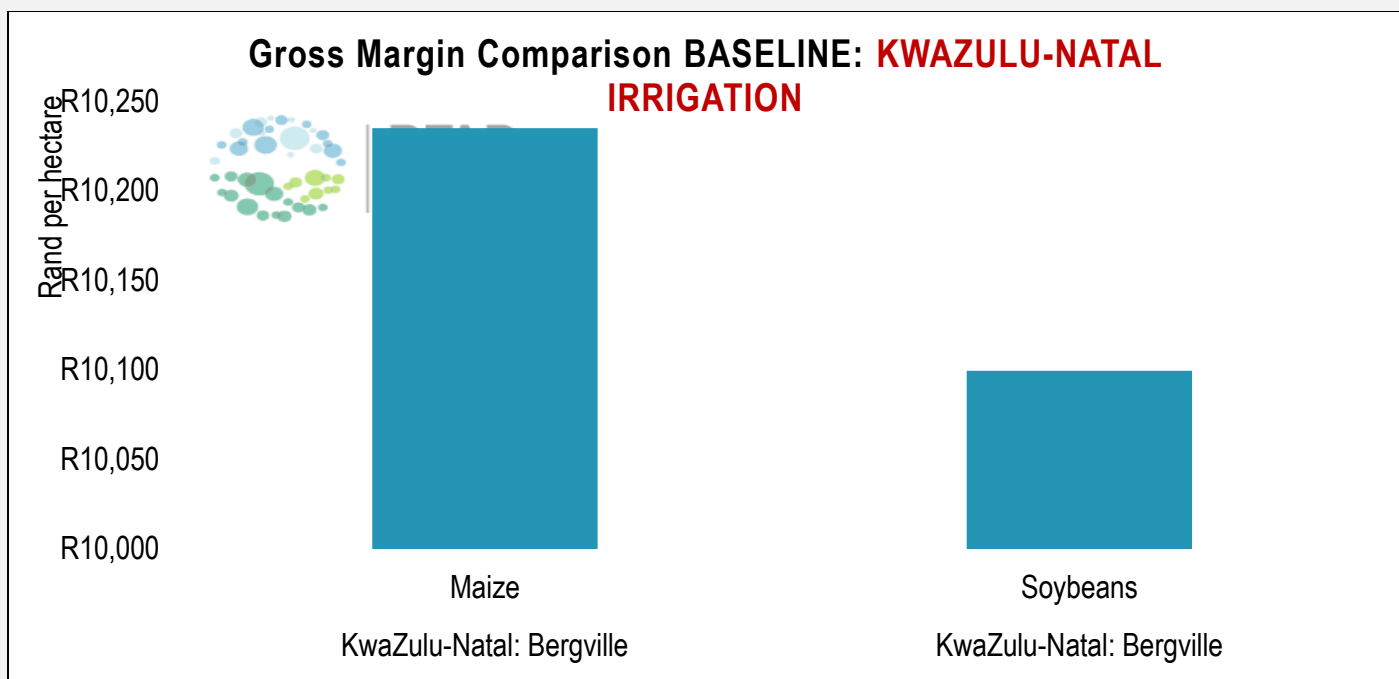


Figure 3.2: Gross margin comparison – Baseline: KwaZulu-Natal: Berggrivier

MAIZE SENSIVITY ANALYSIS (GROSS MARGIN PER HECTARE): KWAZULU-NATAL:BERGVILLE										
PRODUCERS YIELD (T/HA)										
PRICE	10.50		11.00		11.50		12.00		12.50	
	R		R		R		R		R	
R2,855	R 1,153	R 2,580	R 4,008	R 5,435	R 6,862	R 8,290	R 9,717			
R2,955	R 2,203	R 3,680	R 5,158	R 6,635	R 8,112	R 9,590	R 11,067			
R3,055	R 3,253	R 4,780	R 6,308	R 7,835	R 9,362	R 10,890	R 12,417			
R3,155	R 4,303	R 5,880	R 7,458	R 9,035	R 10,612	R 12,190	R 13,767			
R3,255	R 5,353	R 6,980	R 8,608	R 10,235	R 11,862	R 13,490	R 15,117			
R3,355	R 6,403	R 8,080	R 9,758	R 11,435	R 13,112.44	R 14,790	R 16,467			
R3,455	R 7,453	R 9,180	R 10,908	R 12,635	R 14,362	R 16,090	R 17,817			
R3,555	R 8,503	R 10,280	R 12,058	R 13,835	R 15,612	R 17,390	R 19,167			
R3,655	R 9,553	R 11,380	R 13,208	R 15,035	R 16,862	R 18,690	R 20,517			

SOYBEANS SENSIVITY ANALYSIS (GROSS MARGIN PER HECTARE): KWAZULU-NATAL:BERGVILLE										
PRODUCERS YIELD (T/HA)										
PRICE	3.25		3.50		3.75		4.00		4.25	
	R		R		R		R		R	
R6,903	R 3,322	R 5,048	R 6,774	R 8,499	R 10,225	R 11,951	R 13,677			
R7,003	R 3,647	R 5,398	R 7,149	R 8,899	R 10,650	R 12,401	R 14,152			
R7,103	R 3,972	R 5,748	R 7,524	R 9,299	R 11,075	R 12,851	R 14,627			
R7,203	R 4,297	R 6,098	R 7,899	R 9,699	R 11,500	R 13,301	R 15,102			
R7,303	R 4,622	R 6,448	R 8,274	R 10,099	R 11,925	R 13,751	R 15,577			
R7,403	R 4,947	R 6,798	R 8,649	R 10,499	R 12,350	R 14,201	R 16,052			
R7,503	R 5,272	R 7,148	R 9,024	R 10,899	R 12,775	R 14,651	R 16,527			
R7,603	R 5,597	R 7,498	R 9,399	R 11,299	R 13,200	R 15,101	R 17,002			
R7,703	R 5,922	R 7,848	R 9,774	R 11,699	R 13,625	R 15,551	R 17,477			

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): KWAZULU-NATAL:BERGVILLE

PRICE (R/TON)														
YIELD	R	7,003	R	7,103	R	7,203	R	7,303	R	7,403	R	7,503	R	7,603
3.00	-R	8,338	-R	8,038	-R	7,738	-R	7,438	-R	7,138	-R	6,838	-R	6,538
3.25	-R	6,588	-R	6,263	-R	5,938	-R	5,613	-R	5,288	-R	4,963	-R	4,638
3.50	-R	4,837	-R	4,487	-R	4,137	-R	3,787	-R	3,437	-R	3,087	-R	2,737
3.75	-R	3,086	-R	2,711	-R	2,336	-R	1,961	-R	1,586	-R	1,211	-R	836
4.00	-R	1,336	-R	936	-R	536	-R	136	R	264	R	664	R	1,064
4.25	R	415	R	840	R	1,265	R	1,690	R	2,115	R	2,540	R	2,965
4.50	R	2,166	R	2,616	R	3,066	R	3,516	R	3,966	R	4,416	R	4,866
4.75	R	3,917	R	4,392	R	4,867	R	5,342	R	5,817	R	6,292	R	6,767
5.00	R	5,667	R	6,167	R	6,667	R	7,167	R	7,667	R	8,167	R	8,667

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

North-West

Table 3.3: Income & cost budgets for maize, soybeans, sunflower & sorghum for North West: Brits region - Irrigation

Area		North West: Brits / Northam / Koedoeskop			
Crop		Maize	Soybeans	Sunflower	Sorghum
Production System		Irrigation	Irrigation	Irrigation	Irrigation
1) INCOME					
Yield: Deterministic	T/HA	12.00	3.80	3.00	7.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520	R8,180	R5,324
Total deductions	R/TON	R282	R129	R327	R69
- Transport differential	R/TON	R199	R-	R225	R-
- Grade differential	R/TON	R14	R-	R-	R-
- Handling & commission	R/TON	R69	R69	R102	R69
- Seed breeding & technology levy	R/TON	R-	R60	R-	R-
Price premiums	R/TON	R-	R-	R-	R-
Net Farm Gate Price	R/TON	R3,517	R7,391	R7,854	R5,255
GROSS INCOME	R/HA	R42,198	R28,084	R23,561	R36,783
2) VARIABLE EXPENDITURES					
Contracting	R/HA	R881	R923	R-	R-
Crop insurance	R/HA	R1,435	R1,545	R565	R936
Fertilizer	R/HA	R9,263	R3,056	R2,741	R5,611
Lime	R/HA	R679	R-	R-	R441
Seed	R/HA	R5,621	R2,551	R1,136	R1,035
Fuel	R/HA	R1,726	R1,477	R1,463	R1,548
Herbicide	R/HA	R1,142	R989	R842	R1,169
Insecticide/Fungicide	R/HA	R876	R897	R496	R590
Marketing costs	R/HA	R-	R-	R-	R-
Repairs and maintenance	R/HA	R978	R860	R1,168	R860
Casual labour	R/HA	R575	R-	R-	R166
Aerial spray	R/HA	R-	R-	R-	R261
Irrigation Electricity	R/HA	R4,961	R4,059	R2,255	R3,157
Water	R/HA	R1,341	R1,098	R610	R854
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R1,128	R944	R575	R759
TOTAL VARIABLE EXPENDITURE	R/HA	R30,605	R18,398	R11,851	R17,387
TOTAL VARIABLE EXPENDITURE	R/TON	R2,550	R4,841	R3,950	R2,484
3.1) GROSS MARGIN:	R/HA	R11,593	R9,687	R11,710	R19,396
3.2) GROSS MARGIN:	R/TON	R966	R2,549	R3,903	R2,771
BREAK-EVEN YIELD	T/HA	8.70	2.49	1.51	3.31
BREAK-EVEN PRICE	R/TON	R2,550	R4,841	R3,950	R2,484

Source: BFAP, GSA, NWK & Individual Farmers, 2024

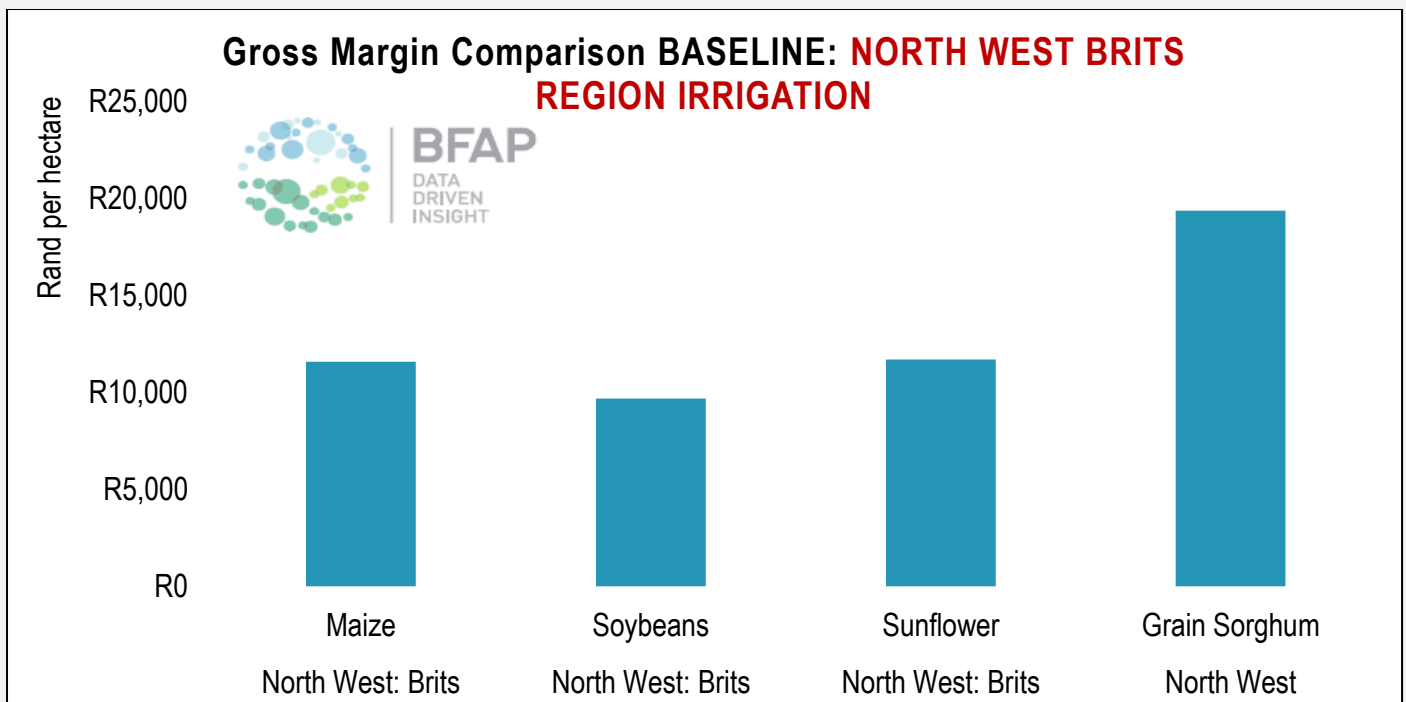


Figure 3.3: Gross margin comparison – Baseline: North West: Brits Region

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST BRITS															
PRODUCERS YIELD (T/HA)															
PRICE		10.50		11.00		11.50		12.00		12.50		13.00		13.50	
R3,117	R	2,118	R	3,677	R	5,235	R	6,793	R	8,351	R	9,910	R	11,468	
R3,217	R	3,168	R	4,777	R	6,385	R	7,993	R	9,601	R	11,210	R	12,818	
R3,317	R	4,218	R	5,877	R	7,535	R	9,193	R	10,851	R	12,510	R	14,168	
R3,417	R	5,268	R	6,977	R	8,685	R	10,393	R	12,101	R	13,810	R	15,518	
R3,517	R	6,318	R	8,077	R	9,835	R	11,593	R	13,351	R	15,110	R	16,868	
R3,617	R	7,368	R	9,177	R	10,985	R	12,793	R	14,601.46	R	16,410	R	18,218	
R3,717	R	8,418	R	10,277	R	12,135	R	13,993	R	15,851	R	17,710	R	19,568	
R3,817	R	9,468	R	11,377	R	13,285	R	15,193	R	17,101	R	19,010	R	20,918	
R3,917	R	10,518	R	12,477	R	14,435	R	16,393	R	18,351	R	20,310	R	22,268	

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST BRITS															
PRODUCERS YIELD (T/HA)															
PRICE		3.00		3.25		3.50		3.80		4.00		4.25		4.50	
R6,991	R	2,574	R	4,322	R	6,069	R	8,167	R	9,565	R	11,312	R	13,060	
R7,091	R	2,874	R	4,647	R	6,419	R	8,547	R	9,965	R	11,737	R	13,510	
R7,191	R	3,174	R	4,972	R	6,769	R	8,927	R	10,365	R	12,162	R	13,960	
R7,291	R	3,474	R	5,297	R	7,119	R	9,307	R	10,765	R	12,587	R	14,410	
R7,391	R	3,774	R	5,622	R	7,469	R	9,687	R	11,165	R	13,012	R	14,860	
R7,491	R	4,074	R	5,947	R	7,819	R	10,067	R	11,565	R	13,437	R	15,310	
R7,591	R	4,374	R	6,272	R	8,169	R	10,447	R	11,965	R	13,862	R	15,760	
R7,691	R	4,674	R	6,597	R	8,519	R	10,827	R	12,365	R	14,287	R	16,210	
R7,791	R	4,974	R	6,922	R	8,869	R	11,207	R	12,765	R	14,712	R	16,660	

SUNFLOWER SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): NORTH WEST BRITS

PRODUCERS YIELD (T/HA)															
PRICE		2.30		2.55		2.80		3.00		3.30		3.55		3.80	
R7,454	R	5,293	R	7,156	R	9,019	R	10,510	R	12,746	R	14,610	R	16,473	
R7,554	R	5,523	R	7,411	R	9,299	R	10,810	R	13,076	R	14,965	R	16,853	
R7,654	R	5,753	R	7,666	R	9,579	R	11,110	R	13,406	R	15,320	R	17,233	
R7,754	R	5,983	R	7,921	R	9,859	R	11,410	R	13,736	R	15,675	R	17,613	
R7,854	R	6,213	R	8,176	R	10,139	R	11,710	R	14,066	R	16,030	R	17,993	
R7,954	R	6,443	R	8,431	R	10,419	R	12,010	R	14,396	R	16,385	R	18,373	
R8,054	R	6,673	R	8,686	R	10,699	R	12,310	R	14,726	R	16,740	R	18,753	
R8,154	R	6,903	R	8,941	R	10,979	R	12,610	R	15,056	R	17,095	R	19,133	
R8,254	R	7,133	R	9,196	R	11,259	R	12,910	R	15,386	R	17,450	R	19,513	

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): NORTH WEST BRITS

PRICE (R/TON)														
YIELD	R	7,091	R	7,191	R	7,291	R	7,391	R	7,491	R	7,591	R	7,691
2.75	-R	10,492	-R	10,217	-R	9,942	-R	9,667	-R	9,392	-R	9,117	-R	8,842
3.00	-R	8,719	-R	8,419	-R	8,119	-R	7,819	-R	7,519	-R	7,219	-R	6,919
3.25	-R	6,946	-R	6,621	-R	6,296	-R	5,971	-R	5,646	-R	5,321	-R	4,996
3.50	-R	5,174	-R	4,824	-R	4,474	-R	4,124	-R	3,774	-R	3,424	-R	3,074
3.80	-R	3,047	-R	2,667	-R	2,287	-R	1,907	-R	1,527	-R	1,147	-R	767
4.00	-R	1,629	-R	1,229	-R	829	-R	429	-R	29	R	371	R	771
4.25	R	144	R	569	R	994	R	1,419	R	1,844	R	2,269	R	2,694
4.50	R	1,917	R	2,367	R	2,817	R	3,267	R	3,717	R	4,167	R	4,617
4.75	R	3,689	R	4,164	R	4,639	R	5,114	R	5,589	R	6,064	R	6,539

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

Table 3.4: Income & cost budgets for maize & soybeans for Limpopo: Loskop region - Irrigation

Area		Limpopo: Loskop	
Crop		Maize	Soybeans
Production System		Irrigation	Irrigation
1) INCOME			
Yield: Deterministic	T/HA	12.00	4.00
SAFEX SIMULATED PRICE / PRODUCER PRICE: 2025	R/TON	R3,798	R7,520
Total deductions	R/TON	R439	R129
- Transport differential	R/TON	R356	R-
- Grade differential	R/TON	R14	R-
- Handling & commission	R/TON	R69	R69
- Seed breeding & technology levy	R/TON	R-	R60
Price premiums	R/TON	R-	R-
Net Farm Gate Price	R/TON	R3,360	R7,391
GROSS INCOME	R/HA	R40,314	R29,562
2) VARIABLE EXPENDITURES			
Contracting	R/HA	R881	R923
Crop insurance	R/HA	R1,371	R1,626
Fertilizer	R/HA	R9,263	R3,327
Lime	R/HA	R863	R-
Seed	R/HA	R5,621	R2,551
Fuel	R/HA	R1,726	R1,477
Herbicide	R/HA	R1,142	R989
Insecticide/Fungicide	R/HA	R876	R441
Marketing costs	R/HA	R-	R-
Repairs and maintenance	R/HA	R1,031	R1,057
Casual labour	R/HA	R575	R-
Aerial spray	R/HA	R-	R-
Irrigation Electricity	R/HA	R5,953	R4,284
Water	R/HA	R1,610	R1,158
Other expenditure: Scheduling / Irrigation Equipment R&M	R/HA	R1,331	R990
TOTAL VARIABLE EXPENDITURE	R/HA	R32,242	R18,823
TOTAL VARIABLE EXPENDITURE	R/TON	R2,687	R4,706
3.1) GROSS MARGIN:	R/HA	R8,073	R10,739
3.2) GROSS MARGIN:	R/TON	R673	R2,685
BREAK-EVEN YIELD	T/HA	9.60	2.55
BREAK-EVEN PRICE	R/TON	R2,687	R4,706

Source: BFAP, GSA & Individual Farmers, 2024

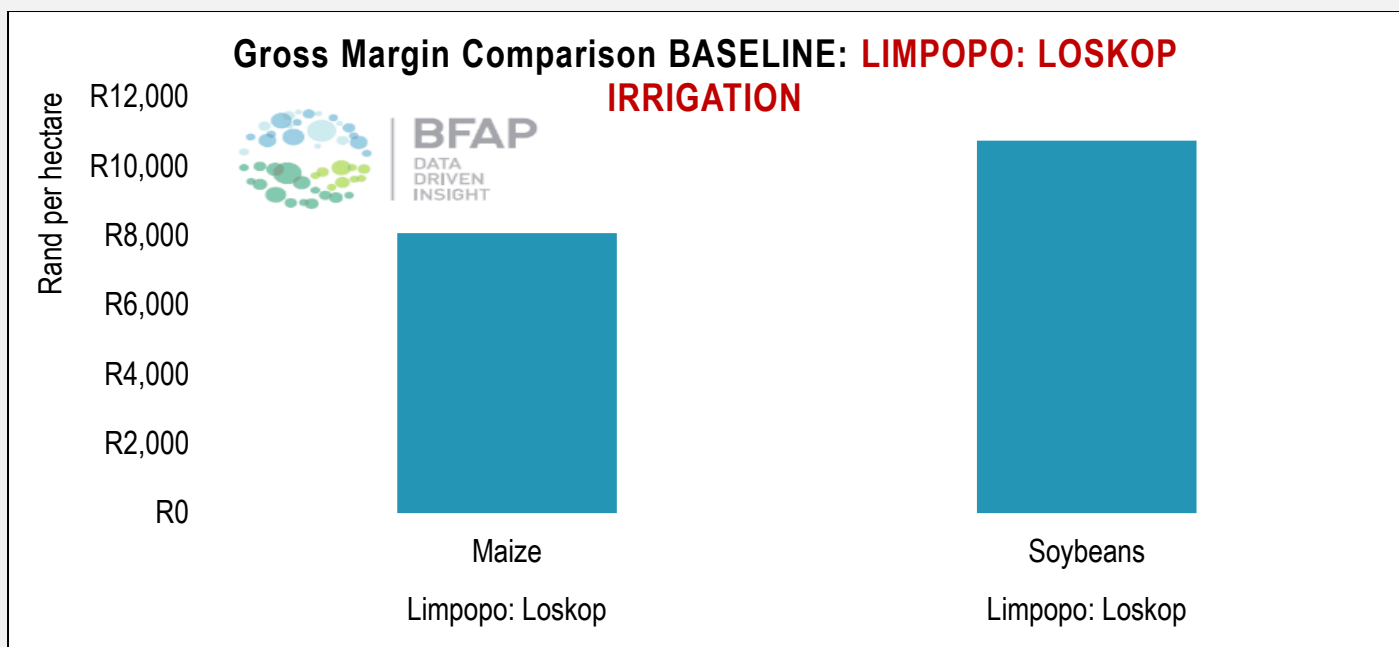


Figure 3.4: Gross margin comparison – Baseline: Limpopo: Loskop Region

MAIZE SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): LOSKOP AREA											
PRODUCERS YIELD (T/HA)											
PRICE	10.50	11.00	11.50	12.00	12.50	13.00	13.50				
R2,960 -R	1,166	R 313	R 1,793	R 3,273	R 4,753	R 6,233	R 7,712				
R3,060 -R	116	R 1,413	R 2,943	R 4,473	R 6,003	R 7,533	R 9,062				
R3,160 R	934	R 2,513	R 4,093	R 5,673	R 7,253	R 8,833	R 10,412				
R3,260 R	1,984	R 3,613	R 5,243	R 6,873	R 8,503	R 10,133	R 11,762				
R3,360 R	3,034	R 4,713	R 6,393	R 8,073	R 9,753	R 11,433	R 13,112				
R3,460 R	4,084	R 5,813	R 7,543	R 9,273	R 11,003	R 12,733	R 14,462				
R3,560 R	5,134	R 6,913	R 8,693	R 10,473	R 12,253	R 14,033	R 15,812				
R3,660 R	6,184	R 8,013	R 9,843	R 11,673	R 13,503	R 15,333	R 17,162				
R3,760 R	7,234	R 9,113	R 10,993	R 12,873	R 14,753	R 16,633	R 18,512				

SOYBEANS SENSITIVITY ANALYSIS (GROSS MARGIN PER HECTARE): LIMPOPO: LOSKOP AREA											
PRODUCERS YIELD (T/HA)											
PRICE	3.25	3.50	3.75	4.00	4.25	4.50	4.75				
R6,991 R	3,896	R 5,644	R 7,391	R 9,139	R 10,887	R 12,634	R 14,382				
R7,091 R	4,221	R 5,994	R 7,766	R 9,539	R 11,312	R 13,084	R 14,857				
R7,191 R	4,546	R 6,344	R 8,141	R 9,939	R 11,737	R 13,534	R 15,332				
R7,291 R	4,871	R 6,694	R 8,516	R 10,339	R 12,162	R 13,984	R 15,807				
R7,391 R	5,196	R 7,044	R 8,891	R 10,739	R 12,587	R 14,434	R 16,282				
R7,491 R	5,521	R 7,394	R 9,266	R 11,139	R 13,012	R 14,884	R 16,757				
R7,591 R	5,846	R 7,744	R 9,641	R 11,539	R 13,437	R 15,334	R 17,232				
R7,691 R	6,171	R 8,094	R 10,016	R 11,939	R 13,862	R 15,784	R 17,707				
R7,791 R	6,496	R 8,444	R 10,391	R 12,339	R 14,287	R 16,234	R 18,182				

SOYBEANS MARGIN ABOVE / BELOW MAIZE (GROSS MARGIN PER HECTARE): LIMPOPO: LOSKOP AREA											
PRICE (R/TON)											
YIELD	R 7,091	R 7,191	R 7,291	R 7,391	R 7,491	R 7,591	R 7,691				
3.00	-R 5,624	-R 5,324	-R 5,024	-R 4,724	-R 4,424	-R 4,124	-R 3,824				
3.25	-R 3,852	-R 3,527	-R 3,202	-R 2,877	-R 2,552	-R 2,227	-R 1,902				
3.50	-R 2,079	-R 1,729	-R 1,379	-R 1,029	-R 679	-R 329	R 21				
3.75	-R 307	R 68	R 443	R 818	R 1,193	R 1,568	R 1,943				
4.00	R 1,466	R 1,866	R 2,266	R 2,666	R 3,066	R 3,466	R 3,866				
4.25	R 3,239	R 3,664	R 4,089	R 4,514	R 4,939	R 5,364	R 5,789				
4.50	R 5,011	R 5,461	R 5,911	R 6,361	R 6,811	R 7,261	R 7,711				
4.75	R 6,784	R 7,259	R 7,734	R 8,209	R 8,684	R 9,159	R 9,634				
5.00	R 8,557	R 9,057	R 9,557	R 10,057	R 10,557	R 11,057	R 11,557				

Notes:

- 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.
- Other macro- & microelements such as calcium, magnesium and zinc are included in the fertiliser costs.
- The cost of fuel includes pre-harvest and harvesting costs with the assumption that own machinery is used.
- The cost for soybean seed reflects a combination of own- and purchased seed.
- There will be large fluctuations for insurance cost (hail) based on the associated risk in respective areas. It is advised that producers adjust this cost based on their individual premiums.
- It is important to note that overhead costs are not included and should be accounted for.

Summary: 2024/25 Income & Cost Budgets

Figures 4.1 - 4.4 provide a summary of the gross margin performance of dryland and irrigated crops over the period from 2018 (adjusted to account for actual yields and crop prices) to 2026 (2025 and 2026 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. Furthermore, uncertainty remains regarding the forecasted La Nina and its effect on yields and a potentially drier- and warmer period during planting, as forecasted by the South African Weather Service (September, 2024). For the gross margins presented in this report, target yields were assumed.

The realized effects of El Niño impacted dryland gross margins, which continued to decline during the 2023/24 production season. In contrast, summer crops under irrigation were better able to mitigate the effects of the drought, resulting in less severe yield reductions. Combined with high crop prices, this allowed for improved margins compared to the 2022/23 season. However, average dryland gross margins across six crops in seven agro-ecological regions are projected to decline further in the 2024/25 production season. Similarly, the average irrigation gross margins across four crops are expected to decrease significantly, assuming trend yields and substantially lower crop prices. Both dryland and irrigation gross margins are anticipated to experience a modest recovery in 2025/26.

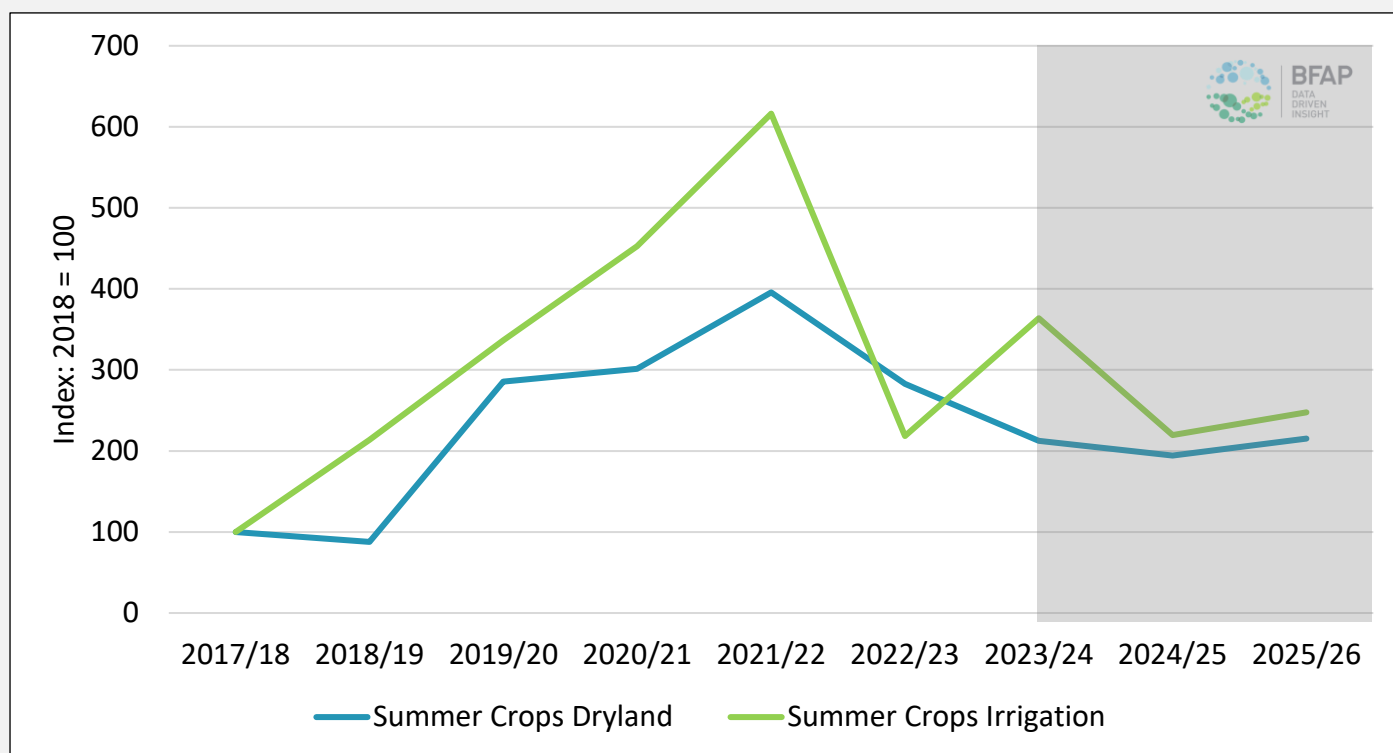


Figure 4.1: Gross margin index between dryland & irrigated summer crops: 2018-2026

In the seven agro-ecological dryland regions, maize gross margins are projected to decline by 23%, while sunflower margins are expected to increase by 42%, and soybean margins are anticipated to remain steady in the 2024/25 season compared to 2023/24. As a result, both maize and soybean gross margins are expected to fall below sunflower margins in the 2024/25 production season. This shift is attributed to the anticipated price reductions for maize and soybeans, along with an assumption that yields will return to trend levels. In 2025/26, maize is expected to outperform oilseeds.

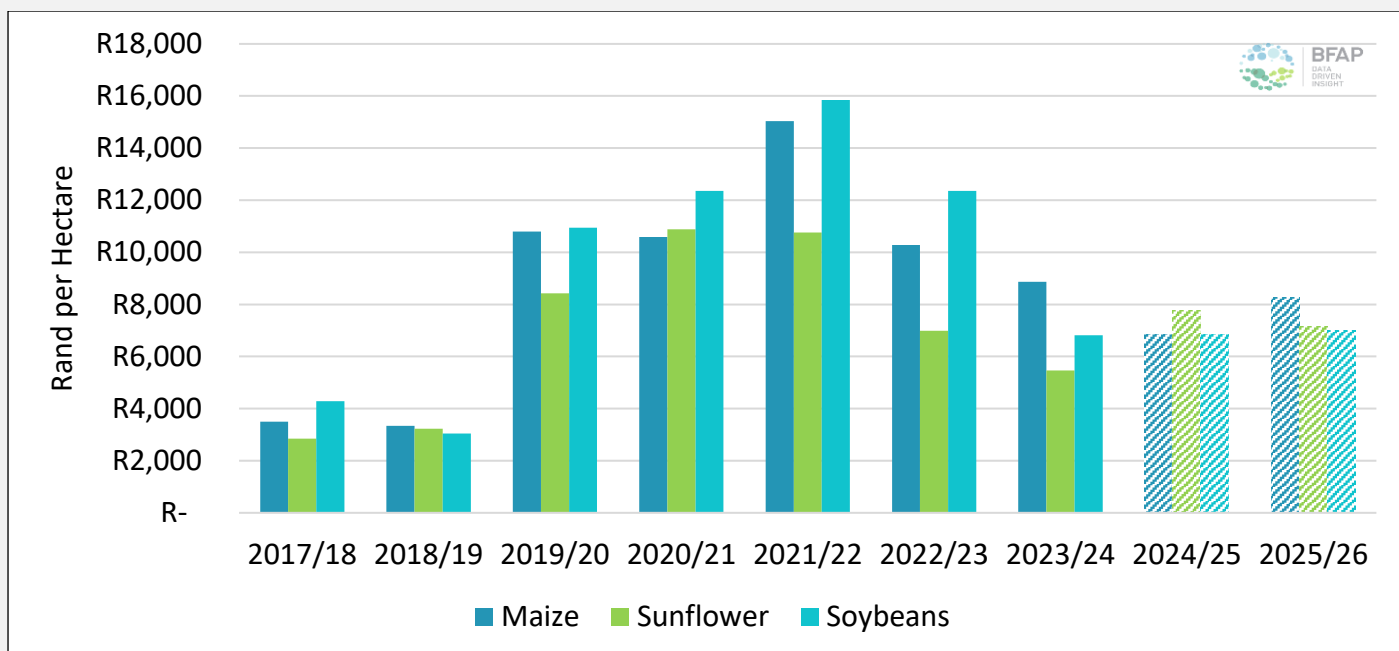


Figure 4.2: Dryland - **Deterministic** weighted gross margin average by crop type: 2018-2026

Figure 4.3 illustrates the changes in yield, price, cost, and gross margins from 2023 to 2024, and projections for 2025, focusing on the eastern and western regions for maize and soybean production, as well as sunflower production. From 2023 to 2024, production costs generally declined; however, the drought caused a reduction in yields. Despite crop prices reacting to the poor harvest by increasing, gross margins still declined. The drought had a more severe impact in the western parts of South Africa compared to the east. Soybeans in the west were particularly hard hit, with a 70% decline in gross margins, though they are expected to recover in 2025 with a projected 60% increase. On the other hand, with declining crop prices, yellow maize in the eastern regions is expected to see lower gross margins in 2025 compared to 2024.

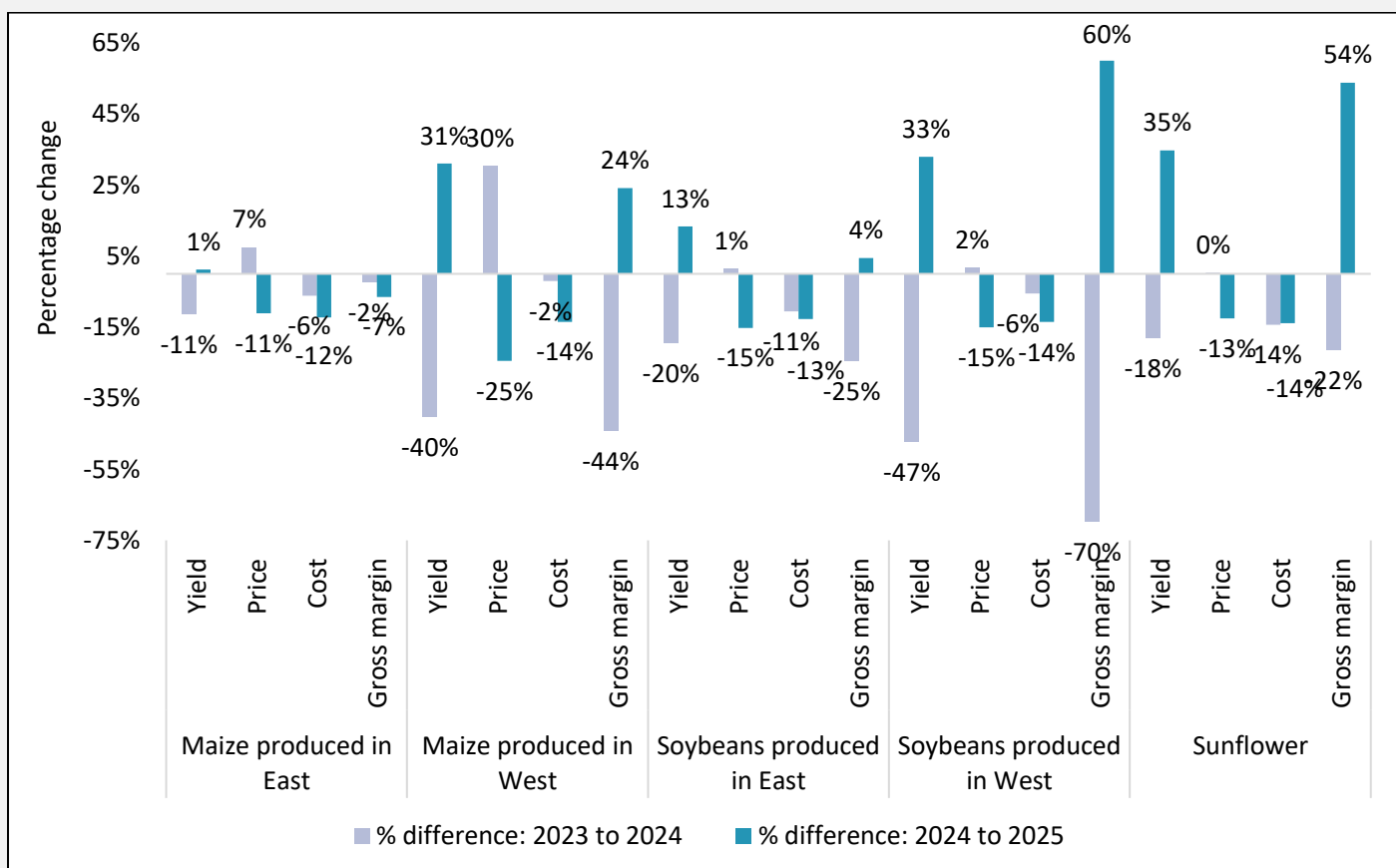


Figure 4.3: Summer crops: Farm-level indicators between 2023, 2024 & 2025 Percentage change between production seasons

Irrigation gross margins improved slightly after the 2022/23 production season, primarily due to high crop prices driven by the drought and poor dryland harvests. In 2023/24, maize achieved the highest margins, followed by soybeans and sunflower. A similar trend is expected in 2024/25 and 2025/26, though at lower levels due to decreasing crop prices, persistently high input costs, and trend-level yields.

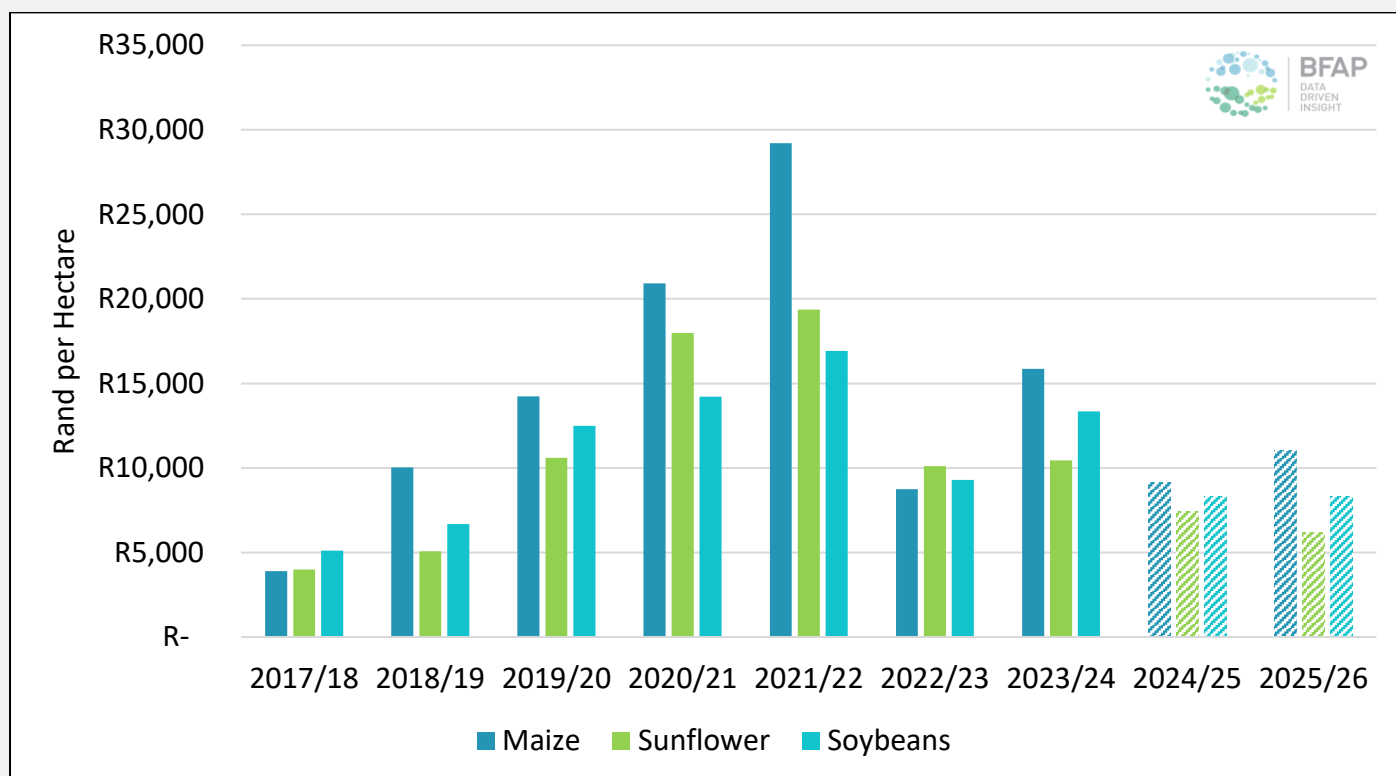


Figure 4.4: Irrigation - **Deterministic** gross margin average by crop type: 2018-2026