



BFAP
DATA
DRIVEN
INSIGHT



BFAP — AGRICULTURAL OUTLOOK
BASELINE 2026

*Exploring agriculture's future to 2050: reconciling an export strategy
with greater food security*



BFAP

DATA
DRIVEN
INSIGHT



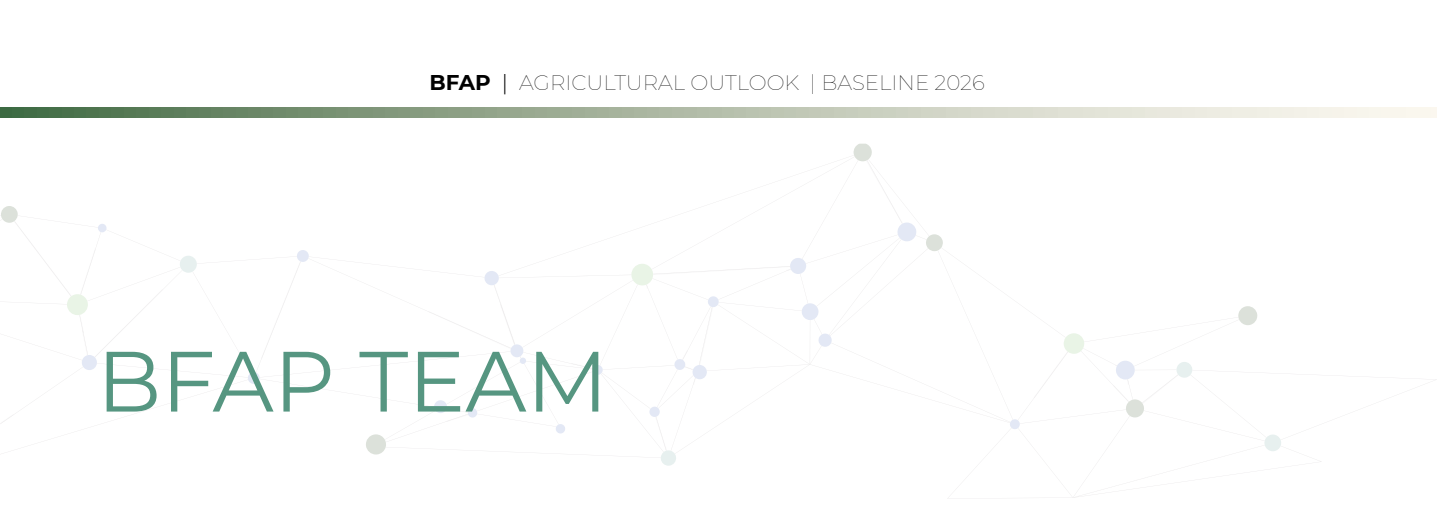
BFAP — AGRICULTURAL OUTLOOK BASELINE 2026

*Exploring agriculture's future to 2050: reconciling an export strategy
with greater food security*



Western Cape
Government
FOR YOU

Agriculture



BFAP TEAM

BOARD OF DIRECTORS

Adv. Annamarie van der Merwe (Chair)
 Prof. Ferdi Meyer
 Dr. Tracy Davids

Dr. Mmatlou Kalaba
 Mr. Wandile Sihlobo
 Dr. Gerhard Coetzee

BFAP GROUP

Mr. Desmond Annandale
 Ms. Khanimamba Baloyi
 Ms. Dipuo Boroko
 Dr. Kandas Cloete
 Dr. Tracy Davids
 Ms. Marion Delpont
 Dr. Daléne Flynn
 Ms. Henja Glas
 Dr. Marnus Gouse
 Ms. Sandy Jackson
 Dr. Mmatlou Kalaba
 Ms. Lianda Louw
 Ms. Marilette Maritz
 Prof. Ferdi Meyer
 Mr. Light Ngobeni
 Ms. Helga Ottermann
 Mr. Louw Pienaar
 Mr. Jean-Pierre Rossouw
 Mr. Gerhard van der Burgh
 Dr. Divan van der Westhuizen
 Mr. Albert van Niekerk
 Dr. Hester Vermeulen

Analyst: Livestock
 Analyst: Agri-socio Economics
 Analyst: Commodity Markets & Foresight
 Senior Analyst: Horticulture
 Commodity Markets & Foresight Lead
 Data Science Lead
 Office and Administration
 Analyst: Data Science
 Operations Manager
 Agri-socio Economics Lead
 International Trade Analyses Lead
 Analyst: Agri-socio Economics
 Finance
 Value Chain Analytics Lead
 Intern: Agri-socio Economics
 Analyst: Farm and Production Analytics
 Senior Analyst: Value Chain Analytics
 Systems Specialist
 IVIS Lead
 Farm and Production Analytics Lead
 IVIS Systems Manager
 Consumer & Food Economics Lead

BFAP COLLABORATORS

Prof. Julian Binfield
Prof. Andre Jooste
Prof. Johann Kirsten
Ms. Bongiswa Matoti
Dr. Holger Matthey
Dr. Karl Pauw
Prof. Pieter Swanepoel
Dr. James Thurlow
Dr. Dirk Troskie
Dr. Melissa vd Merwe
Prof. Nick Vink
Prof. Patrick Westhoff

FAPRI – University of Missouri, USA
Stellenbosch University
Bureau for Economic Research
Western Cape Department of Agriculture
FAO – Rome, Italy
IFPRI – Washington DC
Stellenbosch University
IFPRI – Washington DC
Independent
Stellenbosch University
Stellenbosch University
FAPRI – University of Missouri, USA

This publication and all of its contents are the exclusive property of BFAP NPC. No part of this document may be redistributed, reproduced, or hosted on any other website, platform, or server without the express prior written permission from BFAP. Any unauthorised use, distribution, or hosting is strictly prohibited.

Any use of this report or its contents must be appropriately referenced as: "BFAP Baseline 2026."



ACKNOWLEDGEMENTS

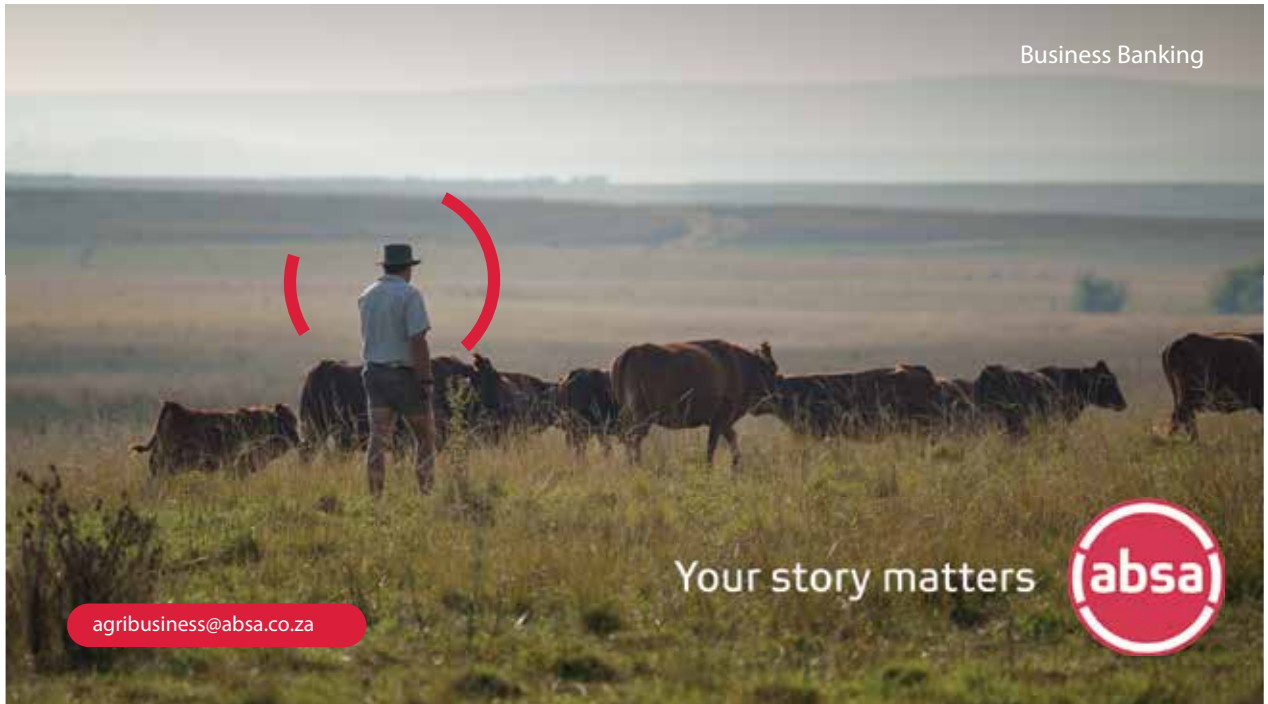
MAIN SPONSORS OF THE BFAP BASELINE

ABSA Agribusiness
Department of Agriculture, Western Cape

OTHER COLLABORATORS

agri benchmark, Thünen Institute
African Network of Agricultural Policy Research
Institutes (ANAPRI)
Agricultural Research Council (ARC)
Alliance for a Green Revolution in Africa (AGRA)
Agricultural Business Chamber (Agbiz)
Bayer
Berries ZA
Bureau for Economic Research (BER),
Stellenbosch University
Citrus Growers Association of Southern Africa
Citrus Growers Association of Southern Africa
Grower Development Company
Corteva Agriscience
Department of Economic Development &
Tourism, Western Cape
Food and Agricultural Policy Research Institute
(FAPRI), University of Missouri
Food and Agricultural Organization of the
United Nations (FAO)
Fruit SA
Gates Foundation
GWK Ltd.
Grain SA
Hortfin
Hortgro Services (SAAPPA & SASPA)
International Food Policy Research Institute
(IFPRI)

John Deere
Maize Trust
Milk Producers Organisation (MPO)
National Agricultural Marketing Council (NAMC)
National Department of Agriculture, Land Reform and
Rural Development (DALRRD)
National Department of Trade, Industry and Competition
(DTIC)
National Emergent Red Meat Producers Organisation
(NERPO)
Nedbank Ltd
NWK Ltd.
Oilseeds Advisory Committee (OAC)
Overberg Agri
Potatoes SA (PSA)
Protein Research Foundation (PRF)
Public Investment Corporation (PIC)
Red Meat Abattoir Association (RMAA)
Red Meat Industry Services (RMIS)
Red Meat Producers' Organisation (RPO)
Sasol Agriculture Trust
Senwes Ltd.
South African Cane Growers' Association
South African Feedlot Association (SAFA)
South African Grain Information Service (SAGIS)
South African Milk Processors Association (SAMPRO)
South African Poultry Association (SAPA)
South African Pork Producers Organisation (SAPPO)
South African Sugar Association (SASA)
South African Table Grape Industry (SATI)
South African Wine Industry Information & Systems
(SAWIS)
Stellenbosch University
University of Pretoria
VKB



Empowering Africa's tomorrow together ... one story at a time

As we mark 23 years of the Bureau for Food and Agricultural Policy (BFAP), we reflect on the enduring value of its work in supporting agricultural and food system planning in South Africa. Since its inception, BFAP has delivered rigorous, evidence-based insights that are vital for guiding stakeholders across the value chain; from policymakers and agribusiness leaders to producers and development partners.

In a sector marked by growing complexity and volatility, the BFAP Baseline has served as a reliable compass. Over the years, it has helped the industry navigate challenges such as recurring foot-and-mouth disease and avian influenza outbreaks, port delays, policy developments such as land reform and water rights, and the mounting effects of climate change, including erratic rainfall and extreme weather. BFAP has also provided clarity on global trade dynamics, including shifts in the United States' trade stance, and the impacts of geopolitical conflicts which have influenced market access and competitiveness.

Beyond identifying risks, BFAP has consistently illuminated opportunities for resilience and growth. Its contributions to the Agriculture and Agro-processing Master Plan (AAMP) underscore its strategic relevance in shaping inclusive development and investment in the sector.

This year's outlook continues that legacy, reminding us that data-driven planning is not optional, but essential for strategic foresight, inclusive growth and long-term sustainability.

At Absa, we commend BFAP for its commitment to excellence, relevance and collaboration. Thank you for keeping the sector informed, focused and future-ready.

Absa AgriBusiness Management Team



Supporting evidence-based decision making for better service delivery **For YOU.**

The Constitution of the Republic of South Africa identifies agriculture as a concurrent function shared between the national and provincial spheres of government. Hence, since provincialisation, the Western Cape Department of Agriculture (WCDoA) has been exploring various approaches to not only gather raw data but also to transform it into information and intelligence which can support decision-making.

This journey took the department trusting its own devices as guided by its mandate, to work closely with all key stakeholders by pooling resources with other government institutions, the private sector and universities to support cutting-edge research undertaken by the Bureau for Food and Agricultural Policy (BFAP). Since its establishment, BFAP has contributed immensely to the sector, with intelligence

gathered through its local and international linkages as well as its own set of models and modelling capacity. BFAP's annual baseline launch marks an important event in the annual calendar of the WCDoA.

The research undertaken by BFAP provide foresight on developments in the agricultural sector. The Western Cape's socio- economy is expected to strengthen over the coming decades, making agility crucial in this complex sector. Institutions like BFAP provide valuable intelligence that informs decisions at both firm and policy levels. As founding members of BFAP, the WCDoA look forward to strengthening collaboration and exploring new technologies and additional fields of interest, as we navigate these unpredictable times together.





FOREWORD

The **Bureau for Food and Agricultural Policy (BFAP)**, established in 2004, serves the agro-food, fibre and beverage sectors in South Africa and the rest of Africa.

Our purpose is to inform better decision-making by providing unique insights gained through rigorous analyses, supported by credible databases, a combination of integrated models and considerable experience. Over more than 20 years, the Bureau has developed a distinct value proposition to deliver a holistic solution to public sector and private clients active in the agricultural sector and related value chains. This offering is complemented through BFAP's investment in the Integrated Value Information System (IVIS), a geo-spatial platform which further augments BFAP's product offering by providing enhanced visual systems-solutions to the integration of data and insights to support strategic decision-making along multi-dimensional value chains.

The BFAP Group consists of a team of experienced experts with a range of multi-disciplinary skills including agricultural economics, food science, mathematics and data science, engineering, supply chain management, socio-economic impact assessment, systems technology, and geo-informatics. We fundamentally believe that a competitive and thriving agricultural sector with its related value chains is built on long-run partnerships. Hence, BFAP has developed a well-

established network of local and international collaborators and partners in the public and private sector. This includes long-standing partnerships with private sector clients, research partners like the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri in the USA, the Food and Agricultural Organisation of the United Nations (FAO) in Rome, the Organisation for Economic Cooperation and Development (OECD) in Paris, and the International Food Policy Research Institute (IFPRI) in Washington, DC. BFAP is also one of the founding members and partners of the African Network of Agricultural Policy Research Institutes (ANAPRI, formerly ReNAPRI). As a team and as a network, we pool our knowledge and experience to offer the best possible insights and access to a unique high value network.

BFAP acknowledges and appreciates the shared insight of numerous industry specialists and collaborators. The financial support from the Western Cape Department of Agriculture and ABSA Agribusiness towards the development and publishing of this Baseline is also gratefully acknowledged.

Although all industry partners' comments and suggestions are taken into consideration, BFAP's own views are presented in this Baseline publication.

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 because 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 by BFAP at any time without notice after publication.

EXECUTIVE SUMMARY

The 2026 BFAP Baseline highlights a South African agricultural sector that remains resilient, globally competitive, and well positioned for future growth if the many available opportunities are exploited. Despite operating in an increasingly complex domestic and global environment, agriculture continues to outperform most sectors of the economy, expanding by an average of 3% per year since the launch of the National Development Plan (NDP) in 2012 while the broader economy grew by less than 1% annually. The sector has achieved substantial productivity gains, become a cornerstone of international trade with a growing trade surplus and foreign exchange earnings, and consistently supplied affordable food to domestic consumers despite the many shocks to the farm economy that have emerged in rapid succession. Several NDP objectives for 2030 have already been exceeded, such as the significant investment in expansion of high-value irrigated commodities. Others are making good progress, such as increasing scale and commercial orientation amongst black farmers, who are also increasingly contributing to employment targets.

Several objectives, however, are unlikely to be achieved by the 2030 target date. A key underlying constraint has been the failure to realise the broader macroeconomic assumptions of the NDP, particularly related to economic growth and employment. Weak governance, deteriorating infrastructure, and corruption and crime, coupled with global vulnerabilities exposed by the pandemic, regional armed conflicts, trade tensions, and weather-induced disruptions have affected participants across the agricultural value chains from the farm to the final consumer.

BFAP's foresight work has been widely used as a strategic reference point for the agricultural and agro-processing sectors, often serving as an "investment compass" that highlights future growth opportunities and the key drivers required to foster a more prosperous sector. Traditionally, the Baseline has addressed possible medium-term futures, but in this edition, in light of the significant socio-economic and political disruptions of recent years, the Baseline reflects on multiple time horizons. These include identification of short-term priorities, a fundamental 10-year baseline outlook, and an initial effort to extend the planning horizon toward 2050. Long-term considerations are more qualitative in nature, based on a range of megatrends that are expected to influence the structure, dynamics, competitiveness and sustainability of the agricultural sector going forward. It also highlights several subsector-specific priorities that can unlock Vision 2050 for a thriving and prosperous agricultural sector.

In the shorter term the sector remains challenged by weak domestic consumer spending power as well as the many domestic and global systemic shocks already mentioned. Immediate priorities in the livestock sector remain centred on addressing animal disease challenges and enabling the resumption of exports, with good

progress made in early 2026. In the field crop and horticulture subsectors, the combination of a declining price cycle and sharp increases in input costs continues to erode margins. Perishable products, in particular, remain hamstrung by operational and weather delays in the Port of Cape Town. Business risks remain high, with the emerging El Niño conditions in 2026/27 raising concerns related to yield impacts in the field crop sector and feed cost impacts in livestock.

Medium-term prospects are more encouraging, with real growth in agricultural GDP a distinct possibility, but only if there is an improvement in the current animal health crises through improved disease management; a normalisation in global input markets as the conflict in the Middle East settles; a further advancement in technology that brings efficiency gains; as well as some expected progress in port operations in the medium-term. Slow improvement in the domestic consumer environment further elevates the role of exports in unlocking value for producers and suggests that growth will continue to be export-led.

Across most industries, revenue growth is expected to moderate as prices continue to normalise. In livestock, a key factor underpinning the short-term declines and slower medium-term price gains is recovery in supply. Several livestock industries have transitioned successfully to net export status, with only pork and poultry still net importers. Export revenue has enabled producers to optimise carcass value through premiums on high-value cuts in relevant export markets, supporting profitability despite price pressure on domestic sales. By 2035, real gross production value of livestock is expected to exceed the average level from 2023-2025 base period by 4.4%. Most additional revenue will come from poultry, beef, milk and processed dairy. With feed prices also expected to be lower, the cycle is turning to a more profitable phase for livestock.

During the past seven years of elevated global commodity prices the area planted to major grains and oilseeds expanded by approximately 700 000 hectares. With prices now declining, some consolidation is expected, thus most production growth is expected to come from yield improvements. Nevertheless, the equilibrium for summer crop area has shifted upwards. While some of the area brought into production through the high price cycle is marginal and unlikely to remain in production, more than half is expected to remain cultivated because of advances in production practices and access to improved seed cultivars. Accordingly, most major grains and oilseeds are expected to remain in surplus position over the outlook, with wheat the major exception.

Projections reflect the assumption of stable weather conditions, implying that the average surplus could be smaller than the volumes exported in the recent past following successive bumper harvests. In reality, weather variability will continue to cause fluctuations around the projected trend and, based on historic deviations, export

volumes in favourable weather years could exceed the volumes observed in the recent past. The value of producing a consistent surplus for major field crops should not be underestimated. It keeps prices at or close to export parity levels, and forces producers to be efficient enough to compete in global markets. In turn, this enables the sector to provide affordable basic food staples for South African consumers, while also supporting the competitiveness of the livestock sector through affordable feed products. This benefit is now extended beyond staple grains to include major oilseeds and protein meal for animal feed, where South Africa has transitioned successfully to a position of competitive surplus production.

The horticultural sector has reached a crossroads. It possesses the biological capacity and technical expertise to cement its position as a global fresh fruit powerhouse, yet it faces mounting challenges that threaten its long-term competitiveness. Chief among these is the rising cost of doing business beyond the farm gate where inefficiencies in logistics, infrastructure, energy provision, and market access are increasingly eroding the margins needed to sustain growth and investment. After a sustained period of expansion, planted area has largely stabilised, with producers continuing to invest in orchard and vineyard replacement, but few signs of a net expansion in area planted. Instead, growth is expected to come from intensification, with significant yield improvements coming from a combination of maturing young orchards, improved cultivars and evolving production practices. Combined with investment into climate mitigation technologies and precision irrigation, this is also expected to unlock additional value through increased pack-out percentages that bolster total income per hectare. This improvement is critical given that major administered costs such as energy and labour are expected to continue increasing faster than output prices and general inflation.

In line with long-term trends in agricultural commodity markets, Baseline projections suggest that, notwithstanding typical weather-induced volatility, producer prices for most agricultural commodities will rise more slowly than general inflation over the coming decade. This is positive for food price inflation and ultimately underpins the sector's contribution to food security. However, rising costs of processing, packaging, logistics, and retail increasingly separate consumers from the efficiency gains achieved at farm level. As a result, weakening food security indicators confirm that national agricultural abundance no longer guarantees household nutritional security. Despite the productive agricultural sector that consistently supplies sufficient food to meet national demand, delivers affordable food, and maintains export competitiveness, a growing share of households remain unable to afford a healthy and diversified diet because of low and uncertain incomes and unemployment, rather than food scarcity. Beyond the most affluent consumer groups, who remain guided by factors such as convenience, health, indulgence and attributes like sustainability and ethics, consumption choices are dictated by the realities of constrained spending power - a household budget stretched by rising transport costs, debt obligations, utility tariffs, housing expenses, and other non-discretionary expenditures.

As focus shifts to the next policy cycle, the 2026 Baseline extends the planning horizon to 2050. Several megatrends have been identified that will continue to influence the trajectory of the food system. While

some are largely determined by exogenous factors, most notably climate, others such as infrastructure development and biosecurity, can be influenced by public policy, targeted investment, and the strength of public-private partnerships. The South African context provides several pertinent examples where suboptimal outcomes ('own goals') have emerged due to institutional decline, governance failures, corruption and weakened implementation capacity. Looking ahead, these systemic governance and institutional constraints may themselves constitute a cross-cutting megatrend that shapes the trajectory of all others. Addressing these challenges is therefore an urgent priority. Strong leadership, improved institutional capacity, and decisive policy implementation will be required to navigate the next phase of development, particularly as many of the more accessible growth opportunities have already been realised.

A key factor shaping future strategies and investment decisions will be the evolution of the consumer environment and the extent to which consumer spending power is able to recover. Accelerated improvements will enable a greater focus on unlocking domestic value. Conversely, prolonged strain on domestic spending power elevates the importance of export strategies and increases exposure to an increasingly complex international trade environment. In this regard, South Africa's fresh produce export sector faces a critical juncture due to its heavy reliance on the EU market and escalating ESG-related non-tariff barriers. A primary challenge relates to the carbon footprint of the value chain. While producers are evaluated on the entire product lifecycle, most electricity and fuel use occurs beyond the farm gate, leaving it largely outside their direct control.

The increasingly assertive use of tariffs as an instrument of economic and strategic policy has expedited progress in bilateral and multilateral market access negotiations in newer destinations. Several trading partners have actively engaged with South Africa to initiate or conclude new agreements, while major economies such as China and India have signalled a willingness to reduce historically high tariff barriers. Optimistically, this points to a future in which South African agricultural products compete on a more equal footing with key global competitors, including Peru, Chile, Argentina and Australia. Pessimistically rising protectionism, escalating trade disputes and the growing intersection of trade policy, geopolitics, and national security considerations could pose material risks to South Africa's export-oriented agricultural sectors.

The Baseline clearly illustrates the importance of export-driven growth, including its potential to promote affordability for domestic consumers. Nevertheless, achieving and maintaining a leading position on the global competitiveness frontier will neither be automatic nor easily attained. Rather, it will require sustained, coordinated, industry-wide effort, supported by enabling policy reforms and continued investment, to ensure that the sector remains adaptive, competitive, and capable of realising its long-term potential. Many of these required actions and coordination are highlighted in the Agricultural and Agro-processing Master Plan (AAMP). The decisions taken over the next decade will play a critical role in shaping opportunities and constraints. As we look towards this future, the central question remains: what actions must be taken today to ensure that South African agriculture remains resilient, competitive, inclusive, and well-positioned to thrive in the decades ahead?

TABLE OF CONTENTS

BFAP TEAM	02
ACKNOWLEDGEMENTS	05
FOREWORD	08
EXECUTIVE SUMMARY	09
TABLE OF CONTENTS	11
CONTEXT AND PURPOSE OF THE BASELINE	12
MEGATRENDS SHAPING SOUTH AFRICAN AGRICULTURE TOWARDS 2050	13
KEY BASELINE ASSUMPTIONS TO 2035	33
OUTLOOK FOR ANIMAL PRODUCTS	38
OUTLOOK FOR FIELD CROPS	55
OUTLOOK FOR HORTICULTURE	71
THE SOUTH AFRICAN 'PLATE AND GLASS': AN ANALYSIS OF CONSUMER TRENDS AND VALUE CHAIN EFFICIENCY TOWARDS 2050	83
REFERENCES	99



CONTEXT AND PURPOSE OF THE BASELINE

The 2026 edition of the BFAP Baseline presents an outlook for agricultural production, consumption, prices, and trade in South Africa over the period 2026 to 2035. This year, as we start to consider the policy framework beyond the National Development Plan (NDP) with its 2030 horizon, the 10 year baseline projections are complimented by some longer term views in the form of qualitative discussions of key elements that are able to accelerate inclusive growth towards 2050. With each iteration of our 10-year outlook for South African agriculture developed by a growing team of analysts and supported by BFAP's suite of foresight models, we are reminded that the future is inherently uncertain and increasingly difficult to forecast.

This has become particularly evident in recent years as new global shocks to South African agriculture have emerged in rapid succession, affecting participants across agricultural value chains from the farm to the final consumer. Weak governance, weakening infrastructure, and corruption and crime, coupled with global forces unleashed by the pandemic, regional armed conflicts, trade tensions, and weather-induced disruptions have been compounded by more recent geopolitical

developments, including the war in Ukraine and the US–Israeli military strikes on Iran, which disrupted a key trade route through the Strait of Hormuz.

These developments underscore the importance of gaining insights from a range of plausible future scenarios. In the Baseline, however, BFAP presents a single plausible outcome based on a defined set of assumptions. This baseline scenario serves as a strategic reference point – a compass that industry and government stakeholders can use to inform their investment and policy decisions. It is intended to support sound decision-making amid evolving global, regional, and South African economic and socio-economic conditions that continue to shape the agricultural sector.

Clearly, future scenarios will be based on the characteristics of the different components of agricultural value chains as well as careful reading of those global and local megatrends that will shape the future of the sector. In the chapter that follows, we discuss these megatrends. For the development of alternative future scenarios for different commodities, BFAP can be contacted directly.





MEGATRENDS SHAPING SOUTH AFRICAN AGRICULTURE TOWARDS 2050

We initiate the 2026 BFAP Baseline by briefly looking beyond the multitude of short-term factors currently influencing agricultural markets, issues that are addressed in detail in subsequent chapters, to consider the longer-term megatrends that are expected to shape South Africa's agriculture and agro-processing sectors over the next two decades. Of course, analysing megatrends is only one way of learning about possible futures. There are also so-called Black Swans, or completely unpredictable and statistically outlier events that carry a potentially massive, system-altering impact. Because they are, by definition, not predictable, we will not discuss them further here, except to say that the only way to prepare for such events is through diversification in all its manifestations, and by building system resilience – largely the same solutions as the more predictable megatrends but blindfolded!

This year marks 16 years since BFAP contributed to the drafting of Chapter 6 of the National Development Plan (NDP) 2030. As the country approaches the end of the NDP's implementation horizon, and in light of the significant socio-economic and political developments observed in recent years, this chapter is dedicated to identifying and discussing a range of megatrends that are expected to influence the structure, dynamics, competitiveness and sustainability of the agricultural sector going forward.

Within the foresight and policy literature, megatrends are typically defined as long-term driving forces whose origins are observable in the present and which are likely to have transformative impacts in the future. Unlike short-term, cyclical shocks, these trends represent broad, persistent trajectories that are expected to have profound implications for participants across agricultural value chains by 2050. Over the past three decades, BFAP's foresight work has been widely used as a strategic reference point for the agricultural and agro-processing sectors, often serving as an "investment compass" that highlights future growth opportunities and the key drivers required to foster a more prosperous sector. In this context, the 2026 Baseline represents an initial effort to extend the planning horizon beyond the NDP's 2030 toward 2050, drawing on current knowledge of the sector and informed expectations around the evolution of these megatrends.

By the midpoint of the century a new generation of leadership will have emerged across farming, agribusiness, and supporting industries. **This naturally raises a critical question: what actions must be taken today to ensure that South African agriculture remains resilient, competitive, inclusive, and well-positioned to thrive in the future?** Achieving and maintaining a leading position on the global competitiveness frontier will neither be automatic nor easily attained. Rather, it will require

sustained, coordinated, industry-wide efforts, supported by appropriate policy reforms, to enable the sector to adapt proactively and realise its long-term potential.

PERFORMANCE SINCE THE ADOPTION OF THE NDP

Before discussing each of the megatrends, we briefly reflect on where South Africa stands in 2026 relative to the vision outlined at the time of drafting the National Development Plan (NDP). Chapter 6 of the NDP aimed to create an integrated and inclusive rural economy, with the agriculture and agro-processing sectors identified as central pillars and anchor activities for rural economic development.

The plan envisaged that expansion in irrigated agriculture, increased use of underutilised land through successful land reform, and prioritisation of subsectors with emerging commercial potential and high labour multipliers would drive growth. Consequently, the target of creating 1 million jobs by 2030 was distributed across primary agriculture (643 000 jobs = 393 000 smallholder/emerging + 250 000 commercial high-value) and agro-processing and related industries (326 000 jobs), while maintaining a positive trade balance in both primary and processed agricultural products. At the time, it was anticipated that these outcomes would be achieved through a combination of investments in water infrastructure; strengthened, innovative, and tenure-secure market and financial linkages for smallholder

producers; as well as sustained investment in research and development and skills transfer.

Reflecting on the roughly 15-year period since Chapter 6 was drafted, progress has been mixed. Some objectives have been exceeded (for example, expansion in irrigation), others are still in progress, and several are unlikely to be achieved by the 2030 target date. A key underlying constraint has been the failure to realise the broader macroeconomic assumptions of the NDP, particularly the expectation that the economy would approach full employment by 2030, supported by an average annual real GDP growth rate of 5.4% between 2011 and 2030.

As illustrated in Figure 1, South Africa's actual economic performance has fallen significantly short of these expectations. Not only has growth underperformed relative to the pre-NDP period (prior to 2011), but the realised average annual growth rate of approximately 1.2% is considerably below the NDP target. Unsurprisingly, this weak growth trajectory has been accompanied by a deterioration in labour market outcomes. Instead of declining, the official unemployment rate increased from 25% in 2011 to 32% in 2025, leaving an estimated 8 million South Africans unemployed, along with a further 3.5 million discouraged work-seekers who have exited the labour force.

Performance of South African agriculture and the

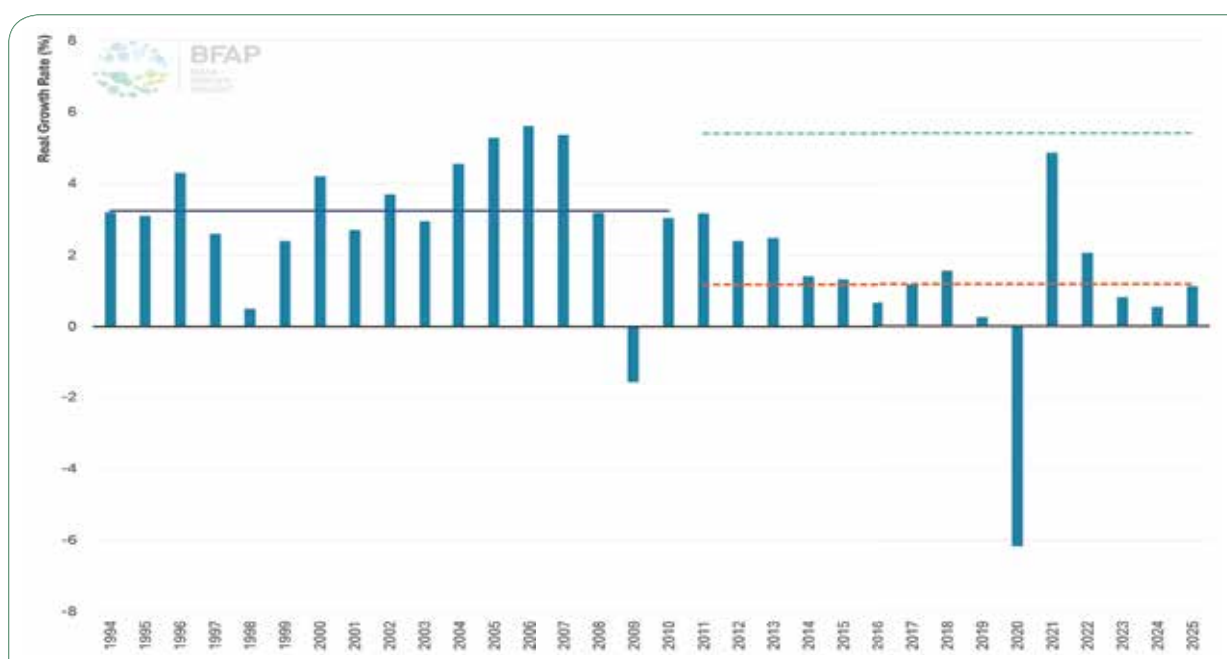


Figure 1: South Africa's Real GDP Growth rate

Source: StatsSA, 2026

broader set of Chapter 6 stakeholders must be considered in the context of an economy that has grown at less than a quarter of the rate originally envisaged in the NDP. Under these constrained conditions, and in the face of multiple exogenous shocks, as documented across the subsector analyses in this Baseline, the sector has performed remarkably well, displaying tremendous resilience.

Despite headwinds, the agriculture and agro-processing sectors have continued to expand, although from an employment perspective, progress remains below the NDP target of creating one million additional jobs across primary and secondary agricultural industries. Figure 2 presents employment trends based on the Quarterly Labour Force Survey (QLFS), which captures both formal and informal employment. At the inception of the NDP in 2011, total employment in the sector stood at approximately 1.2 million jobs. By 2025, this figure had increased by roughly 290 000 jobs, reaching close to 1.5 million. While some observers have attributed part of this increase to changes in survey methodology introduced by Statistics South Africa in 2015, alternative data sources lend support to the conclusion that genuine employment gains have been realised. In particular, the annual Agricultural Survey and the Quarterly Employment Estimates both indicate that at least 80 000 additional jobs have been created in the formal segments of the agriculture and agro-processing sectors over this period.

Importantly, this pattern of employment growth is consistent with the original intent articulated in Chapter 6 of the NDP. The framework explicitly recognised that employment generation would not be confined to commercial agriculture and formal agro-processing enterprises. Rather, a substantial proportion of job creation was anticipated to emerge through improved livelihoods among smallholder farmers, enhanced utilisation of redistributed land, and the consequent expansion of employment opportunities across upstream and downstream value chains. These dynamics reflect the broader and more inclusive conception of sectoral growth underpinning the NDP's vision.

The analysis presented in Figure 3 is restricted to black agricultural households engaged in food production, either as a source of household income or for subsistence purposes. Notable structural changes are evident across rural South Africa. While the total number of agricultural households declined by approximately 300 000 to 400 000 between 2011 and 2023, the composition of the sector has shifted in ways that point to intensification and consolidation. Specifically, a greater number of individuals are now participating in agricultural activities conducted on larger landholdings, accompanied by increases in average herd sizes.

As illustrated in Figure 3, there has been a marked reduction in the number of households operating

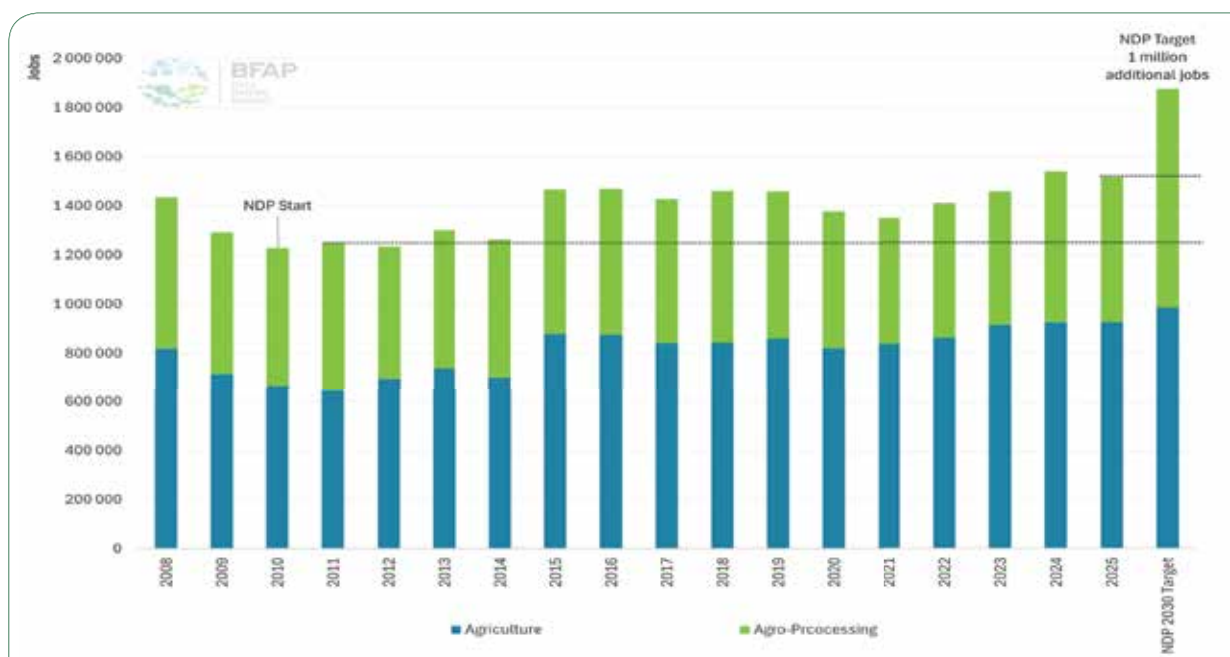


Figure 2: Agriculture and Agro-processing jobs

Source: StatsSA, 2026

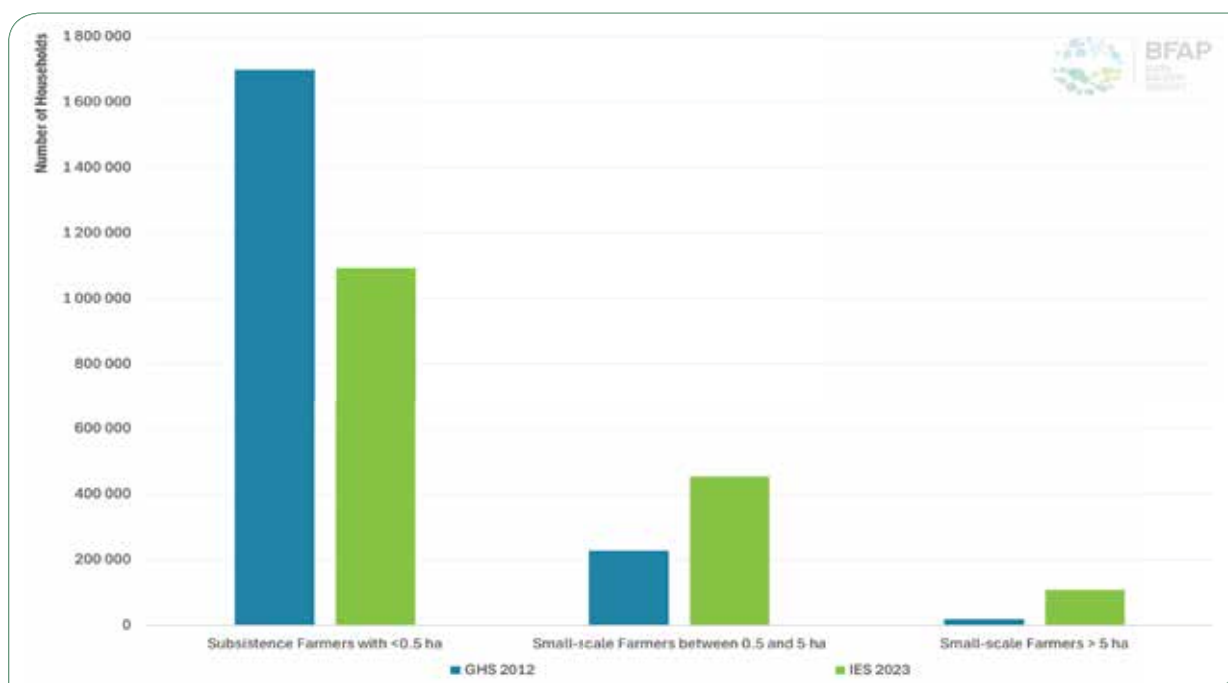


Figure 3: Black agriculturally active households by size

Source: StatsSA, 2026

on land parcels smaller than 0.5 hectares, alongside a doubling of households within the 0.5 - 5-hectare category. Moreover, the number of households cultivating more than 5 hectares increased substantially, from approximately 20 000 in 2013 to over 100 000 in 2023. Households in these latter categories are more likely to employ labour beyond the household, thereby contributing to broader employment generation. Concurrently, market participation has intensified, with the number of households selling agricultural produce rising from 182 000 to 387 000 over the same period.

These trends are corroborated by the Census of Agricultural Households (2022), which indicates that approximately 70 500 black agricultural households produce exclusively for the market, a further 153 000 produce primarily for sale, and an additional 178 000 produce mainly for own consumption while selling surplus output. Collectively, this highlights an ongoing structural transformation within the smallholder segment, characterised by increasing commercial orientation, consolidation of land use, and expanding contributions to rural employment and income generation.

Figure 4 examines the trade performance of South Africa's agricultural and agro-processing sectors, measured in US dollar terms, over the period 2001 to 2025. Using

the International Standard Industrial Classification (ISIC), the analysis highlights the contribution of key primary agricultural industries, including citrus, deciduous fruit, table grapes, and others, to a sustained and expanding trade surplus, which reached just over US\$6 billion in 2025. Despite this strong performance, certain commodities, most notably wheat, forestry products, and tobacco, remain structurally reliant on imports.

Historically, South Africa has experienced periods in which it was a net importer of processed agricultural products. However, this position has improved in recent years, driven by robust export growth in subsectors such as processed fruit and vegetables, beverages, and dairy products. In addition, increased import substitution, particularly within the edible oils segment, has contributed positively to the overall trade balance.

Together, these results indicate that the broader agricultural sector has, to date, exceeded the targets set out in the NDP with respect to the expansion of high-value, export-oriented products. Furthermore, the development of more integrated value chains, notably in soybeans and soybean processing for oil and meal, has facilitated a structural shift in South Africa's trade position, with the country transitioning from a net importer to a net exporter in these product categories over the past decade.

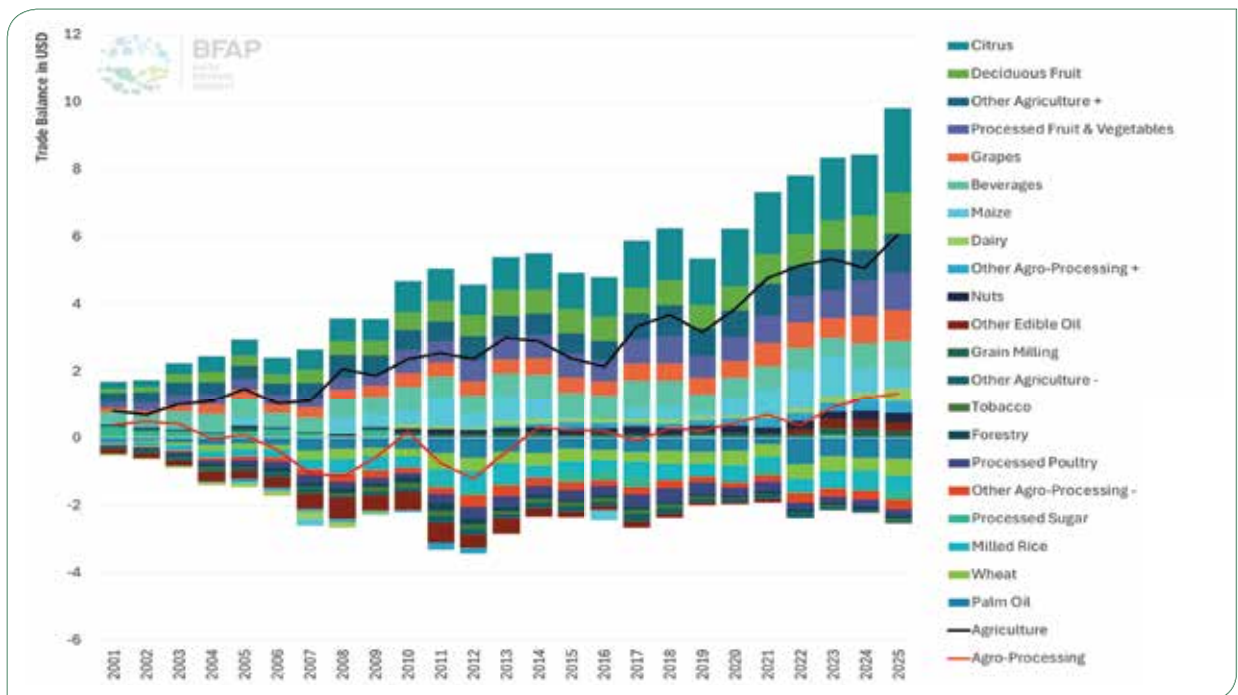


Figure 4: South Africa's agriculture & agro-processing trade balance according to the ISIC classification

Source: ITC, 2026

BRIEF INTRODUCTION TO THE MEGATRENDS

Megatrends are generally defined as long-term structural drivers that are observable in the present and are expected to exert transformative impacts over time. For the *Baseline 2026*, nine megatrends have been identified as among the most prominent forces shaping the future of the agriculture and agro-processing sectors. These are not presented in order of relative importance.

While some megatrends are largely determined by exogenous factors, most notably climate, others such as infrastructure development and biosecurity can to a significant extent be influenced by public policy, targeted investment, and the strength of public-private partnerships. The South African context provides several pertinent examples where suboptimal outcomes ("own goals") have emerged due to institutional decline, governance failures, and weakened implementation capacity. Challenges such as the erosion of state institutions, corruption and state capture, and insufficient collaboration between public and private stakeholders, have constrained sectoral growth and performance.

Looking ahead, these systemic government and institutional constraints may themselves constitute a cross-cutting megatrend that shapes the trajectory of all others. Addressing these challenges is therefore an

urgent priority. Strong leadership, improved institutional capacity, and decisive policy implementation will be required to navigate the next phase of development, particularly as many of the more accessible growth opportunities have already been realised.

The section that follows introduces the selected megatrends and provides illustrative examples to highlight their relevance. It further outlines key strategic actions required both to mitigate potential adverse impacts and to unlock emerging opportunities. These efforts are essential to support inclusive economic growth and employment, especially in rural areas, while strengthening long-term resilience, enhancing competitiveness, and improving national food security.

MEGATREND 1: Local food demand - as influenced by macro-economic performance, fiscal/monetary policy, population growth, urbanisation and spending power

Over the past decade, agricultural production growth in South Africa has, for most commodities, outpaced the growth in domestic consumption. Although the sector has increasingly expanded beyond national borders, the domestic market is expected to remain an important driver of demand towards 2050. This is particularly relevant in the context of ongoing urbanisation, which is

typically associated with a structural shift towards higher consumption of processed products and the expansion of value chains supplying urban centres.

This section briefly revisits the conventional macro-economic demand-side drivers influencing a country's food system, including population growth, income growth and distribution, relative prices, and evolving consumer preferences. Together, these factors underpin dietary transitions within the South African context.

According to the United Nations Population Division, population growth in South Africa is projected to decelerate significantly by 2050. During the NDP period, the population increased from approximately 53 million in 2011 to 63 million in 2025, reflecting an average annual growth rate of 1.8%. In contrast, the population is projected to reach 79 million by 2050, implying a considerably slower growth rate of approximately 0.8% per annum.

Despite this deceleration, urbanisation is expected to continue, with a growing share of the population transitioning from rural to urban areas (Figure 5). The latest urbanisation prospects from the United Nations (2025), which is based on a new harmonised geospatial methodology, suggest that 79% of South Africa's population already resides in urban areas – 50% in large

cities and 29% in towns and semi-dense areas. By 2050, the urban population share is projected to reach 83%, with 55% in large cities and 28% in towns and semi-dense areas. This transition is likely to influence not only the composition of demand for agricultural, food, and fibre products but also the price points at which these goods are consumed.

Importantly, these demand dynamics will be shaped by the aggregate purchasing power of households, which remains contingent on the trajectory of economic growth in South Africa. Consequently, local food demand is identified as a central megatrend influencing the agricultural sector to 2050. This reflects the well-established principle that the supply side of the economy responds to prevailing demand forces, whether originating from domestic markets or international trade partners.

The continued importance of the domestic market in shaping agricultural production is underscored by the structure of South Africa's agri-food system. While more than half of total output is exported, a large share (30%) of this goes to our neighbouring countries, whose consumption patterns are similar to domestic consumers. This highlights the central role of domestic demand conditions in determining production outcomes.

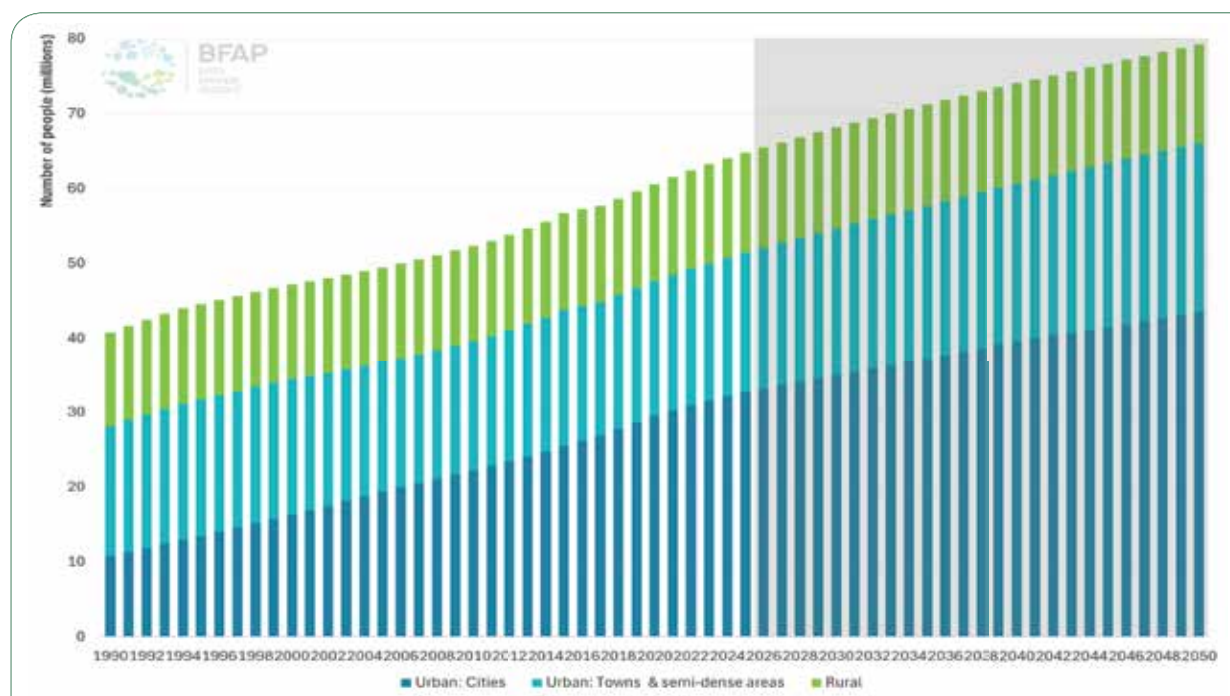


Figure 5: South Africa's population dynamics and UN Outlook

Source: UN, 2025

Consequently, a transition to a higher economic growth trajectory, characterised by the alleviation of structural constraints and broad-based upward mobility among low- and middle-income households, would have significant implications for the composition of agricultural supply by 2050. Conversely, should the subdued growth environment of the past decade persist, the relative importance of external demand (Megatrend 2) is likely to increase. In such a scenario, the capacity of producers to reorient output towards international markets, where stronger demand conditions prevail, will become increasingly important, with corresponding implications for farm-level investment decisions.

A pertinent illustration of demand-led growth effects is observed during the period from approximately 2002 to 2012, when the South African government expanded its social grant system, primarily targeting low-income households. While the long-term fiscal sustainability of this intervention remains subject to debate, its impact on food demand was substantial. The policy facilitated the emergence of a broad cohort of consumers with increased purchasing power, enabling a dietary shift towards higher-value food products, particularly animal protein such as poultry and pork. This, in turn, stimulated upstream demand for animal feed, a key input in livestock production, thereby reinforcing linkages across the agricultural value chain.

Figure 6 presents a cross-sectional overview of household food expenditure in South Africa, disaggregated by expenditure deciles (EDs), where ED1 represents the lowest-income households and ED10 the highest. Several salient features emerge, which support the characterisation of Megatrend 1. First, the domestic food market remains strongly shaped by persistent income inequality, high poverty rates, and widespread food insecurity, with many households unable to afford a nutritionally adequate food basket. Although average annual household food expenditure is estimated at approximately R28 400, households in ED1–ED5 spend considerably less, with consumption patterns dominated by staple products such as maize meal and other cereals.

In contrast, a marked increase in food expenditure is evident in higher-income groups (ED7–ED10), where consumption baskets are more diversified and increasingly dominated by meat products, food-away-from-home (notably restaurants and fast foods), as well as a broader inclusion of dairy, fruit, and vegetables, categories that often remain inaccessible to lower-income households.

The relationship between income and food expenditure shares (illustrated by the green line) aligns with Engel's Law, which posits that the proportion of income allocated to food declines as income rises. Simultaneously,

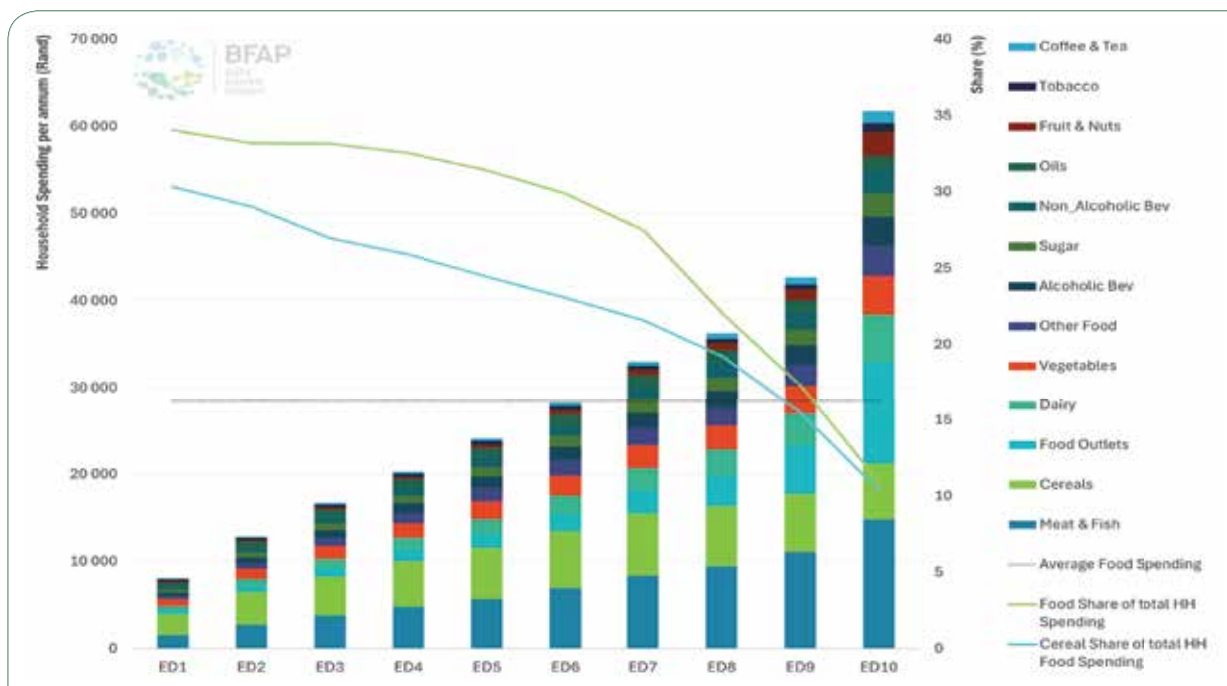


Figure 6: South African Household annual food spending by Expenditure Deciles

Source: StatsSA, 2025

consumption patterns reflect Bennett's Law (blue line), whereby dietary composition shifts away from starchy staples towards higher-value foods such as meat, dairy, fruits and vegetables, edible oils, and processed grains as incomes increase.

The interaction between population growth, the pace of urbanisation, and the extent of income mobility among South African households will ultimately determine the composition of output produced by the domestic food system, including the agro-processing sector. A stable and resilient macroeconomic environment, capable of absorbing shocks while sustaining consistent growth, will therefore play a critical role in shaping the agricultural sector towards 2050. This underscores the importance of maintaining a food system that can competitively supply products at price points that enable consumers to transition towards more balanced and diversified diets.

Should economic growth become more inclusive, thereby enabling upward mobility among the approximately 12 million South Africans currently unable to afford a minimum caloric intake (primarily those in expenditure deciles ED1–ED2), the implications for agricultural production would be substantial. In such a scenario, dietary diversification would likely intensify, driving increased demand for higher-value food products. Consequently, agricultural production systems would increasingly orient towards commodities such as poultry, pork, dairy, fruit, and vegetables to meet the evolving needs of a growing and urbanising population.

MEGATREND 2: Trade and global market dynamics

As highlighted in our *30-Year Review of Agriculture during the Democratic Era*, the relative weakness of domestic economic growth has historically incentivised the agricultural sector to seek demand expansion beyond national borders. South Africa has leveraged its comparative advantage as a counter-seasonal supplier of fruit and nuts to Northern Hemisphere markets, thereby positioning exports as a key growth avenue. It is therefore unsurprising that, over the past two decades, agricultural growth has been largely driven by export-oriented expansion in high-value commodities such as citrus, table grapes, berries, tree nuts, and related products. In contrast, subsectors more dependent on domestic demand conditions have exhibited comparatively subdued growth trajectories.

Figure 7 presents estimates of total farm income disaggregated by source, alongside corresponding data from the National Department of Agriculture (DoA) and Statistics South Africa's Agricultural Survey. These estimates were compiled as part of a recent agricultural GDP benchmarking exercise. The results indicate that income growth within the sector has been uneven across subsectors, with horticulture recording the most rapid expansion, growing at approximately 11% per annum in nominal terms, compared to 8.3% for field crops and 7.3% for livestock production. While livestock remains by far the biggest subsector, horticulture has solidified its position as the second biggest subsector in the process.

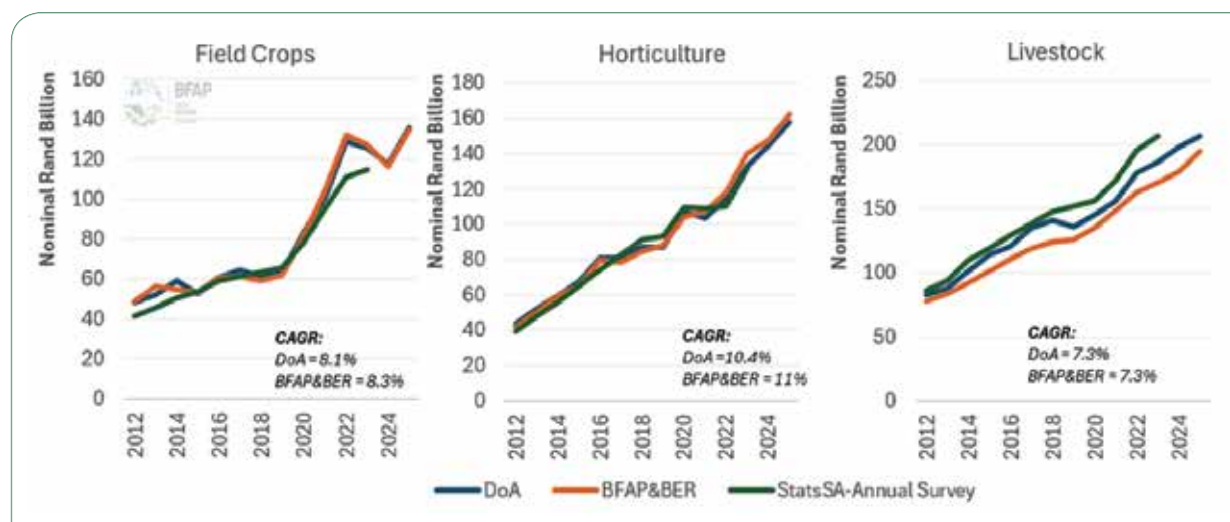


Figure 7: Total agricultural income disaggregated by subsector

Source: BFAP & BER, 2025; NDA, 2026; StatsSA, 2025

Consistent with these trends, trade and global market dynamics are a significant megatrend shaping the agricultural sector. Looking ahead to 2050, international forces are expected to play a dominant role in influencing production patterns, investment decisions, and the overall growth trajectory of South African agriculture.

In this regard, South Africa's fresh produce export sector faces a critical juncture due to its heavy reliance on the EU market and escalating ESG-related non-tariff barriers. EU policies increasingly threaten high-value, perishable crop production, necessitating the continued emphasis on market diversification.

A primary challenge is the carbon footprint of the value chain. While producers are evaluated on the entire lifecycle, the majority of electricity and fuel usage - critical for maintaining the cold chain - occurs beyond the farm gate, leaving it largely outside their direct control. While shipping innovations, such as Hapag-Lloyd's methanol dual-fuel retrofits, signal positive change, domestic shifts toward renewable energy and sustainable rail or electric transport are non-negotiable for long-term market access. However, these require a conducive regulatory environment and accessible capital.

Regional focus areas differ: for example, research confirms that the UK maintains a high priority on social standards and consumer safety, while the EU leads with rigorous environmental mandates like the Corporate Sustainability Due Diligence Directive (CS3D). Fortunately, compliance with stringent EU standards typically serves as a high-water mark, likely ensuring South African producers exceed the thresholds of most other global markets. Ultimately, the opportunity cost of failing to adapt is the loss of access to essential high-value export channels.

The global trade architecture that underpins these dynamics has undergone notable shifts in recent years, driven in part by the increasingly assertive use of tariffs as instruments of economic and strategic policy. A key inflection point was the April 2025 announcement by the United States administration of a more protectionist trade stance, which signalled a departure from established multilateral norms. The sequence of policy adjustments that followed has introduced heightened uncertainty and volatility into the global trading environment.

While these developments were initially perceived as a potential constraint on South Africa's export-led

growth ambitions, they have simultaneously created new opportunities. In particular, the reconfiguration of global trade relations has expedited progress in bilateral and multilateral market access negotiations, both at the tariff and protocol levels. Several trading partners, such as China, the European Union, Indonesia and Viet Nam have actively engaged with South Africa to initiate or conclude new agreements, while major economies such as China and India have signalled a willingness to reduce historically high tariff barriers and expand market access.

Viewed through an optimistic lens, this points to a future in which South African agricultural products compete on a more equal footing with key global competitors, including Peru, Chile, and Argentina, potentially under significantly reduced or zero-tariff regimes in large and rapidly expanding markets. Concurrently, progress in sanitary and phytosanitary (SPS) protocols has accelerated. In the case of China, market access for South African agricultural exports has expanded in recent years to include apples (2015), citrus (2020), pears (2021), avocados (2023), and stone fruit (2025), with cherries and blueberries expected to follow.

Furthermore, South Africa's participation in frameworks such as the China-Africa Economic Partnership for Shared Development is expected to contribute to a substantial reduction in average tariff levels, potentially from approximately 15% to near zero for many agricultural products. At the regional level, the African Continental Free Trade Area (AfCFTA) represents a significant structural development, creating a potential integrated market exceeding 1.4 billion consumers and positioning South Africa's agro-processing sector as a competitive regional supplier. Trade into Africa has been constrained to some extent by spending power limitations in several markets, infrastructural limitations that raise business costs and cumbersome customs processes. Although progress in deepening intra-African trade has been gradual since the agreement's ratification, its long-term potential to stimulate investment, strengthen economic linkages, and expand market opportunities remains significant.

However, an alternative trajectory, characterised by increasing protectionism, escalating trade disputes, and the growing intersection of trade policy with geopolitical considerations and national security priorities, is equally possible and poses material risks. Such dynamics can disrupt global supply chains, reconfigure trade flows, and amplify price volatility in markets on which South

African agricultural exporters are highly dependent. Recent disruptions to key maritime routes, such as those affecting the Strait of Hormuz, illustrate the speed and extent to which global markets can respond to logistical constraints, with spillover effects observed in energy, fertiliser, and currency markets.

These considerations underscore the central importance of Megatrend 2 for the long-term outlook of South African agriculture. In the absence of stable and expanding export market opportunities, supported by competitive and predictable market access conditions, producers may exhibit increased caution in undertaking capital-intensive investments in high-value, export-oriented, and labour-intensive production systems. Moreover, expanded access to foreign markets is likely to entail reciprocal trade liberalisation, resulting in greater import competition within the domestic economy. This, in turn, may place downward pressure on prices and margins in manufacturing sectors, including agro-processing, necessitating ongoing improvements in productivity and competitiveness.

Finally, the shift from import to export parity typically entails a decline in consumer prices, with significant implications for long-run competitiveness and profitability. A practical illustration is South Africa's transition from net imports of soybean meal to a net

exporter, as depicted in the Figure 8. The initial phase of import substitution was relatively straightforward, as domestic prices remained closer to import parity levels. However, as the transition to surplus production occurs, prices decline by approximately 20–30%, reflecting a movement toward export parity conditions. This adjustment is necessary for South Africa to become a competitive exporter of soybean meal in both regional and international markets. This structural shift was made possible by a substantial increase in soybean production, which generated surpluses and led to prices aligning with export parity levels. As a result, crushing margins improved, enabling processors to expand production beyond the absorptive capacity of the domestic market.

While some argue that an export-led growth strategy may undermine local food security, the evidence suggests otherwise. Enhancing competitiveness through export parity pricing benefits domestic consumers by lowering prices. Moreover, increased production driven by access to export markets stimulates employment growth and broader economic activity, thereby supporting livelihoods and strengthening the agricultural sector.

MEGATREND 3: Biosecurity regulations for plants and animals

As global trade volumes increase and rising temperatures shift the geographical range of pests and pathogens,

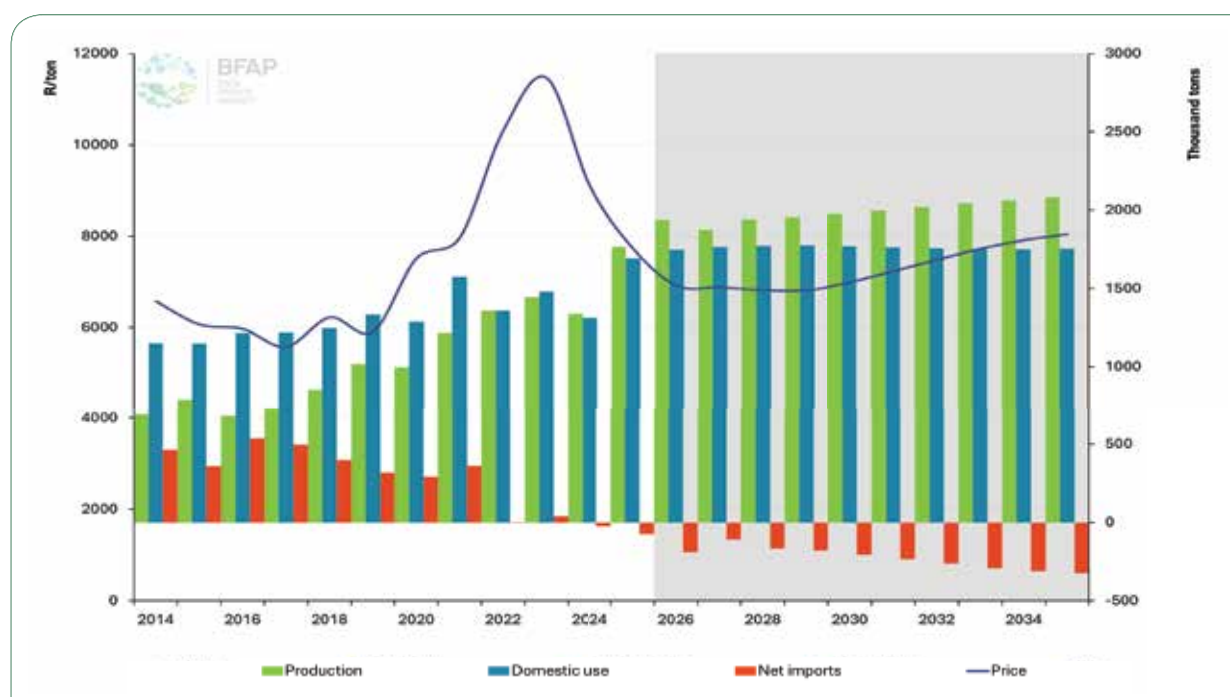


Figure 8: South African soybean meal production, use, trade and prices: 2014-2035

the risk of increased prevalence of Transboundary Animal Diseases (TADs) (particularly those with zoonotic relevance) and invasive species is accelerating. The current Foot and Mouth Disease (FMD) outbreak has already highlighted the limitations of South Africa's veterinary system capacity. Historically, capacity constraints have centred on human and infrastructural resources. These include the need for enhanced domestic vaccine production capabilities and expanded diagnostic throughput for notifiable diseases, both factors that continue to place a strain on the livestock sector. Additionally, the challenges of deploying trained veterinarians and maintaining essential equipment and logistics in marginal areas remain critical areas for development. Beyond these physical constraints, traceability and surveillance frameworks remain largely fragmented, with a reliance on disparate reporting systems and a lack of fully integrated, real-time digital data streams (as seen in the ongoing implementation challenges of systems like LITS-SA (Livestock Identification and Traceability System in South Africa)). Furthermore, a disconnect often persists between state and provincial veterinary oversight and private-sector biosecurity efforts, which can hinder the synchronisation required for a unified response to emerging threats.

In an interconnected global economy, this veterinary system will need to deal with increasing complexity. Biosecurity is no longer a localised farm-gate issue, but a systemic risk to value chains and the performance of national export markets. A single breach, such as African Swine Fever (ASF) or a novel citrus pest, can lead to the immediate closure of international markets, erasing years of competitive gains overnight (as demonstrated by the frequent market closures to South African beef exports linked to FMD outbreaks).

By 2050, the approach to biosecurity will undergo a fundamental transition from a compliance-based activity to a digital defence system required for market access. This shift will likely be characterised by the integration of real-time genomic sequencing and AI-driven surveillance deployed at ports of entry and farm boundaries. Such capabilities will move beyond retrospective detection, allowing for the immediate identification of pathogen strains and the proactive mapping of disease vectors. Traceability at the product level will become increasingly critical, functioning not only as a defence system against disease outbreaks, but also as a key enabler for increased market access domestically and internationally. In this context, the role

of Commodity-Based Trade (CBT) has the potential to mitigate the impacts of outbreaks through zoning and compartmentalisation protocols established between exporting and importing nations.

The ability to provide instantaneous, verified disease-free status will become a mandatory prerequisite for maintaining access to high-value global markets. The primary drivers of this evolution will be the increasing frequency of trade sensitive disease outbreaks, zoonotic spillovers and the migration of climate-driven pests, necessitating a surveillance regime that is as dynamic as the threats it seeks to mitigate.

This megatrend will require a proactive approach to the next Megatrend (Digitalisation of data, AI, and precision agriculture), leveraging technology to support real-time access to data, the application of blockchain technologies to support traceability (Farm to Fork), and other technologies. Additionally, effective farmer support (Megatrend 9) in the form of increased biosecurity adoption and traceability integration, will be required to include the less capital intensive and small-scale producers into the formal (export) value chains. This is not only important for inclusive growth, but is also extremely relevant from a disease and pest control perspective given the strong inter-dependencies between the formal and informal sectors.

MEGATREND 4: Digitalisation of data, AI, and precision agriculture

Few would have expected the technological leaps made in just the past two years with Artificial Intelligence (AI), although discussions of the Fourth Industrial Revolution (4IR) have featured in policy discussions for some time. The pace at which the convergence of artificial intelligence, the Internet of Things (IoT), big data analytics, remote sensing, robotics and digital connectivity is transforming global agricultural production systems will only be accelerated, with the current level of investments set to push the digital frontier even wider. In the past, disruptive technologies have been characterised both by rapid rates of innovation as well as the processes of catching up as the new technologies speed up the functions for which they were originally invented, spread to new functions and new geographies, etc. These processes will create a whole new landscape for agriculture in all its facets in ways that will hardly be recognisable to us.

The three most important technologies that are expected to affect agriculture include a) precision

farming techniques, made possible by real-time data, shared intelligence, and resource optimisation; b) autonomous robots and AI in the form of self-driving machinery, targeted in-field planting, crop management and harvesting, and robots that will take over intensive physical labour; and c) controlled environment agriculture. Because controlled environments cut down on the use of land but are more dependent on secure supplies of energy and water, they will result in high value farming moving even closer to urban areas and depending on more highly skilled workers. Controlled environments will also heighten the demand for next-generation crops and hence for new breeding technologies.

These are all examples of how digital technology in combination with data science, precision agriculture and autonomous robotics will shape the agrifood system of the future. The digital transformation of agriculture is shifting from the precision era (using sensors and GPS to do things better) to the intelligence era (using AI to decide what to do). This is not merely about smart tractors; it is a fundamental reallocation of value. In South Africa, this creates a stark digital divide where those who can afford the initial capital expenditure in AI systems gain an exponential lead in efficiency, while those who cannot are priced out of the competitiveness frontier. The skill set of the farmer will shift from mechanical expertise to data orchestration, where the primary goal is managing the AI's parameters rather than managing the machinery.

Yet, this megatrends' impact will not only be to transform, unlock and enable greater productivity on the farm or in the factories. The digital frontier will also dismantle traditional marketing in ways similar to how e-commerce apps have enabled door-to-door retail sales to balloon in recent years. We are moving toward "Algorithmic Commerce," where AI-driven platforms match farm output to global demand in real-time, bypassing multiple layers of middlemen, and will impact the way commodities have been traded for many decades and pricing will likely shift from "commodity-based" (what the exchange says) to "value-based" (what the AI determines the specific quality, provenance, and carbon-footprint of that batch is worth).

Despite recent advances in AI, data science and the use of precision farming equipment, a fundamental challenge remaining is how to use increasingly complex, large volumes of data to help improve decision-making. Also, as many have learned, AI can and will make mistakes, hallucinations can be costly and automation

dependency on machines without the tacit knowledge and observational instincts of humans can be risky. Finally, and perhaps most consequentially, there is the risk of correlated systemic failure, when a significant portion of the sector relies on the same platforms, the same pricing algorithms, or the same data pipelines. A single model error, cyberattack, or platform outage no longer affects one farm in isolation; it cascades across the supply chain simultaneously, creating a fragility that no individual operator can hedge against alone.

MEGATREND 5: Infrastructure – roads, ports, electricity

The importance of supporting infrastructure as a key enabler for agricultural value chains to be functional and remain competitive has been well demonstrated in recent years. Recent episodes of loadshedding, poor seaport performance causing delays in shipping and a continued trend of rail transport diverted to road all have one thing in common: they are all managed by state-owned entities. Over the past several years much has been said about the need to reform the way in which public infrastructure and services are managed, the need to reset fiscal spending priorities, and to allow for private sector partnerships. However, these have not yet translated into noticeable changes. The World Bank's container port benchmark index has Cape Town Port ranked last out of all 400 ports assessed in 2025, with Durban, Port Elizabeth and Coega ports all close to the bottom. South Africa has launched an ambitious set of rail and port reforms over roughly the last five years, but progress has been uneven because implementation keeps colliding with institutional weakness, governance problems, and operational decay in Transnet and the wider state machinery.

All the while, these delays have caused a clear trend of agriculture and agro-processing transport moving away from rail to road transport. Figure 9 shows how the total income shares of the country's transport and storage sector have changed between 2006 and 2023, with road freight growing its share of the total income from 16% to 32%. Transport agency (typically freight forwarders) has also seen their share increase whilst rail transport has decline 1% in a fast-growing goods transport market. The fastest segments within the road freight growth were for dry bulk/unpacked cargo (15% per annum), followed by refrigerated goods (9%) and containerised freight (7%) all indicative of how much of agriculture's volume growth over this period has been transported via truck on South African roads. During this same period the total volume of maize and wheat transported by rail has fallen from 36% in 2006 to around 3% in 2025 (SAGIS, 2026).

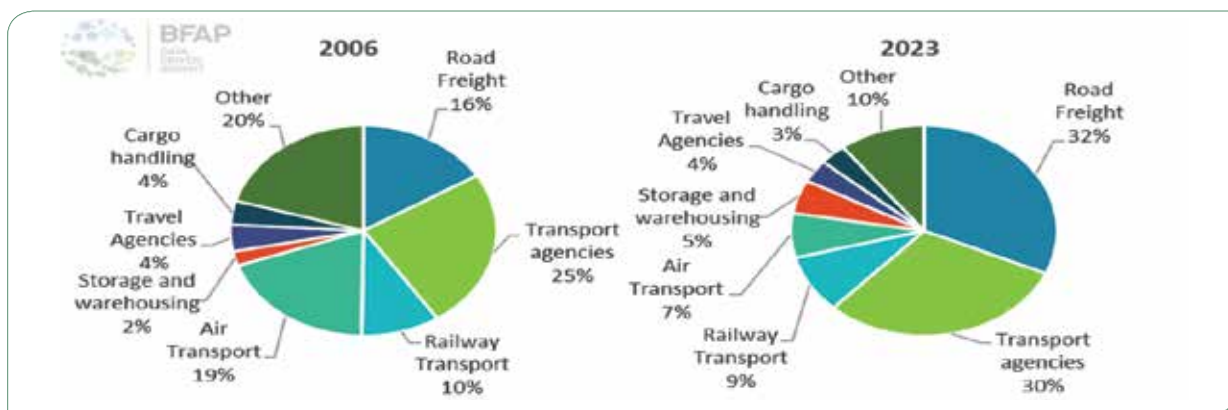


Figure 9: South African transport and storage industry income shares

Source: StatsSA, 2025

The reason logistical infrastructure will play such a pivotal role in shaping the country's agrifood system by 2050 is strongly related to megatrends 1 and 2. Feeding a growing and urbanising population both local and foreign requires cost effective and reliably efficient logistics to get produce from farms to markets and inputs from markets to farms, all done in a timely manner. There is also an important geographic cost differential associated with the cost of transporting goods from coastal to inland regions.

structural constraints in South Africa that will shape the sector's productive capacity in fundamental ways by 2050. South Africa is already classified as a water-scarce country, with average annual rainfall of below 500 mm against a national evaporation rate that exceeds precipitation in large parts of the interior. Agriculture accounts for around 60% of total national water consumption, with roughly two-thirds of that allocated to irrigated farming concentrated predominantly in water-scarce western regions.

MEGATREND 6: Natural resource constraints

Land and water are the two foundational resource inputs to agricultural production, and both face deepening

Figure 10 provides the trends in area planted to irrigated horticulture, showing major expansion over the past decade from approximately 280 000 hectares in 2012

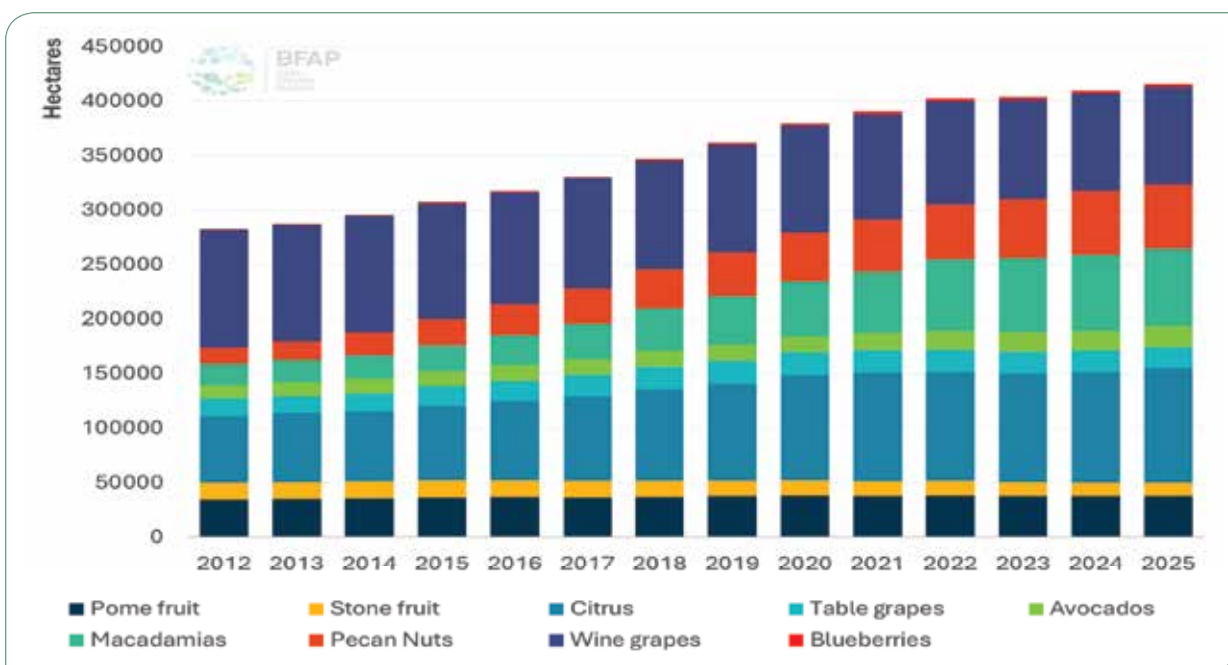


Figure 10: South African horticulture area planted per industry

Source: BFAP & BER, 2025

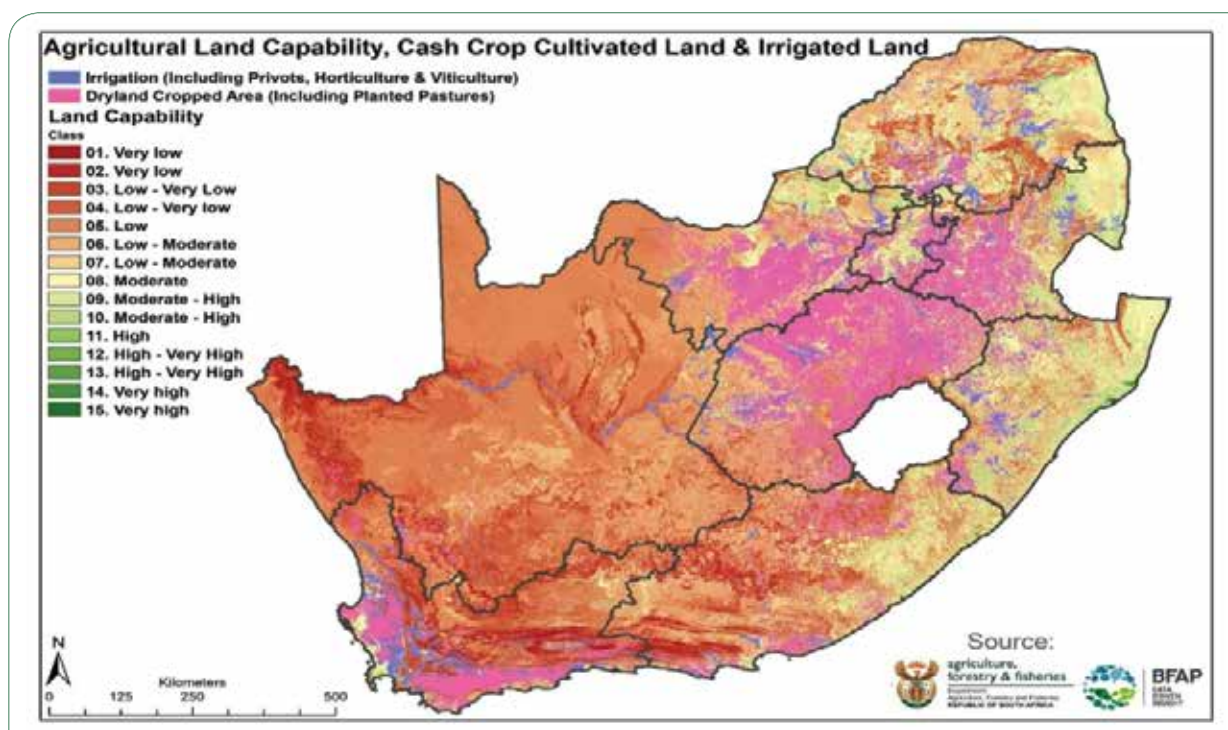


Figure 11: Agricultural land capability map of South Africa

Source: DAFF, 2019

to more than 410 000 hectares in 2025 for the major high-value export products. This is in line with the initial target for expansion set by the NDP of 143 000 hectares. In the course of this expansion some commodities (stone fruit, wine in the interior regions) were replaced by more profitable alternatives (tree nuts, vegetables). These alternatives were typically more labour intensive, which largely explains the trends in labour absorption in agriculture. Still, most of the growth came from expansion in area rather than from substitution between commodities.

Agricultural activities are directly dependent on the availability and quality of natural resources, particularly land and water. With only 15.8 million hectares (12.4%) of the total land surface area of 122.3 million hectares planted to field crops, South Africa is a semi-arid country with a weak resource base for agriculture, which is further limited by significant tracts of land that are under-utilised or unutilised, as already identified in the NDP. This renders the sector inherently risky, with farmers exposed to large and regular climate volatility, with extreme weather events becoming more frequent. Figure 11 highlights the limited land use potential in South Africa, with more than half of total agricultural land area classified as low to medium potential (Class V – VIII). That is why 55% of all agricultural land is

only suitable for extensive grazing systems (DALRRD, 2020).

Despite these limitations, land may not be as constrained as often believed. Figure 11 also illustrates land capabilities across the country. Almost all of the small-scale or subsistence farms are situated in the former homeland areas, which include some 650 000 hectares of high potential agricultural land (this makes up 31% of these areas), but which are home to extremes of poverty and unemployment, a legacy of past policies, which left these areas without the functioning physical, social and institutional infrastructure required for successful farming. Taking South Africa's relatively weak resource base for agriculture into consideration, these underdeveloped farming areas, plus the underperforming land reform farms, present a major opportunity for growth in production and the development of agro-food chains. Table 1 presents a summary of an analysis conducted by the Agricultural Research Council (ARC) and Entsika, commissioned by DALRRD in 2019, to sample and determine the viability of 1.8 million hectares from the land reform farms. In most cases, these were productive commercial farms that were purchased by government under the Proactive Land Acquisition Scheme (PLAS) land reform programme that are now largely lying idle, with output estimated

Table 1: Natural resource potential of PLAS farms

Province	PLAS Hectares									
	Eastern Cape	Free State	Gauteng	Kwazulu-Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	Grand Total
Total assessed	232 479	203 253	44 912	153 030	92 739	242 356	240 925	571 122	77 770	1 858 587
Field Crops	8 834	34 553	18 010	23 261	8 625	54 045	22 406	54 257	4 588	230 465
Horticulture	9 997	9 959	2 335	14 997	14 467	20 358	6 746	8 567	14 232	83 636
Livestock	197 607	150 407	23 085	109 876	65 659	167 953	211 773	502 016	55 761	1 511 031
Irrigation	8 137	8 740	1 392	5 662	7 234	5 089	2 409	6 853	4 588	50 182

Source: ARC, 2019

at less than 10% of what these lands can and used to produce. From the total of 1.8 million hectares that were assessed, 230 465 hectares are suitable for field crops, 83 636 hectares for horticulture, 1.5 million hectares for livestock production and more than 50 000 hectares can be irrigated.

Most cultivated fields in Mpumalanga, Gauteng and KwaZulu-Natal are on high potential soils while in the other provinces the highest proportion of cultivated fields are on marginal potential soils. In the Free State, for example, over 1.7 million hectares of cultivated fields are on soils that are officially classified as marginal to non-arable. This not only underlines the vulnerability with respect to climate but also emphasises the importance of careful land use management, the availability of irrigation, unique soil characteristics, and risks related to terrain and soil management (e.g., erosion).

If irrigated, high-value and export-led horticultural commodities were the fundamental contributors to growth over the past decade, the question as we look towards 2050 is where more growth will come from, given the water scarcity already mentioned. Here two trends are discernible. First, new technologies, ranging from biotechnologies to information technologies, will conceivably result in production moving closer to urban areas. Von Thunen explained why higher-valued crops, which invariably use less land per unit of crop produced, are usually situated closer to populated centres, thus requiring less dedicated physical transport, processing and infrastructure. Second, this also means that the costs of distributing water and the energy required directly for farming, and indirectly for secure water supplies will be lower.

MEGATREND 7: Climate and weather-related changes

While climate is continually changing, climate modellers expect more extreme changes in rainfall and temperature patterns over the coming 6-7 decades due to anthropogenic (human-driven) climate change. According to the latest climate projections by the Intergovernmental Panel on Climate Change (IPCC) (Figure 12), a decrease is expected in rainfall during South Africa's winter and spring (June – October) combined with an expected increase in rainfall between January and March. Navigating these global changes through cultivar development (e.g. shorter growing times) and management practices (e.g. later planting windows) will be critical for future sustainable field crop production.

South Africa has a strong track record of climate resilience that is constantly improving. For example, increases in maize yields have accelerated to an average annual 3.5% over the last decade, compared to 2.6% over the last 5 decades, largely as a result of efforts to build resilience. Similar productivity increases have been recorded for soybeans and canola (Figure 13) and can be attributed to multiple factors:

- Efficient registration of new technology (cultivar development) critical to sustaining productivity gains
- Increased soil moisture conservation through conservation agriculture practices
- Increased grain production under irrigation
- Targeted input application through precision agriculture
- Investments in machinery (which doubled from 2019 to 2023) and larger units enabling scale efficiency in shorter windows of opportunity

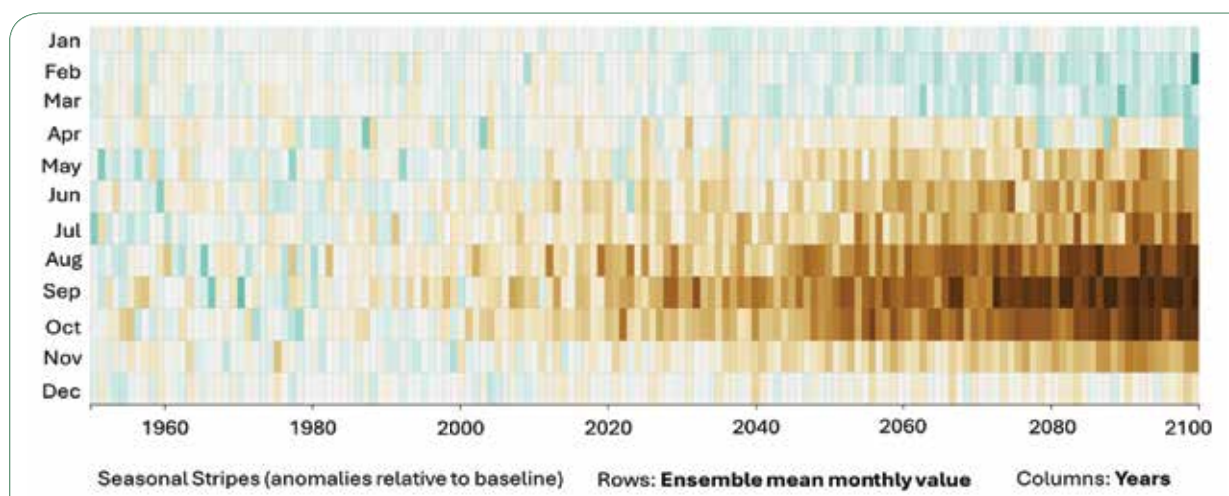


Figure 12: Total precipitation percentage change (SSP5 8.5; CMIP6 - Annual East Southern-Africa)

Source: IPCC, 2026

Overall, South Africa's farmers have achieved world-class productivity improvements and are currently producing much more per millimetre of rainfall received than 20-50 years ago (Figure 14). The current three-year-average maize yield (6.28 tonnes/hectare) is 36% higher than 10 years ago (just before the 2015/16 extreme El Niño event) and the yield per mm rain received has increased more than three-fold (312%) compared to 1983. Overall, South Africa's grain farmers are in a much better position to

"weather the upcoming storms" than they were in the past.

Rising temperatures are also an issue that farmers have to contend with. Hotter days and nights combine with changing (declining) water availability to increase heat stress of plants. Similarly, loss of chilling hours during blossoming and evaporation of scarce water resources result in less water and drier soils, along with accelerated

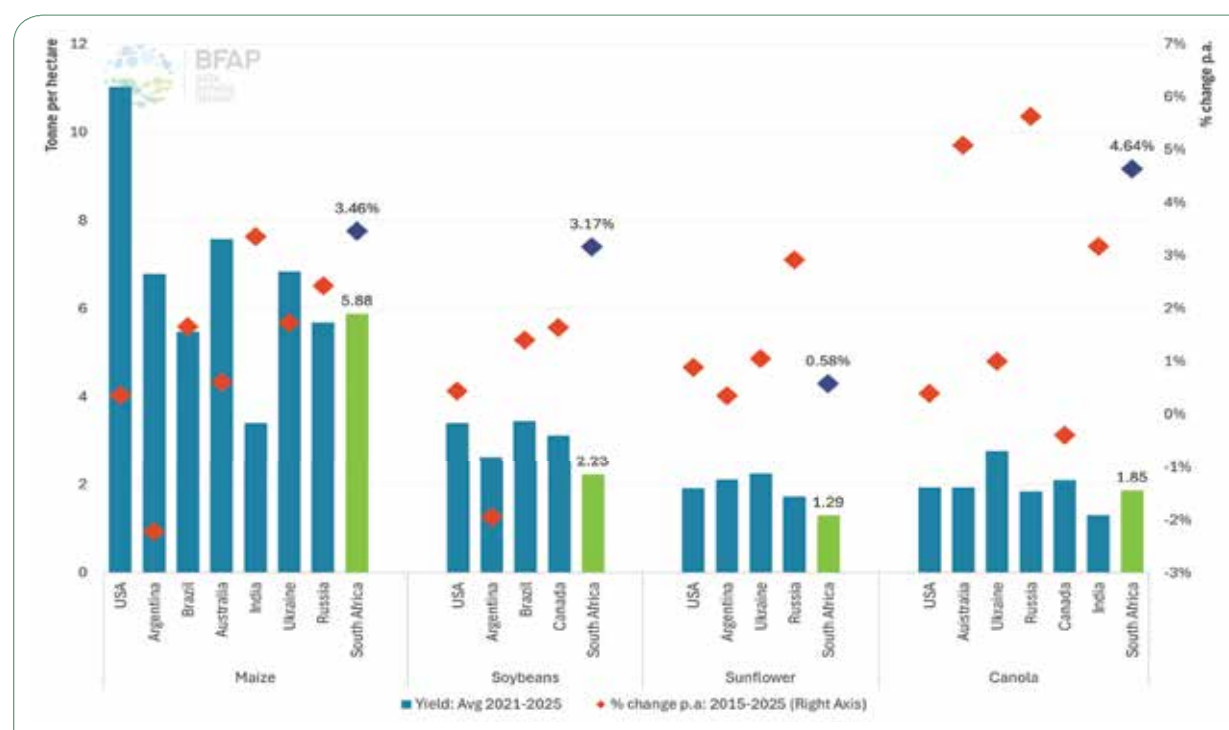


Figure 13: Yield productivity growth: South Africa continues to close the productivity gap

Source: Compiled from USDA (2026) & SAGIS (2026)

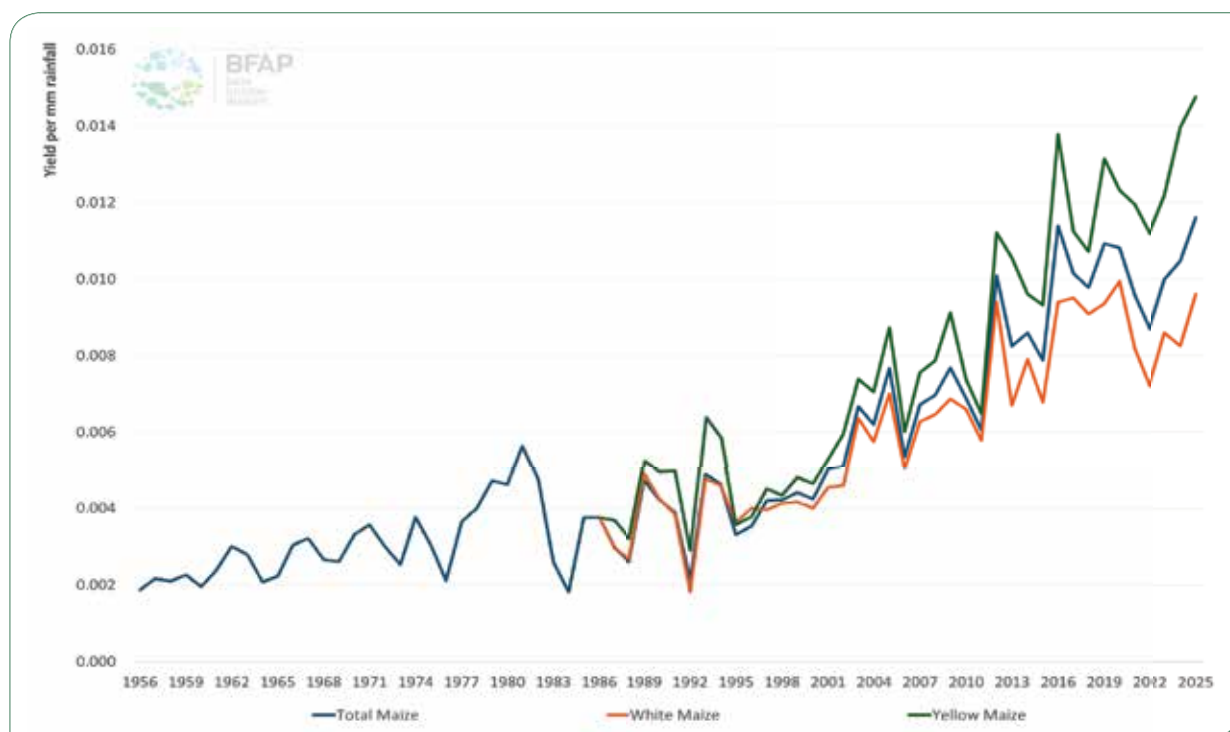


Figure 14: Yield per mm rainfall, South African national average

spread of insects and plant diseases. Heat stress is also an issue in securing healthier animals, while higher temperatures mean that animals drink more water, degrades grasslands and increases the prevalence of invasive weeds. While South African farmers have proven their resilience by adopting new practices such as drought-tolerant crops, precision irrigation, early warning systems and other climate-smart practices, the rate of temperature increases is likely to increase, thereby accelerating the rates at which new technologies and practices will have to be introduced.

While it is generally accepted that extreme weather events will continue to occur with greater regularity, these are average changes: in some areas the rates of change in rainfall and temperature may be higher, stay the same or even be lower. It will be extremely important to identify changes at a more granular level than current macro weather models as reviewed by the IPCC allow and to understand the impact on yields, crop management decisions and identifying research and development priorities.

MEGATREND 8: Rural safety & security

Rural safety and security represent a megatrend that is distinctive to the South African rural context but whose economic consequences for agricultural investment,

productive land use and food system competitiveness are profound and chronically underestimated in policy discourses. Beside the emotive and often contested nature of farm and farm worker attacks, the megatrend we discuss here is more generic and includes the economic consequences of stock theft, illegal hunting, damage or stolen production assets (irrigation equipment, energy infrastructure, rail cables, etc.) whose impact is beyond the direct losses, and broadly suppresses long-term investment in land-intensive, capital-heavy agriculture. This is precisely the type of investment (in export horticulture, irrigation infrastructure, cold chains) that megatrend 2 demands.

What makes rural safety and security unique is a combination of relatively isolated and small communities where law enforcement resources are spread thin and emergency responses slow, and often inaccurate official crime data, with many rural crimes, especially property theft and poaching, going unreported. The result is that, while urban centres have higher murder totals, several rural areas have historically higher rates of crime.

Farmers in such high-risk areas face escalating private security costs, insurance premiums and operational disruptions that erode profitability and deter succession

and new entrant farming. Rural depopulation and the abandonment of land by farmers who cannot operate safely has employment multiplier effects that ripple through small towns, supply chains and rural service economies. By 2050, a SA agriculture sector that has failed to address rural security as a structural constraint will be characterised by geographic concentration of production into more secure and defensible areas, reduced smallholder activities in high-risk regions, and a persistent risk premium embedded in the cost of agricultural finance for properties in affected provinces. A national rural safety architecture that treats farm security as both a human right and an economic infrastructure priority, with dedicated specialised units, intelligence-led policing and private-public partnerships, is a prerequisite for achieving the agricultural investment and transformation targets any 2050 roadmap will require.

MEGATREND 9: Effective farmer support driving sustainable transformation

The structure, duality and long-run competitiveness of South African agriculture will be determined in large measure by the effectiveness of farmer support systems in successfully integrating emerging and smallholder producers into commercially viable agricultural value chains, rather than sustaining them in a permanently subsidy-dependent support economy. This is fundamentally an institutional and governance challenge as much as it is a financial one. The NDP Chapter 6 era demonstrated both the potential and the limitations: real structural change is occurring within rural South Africa with more participation and consolidation amongst black agricultural households, but the pace and depth of commercially viable transformation remain well short of the sector's potential.

The South African food system can be classified as a combination of highly diverse value chains with a wide spectrum of producers linking to a range of formalised and sophisticated markets on the one extreme and completely unregulated and informal markets on the other. Hence, inclusive agriculture and agro-processing transformation requires a multi-dimensional approach of matching farming systems with food systems. By providing support to those less favoured and ensuring access by all farmers to this system in accordance with their competitive advantage, targeted and appropriate interventions will fast-track transformation in the industry, thereby increasing the participation of previously disadvantaged groups. Although significant progress has been made in some sectors, most of the

output is still being produced by the traditional white farming sector. We believe that the effectiveness of farmer support, within the context of the expected impact of the megatrends discussed, will be a driving force for sustainable transformation of agriculture's dualism. Effective farmer support by 2050 will need to operate across four mutually reinforcing dimensions: *secure land tenure*, *market linkages*, *technical support* (rebuilding a functional public extension service at scale, supplemented by private sector and commodity organisation advisory infrastructure); and *appropriate risk management instruments* (affordable crop and livestock insurance products scaled to smaller farm sizes).

Figure 15 is our schematic representation of a proposed framework that links different farmer categories and farming systems coexisting in South Africa to diverse value chains and markets. This framework has also been adopted in the AAMP. The farmer categories are (loosely) paired against their target markets and examples of specific support services required for these farmers to thrive are identified. Successful transformation will result in an increased number of smallholder farmers able to produce for local markets, and ensure regional food security, and where possible and viable, link into formal or tailor-made value chains for domestic and global markets. Nevertheless, South Africa's largely urbanised population and economically important international trade balance will still largely depend on large scale commercial farming operations of both white and black commercial farmers and corporate agribusinesses such as the fruit, sugar, poultry and egg producers.

The sustainable existence of a strong and healthy commercial sector is vital for the burgeoning smallholder sector, as the larger farmers create the critical mass of demand for research and technologies, input supply networks and value chains that could incorporate, expand and adjust to also serve the smallholder sector better if properly targeted and managed. Transformation of the commercial farming sector and the establishment and support of increased numbers of black commercial farmers is key for the continued existence of the sector. While dealing with the shorter-term responses to mitigate immediate shocks, targeted interventions and investments into the long-term development goals must be prioritised to address the dualistic nature of the sector, the slow progress on racial transformation and the sector's overall ability to make a real contribution to rural livelihoods and food security. Ironically, many of the required short- and long-term interventions are not

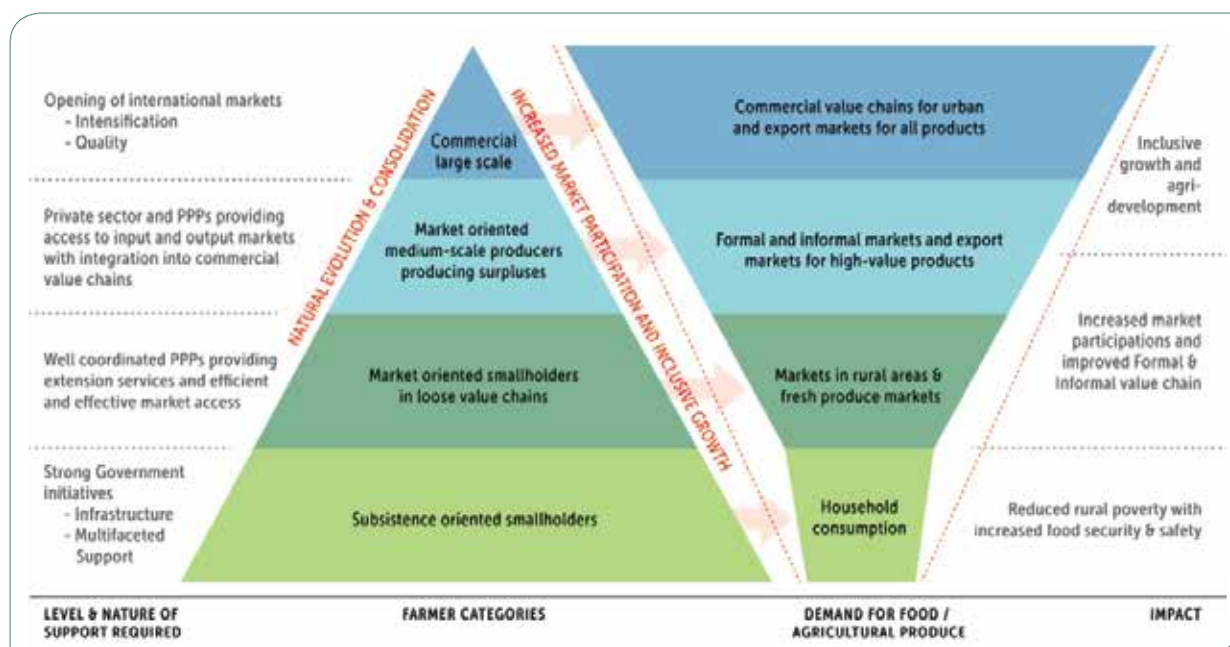


Figure 15: Potential framework linking producer support to dedicated value chains

mutually exclusive, and clear and decisive actions on low hanging fruit in the short-term can have lasting positive impacts with significant multiplier effects throughout the economy.

CONCLUDING REMARKS

These nine megatrends have been presented in broad brush strokes but nevertheless frame the agenda for BFAP's research priorities in the coming years. These priorities will be driven by a deeper understanding that will come from more granulated analyses of each of them, as well as efforts to incorporate the results in its modelling exercises. Some examples of these research priorities include markers of future food trends, and of global agricultural trade (Megatrends 1 and 2):

1. Whether the trend from loyalty to branded foods will continue to shift towards loyalty to store brands and especially loyalty programmes such as offered by all the supermarket chains.
2. What are the economic prospects for the distant future? This is important because the relationship between economic prospects and changes in aggregate food consumption in South Africa is a very direct one. When the economy slows it does not take long for consumers to switch to cheaper animal proteins (cheaper cuts of meat, cheaper meat types); out of animal to plant-based proteins; out of proteins to starches; out of more expensive to cheaper starches; and almost entirely out of fruits and vegetables. These substitution effects work both ways – when economic prospects improve, substitution works in the opposite direction.
3. While almost everybody agrees that health concerns drive food consumption patterns, and that this relationship is expected to strengthen over time, it is not clear which health concern will be overriding – for example reducing consumption of animal-based foods to combat cardiovascular diseases or increasing these to combat obesity? There are many examples of such anomalies, and it is important to track where these fashions are heading.
4. When the economic prospects of poor people improve, they also opt for foods that are more processed, while wealthier people demand less processed foods. Which of these trends will be strongest in the future?
5. The exact expected architecture of African regional and continental trade agreements. While these, to the extent that they lead to better market access, hold much potential for South African agriculture, experience shows that this may not be the case. Examples include the confusion caused by overlapping agreements with overlapping

memberships which allow countries to hide behind legal niceties and the recent actions of Botswana and Namibia in refusing access to South African produce in apparent contravention of the SACU agreement.

6. The availability and competitiveness of shipping services out of South Africa, a factor that has always had the potential to render South African produce uncompetitive in foreign markets despite our many comparative advantages.
7. Expectations around macroeconomic stability, especially exchange rates, and even more specifically the Rand price of the dollar, as such a large part of the costs from farm gate to export destination is denoted in dollars. While much is made of current volatility, there is little evidence that rates are more volatile after the 1980s. Does this allow us to extrapolate rates that remain on trend? Probably not, for two reasons. First, what has changed is the greater prevalence of short-term spikes, much the same as the Black Swans that we mentioned earlier. Second, in the South African case the Rand is often used by currency traders as a proxy for emerging market currencies, thus leading

to wild unexpected swings that place South African exporters at a disadvantage, whether the Rand appreciates or depreciates.

8. Both alcoholic beverages and tobacco products are treated differently from mainstream agricultural commodities because of their impact on human health, and both are important for South African trade (e.g. illicit cigarette imports, wine exports). Their long-term economic prospects will be affected by foreign consumers and foreign governments and need to be monitored and analysed more closely.

It is common cause that future global agricultural trade will be influenced most by factors such as climate change, economic growth, trade policies, technology, and input costs. While these broad categories can help us to understand the broad outline of South African agriculture's future export prospects, far more granulated research will be required. Again, the BFAP research agenda for the coming years will prioritise these more granular manifestations of the main influencers of future trade, both in terms of deeper understanding and of incorporating them in its modelling exercises.





KEY BASELINE ASSUMPTIONS TO 2035

POLICIES

The Baseline assumes that current international as well as domestic agricultural policies will be maintained throughout the period under review (2026 – 2035). In a global setting, this accounts for the current tariff levels imposed by the United States, including those products that can still enter tariff free, while cognisant that long term US tariffs still carry a high level of uncertainty. It also assumes that all other countries adhere to their bilateral and multilateral trade obligations. This remains an important consideration given the extent of short-term trade controls that have been applied intermittently through the various crises in the past 5 years. It also implies that countries adhere to stated objectives related to biofuel blending mandates. On the domestic front, current domestic and international policies are assumed to be maintained.

With the deregulation of South Africa's agricultural markets in the mid-nineties, many non-tariff barriers to trade and some direct trade subsidies to agriculture were replaced by a simplified tariff schedule with generally lower tariff barriers. In the case of maize and wheat, variable import tariffs were introduced. The variable import tariff for wheat was replaced by a 2% ad valorem tariff in 2006. However, in December 2008 the

original variable import levy system was re-introduced and projections for the global price suggest that the tariff will remain in place over the rest of the Outlook as the projected world price for wheat remains below the current reference price of \$279/tonne.

Global maize prices have traded significantly higher than the reference price of \$110 per tonne in recent years and international prices are not projected to fall below this level over the next decade. Consequently, no maize tariff is applied over the Outlook. Ad valorem tariffs are applied in the case of oilseeds. For meat and dairy products, a combination of fixed rate tariffs and/or ad valorem tariffs are implemented.

A variable import tariff is also applied in the sugar industry, with the tariff rate triggered when the dollar-based reference price (London Nr 5) falls below \$680/tonne. This level was imposed in 2019 and is currently under revision. Nevertheless, the baseline still reflects this level and will only be adapted if an official decision on a change is published.

General duties on imported chicken were increased substantially in October 2013; however a significant share of imports originate from the EU and therefore

carry no duty under the original Trade, Development and Cooperation Agreement (TDCA), which was later replaced by the new Economic Partnership Agreement (EPA). Furthermore, South Africa applies anti-dumping duties of R9.40 per kilogram on bone-in chicken pieces originating from the United States, which was extended in 2024 with a quota that is exempt and only subject to the general duty, but this quota has not been fully utilised since 2021. Although current bilateral engagements may result in the renegotiation of the quota, it is maintained at current levels for this year's baseline. South Africa also applied a safeguard duty of 35.3% on bone-in portions originating from the EU from 2018. This safeguard was reduced annually and was phased out completely by March 2022. In 2020 the general duty on bone-in portions was increased from 37% to 62%, while the general duty on boneless cuts was increased from 12% to 42%. In 2022, ITAC granted further anti-dumping duties on bone-in portions originating from Brazil, Denmark, Ireland, Poland and Spain.

The projected tariff levels, as derived from the projections of world commodity prices, are presented in Table 2.

South Africa's horticulture sector, as a net exporter, is influenced by policies in the global trade arena. Baseline assumptions reflect limited changes in this environment. Apart from the temporary tariff relief

granted by China, current tariffs imposed by other key trading partners are maintained over the projection period. This implies that South Africa continues to face a more stringent tariff environment than some of its competitors in key Asian markets. While the tariff environment is more favourable in the EU thanks to the EPA, it must be noted that South African producers are facing increasingly stringent Sanitary and Phytosanitary requirements – such as the new cold chain requirements recently imposed on citrus exports due to perceived risks around False Coddling Moth. In the United States, the change in stance towards South African imports is noted but given the high degree of uncertainty with respect to the ultimate level of application with ongoing diplomatic engagement and negotiations, as well as the ad hoc nature of changes in 2025, tariffs are maintained at current levels for the baseline.

MACRO-ECONOMIC ASSUMPTIONS

To some extent, the Baseline simulations are driven by the outlook for a number of key macroeconomic indicators. Projections for these indicators are mostly, but not exclusively, based on information provided by the OECD, the IMF and the BER. The global economy has been riddled with disruptions in recent years, including the pandemic, the war in Ukraine, surging energy prices, spiralling inflation that resulted in aggressive interest rate hikes, escalating conflict in the Middle East, increasing geopolitical fragmentation and

Table 2: Policy Assumptions

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rand per tonne										
Maize tariff: (Ref. price = US\$ 110)	0	0	0	0	0	0	0	0	0	0
Wheat tariff (Ref price = US\$ 279)	577	509	532	575	620	638	634	618	637	667
Wheat tariff: (300 000 tonne quota: EU Origin)	0	0	0	0	0	0	0	0	0	0
Sunflower seed tariff: 9.4 % of fob	1031	1036	970	961	967	972	986	1005	1025	1045
Sunflower cake tariff: 6.6 % of fob (4.95% for MERCUSOR origin)	196	195	207	203	204	204	207	211	215	219
Sorghum tariff: 3 % of fob	107	109	108	108	110	113	115	118	120	123
Soybean tariff: 8 % of fob	540	559	565	556	558	569	586	603	615	626
Soybean cake tariff: 6.6 % of fob (4.95% for MERCUSOR origin)	337	340	339	335	344	356	369	382	391	396

Table 2: Policy Assumptions (Continued)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Tonnes										
Cheese, TRQ quantity	1199	1199	1199	1199	1199	1199	1199	1199	1199	1199
Butter, TRQ quantity	1167	1167	1167	1167	1167	1167	1167	1167	1167	1167
SMP, TRQ quantity	4470	4470	4470	4470	4470	4470	4470	4470	4470	4470
WMP, TRQ quantity	213	213	213	213	213	213	213	213	213	213
Percentage										
Cheese, in-TRQ	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Butter, in-TRQ	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
SMP, in-TRQ	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
WMP, in-TRQ	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Cents per kilogram										
Cheese, above TRQ rate	500	500	500	500	500	500	500	500	500	500
Butter, above TRQ rate	500	500	500	500	500	500	500	500	500	500
SMP, above TRQ rate	450	450	450	450	450	450	450	450	450	450
WMP, above TRQ rate	450	450	450	450	450	450	450	450	450	450
Beef tariff: max (40 %*fob,240c/kg)	3030	3066	3049	3035	3034	3072	3177	3380	3542	3687
Lamb tariff: max (40 %* fob,200c/kg)	5150	5507	5579	5530	5456	5518	5696	5986	6252	6495
Chicken tariff (Whole frozen): 82%	2619	2667	2720	2774	2834	2897	2968	3059	3150	3241
Chicken tariff (Carcass): 31%	122	122	124	125	126	128	129	130	132	133
Chicken tariff (Boneless Cuts): 42%	1536	1564	1595	1627	1662	1699	1741	1794	1847	1901
Chicken tariff (Offal): 30%	258	263	268	274	280	286	293	302	311	320
Chicken tariff (Bone in portions): 62%	941	958	977	997	1018	1041	1066	1099	1132	1165
Chicken tariff: EU Origin	0	0	0	0	0	0	0	0	0	0
Pork tariff: max (15 %* fob, 130c/kg)	739	774	776	788	796	808	823	843	862	881

disruptions on key maritime routes such as the Red Sea, the Strait of Hormuz and the Black Sea. The Middle East has invested to diversify routes, but the escalation in conflict in 2026 again illustrates its volatility and the potential impact on energy markets and shipping when conflict escalates.

The global economy was poised to accelerate growth in early 2026, with widespread optimism around investments into Artificial Intelligence and the productivity gains that this may bring. However, escalation of the war in the Middle East involving Iran, Israel and the United States introduced a new and

substantial shock to global energy markets owing to its closure of the Strait of Hormuz. While a peace deal was signed by Iran and the United States in June, it remains fragile with many negotiations still ongoing, leaving a high degree of risk around global macro-economic projections. Nevertheless, the IMF in its April edition of the World Economic Outlook still pointed to growth in excess of 4% in 2026 and 2027.

Further to the impact of global risks in the domestic economy, South Africa also faces a number of unique domestic challenges. Growth has in recent years been persistently slow, constrained by structural challenges

Table 3: Key Macro-Economic Assumptions

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Millions										
Total population of SA	62.7	63.3	63.8	64.3	64.8	65.4	65.9	66.4	66.9	67.5
SA cents per foreign currency										
Exchange rate										
(Rand/US\$)	16.46	16.67	16.83	17.01	17.19	17.39	17.62	17.89	18.24	18.61
Exchange rate										
(Rand/Euro)	19.26	19.58	19.86	20.07	20.28	20.52	20.76	21.01	21.26	21.51
Percentage change										
Real GDP per capita	0.4%	0.2%	0.7%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Consumer Price Index	4.0%	3.1%	3.0%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Percentage										
Weighted prime interest rate	10.4	10.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5

such as inconsistent and increasingly expensive energy supply, deteriorating municipal infrastructure and logistical bottlenecks as well as corruption and at times questionable economic decision making. As such, South Africa's economy grew by only 0.5% in 2024. Despite improved sentiment and substantial improvements in electricity supply, growth improved to only 1.1% in 2025, with the Rand strengthening from R18.33 to the US dollar in 2024 to R17.89 in 2025. In 2026, the Rand is expected to strengthen further to R16.46. In early 2026, South Africa's economy was showing tentative signs of recovery, with lower inflation, easing interest rates and marginal improvements in consumer and business confidence. The energy shock following the war in Iran however introduced new headwinds, again highlighting its fragility to external shocks. The baseline does assume some improvements in economic growth over the coming decade, but these are slow, with substantial progress still to be made in structural reforms if they are to be accelerated. Table 3 presents the key macroeconomic assumptions that underpin the projections provided in this baseline.

The shock to global energy markets following the start of the war in Iran was severe, with oil prices peaking well above 100 USD per barrel. However, following signature of the preliminary peace deal in June, the price had declined to just above 70 USD. While the fragility of the peace deal and the ultimate impact on shipping through the Strait of Hormuz raises the uncertainty around oil and fertilizer projections, the

baseline assumes that the peace deal holds and that a more permanent solution will be negotiated within the 60-day framework. This suggests that oil prices will continue to moderate.

The closure of the Strait of Hormuz also brought a significant shock to global fertiliser markets, with the Middle East a major supplier of Urea in particular. By June, Urea prices had also declined again to pre-war levels, suggesting that production has ramped up in other regions. While global prices have largely normalised, increased shipping costs and risk premiums alone will still likely result in higher fertiliser costs in South Africa in 2026. The strengthening of the Rand will however offset some of this increase. Figure 16 presents the baseline assumptions for Brent Crude oil, fuel and fertiliser prices.

Beyond oil, the increases in shipping rates will also affect other imported inputs such as animal feed additives, herbicides and insecticides. While the combination of fuel, fertiliser and crop protection products contribute the greatest share of input costs for field crop producers, cost structures in high value horticultural sectors look different. Here producers are exposed, as major administered prices such as labour and electricity have tended to rise faster than general inflation and this will likely remain the case.

To conclude, the baseline assumptions present a single plausible view of the future, but the macroeconomic

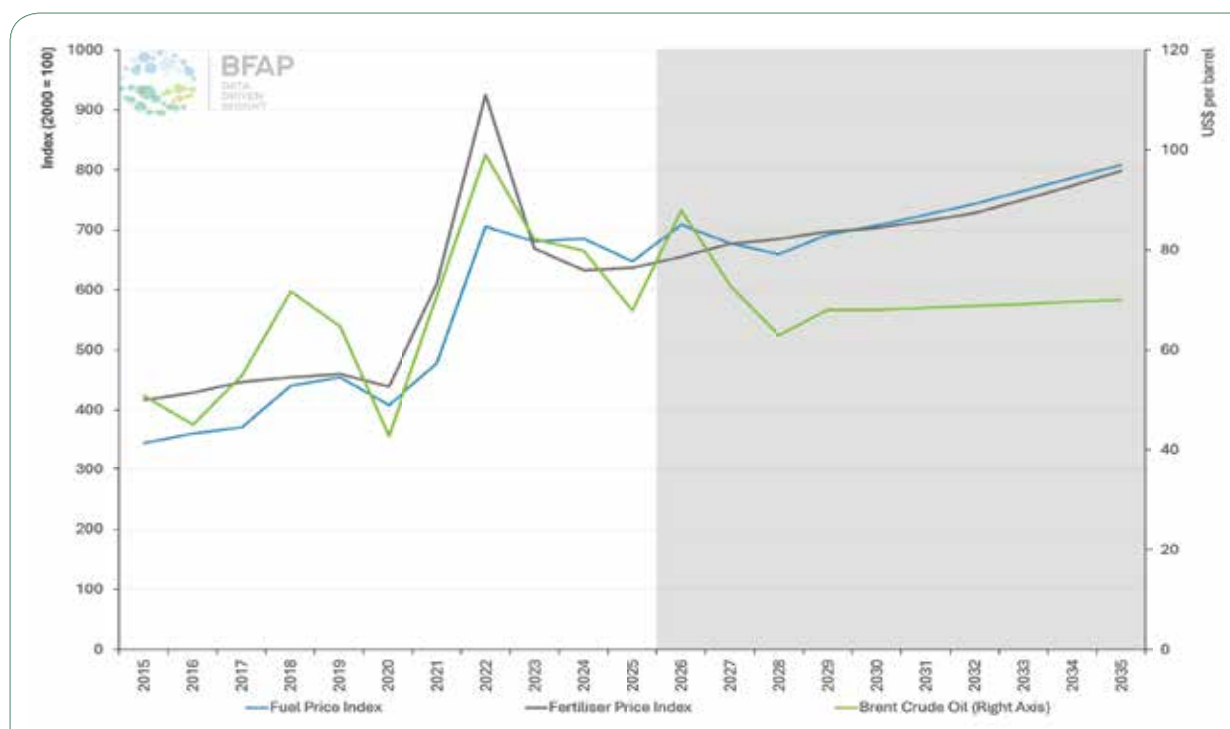


Figure 16: Oil price assumption and input cost implication

Source: OECD, IMF, BER and BFAP (2025)

environment remains riddled by risk and uncertainty. Going forward, it is likely that volatility in commodity and input markets will continue, with ample upside and downside price risks that include further escalation of

tension in the Middle East, changing trade patterns, extreme weather fluctuations, subdued economic performance and policies that could impact crop and input markets.





OUTLOOK FOR ANIMAL PRODUCTS

INTRODUCTION

South Africa's animal product sector accounts for 43% of total agricultural revenue and includes a diverse range of industries that rely on extensive pasture based, as well as feed intensive controlled environment production systems. Almost three quarters of total animal product revenue is attributed to just three industries, with poultry (35%), beef (25%) and milk (14%) being the largest contributors (Figure 17).

The livestock sector has navigated some challenging years in the recent past, being influenced by a sustained period of high feed prices globally, a weak domestic consumer environment and numerous animal disease outbreaks in South Africa. These included widespread Highly Pathogenic Avian Influenza (HPAI) in 2023, ongoing Foot and Mouth Disease (FMD) that affected weaner producers, several major feedlots and dairy producers in 2025 and 2026, as well as African Swine Fever (ASF) that affected multiple commercial piggeries in early 2026.

Despite these challenges, revenue growth remained positive, though this reflects ample influence from rising prices rather than strong production growth. These price dynamics originate from a combination of strong world markets and intermittent supply disruptions in South Africa due to the animal disease challenges. Amongst

the various livestock products, revenue from the export orientated ostrich industry grew the fastest, followed by pork, milk, eggs, poultry and wool. Amongst all these sectors, average annual growth exceeded 8% per annum for the period from 2020 to 2025. Growth in beef revenue was slower, at 4.4% per annum, partly due to the movement restrictions imposed in 2025 to control the spread of FMD, which delayed sale of products that ordinarily would have entered the market.

While revenue is an important indicator of past performance, it must also be considered in relation to costs, which also increased sharply over the same period. From 2020 to 2025 for instance, the average cost of a chicken feed ration increased by 6.3% per annum. While significant fluctuations occurred during this period, the relative price and cost movements were on average sufficient to induce some expansion in production in industries such as pork (5.3% p.a.) and poultry (1.2% p.a.).

Domestic supply disruptions, particularly in the poultry industry in 2023 and the beef industry in 2025, contributed to sharp domestic price increases, but the influence from international markets should not be ignored. Beef and sheep meat prices continue to rise globally, reflecting constrained supplies (Figure 18).

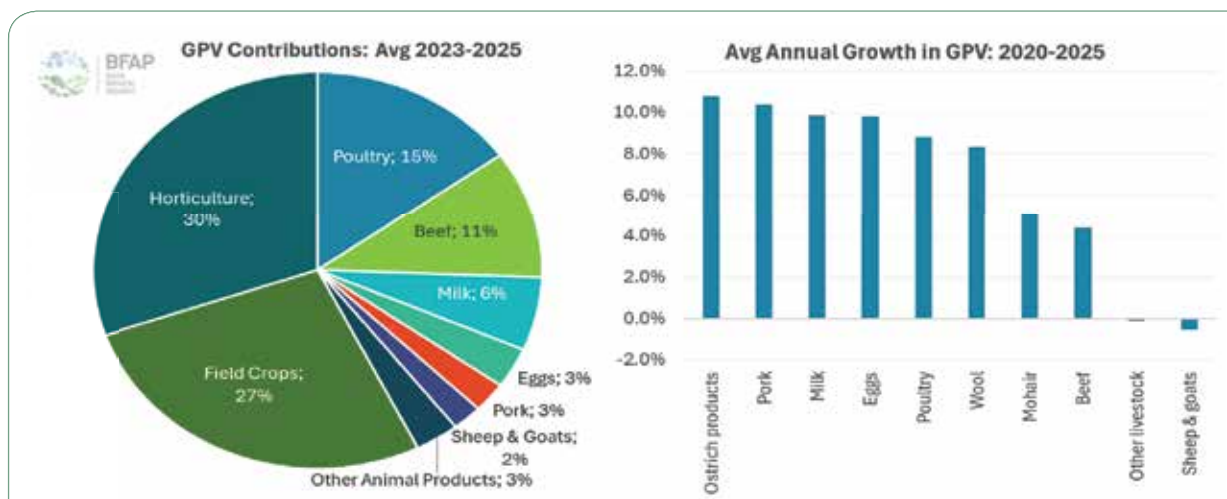


Figure 17: Revenue contributions and growth performance in major animal product sectors

Source: Compiled from DoA, 2026

Following a combination of high feed prices from 2021 to 2023 and weather-related strain on grazing conditions, cattle herd numbers in the United States have reached record lows. Combined with herd rebuilding in several other major production regions, this induced a reduction in production globally in 2025. Sheep meat production from the Oceanic region also declined, which was a key factor underpinning a 12% and 27% increase respectively in the FAO beef and sheep meat indices in 2025. In the case of pork and poultry, world prices have started to soften, with year-on-year reductions of 2.4% and 1.4% respectively in 2025. This reflects the shorter production cycle, which enables a faster supply response when profitability starts to improve, but strong demand for these products, considering high red meat prices, kept price declines small.

The 2026 edition of the OECD-FAO Agricultural Outlook suggests that high beef and sheep prices will persist in the short term, as ongoing herd rebuilding limits marketed volumes in several major production regions. Once the effect of the current rebuilding cycle starts to penetrate the market, prices are expected to enter a downward cycle. Given that the Chinese annual quota for Brazilian products is almost full midway through 2026, potential redirection of such products to other markets may dampen price prospects sooner. Pork and poultry prices are expected to remain more stable, as the supply response is already visible. Despite the decline in ruminant (cattle, sheep, goats) prices, the medium-term trajectory still points to some divergence from non-ruminant (pigs, poultry) prices, reflecting the

faster rate of productivity gains in non-ruminants, as well as the greater land requirements for cattle and sheep production that result in higher relative production costs.

The FAO's dairy price index also increased in 2025, reflecting strong price gains particularly for cheese and butter in the first half of the year. Prices moderated in the second half of the year as milk production increased more than anticipated in major exporting countries. Following the correction in 2026 on the back of higher supply, dairy product prices are projected to continue a modest upward trajectory over the outlook, with the price spread between fat and non-fat components set to persist due to the comparatively strong demand for milk fats. While the projections from the OECD-FAO (2026) reflect the assumption of normal weather conditions, prices are set to remain volatile around these trends, in line with historic norms. The small share of total product traded internationally combined with the relative dominance of a few major exporters and widely restrictive international trade environment continue to underpin the substantial volatility in dairy markets.

SHORT TERM OUTLOOK: Stabilising widespread animal disease challenges

South Africa's livestock sector stands at an historic crossroad. After some challenging years, profitability prospects are improving and strong international markets underpin substantial growth opportunities. At the same time, it remains hamstrung by the persistent escalation of animal disease challenges which have

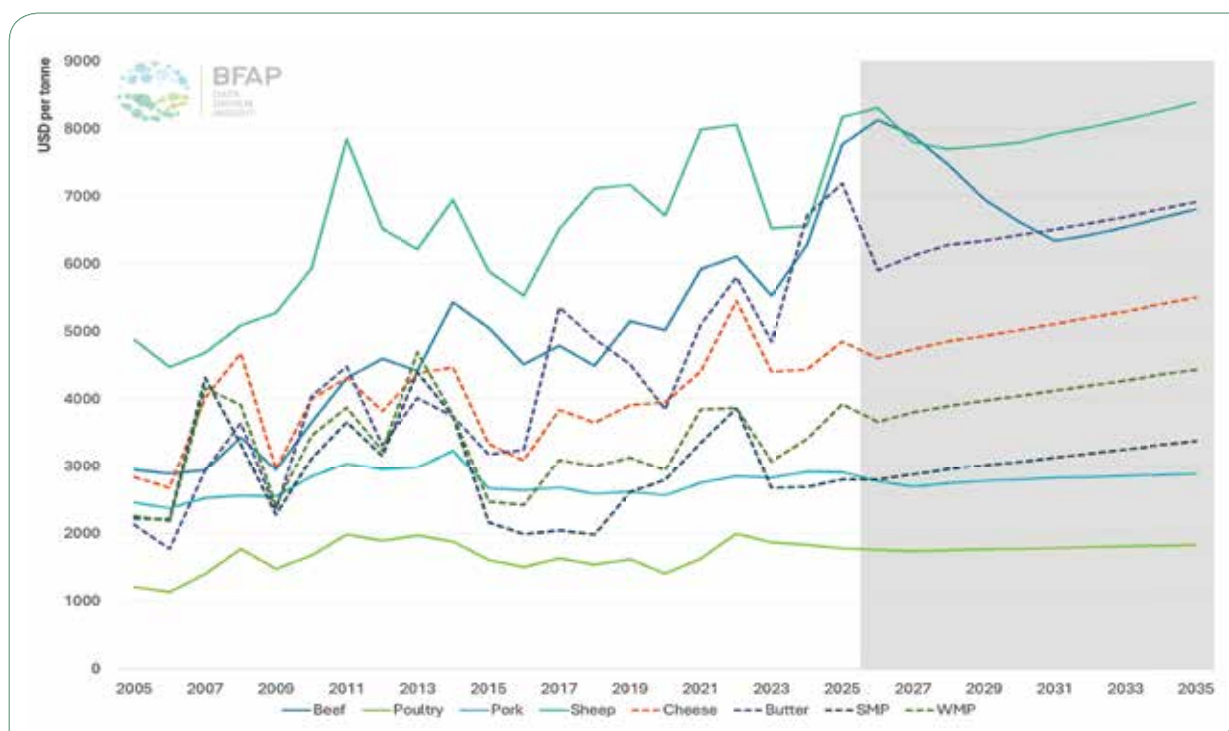


Figure 18: International animal product prices: 2005-2035

Source: BFAP, FAPRI & OECD-FAO, 2026

resulted in substantial financial losses due to movement controls, interruptions in access to various export markets and reduced productivity. The magnitude of animal disease challenges has also resulted in unprecedented efforts to improve biosecurity and facilitate widespread vaccination. However, such strategies take time to implement, and the level of success achieved over the next two years will define the risk profile and trajectory of livestock markets.

Prices remain elevated but could decline as supply improves

Despite the relative strength of international markets, which had prompted strong export performance in early 2025 prior to the spread of FMD into major feedlots, both beef and sheep meat production declined, by 8% and 4.6% respectively, in 2025. In the case of sheep, this is mainly the result of reduced slaughter volumes, but for beef it reflects reductions in both slaughter volumes and slaughter weights. Amid ongoing disease risk and high price incentives, many producers marketed products early. Given ongoing supply constraints, beef carcass prices increased by 21% year on year, significantly more than the international price increase of 12%. Domestic sheep meat prices also increased by 21%, whilst pork and poultry price gains were more muted at 8% and

6% respectively. Amongst the various meat industries, poultry was the only one where production expanded, with a 1.6% year on year increase. In early 2026, most meat prices remain elevated, with pork prices rising sharply in quarter 1 following a sharp reduction in slaughter numbers as a result of both FMD and ASF.

Beef prices in particular have softened from the peaks of late 2025, reflecting a combination of consumer resistance to higher prices and improvements in supply as vaccine rollout continues to gather momentum. Nevertheless, absolute price levels remain well above those observed in quarter 1 of 2025, prior to the start of supply disruptions. Some price support is expected to remain through the second half of 2026 given that international markets remain strong, but as supply continues to recover both in South Africa and abroad prices are expected to soften further into 2027. The rate of decline differs across meat types, reflecting differences in timing of disease impact and recovery, as well as the length of production cycles. Pork prices would likely be the slowest to come down given that the bulk of disease impact was much later than in beef and that ASF protocols necessitate culling, whereas animals affected by FMD can still be marketed at a later stage.

Feed costs declining but El Niño risk ahead

Further to favourable meat prices, livestock sectors are also benefitting from substantial declines in feed prices in late 2025 and early 2026. Over the first 5 months of 2026, compared to the same period in 2025, yellow maize and soybean meal prices have declined by 30% and 23% respectively. With another bumper harvest expected for both maize and soybean, which should result in substantial exportable surpluses, feed material prices are expected to remain under pressure for the rest of 2026 and early 2027. After that, uncertainty starts to increase, with the probability of a “super El Niño” event still rising consistently (at the time of writing). This would likely impact the 2026/27 summer crop and therefore increases the risk of lower production and increased prices through the second half of 2027 and early 2028. While such events have in the past resulted in significant yield declines in South Africa, the potential price impact in 2027 could be mitigated to some extent by high carryover stocks into 2027 and late rain in 2026 which has bolstered soil moisture in key production regions. Nevertheless, from a livestock production perspective, risks of increased feed prices remain, even if they are more muted than in previous El Niño seasons. Some benefit is also expected from the structural growth in the soybean sector, specifically in production and

processing, that has enabled South Africa to move from a net importer to a net exporter of both soybeans and soybean meal, subsequently reducing protein costs in animal feed rations.

Profitability cycle favourable – but benefits uneven due to disease impact

The combination of favourable prices and declining feed costs has shifted profitability cycles to a more favourable position for livestock in 2026 and despite the weather-related risks of higher feed prices in 2027, the equilibrium position going forward remains favourable. This is illustrated in the meat to maize and milk to maize price ratios in Figure 19. With maize being the biggest raw material cost in typical feed rations and feed dominating the total production cost structure, particularly for intensive livestock industries, this provides a basic indicator of profitability in the sector. Whilst not quite reaching the peaks of 2017, which induced significant expansion, the equilibrium position of output to input cost ratios remain favourable compared to the past.

While profitability continues to improve, it must also be acknowledged that benefits have been curtailed in some industries by disease impacts that limited the ability of some producers to market, even when

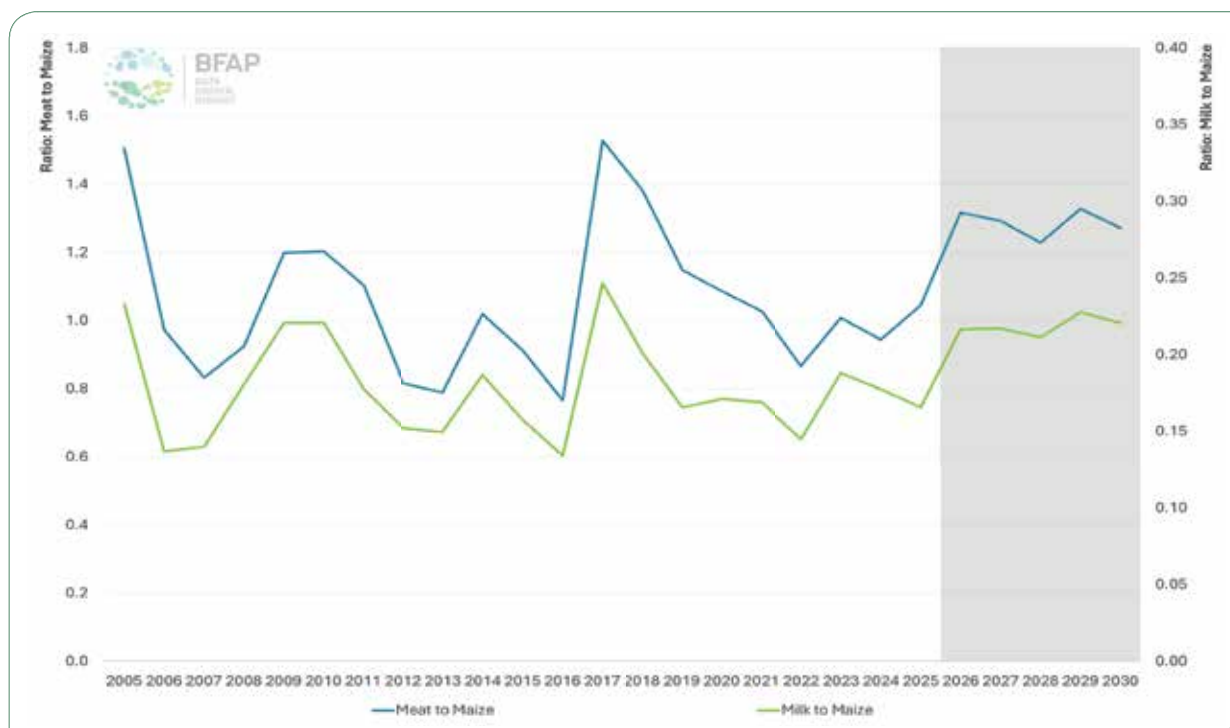


Figure 19: Profitability ratios: Combined meat price to maize price index and milk to maize price index: 2005-2030

prices are favourable. The major benefactor has been poultry, where supply was able to continue unaffected, and those producers in other sectors which remain unaffected by disease. Others have faced substantial financial losses.

Successful vaccination roll-out and trade protocol adjustments critical to unlock export value

While baseline projections point to sustained recovery in production volumes across most sectors in 2026 and all sectors in 2027, this is predicated on the assumption that current animal disease management efforts bear fruit. While the FMD vaccine rollout still needs to accelerate in several areas, current efforts are starting to stabilise the sector and have the potential to restore market access and improve resilience. Early signs of recovery are emerging: April export data showed encouraging momentum for the first time since quarter 1 of 2025 and Karan Beef has recently resumed exports to Jordan under new trade protocols. To put this six-month effort into perspective, it took Argentina approximately two years to reap the benefits of an FMD turnaround strategy.

With the domestic consumer environment remains strained and general inflation continues its upward trend following the impacts of the war in Iran, continued momentum in both the vaccination strategy to enable supply and adjustments to bilateral trade protocols to facilitate export flows are critical to recovery. The conflict in the Middle East, which has resulted in sharp increases in shipping costs and significant risk premiums into the region, brings its own challenges to access these markets. Whilst fragile, signs of an initial deal between the United States and Iran has brought some improvement, but the fluctuations through early 2026 illustrate the need for diverse marketing options and rapid adaptation of trade protocols with multiple markets. The FMD shock in 2025 undoubtedly brought a watershed moment to livestock and had an unintended but potentially transformative outcome: it has forced the sector to commit to a national identification and traceability system. This is something the industry has worked towards for more than a decade, but without sufficient momentum for widespread producer adoption, until now. This enables compartmentalisation and commodity-based trade strategies that are able to sustain and accelerate export flows, enabling the industry to benefit from strong international markets.

MEDIUM TERM OUTLOOK TO 2035: Export led growth in constrained consumer environment

Revenue growth slows as prices normalise

Strong revenue performance in the livestock sector in recent years is depicted in Figure 20, which shows nominal gross production value from most major animal-based products on the left axis along with an index of real (inflation adjusted) gross production value from all animal products on the right axis. Revenue growth exceeded general inflation in most years since 2020, and nominal growth was such that the average level between 2020 and 2025 exceeded the average level from 2014-2019 by 50%. As mentioned, this was also a period of very strong crop prices and spiralling input costs. As such, costs such as feed and energy also exceeded general inflation, bringing pressure to livestock margins despite strong revenue performance. Production growth slowed as a result, giving rise to the current high price environment, which reached a peak in 2025.

Over the outlook, revenue growth is projected to slow, to the extent that it may not exceed general inflation in the near term, with real growth only resuming in the second half of the coming decade. This reflects the downward correction in prices in the short term and slower growth thereafter, as supply recovers globally and animal disease related supply disruptions in South Africa ease. Despite this consolidation, the average level over the outlook is expected to exceed that of the past five years by 41% in nominal terms. Even after accounting for general inflation over this period, the real gross production value by 2035 is still expected to exceed the average level from 2023-2025 base period by 4.4%. The bulk of additional revenue is expected to come from the poultry, beef, milk and processed dairy sectors.

Profitability prospects support production growth but disease risks still a constraint

Whereas revenue performance over the past 5 years was to a large extent driven by prices, the improvements in profitability as a result of lower feed costs over the outlook is expected to induce expansion in livestock production (Figure 21) ranging from 0.2% per annum on average for sheep to 1.6% per annum for poultry, beef and pork, and 2% per annum for milk. As such, the revenue growth presented in Figure 20 stems from increased production volumes rather than further real price gains. This reflects the reality for most agricultural commodity markets, where despite cycles and volatility,

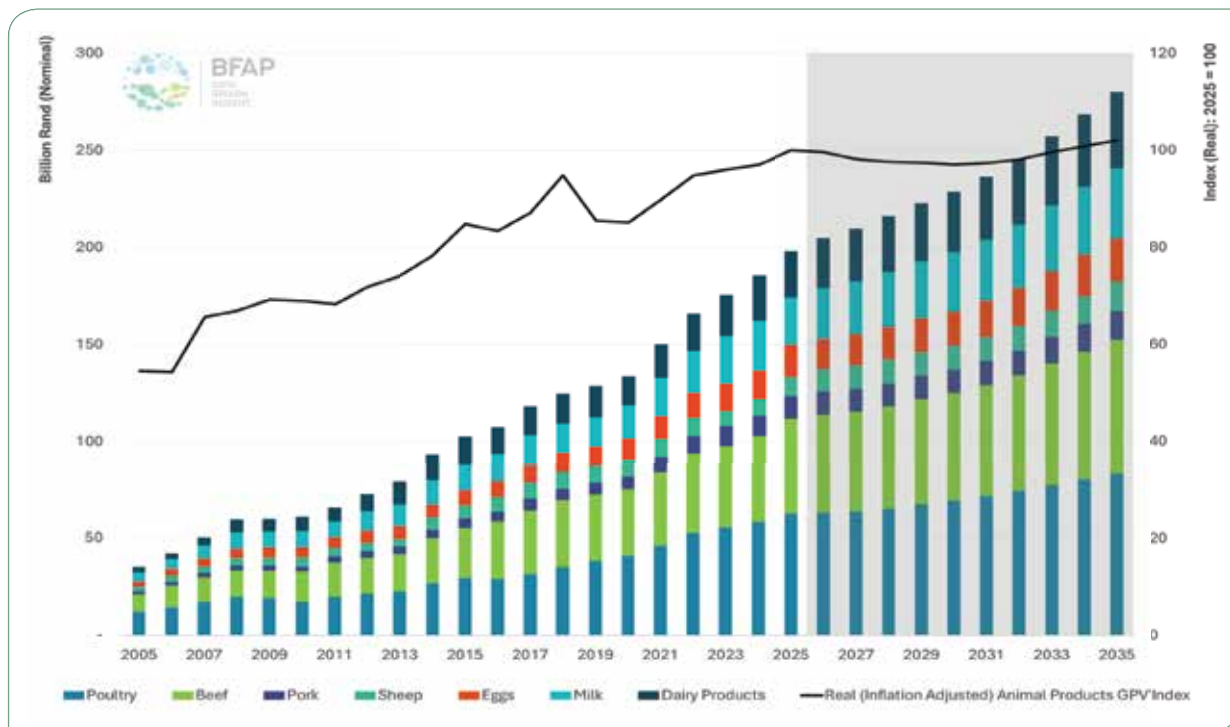


Figure 20: Gross production value from animal products: 2005-2035

often induced by weather conditions, real prices have trended downwards in the long term and are expected to remain on this trajectory.

A core component underpinning production growth is productivity gains. Table 4 illustrates some of the improvements made in this regard over the past 20 years, using a basic metric of production per productive livestock unit, as measured by animal inventories. This combines a number of factors, which include reproductive rates, mortality, carcass weights, average daily gain, milk yield per cow and in the case of more intensive industries, the number of reproductive cycles per year. Amongst the industries included, productivity gains have been fastest in the pork sector, which has a shorter production cycle than beef for instance, enabling rapid progress in genetics. It has also benefitted from significant investments in production technologies. In the more extensive sectors, progress has been slower but still significant. Over the outlook period, projected improvements in profitability are expected to induce some expansion, but historic advances in productivity are also expected to be sustained, contributing to the projected production growth shown in Figure 21. Across most industries, such growth is expected to accelerate relative to the past. Across all industries, but particularly the more extensive ones such as beef, sheep and dairy,

there is significant potential to improve productivity gains through improved animal disease management and potential genetic improvements in informal sector herds.

In the poultry industry productivity gains would typically be measured through the length of production cycle to achieve target weights, the number of cycles per year and the feed conversion ratio. While long term series of such metrics are not readily available, it is noteworthy that from 2015 to 2024 average feed conversion ratios improved by 14%, whereas the cycle length declined by 10%. Sustained improvements in feed conversion over the outlook also will result in a reduced feed requirement per kilogram of chicken produced by 2035 relative to the 2023-2025 base period. Considering all livestock sectors, the total volume of meat, milk and eggs produced per unit of feed used is projected to improve by a further 8% by 2035 relative to the 2023-2025 base period.

Domestic demand growth limited by economic performance and spending power

Consumer spending power in South Africa has been strained for some time as the combination of structural economic challenges, high unemployment and multiple global disruptions limited per capita GDP growth to less than 0.5% per annum on average since 2020. While some

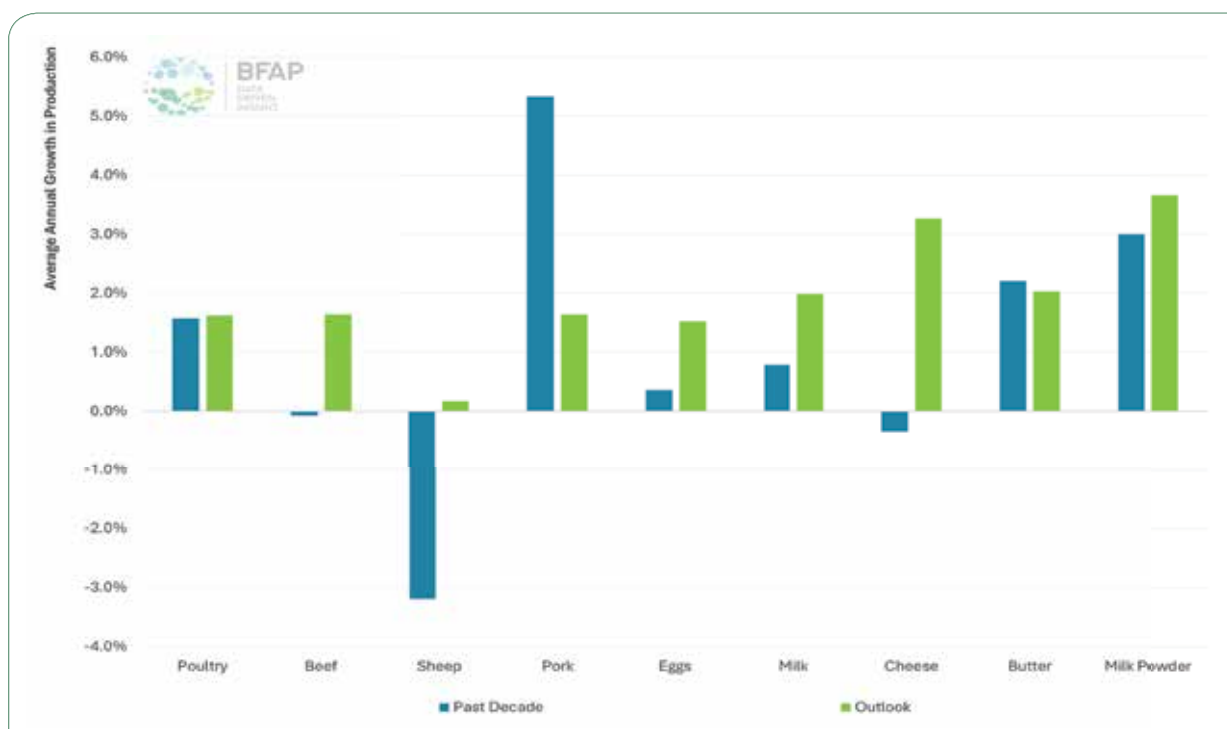


Figure 21: Average annual growth in production of animal-based products: Outlook vs. Past Decade

Table 4: Improvements in production per livestock inventory unit in different livestock industries

	Beef	Pork	Milk
Past decade	11.1%	84.0%	14.3%
Past 20 years	44.6%	181.6%	32.3%

tentative signs of recovery were evident in early 2026, the energy price shock following escalation of war in Iran and the subsequent closure of the Strait of Hormuz brought renewed headwinds. While progress on reforms has improved the outlook relative to recent years, per capita GDP is still expected to average only 0.7% per annum through to 2035.

Meat is amongst the higher cost items in a typical food basket, making consumption sensitive to fluctuations in consumer spending power. With disposable income under pressure and meat prices rising in real terms, per capita meat and dairy product consumption declined consistently from 2019 to 2023 (Figure 22). Modest improvements in 2024 and 2025 resulted from increased consumption of more affordable products such as poultry, pork, milk and eggs, which was partially offset by further declines in beef, sheep and processed dairy products. While further improvements are expected over the outlook period due both to consistent albeit slow improvement in spending power and reductions in real prices across most products, total per capita consumption of meat and

dairy products by 2035 is still expected to be lower than the levels observed from 2018 to 2020. With affordability and value for money a core priority, chicken, eggs and fresh milk are still expected to account for the biggest share of growth. Chicken consumption growth benefits from its relative affordability, along with favourable perceptions regarding its health characteristics. Pork is also increasingly accepted amongst younger consumers and benefits from improved relative affordability that supports growing consumption. Some recovery is also expected in beef consumption. While large differences exist between the prices of various beef cuts, with several more affordable entry points such as mince and stewing beef, it remains more expensive on average than pork and poultry. Nevertheless, with prices declining from the peaks of 2025, some improvement in relative affordability is expected to support consumption growth in the short term. Whilst slower amongst the more expensive products, per capita consumption is expected to rise across all products except for sheep, which is the most expensive meat product.

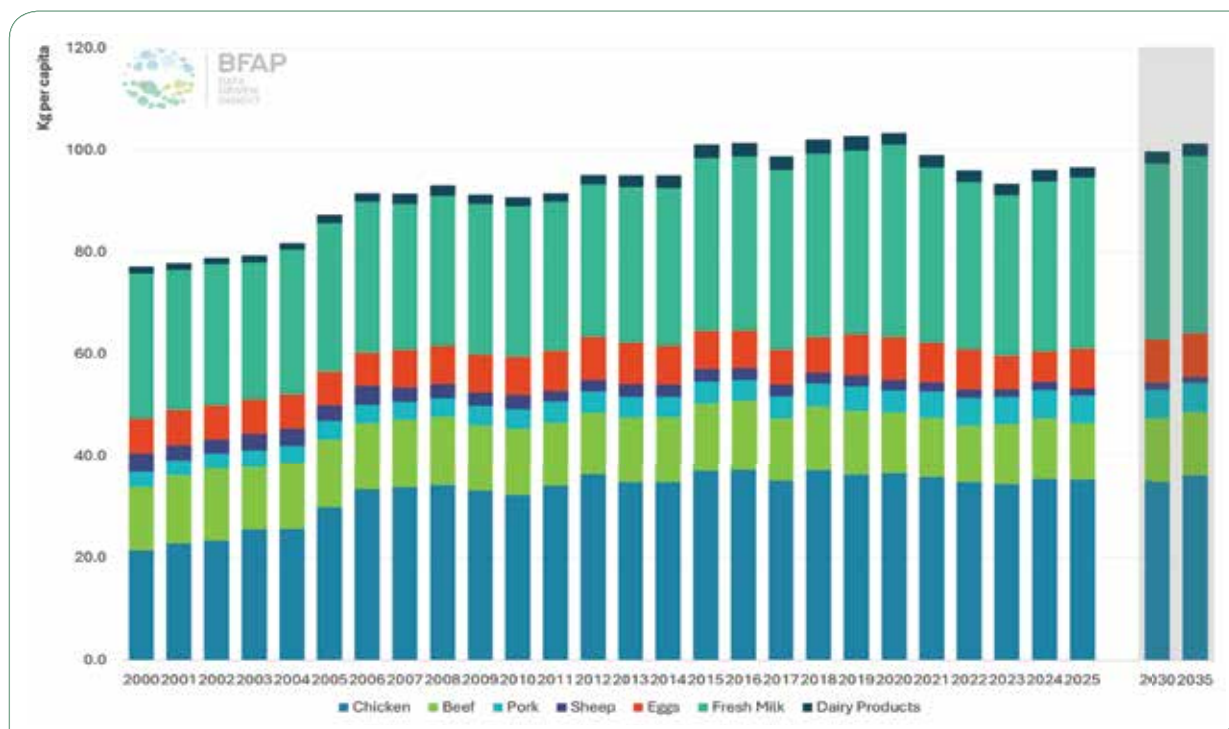


Figure 22: Per capita consumption of major meat and dairy products: 2000 2 2035

Population growth and continued urbanisation, which brings more frequent purchases and access to refrigeration facilities, also contribute to meat consumption growth (Figure 23). Egg and beef consumption growth also contain an element of recovery following below-normal consumption in 2023 and 2025 respectively due to animal disease induced price peaks. While the rate of growth in poultry meat consumption is slower, it is far more widely consumed than other meat types and hence growth comes from a larger base. Of the additional meat consumed by 2035 relative to the 2023-2025 base period, more than 60% is expected to be poultry. Milk consumption is expected to rise by 37%, being a highly affordable protein source with limited substitutable products. From a much smaller base, the consumption of dairy products such as cheese, butter and milk powders is also expected to rise by 34%, underpinned by moderate price growth that is well below general inflation.

Export-led strategies increasingly critical to unlock value

Muted domestic demand growth elevates the importance of export strategies to increase carcass value for producers. This may seem counterintuitive given that the total net trade position for meat and

dairy products remains in deficit, but this is really only because imports are larger than exports for poultry meat, the largest sector, with several others having already transitioned to net exporting positions (Figure 24). Milk and dairy products were the first to transition to a surplus position, followed by beef from 2015 and sheep from 2020. In fact, since 2020, the only industries still in a net importing position are pork and poultry. This is also reflective of product mix, with pork imports comprising mainly ribs into the hospitality sector, while the share of mechanically deboned meat (MDM) in total chicken imports has increased from 30% in 2018 to more than 60% by 2025. This decline emanates from successful import replacement amongst other chicken cuts, with bone-in portion imports in particular declining to just 50 000 tonnes by 2025 from 287 000 tonnes in 2018. MDM is not produced on a large scale in South Africa and so will likely continue to be imported as an input in the production of processed meats.

While the success of poultry import replacement reflects improved competitiveness and investments to expand production, the decline in cuts other than MDM suggests that opportunities for further import replacement are limited. Instead, if production growth is to continue outpacing consumption, as it has done in recent years,

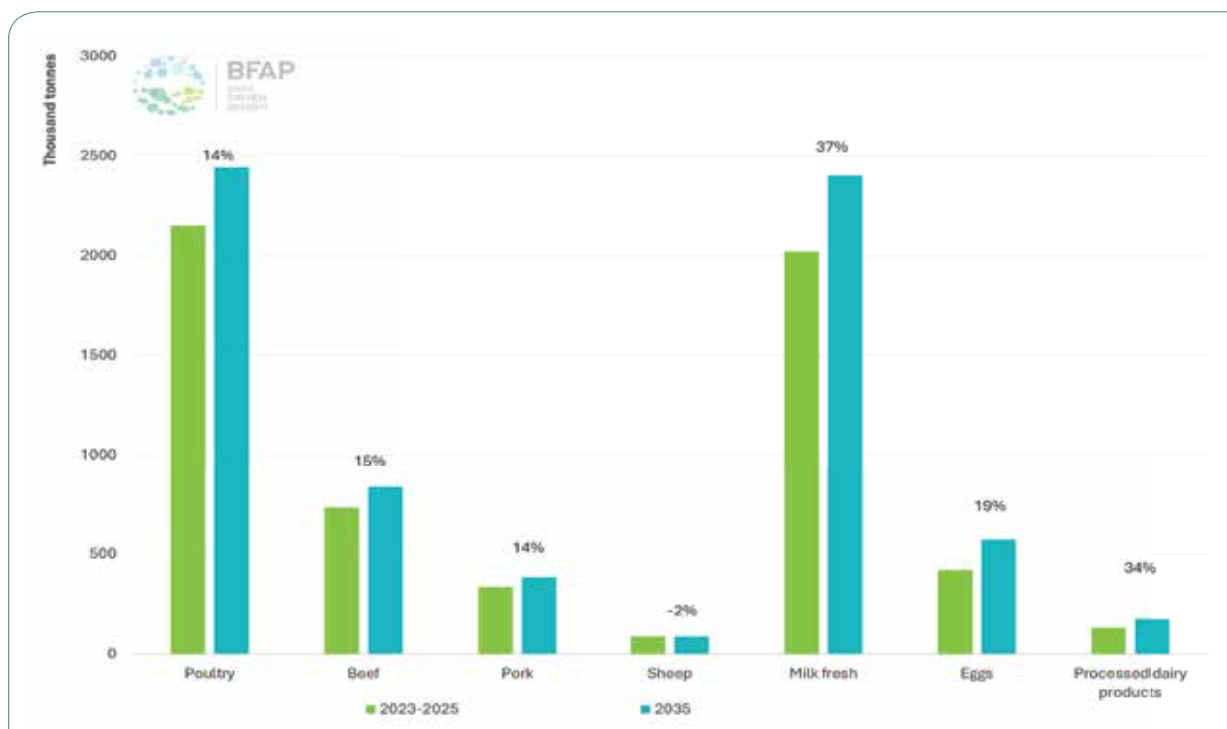


Figure 23: Demand for meat and dairy products: 2035 vs. 2023-2025 base period

growth will increasingly need to be export led, in line with the red meat industries that have already transitioned successfully.

Much of the success in beef exports, particularly prior to the market access constraints that resulted from FMD in 2025, is due to prioritisation of high value markets for premium cuts. South Africa's meat industries are small in the global context and while growth potential exists, they lack the natural resource base to become a high volume, dominant exporter such as Brazil. Instead, strategies focus on niche markets, where premiums can be attained for high value cuts, thereby using export markets to unlock additional value from a carcass. Such strategies are evident from the increased contribution of high value boneless cuts in the total export mix over the past decade (Figure 25). While exports remain a small share of total production in volumes terms, its share in total value is higher and current volumes remain constrained by the high risk of market closure due to disease outbreak. This risk has prevented producers from increasing their reliance on exports, which would be possible in a derisked environment.

Under baseline assumptions, the poultry industry is set to remain a net importer, but with a declining share of

total consumption coming from imports as domestic production expands. Growth in exports is feasible and would be beneficial, but significant investment is still required to grow market access and enable compliance with standards presented in high value markets such as the EU. With initial export growth strategies focussed on the Middle East, and on processed products, baseline export growth remains slow.

In the case of beef, sheep and dairy products, where export market penetration has already been more successful, prospects for export led growth are better under baseline conditions. Current negotiations to adapt trade protocols to account for vaccinations, along with traceability systems that enable compartmentalisation are expected to support export growth of 7% per annum for beef products, 1% per annum for sheep and 2% per annum for dairy products. In enabling successful exports through compartments such as major feedlots, the demand for weaner calves will also increase, in the process opening market space for small, medium and large-scale producers in South Africa that produce weaners for sale into feedlot systems. Thus, while exports would occur through major facilities that are approved for this purpose, export led growth can be inclusive and unlock opportunities across the entire value chain.

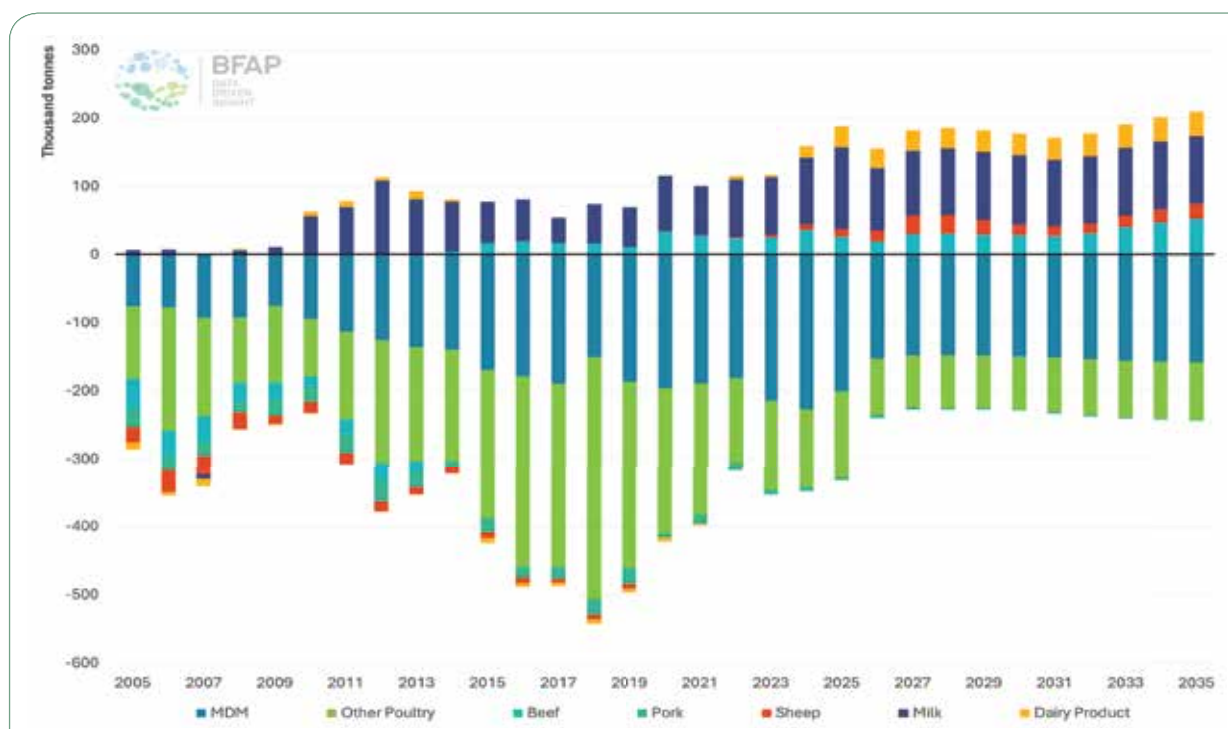


Figure 24: Net trade from major animal product sectors: 2005-2035

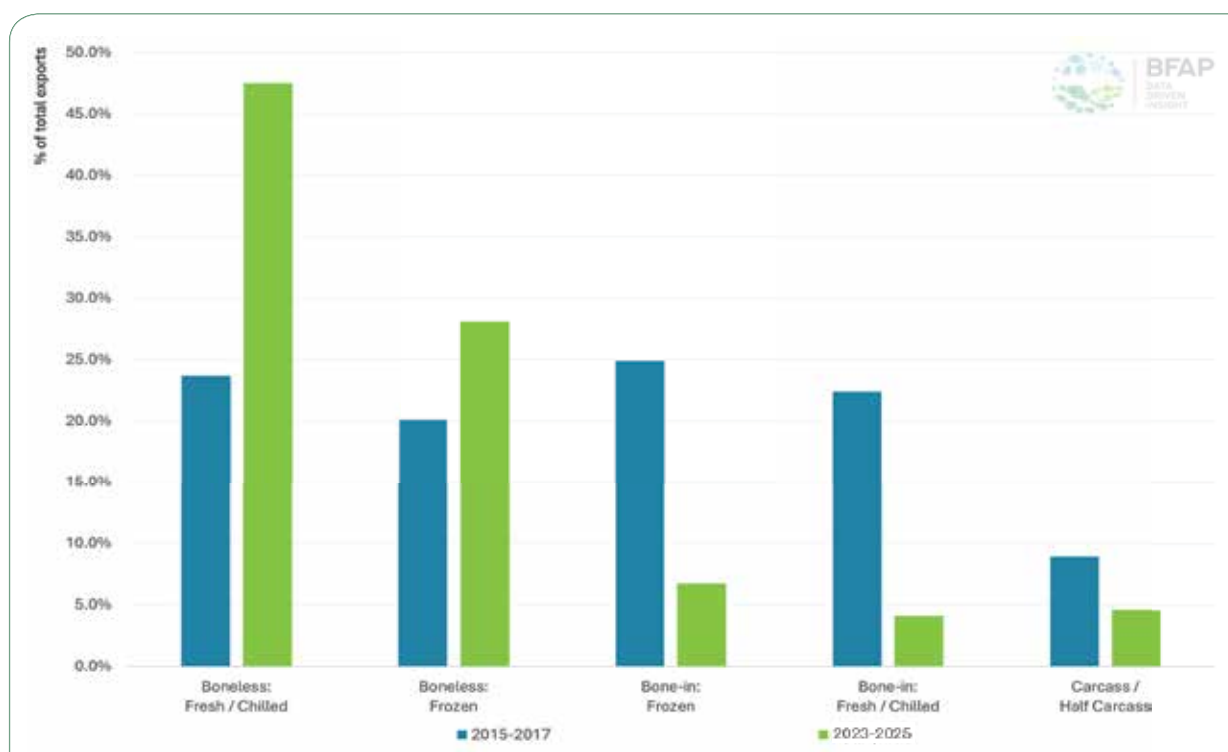


Figure 25: Changing export composition in the beef industry over the past decade

Carcass value optimisation can unlock premiums while promoting domestic affordability

While it may seem that growing exports reduce domestic availability and therefore increase prices, the opposite is in fact true. In targeting high value export markets for premium cuts, producers are able to optimise the value of a carcass. This enables higher returns without increasing prices on the cuts that are typically marketed domestically. If returns are increased, producers are more likely to reinvest to expand production and even if the share of exports in total production increases further, the bulk of the cuts will always be marketed domestically. Hence growing production volumes imply that domestic supply will also rise with exports, potentially promoting affordability for domestic consumers.

This strategy has already been pursued successfully in beef and sheep and will become increasingly relevant to poultry over the projection period. If premiums can be attained in export markets for cuts such as breasts, it could enable lower prices for bone-in portions, thus expanding its market amongst lower income consumers. Individually Quick Frozen (IQF) mixed portions often present the entry point into meat consumption for such consumers, who are highly price

sensitive, and improved affordability would result in significant additional demand.

Figure 26 presents a combined price index for meat products, weighted by production volume, along with an index of milk prices and general inflation. It shows that, given current projections for export led growth, which enables production growth to remain faster than domestic demand over the coming decade, both meat and dairy price growth are expected to be slower than general inflation. This comes despite strong world prices for these products and illustrates the potential benefit to domestic consumers from strategies that seek to unlock value in the export market for premium cuts, rather than relying solely on domestic consumers to recoup costs. When producers target exports, even if only for premium products, they are forced to operate in a highly competitive international market, which in turn drives investment into productivity gains that enable profitable production at lower domestic price points, to the benefit of domestic consumers.

UNLOCKING VISION 2050: Key factors that can unlock potential to compete globally and deliver affordable products to South African consumers
South Africa's animal product sectors have immense

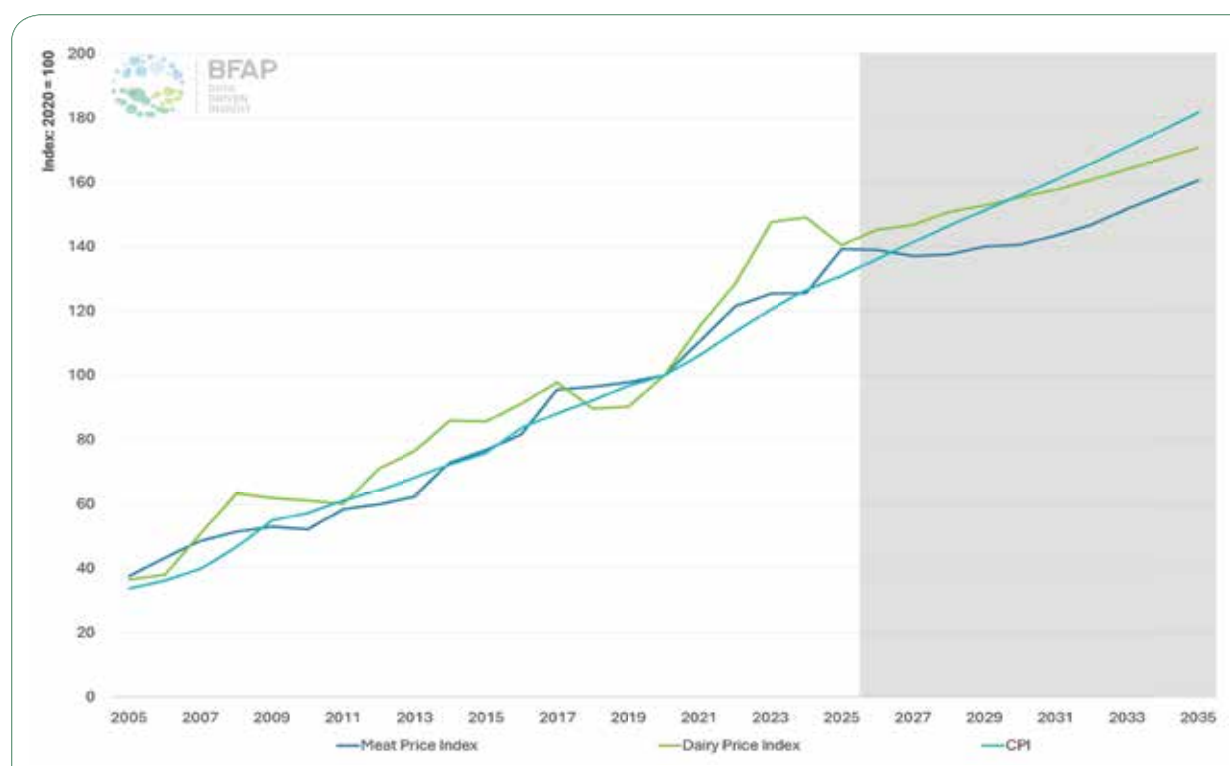


Figure 26: Weighted price index for major animal products: 2005-2035

potential for inclusive growth. Many have already transitioned to net export positions, pointing to a proven ability to compete internationally and implying that further production growth will likely be export led and contingent on maintaining this competitive position. Consideration of options to accelerate growth and unlock additional value by 2050 should therefore be focussed on factors that are able to improve its relative competitiveness further, while unlocking additional value through quality premiums in high value markets and thereby enabling further expansion. Public private partnerships will be critical to ensure that the industry does indeed reach its potential to enable inclusive growth. This will require a distinct strategy, including prioritisation of target markets and products based on sound economic research, as well as a de-risked environment with biosecurity standards that are fit for international trade and effectively enforced. Around the world, such standards have proven essential for maintaining market access, enhancing competitiveness, and supporting sustained growth in export market share.

Quality assurance and generic marketing of South African products can accelerate export growth

To accelerate export growth and ensure long-term industry sustainability, the South African livestock

industry must transition from a commodity-based price-taker model toward a value-added, quality-centric marketing strategy. While the industry has historically relied on standardised carcass classifications, there is a critical need to move toward a unified national approach to quality signalling. By shifting the focus from generic marketing to a framework centred on quality assurance and verified provenance, the industry can better align its offerings with the demands of high-value global markets and capture the premiums associated with eating quality and sustainable production.

The path to increased global competitiveness lies in the evolution of quality assessment, moving beyond descriptive physical characteristics toward objective systems that verify integrity and predict eating quality. By establishing a recognised national standard for quality assurance, South Africa can provide the transparency and verification that international buyers increasingly require. This strategic pivot allows the industry to move from simply identifying quality to actively engineering it, ensuring a consistent, high-value product that strengthens competitiveness in the global arena.

Ultimately, the integration of a structured market development approach helps de-risk the export

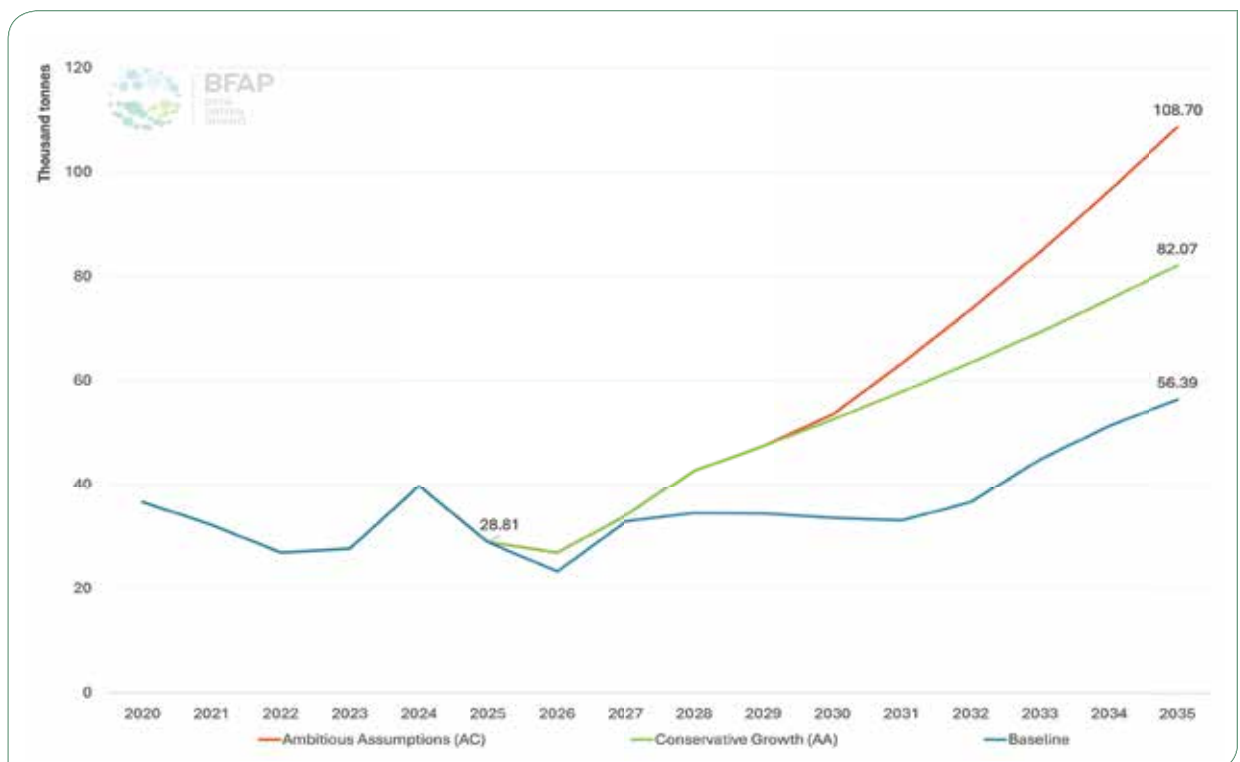


Figure 27: Alternative export scenarios that can accelerate growth in beef production

Table 5: Market development scenario outputs

	Price impact	GPV Impact
Conservative growth (AA)	- A2 carcass price improvement of R2 per kg by 2035 - R620 per head on a 310kg carcass by 2035	Cumulatively from 2026 to 2035 yields additional GPV above the baseline of R12.1 billion
Ambitious assumptions (AC)	- A2 carcass price improvement of R4.1 per kg by 2035 - R1271 per head on a 310kg carcass by 2035	Cumulatively from 2026 to 2035 yields additional GPV above the baseline of R18.2 billion

environment and opens pathways to diverse, high-growth markets. By unlocking the maximum value of the carcass through targeted export strategies, the industry creates a dual benefit: increasing the overall revenue and improving the returns for producers, while simultaneously maintaining a balanced and sustainable supply for the domestic market. This strategic alignment is essential for transforming the livestock sector into a sophisticated, export-driven engine of economic growth.

The potential impact of this transition is significant, as demonstrated by the alternative growth scenarios depicted in Figure 27. Under a conservative growth trajectory (Scenario AA), the industry could see a cumulative additional GPV of R12.1 billion by 2035, with export volumes reaching approximately 82 000 tonnes. However, by aggressively pursuing ambitious assumptions (Scenario AC), where the focus on high-tier quality and market access is maximised, this figure rises to an additional R18.2 billion in GPV and a projected volume of 108 700 tonnes (Table 5). These figures underscore that the shift from generic commodity to quality-based product marketing is not merely a strategic preference, but a primary driver of substantial economic value for the entire livestock value chain.

Competitive market access and associated trade protocols must be prioritised

Securing competitive market access requires a strategic shift from merely maintaining basic trade agreements to actively negotiating protocols that reflect the particular production environments of the South African meat and dairy sectors. It also requires a clear strategy of market prioritisation, informed by robust research, to ensure timely action can be taken to open markets. While access to certain markets is granted through the agreement and fulfilment of basic

sanitary and phytosanitary (SPS) requirements, true competitiveness is achieved through the establishment of tailored bilateral protocols. These agreements allow a move toward high-value market segments by aligning specific production standards with the precise requirements of target importing nations.

To accelerate this process, South Africa should prioritise 'easy win', strategic interventions that provide immediate market access with relatively low regulatory hurdles. This includes the aggressive pursuit of Bilateral Protocol Addendums, the implementation of compartmentalisation to isolate disease-free production zones, and the adoption of advanced traceability systems. By focusing on these high-impact, short-term goals, South Africa can rapidly diversify its export footprint and reduce its reliance on a limited number of traditional markets, thereby hedging against regional volatility and trade disruptions.

Furthermore, the complexity of modern trade protocols necessitates continued and dedicated mapping of product-market fits, identifying emerging constraints in real-time, and supporting new exporters in navigating the transition from domestic to international trade. By synchronising animal health status, food safety certifications, and trade diplomacy, the industry can ensure that the technical capacity to produce high-quality meat is matched by the regulatory capacity to move it into the world's most lucrative markets.

The beef industry has achieved some success in recent years, enabling access to new markets such as Saudi Arabia, and growing exports in China substantially. While Chinese exports have again been halted as a result of the current FMD outbreak for the second time in the recent past, the successes attained from a market access perspective remain an enabler of export growth in a scenario where disease management improves.

It also illustrates the fragility of bilateral agreements when animal disease management is lacking.

In the poultry industry, significant investments in excess of R1.5 billion have enabled expanded production following the signing of the Poultry Industry Masterplan and while much import replacement has been achieved, the next phase must shift focus to enabling exports. A focus on exports will increasingly expose the industry to the growing fragmentation and increasingly complex international trade environment but can also unlock opportunities for carcass value optimisation strategies that have been successful in other meat sectors. This could further improve the competitiveness of South African producers against imported bone-in portions. Such strategies have potential but limited impact under baseline assumptions.

Animal disease challenges must be addressed successfully to unlock long term export viability

Successful animal disease management is a longstanding challenge that has constrained performance across most livestock industries in South Africa. Figure 28 presents the number of outbreaks

over time, as well as the size of the impact, normalised across species using carcass weights to depict impact in terms of meat volumes affected. The frequency and intensity of outbreaks have escalated considerably in recent years, and the quantum of current animal disease challenges has brought the sector to a crossroads, with the required crisis response yielding unprecedented cooperation efforts across the value chain, as well as in government. Much of its success in future will however depend on the success of current initiatives and the sustained efforts to improve disease management over time. If the current urgency is able to initiate a period of improved disease management, medium term export prospects may improve. Conversely, if momentum is lost and current efforts do not yield the required success, the industry could fall back to simply producing for domestic consumption, with limited alternatives when domestic spending power remains strained.

The spread and impact of animal disease in recent years has been well documented, with widespread effects across all livestock industries at various times. Management strategies also differ across industries,

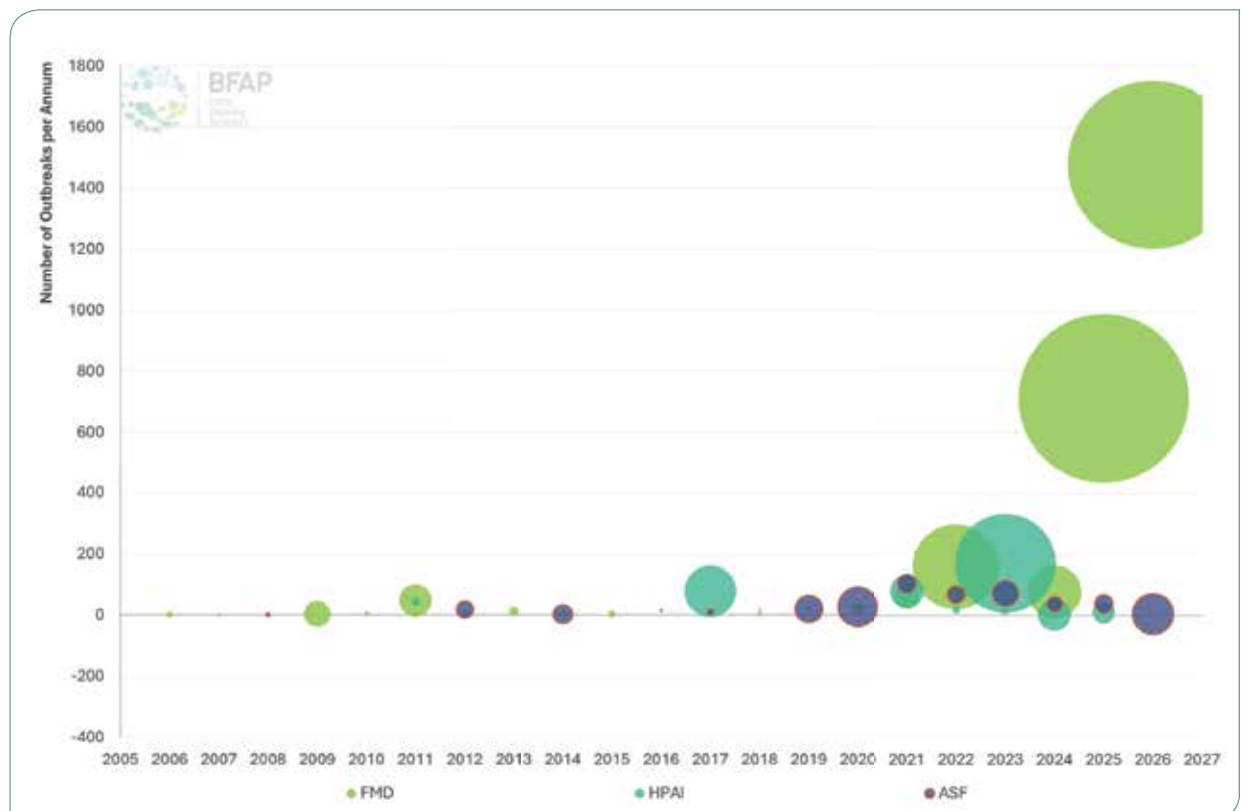


Figure 28: Number of Animal Disease outbreaks & cases over time (FMD and HPAI) and Number of Animals Killed and Disposed of (ASF) - (all expressed per kg meat affected)

but a well-coordinated national approach is critical to enable sustained improvement. Modern, controlled environment production systems used in pork and poultry enable stringent on-farm biosecurity measures, which have in the past proven reasonably effective in controlling disease spread amongst larger producers, but the impact of HPAI in 2023, which resulted in the culling of almost 10 million birds, and the spread of ASF into multiple commercial piggeries in 2026 are clear signals that this barrier alone is not sufficient. Furthermore, smaller producers are unable to invest the same capital and are therefore more exposed.

Animal disease impacts stretch well beyond just FMD, ASF and HPAI. Successfully overcoming the challenges plaguing the industry is a substantial task that requires long term vision, along with buy-in and collaboration across all livestock industries. Investment into robust biosecurity protocols is critical, as is expanded capacity, in terms of vaccine manufacturing, lab capacity and human capacity. Many actions are being taken to execute on veterinary strategies, but sustained momentum and widespread collaboration as part of an integrated disease management framework is critical for long term success.

Non-economic factors that influence consumers in destination markets must be considered

Beyond price and trade protocols, the long-term success of South Africa's export strategy depends on understanding the evolving values and perceptions of consumers in destination markets. Increasingly, purchasing decisions are shaped not only by economic considerations but by broader lifestyle and ethical concerns. Health consciousness continues to influence global demand patterns, with consumers in key export markets placing greater emphasis on the nutritional profile, safety, and traceability of animal protein. Simultaneously, the perceived environmental footprint of livestock production has become a growing consideration, particularly in developed markets, where consumers are increasingly scrutinising the sustainability credentials of the products they purchase. As global sentiment around climate change intensifies, the industry must be prepared to substantiate its environmental performance to maintain its social license to trade in these regions.

Compounding these shifts is the rising prominence of alternative protein products, which are reshaping the competitive landscape in several destination

markets. While plant-based and lab-grown alternatives are unlikely to fully displace traditional livestock products in the near term, their growing visibility reflects a broader diversification of consumer choice that the industry cannot afford to ignore. To remain competitive, particularly in developed export markets, South African producers must proactively engage with these non-economic drivers, positioning livestock products not only as a source of nutrition, but as part of a credible, sustainable, and ethical food system. Failing to account for these shifting consumer sentiments risks eroding market share in destination markets, even where economic fundamentals remain favourable.

Productivity gains amongst smaller producers are critical to unlock additional weaner supply and ensure inclusivity

While much of the strategic focus on export growth centres on quality assurance and market access, the long-term sustainability of the value chain depends equally on strengthening the base of production. Smallholder and emerging producers represent a substantial yet often underutilised source of potential weaner supply. Unlocking productivity gains within this segment of the industry is therefore not only a matter of social equity, but a fundamental economic necessity. As demand for high-value beef increases both locally and internationally, ensuring a stable and growing supply of weaners becomes essential to prevent supply-side constraints from limiting the industry's overall growth potential.

Addressing the productivity gap among smaller producers requires a holistic approach that extends beyond simple herd expansion, focusing instead on improving efficiency, animal health outcomes, and access to markets and support services. By empowering these producers with the tools, knowledge, and infrastructure needed to enhance their output, the industry can simultaneously improve rural livelihoods and strengthen the overall resilience of the national herd. Ultimately, fostering inclusivity within the production base ensures that the benefits of a modernised, export-driven livestock sector are shared broadly, creating a more sustainable and equitable foundation for growth across the value chain.

Port and rail infrastructure is critical to ensure sustainable export success

The competitiveness of South Africa's livestock export

ambitions is ultimately dependent on the efficiency of the logistics network that underpins it. Even with world-class quality assurance systems and favourable trade protocols in place, sustainable export success cannot be achieved without reliable port and rail infrastructure to move products efficiently from production regions to international markets. Persistent inefficiencies, congestion, and reliability challenges within South Africa's rail and port systems increase costs, introduce delays, and undermine the ability of exporters to meet the stringent delivery and cold-chain requirements demanded by high-value international buyers. Addressing these infrastructure constraints is therefore not a peripheral concern, but a foundational requirement for translating gains in quality and market access into tangible, long-term export growth.

Additionally, reliable and affordable electricity supply remains a critical, if often underappreciated, pillar of export competitiveness, given the value chain's absolute dependence on continuous cold storage and abattoir processing capacity. Any interruption in supply poses a direct risk to food safety, product quality, and the integrity of the cold chain required to meet international export standards. While the frequency and severity of load shedding have improved markedly in recent years, the memory of prior disruptions underscores the need for continued investment in supply resilience, whether through grid stability, backup generation capacity, or alternative energy solutions at critical points in the value chain. Ensuring that abattoirs and cold storage facilities can operate without interruption is therefore essential not only for maintaining day-to-day operational efficiency, but for safeguarding the export certifications and buyer confidence that underpin South Africa's long-term competitiveness in global markets.

Theft and predation tied to other rural services and infrastructure

Accelerated growth, particularly for extensive production systems such as sheep and weaner calves, would also require solutions to the challenges associated with stock theft and predation. These challenges are often closely tied to the broader state of rural services and infrastructure, including road access, rural policing capacity, and community safety networks, which collectively determine how effectively producers can protect their flocks in remote and extensive farming areas. Where rural infrastructure is weak or under-resourced, the risk of theft and predation increases,

further discouraging investment and expansion in these regions. Addressing these challenges therefore requires a coordinated approach that extends beyond farm-level interventions, encompassing improved rural safety services, strengthened community-based monitoring systems, and continued investment in the rural infrastructure needed to support a secure farming environment.

POLICY PRIORITIES TO ENABLE ACCELERATED GROWTH AND ADDITIONAL VALUE ADDITION IN LIVESTOCK AND LIVESTOCK PRODUCT VALUE CHAINS

The livestock sector remains a cornerstone of South African agriculture, contributing significantly to rural livelihoods and national food security. However, the industry is at a critical juncture, where traditional commodity-led models are facing diminishing returns and increasing global competition. To maintain momentum and ensure long-term sustainability, the sector must pivot toward a high-value, export-oriented strategy that prioritises quality over volume. Beyond the baseline outlook, this chapter has highlighted several strategic priorities with the potential to unlock accelerated, inclusive growth, allowing the sector to compete globally and maximise its contribution to value addition.

Unlocking this growth requires the prioritisation of several key strategic initiatives:

- **Transitioning to a Quality-Based Marketing Framework:** Moving away from generic commodity marketing toward a unified national system of quality assurance and verified provenance. By prioritising predictive quality and objective grading, the industry can capture high-value premiums and align South African products with the demands of the world's most lucrative markets.
- **Prioritising Competitive Market Access and Trade Protocols:** Whilst diversification of export markets is an important component of export led growth, focus must also shift from basic market access to market-product specific marketing. This involves the aggressive pursuit of tailored bilateral protocols, compartmentalisation, and advanced traceability to de-risk the export environment and diversify the global market footprint.
- **Establishing Centralised Coordination for Export Growth:** Developing a strategic coordinating

function, to manage product-market fit, navigate complex trade diplomacy, and support new entrants in transitioning from domestic to international trade.

- **Integrating Genetics and Production Precision:**

Leveraging genomic data and standardised grading to engineer desired quality, ensuring that production is precisely aligned with the specific requirements of high-growth export markets.

The livestock sector is at a pivotal moment where prioritising these actions can enable substantial growth and value addition leading up to 2050;

simultaneously increasing export revenues and enhancing the economic resilience of producers, whilst still promoting domestic affordability and thereby supporting food security initiatives. However, failure to modernise the sector (quality, traceability, sustainability and export market access) and protect the sector (biosecurity) will result in the industry being left behind in an increasingly complex global market, potentially resulting in stagnant growth in the sector. The right strategic priorities, successfully implemented through collaboration across the entire value chain, can place the livestock sector on a sustainable and thriving path toward 2050.





OUTLOOK FOR FIELD CROPS

INTRODUCTION

South Africa's field crop sector accounts for just over a quarter of total agricultural revenue (Figure 29). While it spans both summer and winter rainfall regions and comprises both dryland and irrigated production systems, 90% of all its revenue is attributed to just 5 crops, namely maize, soybeans, sugarcane, wheat and sunflower. The sector has been through a highly profitable cycle in recent years, benefitting from high agricultural commodity prices globally from 2020 to 2023 (Figure 30) and favourable weather conditions that supported strong yield performance in 4 of the past 6 years. This resulted in an expansion in total production area of just over 700 000 hectares from 2020 to 2026. It also enabled investment into efficiency enhancing technologies, with the value of agricultural machinery sales nearly doubling from 2020 to 2023. This comprised large units, and precision technology, which enables efficient input allocation and rapid progress when weather conditions are favourable.

Figure 29 illustrates that oilseeds, particularly soybeans and canola, grew the fastest of all field crop subsectors. This reflects relatively stronger international prices (Figure 30), due both to the ongoing war in Ukraine and the demand emanating from various policies that support the use of vegetable oil for biodiesel

manufacture. Combined with the step change in yield potential in recent years following the release of new technologies and expanded production area, this enabled revenue growth of almost 30% per annum on average for canola and 15% per annum for soybeans. While growth in sugarcane, maize and wheat was slower, it still exceeded 8% per annum on average, which remains strong.

Despite the strong performance, which was a major contributor to the resilient growth in agricultural GDP, the field crop sector continues to operate in a highly volatile and high-risk environment, with prices now in a declining trajectory. Globally, supply has responded to the previous high prices and while prices in South Africa took longer to decline due to an El Niño affected dry year in 2024, stocks levels have recovered and with another record harvest expected in 2026, prices have now fallen sharply. While investments made through the profitable cycles over the past five years have strengthened the industry's ability to cope better with a lower price cycle than in the past, the reality is that near-term prospects suggest that a lower-price environment is likely to persist. This will necessitate prudent financial management and continued focus on optimal cost allocation.

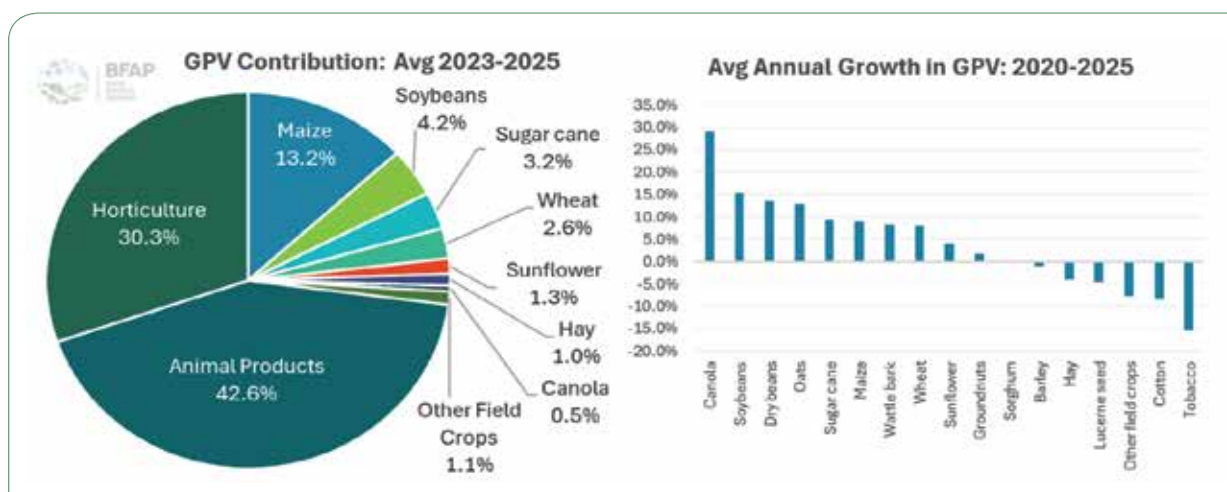


Figure 29: Revenue contributions and growth performance in major field crop sectors

Source: Compiled from DoA, 2026



Figure 30: International crop prices: 2005-2035

Source: BFAP, FAPRI & OECD-FAO, 2026

SHORT TERM OUTLOOK: NAVIGATING THE PERFECT STORM

South Africa's field crop sector has arrived at a critical juncture, as a combination of exogenous factors and domestic market conditions have created a perfect storm that will exacerbate margin pressure that was already starting to build at the start of 2026. New headwinds reflect the combination of spiralling input costs, price

pressure and escalating weather risks, which threaten short term prospects.

Sharp increases in input costs following escalation in Middle East conflict

At the start of 2026, fuel and most fertiliser prices were

stable or marginally lower than in early 2025. While the decline was generally smaller than the decline in crop prices, the prospects for further decline were favourable in light of a strengthening Rand. However, escalation of war in the Middle East and the subsequent disruptions in the Strait of Hormuz since March resulted in a rapid and severe turnaround in the input cost environment. With 20% of global crude oil and a third of global fertiliser trade typically transiting through the Strait, both fertiliser and fuel costs increased sharply. Domestic price increases were further exacerbated by rising freight rates and inland transportation costs: for example, from March to May 2026 diesel and urea prices increased by 68% and 87% respectively. These increases happened at the height of the winter crop planting season, severely impacting the affordability of inputs for producers who had not procured inputs before February. At the same time, the spike in diesel prices drove harvest costs higher in the summer crop regions. While international fertiliser prices have since come down as import demand from the United States slowed and production in areas other than the Middle East ramped up, the volatility brought additional uncertainty. Since the signing of the peace agreement between the United States and Iran in June, international prices have declined further, but the agreement remains fragile and cost escalations through the import chain could still leave South African prices higher than they might have been in the runup to the 2026 summer crop planting season.

Probability of El Niño raises weather risks

The increased probability of El Niño conditions in the second half of 2026 also elevates weather related risks for summer crop producers. While the correlation is not perfect, El Niño is often considered a leading indicator of harsher weather conditions for summer crop production, particularly in the western parts of the country. The expected intensity of the El Niño event is of particular concern, with several analysts referring to a “super El Niño”.

Several factors may mitigate some of the yield risk that would normally be expected in such an intense El Niño year. These include advances in seed technology, which has enabled better drought tolerance, particularly for maize, as well as the late rains received across most of the summer crop production areas in quarter 1 of 2026. Wet conditions well into the start of winter have bolstered soil moisture, providing some buffer to potentially drier conditions through the 2026/27 season.

The low prices through early 2026, combined with the sharp increases in transportation and freight rates in quarter 2 has resulted in lower export volumes than might have been expected in a year with such a bumper crop. This will likely bolster stock levels going into the 2026/27 season. From an availability perspective, this reduces the risk associated with the building El Niño, but it also implies that the price response to a smaller crop as a result of weather conditions may be slow, which would increase and prolong pressure on producer margins (Figure 31).

Potential opportunities, but also competition in broader Sub-Saharan Africa region

A key factor that will influence price levels in 2027 is the extent of impact that the potential El Niño has on producers in other African countries. In previous occurrences, production in Southern African countries such as Zimbabwe, Mozambique and Malawi has been impacted severely, with an uneven spread across Zambia's Northern and Southern production areas. If this is the case again, there could be export opportunities at favourable prices for white maize into neighbouring countries, but Zambia is the wildcard. Stock levels have increased sharply following a good crop in 2025 and another record harvest is expected in 2026. While government's capacity to hold stock is limited, some procurement would still be expected in the run-up to elections, suggesting that there will be ample stock to release and clear if exports are allowed later in the 2026/27 season. Such exports would provide competition for South African products and may constrain price increases in key markets such as Zimbabwe and Malawi.

Efficiency, crop mix decisions and cost management key to surviving the current storm

With high stocks suggesting that current price pressure may be prolonged, even in the event of a smaller crop in 2027, summer crop producers will have to prioritise stability to ride out the current cycle as far as possible. This will require nimble and well-informed decisions with respect to crop mix, input allocation, yield potential and timing of marketing. Field crops have long been the most volatile of the three subsectors within South African agriculture and prudent cash flow management and investment into efficiency enhancing technologies through strong periods enable producers to ride out cycles of weak profitability. Investments into precision technology in recent years are a key enabler of input optimisation.

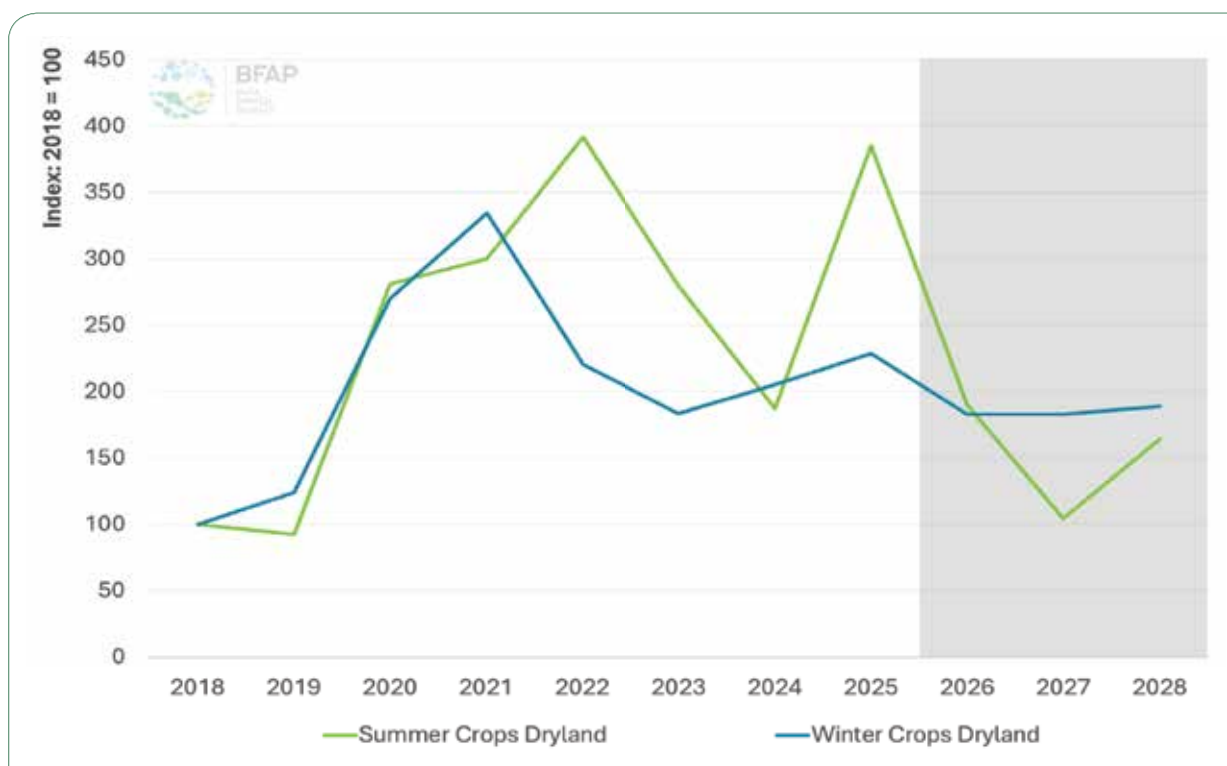


Figure 31: Combined index of gross margin performance in summer and winter production regions: 2018-2028

Crops such as sunflower come into their own in drier years and provide a key risk mitigation that have often enabled producers in more marginal regions to stay in the game. In the medium term, this then allows them to benefit from potential upswings that result from external shocks, but productivity remains the key to staying ahead of the long-term decline in real agricultural commodity prices. With elevated uncertainty in global markets, particularly with respect to the potential duration of the disruptions in the Persian Gulf, there is potential for improvement in prices if disruptions persist beyond current expectations. This will likely be observed in oilseeds prior to grains, given that high crude oil prices are increasing the demand for vegetable oil in biomass-based diesel production.

MEDIUM TERM OUTLOOK TO 2035: Productivity and global competitiveness remain core to sustained profitability

Some consolidation in output, but at higher levels

The extent of field crop performance over the past five years is clearly evident from Figure 32, which shows nominal gross production value from major crop categories on the left axis, along with an index

of real gross production value from all field crops on the right axis. On average, over the period from 2020 to 2025, nominal revenue from field crops was more than double that achieved from 2014-2019. In a period characterised by multiple disruptions globally, this was also accompanied by higher costs, but even in real terms, when deflating with CPI to account for general cost increases, the average real gross production value from 2020-2025 was 33% higher than the equivalent value from 2014-2019. This performance reflects area expansion, strong yield outcomes and higher prices, which suggests that over the outlook, some consolidation would be expected, in line with lower price projections and normal yield assumptions. This is already evident in 2026, following the sharp price decline, but following the short-term correction, nominal revenue by 2035 only exceeds the average of 2020-2025 by 20%. This is insufficient to outpace general inflation and in real terms gross production value from field crops is expected to be almost 22% lower by 2035 compared to the average from 2020-2025. Despite the consolidation from recent peaks, the new equilibrium over the outlook reflects the investments made through the past five years, and by 2035 real gross production

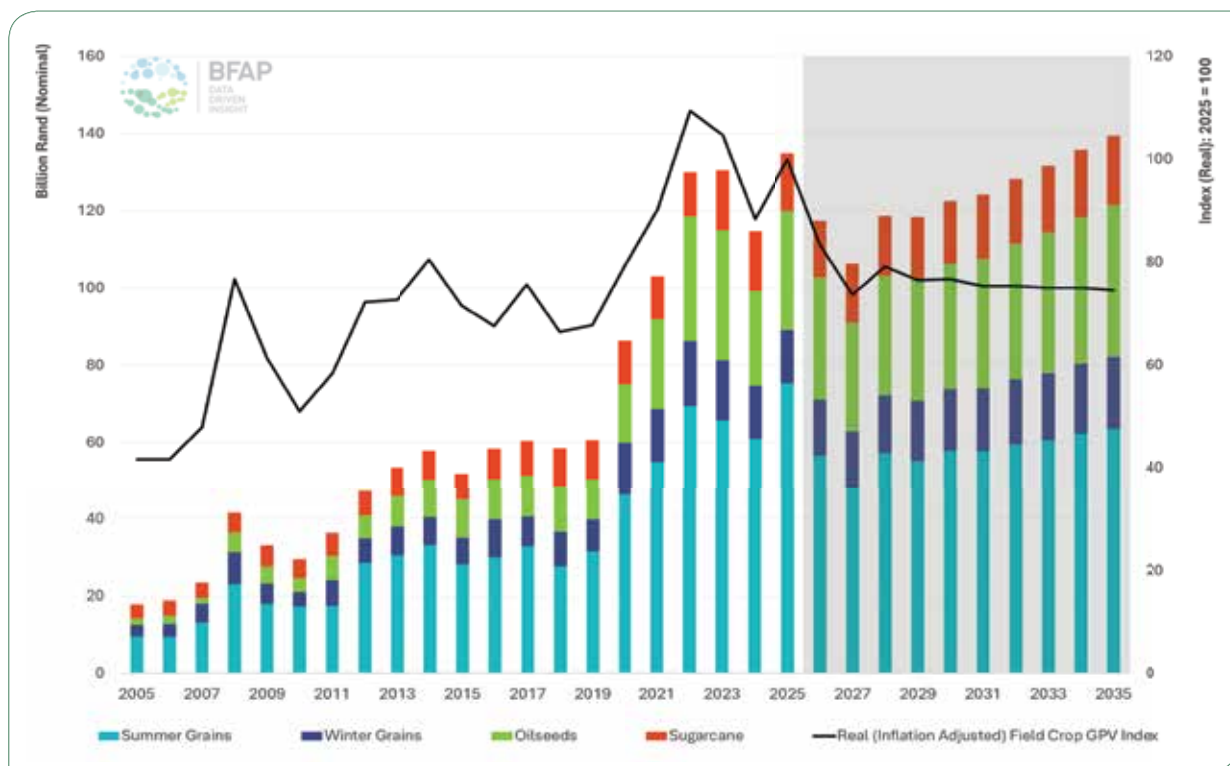


Figure 32: Gross production value from field crops: 2005-2035

value from field crops is still 4% higher than the average value attained from 2014 to 2019, which was the previous low-price cycle. The biggest contributors to revenue gains are oilseeds, particularly soybeans and canola. The projection essentially represents an average outcome, being associated with long term average weather conditions. As in the past, there will be volatility around the projected trend, as yield levels fluctuate in line with weather conditions.

Cultivated area to consolidate as yield gains drive production growth

The consolidation in field crop revenue encompasses several components, one of which is consolidation in area harvested. This is particularly relevant in the summer rainfall production regions, which accounted for more than 85% of the gain in total area cultivated from 2020 to 2026, and also accounts for the bulk of the consolidation over the next few years. The bulk of the decline occurs in the near term, as the increases in input costs and the risk of El Niño accelerates the decline in area planted that was already expected owing to a projected price decline of 8% - 32% across the various summer crops in 2026 compared to 2025.

Figure 33 illustrates that the equilibrium production area over the outlook, while more than 300 000 hectares below the levels achieved in 2026, is still well above the average area cultivated to summer crops prior to 2020. While some of the area brought into production through the high price cycle is marginal and likely not economically viable at current lower prices, more than half of the area that was added is expected to stay in production. This reflects advances in production practices and access to improved seed cultivars, which enable sustainable production in these regions, due to improved yield performance.

Winter rainfall area is expected to be more stable, owing to the variable import tariff applied in the wheat sector, which limits the short-term price decline relative to crops such as maize. This also affects malting barley prices, which are derived from wheat, while canola prices also find some support from global vegetable oil prices. This enables a gain of 4%, or 22 000 hectares by 2035 relative to 2025. Total winter crop area in 2026 is however expected to decline on account of current high input costs, before recovering in the medium term. Projected gains are much slower than in the past decade and primarily driven by canola.

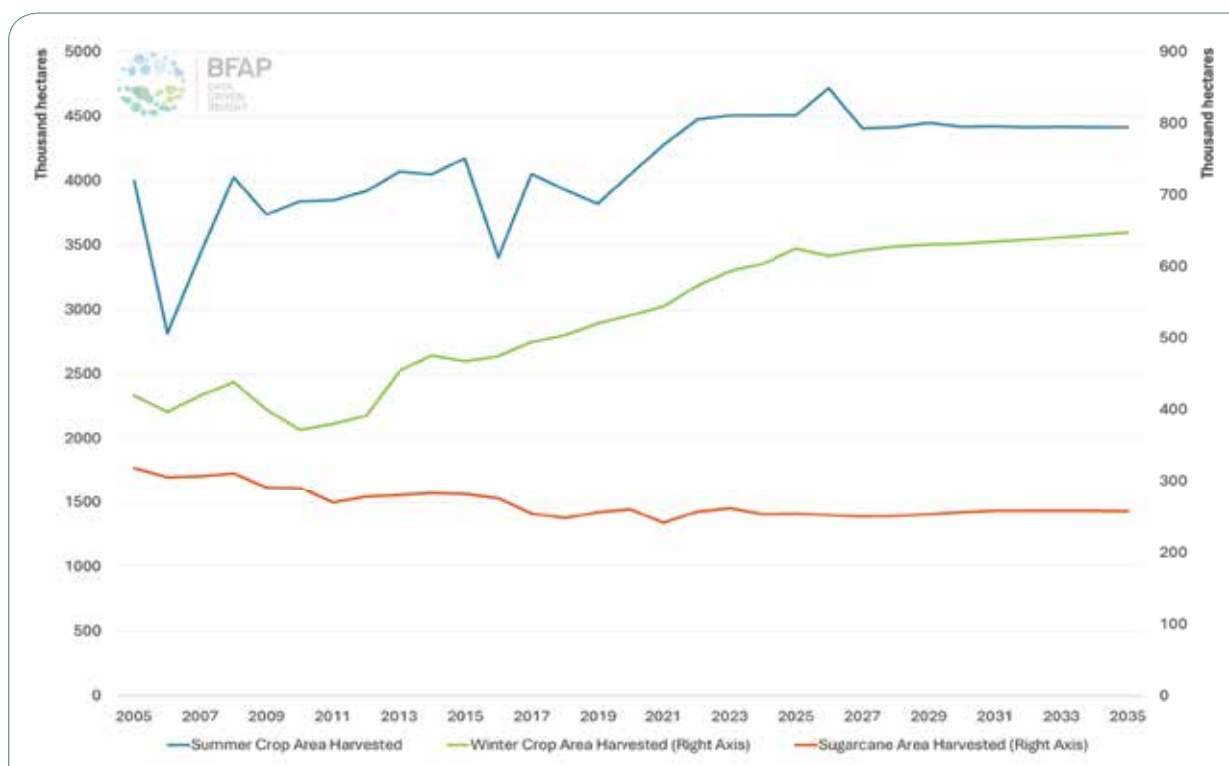


Figure 33: Area planted to summer crops, winter crops and sugarcane: 2005-2035

Area under sugarcane is expected to remain fairly stable, having declined by almost 10% over the past decade. Higher prices in recent years did aid in stabilising production area and while input cost pressure combined with milling uncertainty in some of the coastal production regions could induce a small further decline in the next 2 years, improvements in global sugar prices over the second half of the outlook, combined with implementation of the second sugarcane Masterplan and a smaller share of the total crop being exported, should support profitability sufficiently for stabilisation in the medium term.

Figure 34 presents the share of total area cultivated to major field crops, according to major crop groups. It illustrates that the relative contribution from oilseeds has grown in recent years. While this trend persists over the outlook, the rate of growth in oilseeds share in total area is expected to decline, as most oilseed sectors are now also in a surplus position, with prices trading at or near-export parity levels in most years. While oilseed prices are expected to hold up better globally owing to demand from the energy sector for vegetable oil, the difference to grains in South Africa has declined now that oilseed prices are also trading close to export parity levels. In the

past, with products such as protein meal and vegetable oils more reliant on imports, the price derived from these products was typically higher than export parity. By 2025 however, South Africa had moved to a surplus position for oilseeds and protein meal, with vegetable oil markets for products produced in South Africa balanced close to self-sufficiency and for some products also exporting a surplus.

Given the consolidation in area harvested, the bulk of production growth expected over the outlook will be driven by further yield gains from advances in production technology. Such gains have been rapid in the past (Figure 35), with maize, sorghum (albeit from a low base), soybean and canola all exceeding growth of 2.5% per annum. The only exceptions, with growth of less than 1% per annum, was sunflower and barley. The wetter years experienced in the recent past were not ideal for sunflower production, with the crop coming into its own in drier years, when its resilience to such conditions make it critical for risk mitigation.

Over the outlook, projected yield growth is slower than in the past for all crops except sunflower and barley, both of which contain an element of recovery from below average



Figure 34: Contributions of major crop groups to total cultivated area

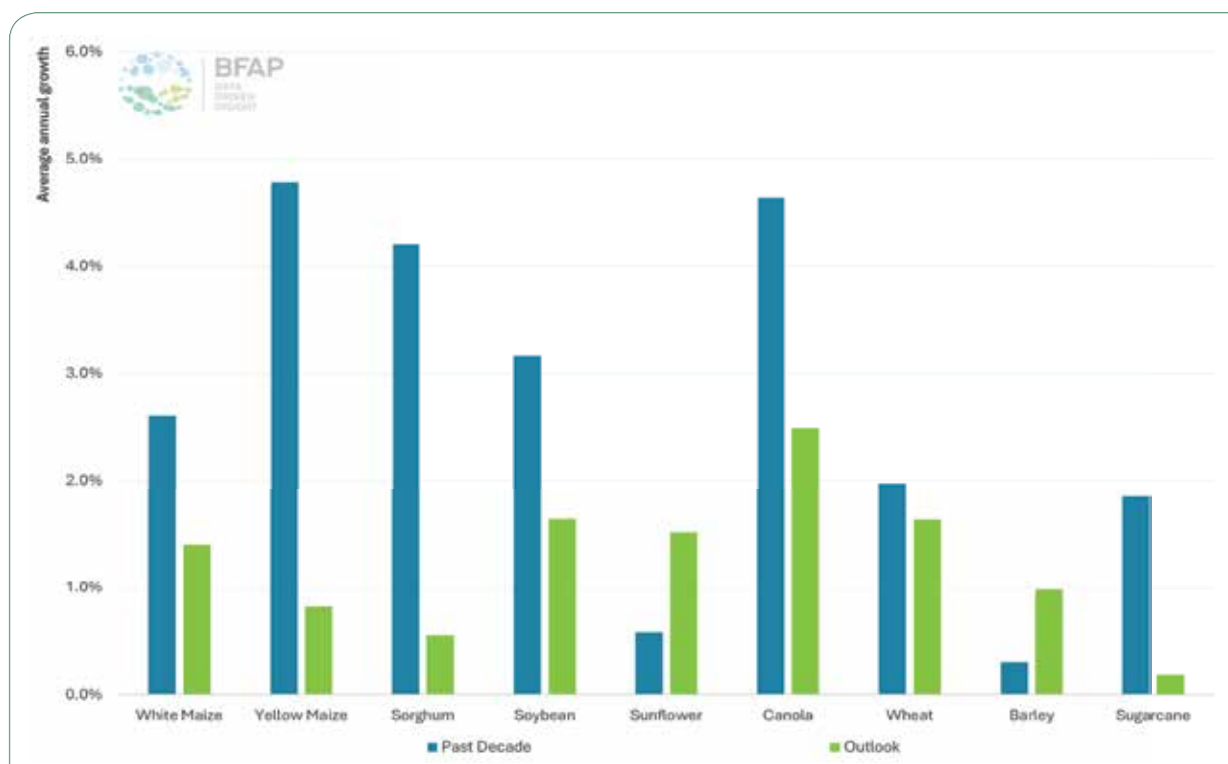


Figure 35: Average annual yield improvements in the past decade relative to outlook assumptions

performance in 2025. For other crops, the slowdown reflects multiple factors, including base effects, given the gains achieved in recent years, and the fact that 2025 (and 2026 expectations) were above average for most crops. The slowdown also incorporates a return to long term norms in terms of weather, acknowledging that there will be volatility around the projected trend as these weather conditions fluctuate and extreme events become more frequent. Yield projections for the baseline incorporate further projected advances in seed technology, but are typically more conservative given South Africa's current policy stance on new breeding technologies, which may slow potential introduction of new cultivars.

Domestic demand growth limited by economic performance and spending power

Demand growth prospects for the various field crops and products derived from them are influenced by factors such as spending power, population growth, urbanisation and perspectives around factors such as health and convenience. The diversity of uses for each individual product also plays a role, both in international and domestic markets, and can be influenced by policy initiatives. Figure 36 and Figure 37 present projected demand growth for primary agricultural commodities and selected secondary products derived from them. Broadly, domestic demand growth is expected to remain slow, owing to the slow economic growth projections. This is particularly relevant to products used primarily for direct human consumption such as white maize, wheat, barley and sugar. For major food grains, projected demand growth ranges from 10% to 13% by 2035 relative to the 2023-2025 base period. In the case of sugar, this is slower, as initiatives such as the Health Promotions Levy or "Sugar Tax" actively suppress sugar intake. As such, growth is expected to be merely 6% for the 10-year period, which is well below the rate of population growth. If demand growth is to be accelerated in future, marketing channels will have to diversify, with energy products such as ethanol or sustainable aviation fuels potential alternative uses.

Processing demand for oilseeds is stronger, following further expansion in processing facilities in recent years, which has enabled South Africa to become self-sufficient and then move to a net exporting position for protein meals and some vegetable oils such as soybean oil and canola. By 2035, projected increases in crush volumes range from 20% for sunflower to 37% for soybeans and 76% for canola. In the case of soybeans and canola, these growth rates outpace the demand for

processed products such as protein meal and vegetable oil, suggesting that expanded processing volumes are driven by product exports rather than strong gains in domestic demand. Given that the shift to a net exporting position could result in more affordable products, where prices are derived from export parity levels as opposed to the import parity-based pricing that was relevant in the past, domestic demand growth for vegetable oils remains stronger than for basic food staples. This is also influenced by their use in convenience foods, as well as industrial uses.

For products predominantly used as animal feed, such as yellow maize and protein meal, demand growth is better but still relatively slow, at 13% and 17% respectively by 2035 relative to the 2023-2025 base period. This is underpinned by consistent but still muted growth in the livestock sector, where animal disease challenges have constrained export growth in recent years. Supply disruptions have also contributed to higher product prices, reducing affordability for consumers in the lower income brackets. While some improvements are expected under baseline projections, particularly in export enablement, animal disease risks remain substantial and continue to constrain the livestock sector from achieving its full potential. In a scenario where such risks are reduced meaningfully, demand growth for feed products could accelerate. Nevertheless, ongoing efficiency gains in livestock production, which are quickest in the poultry sector with its short production cycle, suggest that growth in feed product use will be slower than livestock production growth.

Faced by slow demand prospects from domestic animal feed sectors, growth in protein meal sales in particular will likely be led by exports. Given that international crush volumes are increasingly driven by vegetable oil use in biodiesel markets rather than strong demand for protein meal, South Africa's products will have to compete in a highly competitive global market, where protein meal prices are fundamentally lower due to excess supply. This will in turn ensure affordable feed products for South Africa's intensive livestock sector, enabling improvements in its relative competitiveness globally.

Exports set to remain volatile as crop production fluctuates

With the exception of wheat, most major field crop industries have grown to a net exporting position in recent years. Consequently, the size of the surplus can fluctuate substantially based on changing weather conditions

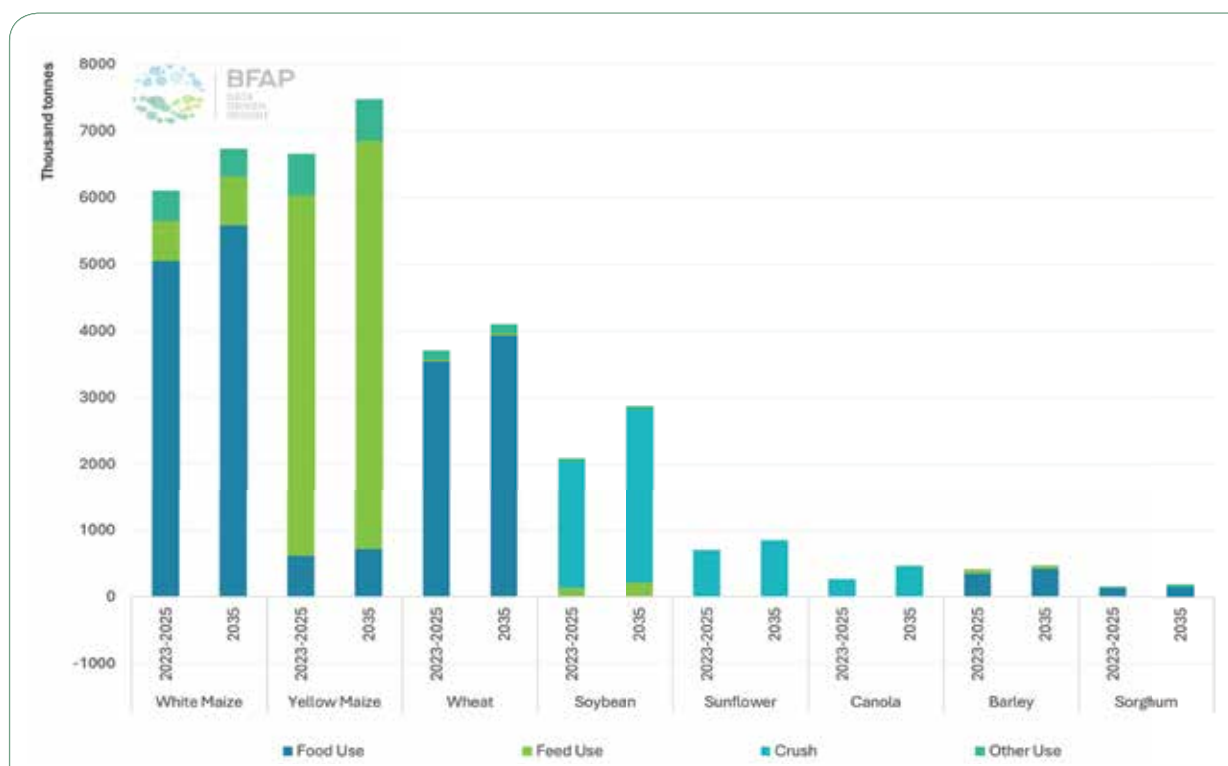


Figure 36: Demand for primary agricultural commodities: 2035 vs. 2023-2025 base period

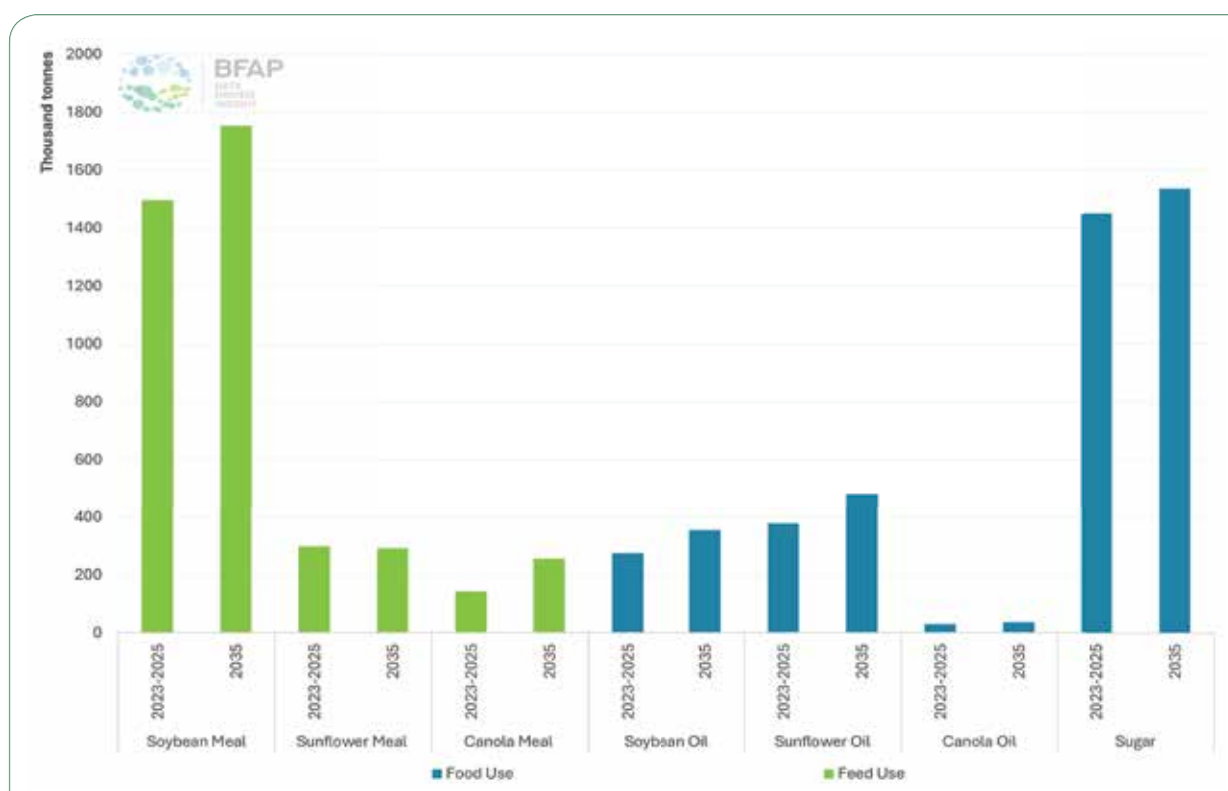


Figure 37: Demand for secondary products: 2035 vs. 2023-2025 base period

and resultant crop sizes. The past five years have been particularly strong in this regard and hence projected export volumes under baseline assumptions consolidate from the record levels in the recent past. This is particularly relevant to 2027, where yield estimates are conservative given the looming El Niño weather conditions. From 2027 onwards, yield projections normalise in line with the assumption of stable weather conditions, and field crop exports are projected to rise by an annual average of 3.4%, with growing contributions from yellow maize, oilseeds and protein meal. White maize export growth is more muted given the consolidation in area planted which reduces surpluses, as well as growing competition from regional exporters such as Zambia and Tanzania. Both these countries grow non-GM white maize and Zambia in particular is favourably located to supply Zimbabwe when it has sufficient export surplus. While South Africa is a consistent supplier into Mozambique, Botswana and Namibia, intermittent additional export opportunities will likely arise in Zimbabwe, as Zambia is prone to impose discretionary export controls when prices rise. However, such intermittent opportunities do not drive long term growth strategies. A potentially bigger opportunity is in the DRC, for processed maize meal rather than grain, provided that South Africa can compete with Zambian millers who are more favourably

located to supply DRC but are less consistent with surpluses than South Africa.

Consideration of export growth in a sector as volatile as field crops, particularly with respect to strategic planning for port capacity and logistical infrastructure, should not merely be based on the baseline projection, which is essentially an average outcome associated with stable weather conditions. Consequently, Figure 38 also presents a total export figure for good years, based on the historic deviation from average export volumes in years of good weather and subsequent bumper harvests. In any given year in the outlook, if weather conditions are favourable, export volumes would be expected to reach this level, as opposed to the lower baseline projection. It is in these years, when prices are typically also at their lowest, where efficient logistical chains and port capacity are essential to ensure sustainable price levels for producers to enable them to keep producing a consistent surplus.

The value of producing a consistent surplus for major field crops should not be underestimated. It keeps prices at or close to export parity levels, and forces producers to be efficient enough to compete in global markets. This enables them to provide affordable basic food staples

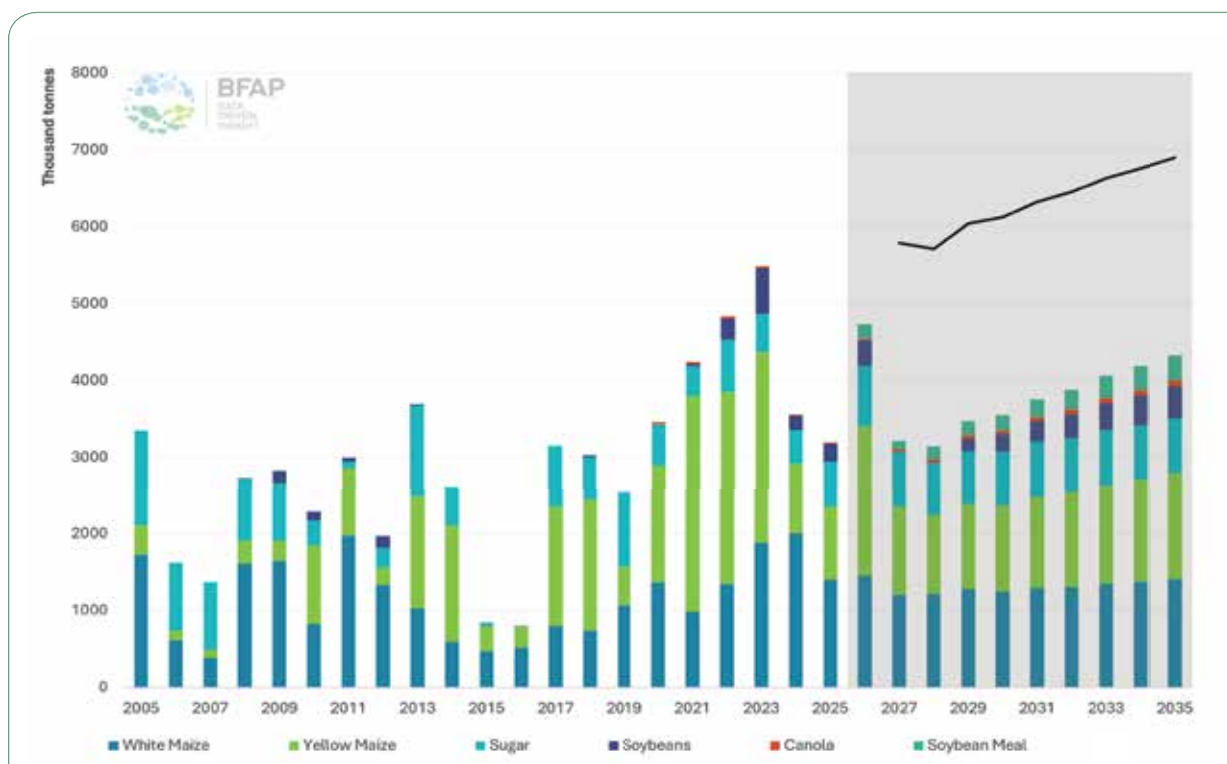


Figure 38: Export volumes from major contributing field crop sectors: 2005-2035

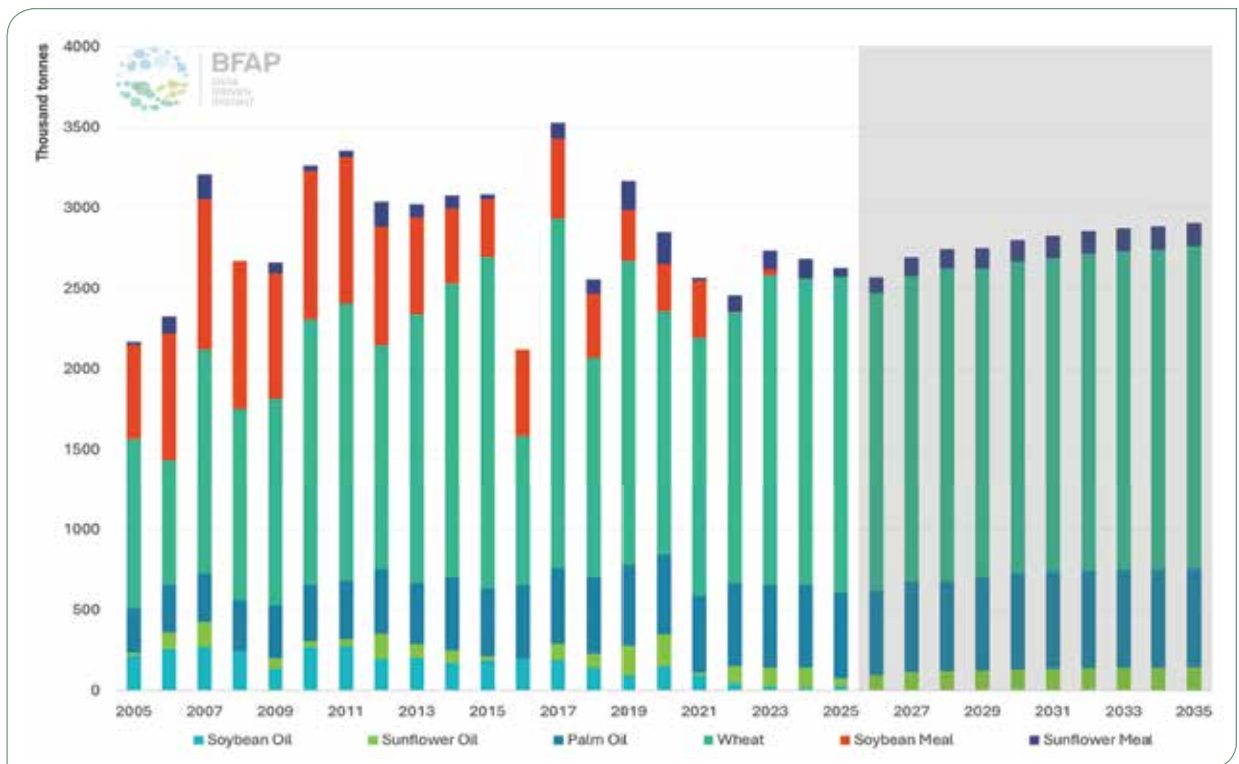


Figure 39: Imports of major field crop products: 2005-2035

for South African consumers, while also supporting the competitiveness of the livestock sector through affordable feed products. Furthermore, a consistent and sustainable surplus in normal years provides a buffer for years when weather conditions are challenging, as export volumes will decline. As long as the production shock is not sufficient to induce imports, potential price increases remain smaller than might otherwise be the case if South Africa is closer to self-sufficiency in normal years.

While competitive exports are a key contributor to growth prospects for field crops, it must also be acknowledged that there are certain products where South Africa will likely remain a net importer, owing to limitations in natural resources to grow production. This is relevant to cereals such as wheat and rice, as well as palm oil. Between them, these products account for the bulk of field crop product imports (Figure 39). South Africa does not have the natural resource base to produce palm oil or rice. While some palm oil imports are expected to be replaced by growing soybean oil production, palm oil has favourable frying characteristics and its affordability relative to other vegetable oils underpin its use for industrial purposes. In the case of wheat, South Africa produces around half of its domestic requirement in any given year, with some fluctuations in this share as weather conditions change.

The share of imports in total domestic use is expected to remain fairly consistent over the outlook. Most of the production occurs in the Western Cape, where profitability is already under pressure and producers are increasingly looking to alternatives such as canola to bolster income and ensure sustainability. Historically, South Africa produced more wheat in the Free State, but with changing rainfall patterns and advances in soybean cultivars, the relative profitability of soybeans in these regions limits potential switches back into wheat. With more than 80% of total wheat area in the winter rainfall region in the Western Cape, South Africa cannot become self-sufficient in wheat production and will continue to rely on competitive imports to supplement domestic production volumes.

Export led growth yields internationally competitive prices that enable affordability

The role of exports in the broader field crop value chain is multifaceted, and while it may seem counterintuitive, competitive exports can enable improvements in food security. This relates specifically to affordability, which is of course dependent on both income and food prices. From a food price perspective, consistent surplus production of commodities such as maize, oilseeds and protein meal keeps prices at the lowest possible levels,

owing to the need to compete with the top producers globally for market share. South Africa is a small surplus producer in the global context and therefore a price taker in the international market, hence domestic prices need to fall all the way to export parity and sometimes even a bit below for large scale exports to become viable. This ensures the lowest possible prices for consumers but can bring price pressure for producers when the cost of trade is high.

Figure 40 presents a combined price index for major field crops, weighted by production volume, and shows that the projected price path is slower than general inflation. Of the products included in the index, maize and soybean prices are projected to trade near export parity levels, while sunflower prices are derived from the value of sunflower oil and sunflower meal, as South Africa is close to self-sufficiency, with the market finely balanced. By contrast, wheat prices are derived from import parity levels, with the variable import tariff providing some buffer when the price of HRW wheat globally falls below US\$ 279. With world markets expected to be well supplied and prices fairly stable in US\$ terms, South Africa's prices under baseline conditions move in line with the projected depreciation in the value of the Rand, which is expected

to be slower than in the recent past. Under baseline assumptions, which include stable weather conditions, this implies that the projected average annual increase remains slower than general inflation.

South Africa's ability to sustainably produce a consistent surplus into global markets however is a key factor that can mitigate potential volatility associated with fluctuations in production levels. This will be dependent on efficiency not only on farm, but also through the value chain, to ensure that both exported and imported products can move as cost effectively as possible to and from the port, while limiting additional costs that often result from delays at the port. This ensures both affordable products for consumers and sustainable returns for producers.

UNLOCKING VISION 2050: Key factors that can unlock potential to compete sustainably in international markets and deliver affordable products to South African consumers

Despite South Africa's agro-climatic limitations, many field crop industries have successfully transitioned to become competitive exporters over the past decade. This suggests that most of them have already proven their ability to compete internationally and also implies

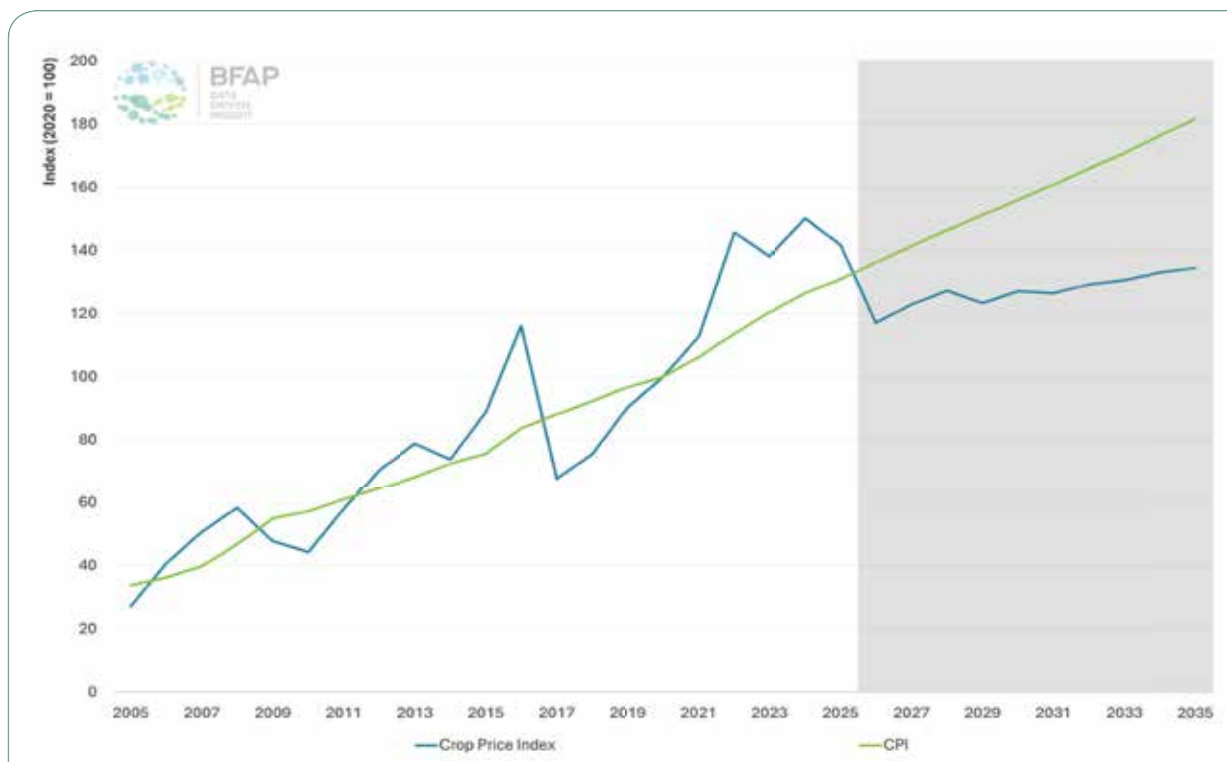


Figure 40: Weighted price index for major field crop commodities, including maize, wheat, soybean and sunflower: 2005-2035

that further production growth will likely be export led and contingent on maintaining this competitive position. Consideration of options to accelerate growth and unlock additional value by 2050 should therefore be focussed on factors that are able to improve its relative competitiveness further, thus enabling further expansion, or alternatively growing domestic value addition beyond the farm gate by further diversifying demand streams.

Additional land can be brought into production if economically sustainable

South Africa has additional land to expand production beyond baseline projections, provided that it is economically viable to do so. This includes land area that was in production through the high price cycle in recent years and which is set to be reallocated to uses such as pasture under baseline conditions. As seen earlier, there is also underutilised land that was procured under land reform that could be brought into production with the right farmer support structures, thereby enabling additional production while also prioritising inclusivity. The baseline projections have already indicated that the constraint is not land availability, but rather competitiveness of more marginal production regions or systems at export parity levels. This suggests that pathways toward further expansion would come from efficiency in production and market dynamics that allows production from these areas to be sustainable economically. The reality is that globally, despite volatility, agricultural commodity prices will continue to trend downwards in real terms, as they invariably do over the long term.

Legislation enabling adoption of top technology is a core enabler of competitiveness

A core factor underpinning historic expansion in field crop production has been investments in key technologies that enabled yield gains that outpace those achieved in other major production regions.

South Africa has been a leader in the adoption of genetically modified (GM) crops. Its regulatory framework has played a pivotal role by ensuring appropriate biosafety standards while enabling the uptake of GM technologies. This balanced approach has been an important driver of yield growth and improved production competitiveness. Scientific advances in plant breeding technologies now provide new opportunities for agriculture.

New Breeding Techniques (NBTs) hold substantial potential to accelerate historic yield gains through rapid

progress in plant breeding but require a modernised legislative framework. South Africa's current approach to NBTs applies requirements developed for transgenic technologies to a broader range of newer techniques, including some that deliver products comparable to conventionally bred outcomes. International approaches to these new techniques continue to evolve, with many key trading partners and many African countries adopting more risk-proportionate, product-focused systems. South Africa's continued reliance on a process-based framework and delayed adoption of a more risk-appropriate NBT framework increasingly suppresses domestic innovation and creates future trade and competitiveness challenges.

In a recent study conducted to inform the debate on NBT regulation in South Africa, BFAP evaluated different scenarios where the lack of NBT adoption in South Africa introduces a structural yield gap that constrains competitiveness. This evaluation was conducted to 2035, based on potential yield gains from emerging NBT technologies, but longer-term considerations are even more prudent, as the structural yield gap illustrated in Figure 41 will only increase over a longer time horizon.

Price formation mechanisms suggest that maize prices would be by far the most sensitive to differences in total production expectations over the outlook that result from divergence in yield paths. Figure 42 presents these potential price impacts from the different NBT adoption scenarios. In a scenario where NBT access is not facilitated, a limited exportable surplus results in prices drifting away from export parity levels. Conversely, in a scenario where NBT access is enabled, the total crop projected by 2035 increases, leaving a much bigger exportable surplus that pushes prices to export parity, some 35% below the levels associated with the no-NBT scenario. In the case of white maize, prices fall further (37%) than yellow maize (33%), due to the size of the surplus and the need to either absorb product in feed markets or ship it to more distant regional markets. Maize price dynamics have an important bearing on maize meal prices, with a long-run price transmission elasticity of 0.63. This suggests that in a world with access to NBTs, where South Africa's white maize prices are 37% lower compared to a non-NBT world, maize meal would be 21% cheaper. Considering the dependence of lower-income consumers on maize meal as a core staple, this is a significant outcome with respect to food security.

The price impact of not accessing NBT technologies is clear and these technologies are expected to increasingly

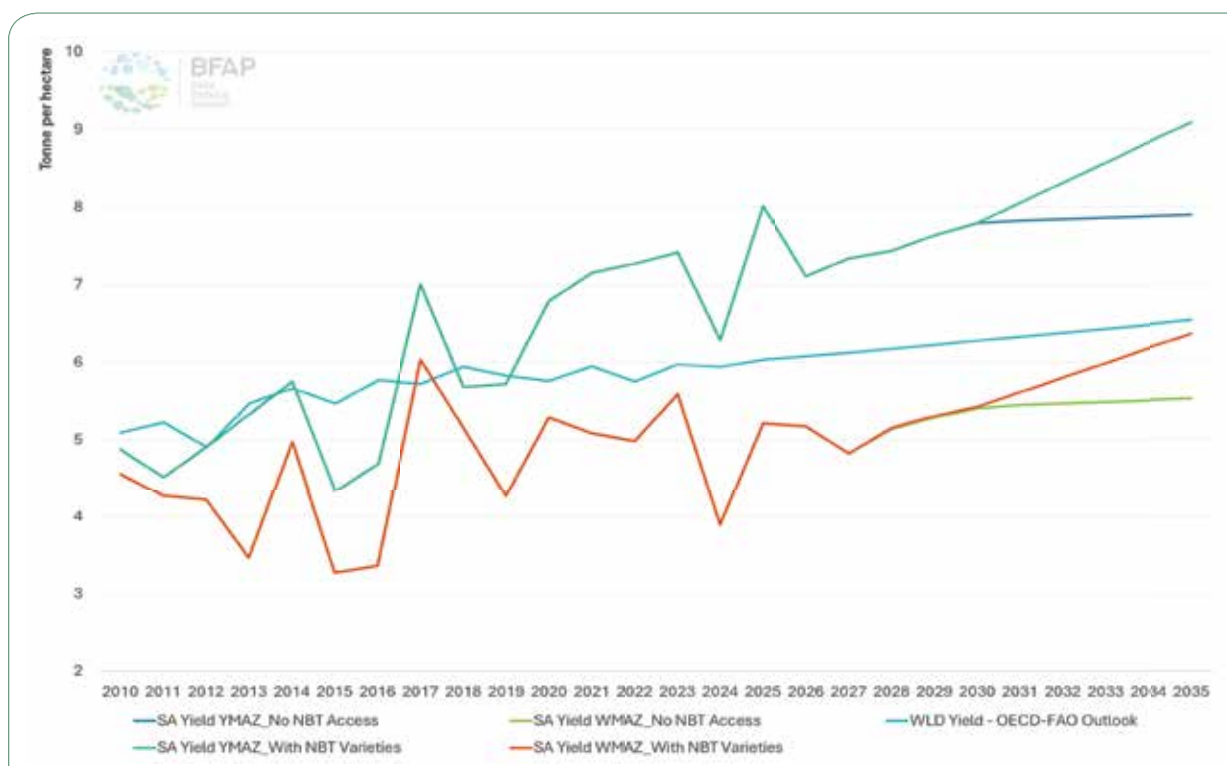


Figure 41: Maize yield outcomes under different scenarios with and without access to NBT varieties

underpin new cultivar releases in future owing to the rapid progress that they enable. Further to their impact on productivity, NBT's also exhibit significant potential to improve drought tolerance. In a changing climate that will likely increase the frequency and intensity of extreme weather events, this is a critical risk mitigation mechanism for producers.

To ensure that South African producers have access to the latest technology to remain on the productivity

curve, produce a sustainable surplus and not fall behind key competitors, the regulatory focus must move from the breeding process to the characteristics and risk profile of the final product, distinguishing genuinely novel biosafety risks from changes achievable through conventional breeding. This will ensure that producers remain sustainable, growing potential surpluses and thereby providing affordable products to South African consumers and maximising their contribution to food security.



Figure 42: Maize price projections under different NBT access scenarios

Bioenergy can diversify demand and enable further value addition

With the growing focus on sustainability and climate change mitigation, many countries have adopted policies that foster the use of biomass-based fuels. Initiatives such as Brazil's Renova Bio program, the EU's Renewable Energy Directive and the United States' Renewable Fuels Standard programme bring multiple benefits such as reducing reliance on imported fossil fuels, aiding the achievement of COP21 commitments to reduce emissions, and diversifying demand for its agricultural commodities. This has fuelled widespread production of ethanol from both maize and sugarcane, and later also growth in biomass-based diesel, which is more flexible in attaining higher blend rates into conventional fuels than ethanol.

In South Africa, such production is still limited to some ethanol, primarily for medical use. Given slow projected growth in food and feed demand, bioenergy provides a promising avenue for additional value addition to surplus agricultural commodities in the long term. The sugar sector has long since considered the production of ethanol and sustainable aviation fuels as alternative demand streams, given that demand growth for sugar as direct food use will remain limited and because sugar export prices tend to be below production cost (largely because of biofuel policies in large sugar producing countries).

There has also been consideration of sorghum-based ethanol production. Investments into such initiatives are however contingent on policy support, both in terms of mandated blending through periods where fossil fuel prices decline and through enabling the use of surplus food grains in biomass-based fuel production. In other countries, such initiatives, with the right policy support, have proven successful in growing the market for agricultural products, while reducing reliance on fossil fuel imports, which have become increasingly volatile amid ongoing conflict in the Middle East. In the long term, policy shifts to enable them in South Africa can bring the same benefits, while also aiding in the achievements of COP 21 targets, although these gains would need to be weighed against the fiscal cost of support measures and the potential impact on food prices in a country heavily dependent on rainfed agriculture.

Port and rail infrastructure is critical to ensure sustainable surplus and cost-effective imports

While bioenergy production should be considered to grow market space, its success is also contingent on affordable feedstock to make production feasible. It will likely only succeed if South Africa remains a surplus producer of products such as sugar and soybean oil. Consequently, priority must be afforded to investment in infrastructure that not only enables trade but also reduces costs and can reduce the cost of transport and value addition, thereby narrowing the gap between producer and consumer prices. In years of major surplus, South Africa's ports already struggle to handle export volumes, resulting in prices falling well below export parity levels for extended periods. With surplus levels in favourable production years potentially higher in the outlook than the levels observed in recent years, port capacity is a key consideration.

Further to port capacity, investment into rail infrastructure is critical to reduce the cost of transportation to port, as well as to market. For many years, South Africa continued to import protein meal into the Western Cape, despite surpluses in more northern production regions due to the high cost of transporting products by road from summer rainfall production regions into the Western Cape, relative to shipping it from Argentina. Investment to move more products from road to rail can reduce such costs markedly, reducing the price gap between surplus and deficit regions, while also reducing the cost of transport to and from the major ports. This can bring about lower input costs for products where import reliance is high, such as fertiliser, lower costs of imported food products such as wheat and rice, and more sustainable export prices for producers of surplus commodities.

POLICY PRIORITIES TO ENABLE ACCELERATED GROWTH AND ADDITIONAL VALUE ADDITION IN FIELD CROP VALUE CHAINS

The field crop sector has undoubtedly been one of the success stories within South African agriculture in recent years. However, momentum is shifting, and producers are moving into a lower price cycle with multiple challenges on the horizon. Further to sketching the baseline outlook, this chapter highlighted a handful of priorities that have significant potential to unlock accelerated, inclusive growth in the sector, allowing it to maximise its contribution to food security,

value addition and livestock sector competitiveness. Unlocking this growth requires prioritisation of a few key policy initiatives:

- Comprehensive support to land reform recipients is necessary to ensure their sustainable contribution to production. Support measures should move beyond short-term assistance towards the development of commercially viable enterprises capable of generating consistent surplus production. There are many success stories that can be replicated to not only ensure sustainability but enable new entrants to thrive and maximise their contribution to agricultural value addition.
- Modernising legislation with respect to New Breeding Technologies, unlocking the benefit that they can bring through efficiency gains and drought tolerance, thereby improving resilience to climate change and ensuring that South African producers can remain at the forefront of technology adoption and compete globally.
- At least giving consideration to enable the bioenergy sector to broaden agricultural markets and reduce dependence on imported fossil fuels.
- Prioritising investment into core infrastructure that can improve efficiency throughout agricultural value chains and further improve export competitiveness.

The field crop sector is at a critical juncture, where prioritising the right actions can enable substantial growth and value addition to 2050, simultaneously improving export revenue and food security impacts. However, should these actions not be applied successfully, it also risks falling behind in an increasingly competitive and complex global market, in the process also constraining the competitiveness of other sectors such as livestock that depend on it for competitively priced inputs. The right policy priorities, successfully implemented in a collaborative manner across the value chain, can put the field crop sector on a sustainable and thriving path to 2050.





OUTLOOK FOR HORTICULTURE

INTRODUCTION

South Africa's horticulture sector accounts for approximately 30% of total agricultural revenue. While it comprises a diverse range of products, a significant portion of its revenue is driven by a few key subsectors (Figure 43). Growth in the sector was exceptional from 2020 to 2025, with several high-value commodities showing strong upward momentum.

Dried fruit, subtropical fruit, and nuts grew the fastest of all horticultural subsectors. This growth is highlighted

by an average annual increase in GPV of 17.1% for dried fruit, 12.9% for subtropical fruit, and 11.9% for nuts. Other staples such as potatoes and deciduous fruit also maintained strong growth rates of 11.7% per annum. While growth in citrus fruit and vegetables was more moderate, it is from a higher base and remained robust at 9.3% and 7.3% respectively. By contrast, some specialised products like flowers and bulbs and rooibos tea experienced slight declines, with rooibos tea seeing an average annual contraction of 4.4%.

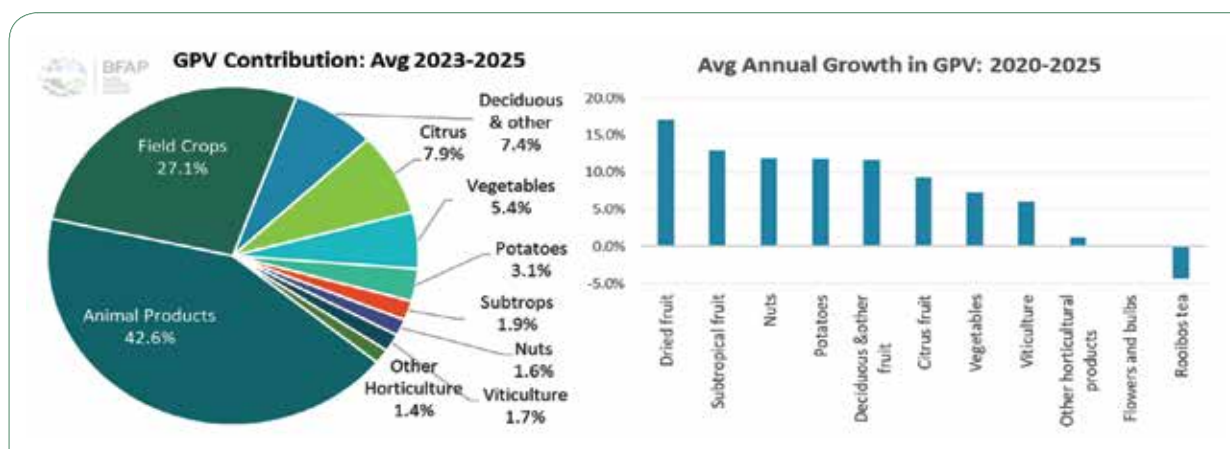


Figure 43: Revenue contributions and growth performance in major horticulture crop sectors

Source: Compiled from DoA, 2026

The South African horticultural sector enters 2026 facing a strategic crossroads. While it possesses the biological capacity and technical expertise to cement its position as a global fruit superpower by 2050, it faces mounting challenges that threaten its long-term competitiveness. Chief among these is the rising cost of doing business beyond the farm gate, where inefficiencies in logistics, infrastructure, energy provision, and market access are increasingly eroding the margins needed to sustain growth and investment.

In the perennial fruit and nut industries, the investment horizon is measured in decades. An orchard established today must remain productive and profitable through 2050 and beyond. The sector's immediate priority should therefore be the implementation of structural reforms that reduce long-term systemic risk. Such de-risking is essential to restore the business confidence necessary for capital reinvestment and production expansion.

To date, South African producers have demonstrated remarkable resilience. Through continuous improvements in on-farm productivity and efficiency, they have managed to offset much of the pressure arising from rising input costs and stagnant output prices. However, there are clear limits to what can be achieved within the farm gate alone. Without fundamental changes, specifically regarding logistical throughput, energy security, and trade policy, future expansion will remain selective and constrained.

This chapter connects the immediate 10-year baseline outlook (2035) with the structural requirements of a long-term horizon – the investment period a producer of long-term perennial crops typically needs to visualise. It moves beyond a simple volume-based forecast to analyse the 2050 potential: a strategic shift toward value-chain resilience. By focusing on the dividends that can be unlocked through infrastructure reform and market diversification, this analysis provides a roadmap for transitioning the industry from a cycle of defensive survival to a trajectory of high-growth global competitiveness.

SHORT TERM OUTLOOK: Rising costs eroding margins in high-risk environment

The 2025 season served as a baseline of high potential, characterised by favourable production conditions, high fruit quality, and robust volumes for citrus, pome fruit, and wine grapes. In most instances, market conditions supported positive returns to growers at the

primary production level. However, during the second half of 2025, these gains were largely offset by structural inefficiencies in the export value chain and a shifting geopolitical landscape that introduced significant volatility into South Africa's traditional and emerging trade routes.

The logistics crisis: Cape Town port and operational delays

The most significant deterrent to short-term profitability in 2025/26 was the operational failure of the Port of Cape Town. According to the World Bank and S&P Global Market Intelligence Container Port Performance Index (CPPI) 2025, the Port of Cape Town was ranked as the lowest-performing container port globally, placed 400th out of 400. This reflects significant capacity and performance constraints to manage throughput, which was further exacerbated by environmental factors.

During the 2025/26 table grape and stone fruit seasons high winds and fog resulted in the loss of approximately one month of operational time during the peak shipping window of November and December 2025. This led to massive backlogs, vessel bypassing, short shipping, and deteriorated fruit quality due to prolonged waiting times and extended cold storage times. The deciduous fruit industry, which ships roughly 80% of its exports through Cape Town, faced unprecedented losses. Logistics-related inefficiencies are estimated to have cost table grape producers approximately R3.2 billion and stone fruit growers R1.05 billion in lost revenue and additional costs during the 2025/26 season.

Trade data (Figure 44) points to significant spillover from 2025 to 2026 due to port delays. In the 2025/26 season, 22 million cartons of table grapes were inspected by week 52, yet only 11.4 million (52%) were successfully shipped, leaving nearly half the crop facing delays. Similarly, for stone fruit, only 62% of inspected cartons were shipped by week 52, with 38% spilling over into the following year. These delays not only incurred direct costs, such as reinspection fees, additional port charges, redirecting to alternative ports (such as Port Elizabeth and Coega) but also caused long-term reputational damage with European and UK retailers, creating market openings for competitors such as Chile and Peru.

Trade policy and geopolitical volatility stifling export success

Trade dynamics in 2025 were dominated by the implementation of punitive tariffs in the United States, a

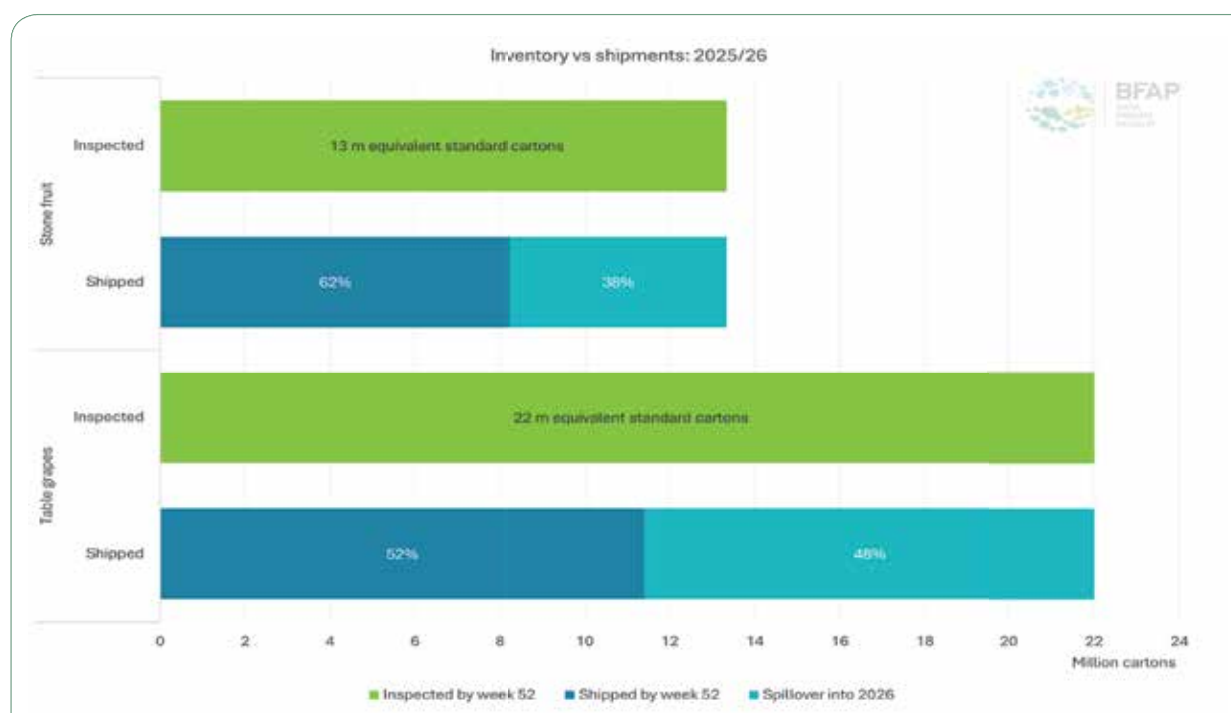


Figure 44: Impact of delays at Cape Town port on shipping of inspected cartons: 2025/26 season

Source: Agrihub, 2026; Hortgro, 2026; SATI, 2026

premium market where South Africa had been actively expanding its footprint. The introduction of Liberation Day tariffs, and the expiry of the African Growth and Opportunity Act (AGOA) in September 2025 introduced a period of acute uncertainty. The U.S. House of Representatives approved an extension bill, reinstating tariff-free access until 31 December 2026, welcome albeit temporary relief in accessing such a lucrative market. To really grow South Africa's footprint in that market, longer term commitments on preferential access are necessary, especially on products where South Africa competes with South American producers.

Conversely, the industry has seen positive developments in market diversification. Under the Forum on China-Africa Cooperation (FOCAC), China has opened its markets for the next two years, with a focus on finalising a permanent trade protocol. A landmark market access agreement for stone fruit (apricots, peaches, nectarines, plums, and prunes), which became operational for the 2025/26 season, and the relaxation of phytosanitary cold-treatment protocols for citrus are additional benefits to the zero-tariff access. India remains a high-potential market, though market expansion continues to be hampered by high tariffs and cumbersome Sanitary and Phytosanitary (SPS) protocols that render

South African products less competitive than those from other Southern Hemisphere suppliers. This challenge is particularly evident for apples, where product can be successfully stored in controlled atmosphere cold rooms for extended periods of time.

In the Middle East, the ongoing conflict has significantly disrupted supply chains. Beyond the direct impact on citrus exports to the region in 2026, the conflict has caused a ripple effect across all horticultural value chains. Following sharp increases in Brent Crude oil prices after closure of the Strait of Hormuz, trucking rates to ports and international shipping rates increased sharply and have remained elevated and volatile, eroding margins of South African fresh produce producers.

Gross production value to consolidate in the short term

The industry is currently transitioning from a period of high real growth into a cycle of consolidation. Following the recovery from the 2015-2017 Western Cape drought, GPV reached a peak in 2025. From 2016 to 2025, nominal growth was 125%, and 34% in real terms. However, projections for 2026 suggest a decline in both nominal and real terms.

2026 is shaping up as a year of consolidation, with conservative estimates pointing to a decline in the nominal GPV for the major commodities (citrus, pome fruit, table grapes, stone fruit, blueberries, and wine grapes) of almost 2%. This drop can be further aggravated by adverse market conditions and quality issues related to port delays, as well as heavy rain and floods. Adjusting for inflation, the real decline is more pronounced, falling by 5.3%. Perhaps most concerning is the trajectory of Real GPV per hectare. After reaching R364 889/ha in 2025 on average across the basket of products, this metric is projected to fall to R345 376/ha year-on-year. This loss of close to R20 000/ha in real revenue is accompanied by higher prices of essential inputs, leading to a substantial impact on profit margins. Real GPV per hectare is not expected to return to 2025 levels until 2031. The trend indicates that, although the total area under production is projected to increase only modestly over the outlook period, short-term profitability per hectare will be constrained by a widening cost-price squeeze. Over time, however, the adoption of more intensive production systems and productivity-enhancing practices is expected to offset these pressures, resulting in positive real growth and improved economic returns by 2035.

Cost increases outpacing revenue gains

The primary driver of this margin squeeze is the fact that major input costs are escalating at a rate significantly higher than producer prices. By 2028, average output prices across the major fruit categories will have only marginally surpassed 2025 levels (Figure 45), but current indications are that input costs for electricity will have surged by 26% and labour by 16%. The divergence between the price received for fruit and the cost of production threatens the viability of especially smaller operations and limits the capital available for expansion and/or replacement.

The escalation of Eskom tariffs remains a critical risk. In 2025, NERSA approved a 12.74% tariff increase for Eskom customers, a rate nearly four times the CPI of 3.2%. This has made the business case for behind-the-meter renewable energy solutions, specifically solar PV and Battery Energy Storage Systems (BESS), a strategic necessity rather than an optional sustainability goal. In addition, coal powered energy will increasingly challenge South African value chains' commitment to carbon reduction to meet ESG market requirements.

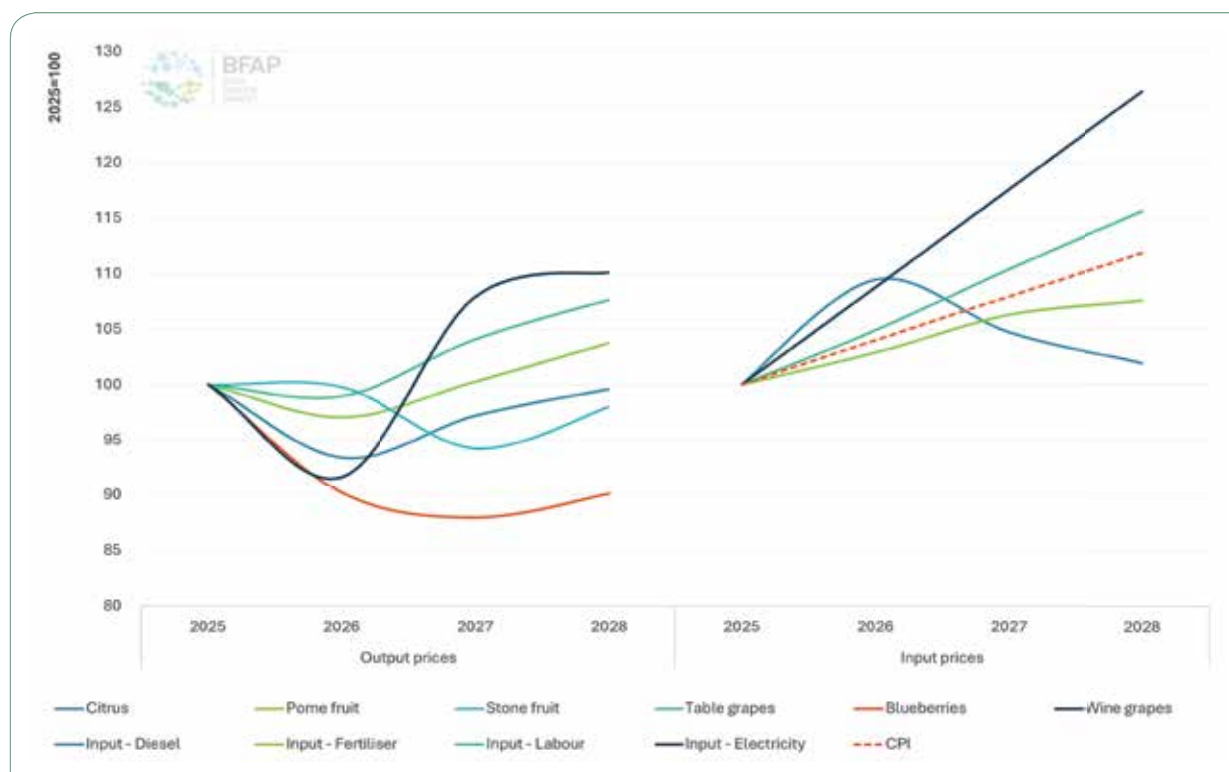


Figure 45: Cost-produce price index gap: 2025-2028

The horticultural industry requires consistent, high-quality power to maintain the cold chain; any failure in temperature management during storage or transit results in protocol failure, quality claims and/or total loss of value. In the Western Cape, the behind-the-meter market for businesses is expected to grow by 240 MW for solar PV and 40 MWh for BESS by 2030, representing a R3.3 billion investment opportunity (GreenCape, 2026). However, regulatory barriers persist. Systems larger than 1 MW face high compliance and budget quote costs from Eskom, which can inflate project costs substantially. For the horticultural sector to remain competitive, the acceleration of private-sector energy project viability, specifically for large-scale cold storage facilities, is non-negotiable.

MEDIUM-TERM OUTLOOK TO 2035: Value-chain resilience to enable expansion

As the South African horticultural sector moves toward 2035, the industry's strategy is shifting from volume-driven expansion toward structural rebalancing and intensification. This transition is a direct response to the margin squeeze where input cost inflation consistently outpaces output price growth. In this environment,

resilience is built on increasing the value extracted per unit of land and per cubic meter of water.

The strategic pivot: quality over quantity, and quantity over area

The 2035 projections indicate a plateauing of the rate of land expansion across several key horticulture commodities. As illustrated in Figure 46, the projected aggregate expansion in key fresh fruit industries is 0.3% per annum. This growth is characterised by marginal increases in the cultivation of citrus, table grapes, and blueberries. Despite this modest expansion in area, production and exports are projected to maintain the upward trajectory observed over the previous decade. Specifically, production and exports are expected to grow by 1.9% and 2.3% per annum, respectively, signalling a consistent increase in overall pack-outs (the ratio of high quality fruit, most of which is exported, to total harvest).

The total GPV from horticulture is projected to maintain a strong and consistent upward trajectory over the outlook period, increasing from approximately R87.8 billion in 2025 to R142.8 billion by 2035. This growth

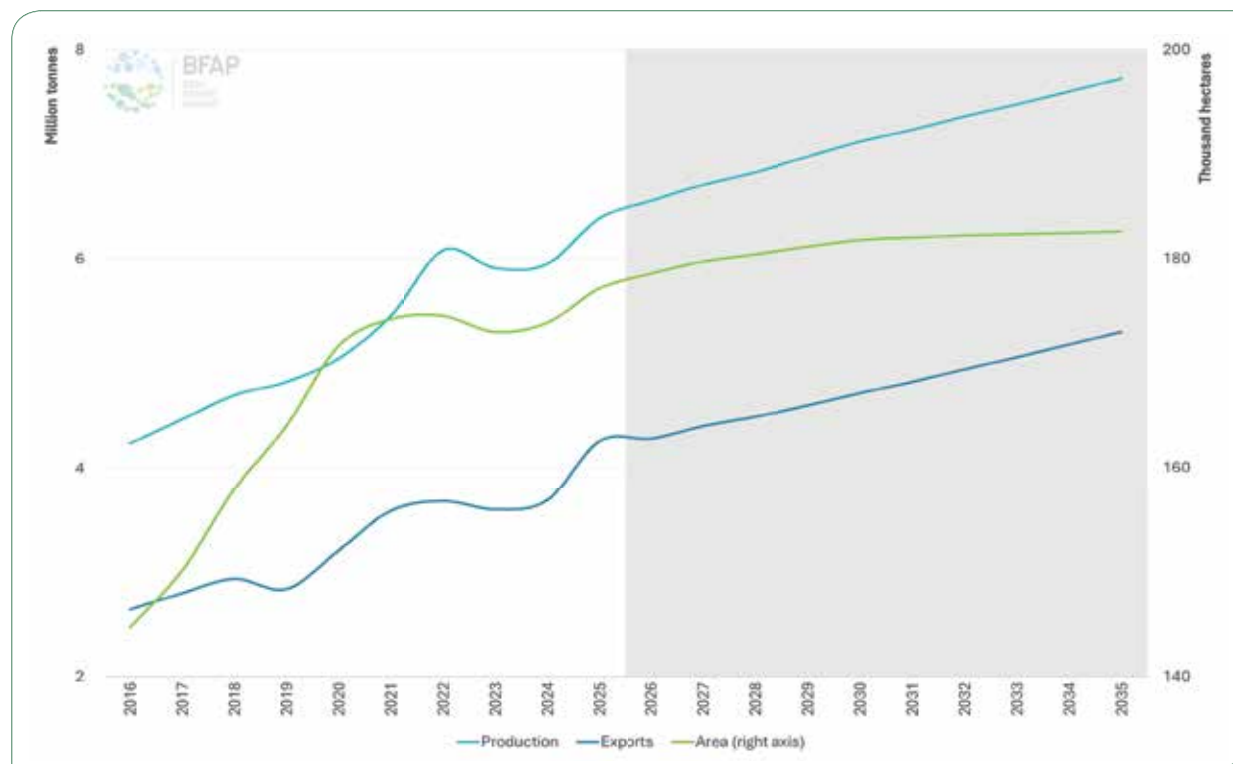


Figure 46: Trajectory of area, production and exports: 2016-2035

is mirrored by the GPV derived from exports, which is expected to rise from R74.4 billion to R120.1 billion over the same period, confirming that exports remain the primary driver of total value.

Growth patterns vary significantly across the individual commodities. The berries sector exhibits the most rapid percentage growth, with exports projected to double in volume over the outlook period. Similarly, citrus and table grapes demonstrate steady expansion, albeit from very different bases; citrus is projected to climb to 3.72 million tonnes, while table grapes show consistent growth to close in on 400 000 tonnes by 2035. Conversely, stone fruit and pome fruit remain relatively stable, with the latter potentially ending at more than 1 million tonnes of exports by the end of the outlook. In contrast, the wine sector exhibits a more volatile trajectory, peaking around 2028 and 2029 before settling into a slow-growth pattern to reach just over 300 million litres in 2035.

As indicated in Figure 48, the total area for pome fruit is expected to remain largely stagnant, while stone fruit area is projected to contract by approximately 1% per annum. However, despite this plateau, GPV is projected to grow by 4% to 5% across most major

categories, with blueberries leading at 8%. This growth is driven by intensification: the replacement of older orchards with high-yielding, high pack-out varieties and the adoption of climate mitigation technologies such as shade netting and precision irrigation. Export volumes are expected to grow at a faster pace than total yields, reflecting a systemic improvement in pack-out percentages. For pome and stone fruit, growth is largely decoupled from area expansion. In the case of citrus, area grows marginally at 0.5% per annum, GPV growth is ten times higher (5.0%), underscoring the shift toward high-value varieties, continued growth in soft citrus planted area, and average yield improvements as a result of younger orchards entering production and production improvements.

Having benefited from two exceptionally strong production cycles (2024/25 and 2025/2026), the wine industry is projected to enter a period of normalisation. This shift is expected to result in a reduction in wine production over the coming outlook. While the contraction of cultivated areas remains a concern, there are encouraging signs that the tempo of this decline is easing. Strategically, the industry continues to balance three primary objectives: retain the South African consumer, secure a presence in key global

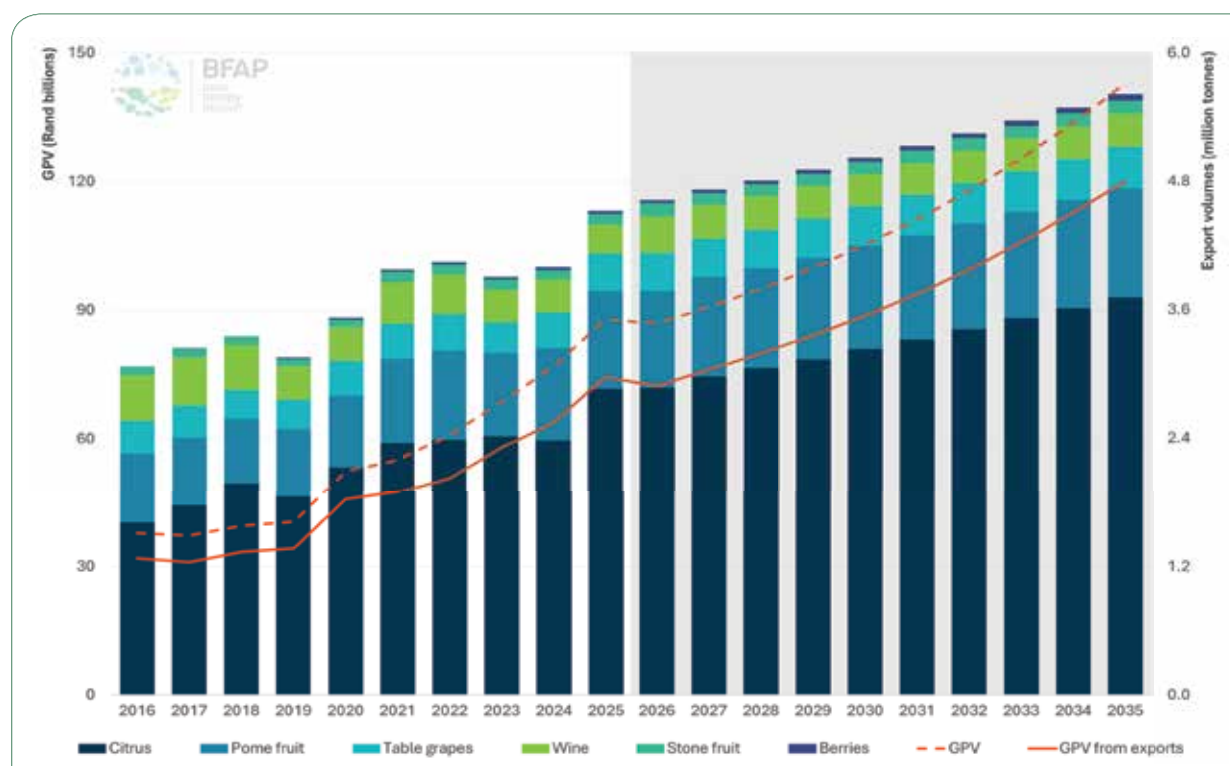


Figure 47: GPV and GPV from exports: 2016-2035

markets, and manage domestic inventory levels. With production returning to more 'normal' levels under the baseline, the export outlook remains steady. However, the financial landscape is challenging; nominal GPV growth is merely 1.8%, signalling a contraction in real terms. This is largely a reflection of evolving consumer behaviour, where a general global decline in alcohol consumption is compounded by a specific migration from wine to other beverage categories.

To evaluate the viability of proposed shifts in intensification, farm-level financial simulations were conducted for representative apple and soft citrus farms over a 10-year horizon. The results confirm that focusing on quality (pack-outs) provides a more robust return on investment than focusing solely on yield, even though both result in higher margins if increases in the cost of inputs can be limited to avoid moving beyond the optimal production levels (Figure 48). In comparison to the baseline, the following three scenarios were simulated:

- Scenario 1 (S1): 10% increase in yield.
- Scenario 2 (S2): Balanced 5% yield increase and 5% pack-out improvement.
- Scenario 3 (S3): 10% improvement in pack-out (e.g., 50% to 60% export grade).

For apples, a 10% improvement in pack-outs (S3) resulted in a 72% increase in gross margins over the 10-year baseline, compared to a 50% increase from a 10% yield gain (S1). In soft citrus, the impact was similarly weighted toward quality, with S3 delivering a 29.6% profitability gain compared to 19.4% for yield alone. This highlights that in a competitive global market where processing or local fresh markets often return less than export markets, the ability to convert a higher percentage of the crop into export-grade fruit is the single most important factor for long-term survival. The outcome of this simulation is that intensification, specifically with a quality-first focus, is justified. The impact on apples is more pronounced than soft citrus, but in both instances intensification is a necessary step towards financial sustainability.

Competitive market access requires reasonable SPS requirements and tariff reduction

The sustainability of this intensification strategy is heavily dependent on competitive market access. While South Africa has century-long relationships with the EU and UK, these markets are maturing. Future growth must be absorbed by unlocking market share in eastern markets, specifically China and India. However, South Africa typically faces a significant tariff wall in these regions

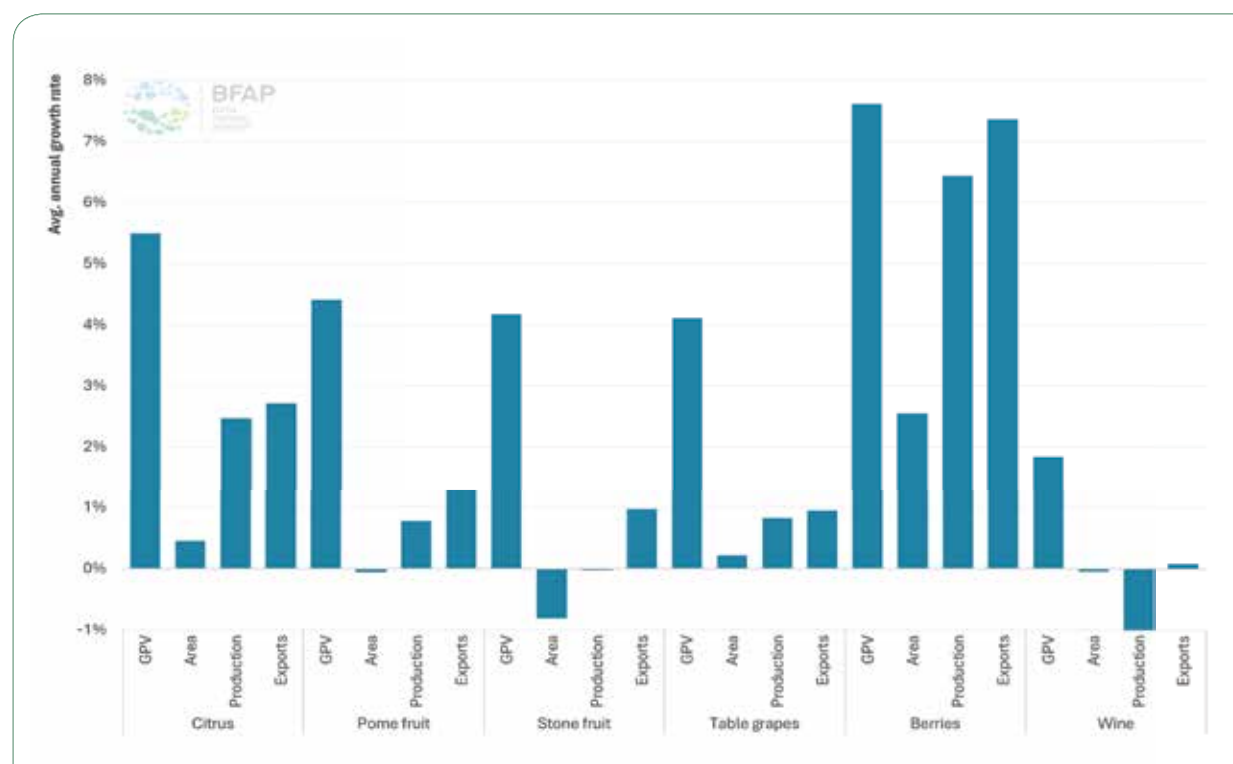


Figure 48: Drivers of gross production value growth: 2025-2035

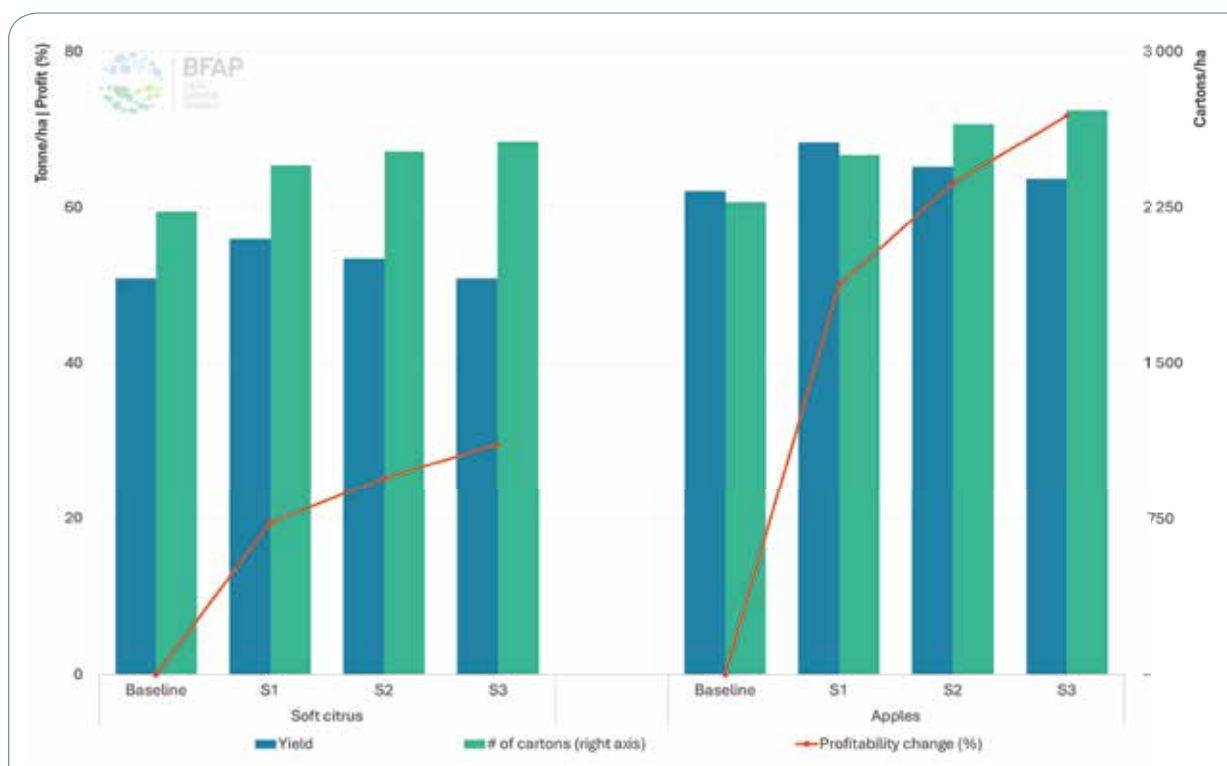


Figure 49: Soft citrus and apples sensitivity analysis case studies: 2025-2035

compared to Southern Hemisphere competitors like Chile, Australia, and New Zealand, who benefit from various Free Trade Agreements (FTAs).

Figure 50 represents a reasonable indication of the price at which product was discharged from South Africa to China and India in 2025, the price point at which it arrives at the port of destination, and the tariff consequently raised for a standard selling weight. With these products now entering China duty-free under FOCAC, there is the potential for South African exporters to benefit from the removal of import tariffs that have historically weighed on competitiveness. For example, the tariff on soft citrus adds approximately R38 per 15 kg carton to the landed cost in China. The elimination of this duty creates an opportunity for a more efficient value chain, lowering costs for importers and consumers while improving returns to producers. As a result, the benefits of enhanced market access could be shared across the value chain, helping to alleviate margin pressure and strengthen the competitive position of South African exports.

In India, however, the disparity in duties still significantly inflates the landed price of South African fruit. Apples face a staggering cumulative duty structure (Basic Customs Duty + AIDC¹) that effectively adds 50% to the cost. Packaged wine faces a substantial barrier to entry due to the 150% MFN tariff. This creates a stark disparity in market access, as only Australia and the UAE possess agreements allowing for duty-free exports to India. As a result, South African wines are priced out of the market compared to Australian imports, which have established a leading position within the Indian market. The tariff burden extends beyond the MFN duty alone. In addition to the customs tariff and AIDC, a 10% Social Welfare Surcharge (SWS) is typically applied to the basic customs duty value, while a Goods and Services Surcharge of 0% to 5% may apply depending on packaging/processing state.

Port terminals hold the key to unlocking the projected GPV

The period through 2035 will be defined by a fundamental structural rebalancing. As the era of rapid land expansion draws to a close for most commodities

¹ A special tax (cess) levied by the Indian government for agricultural infrastructure and development.

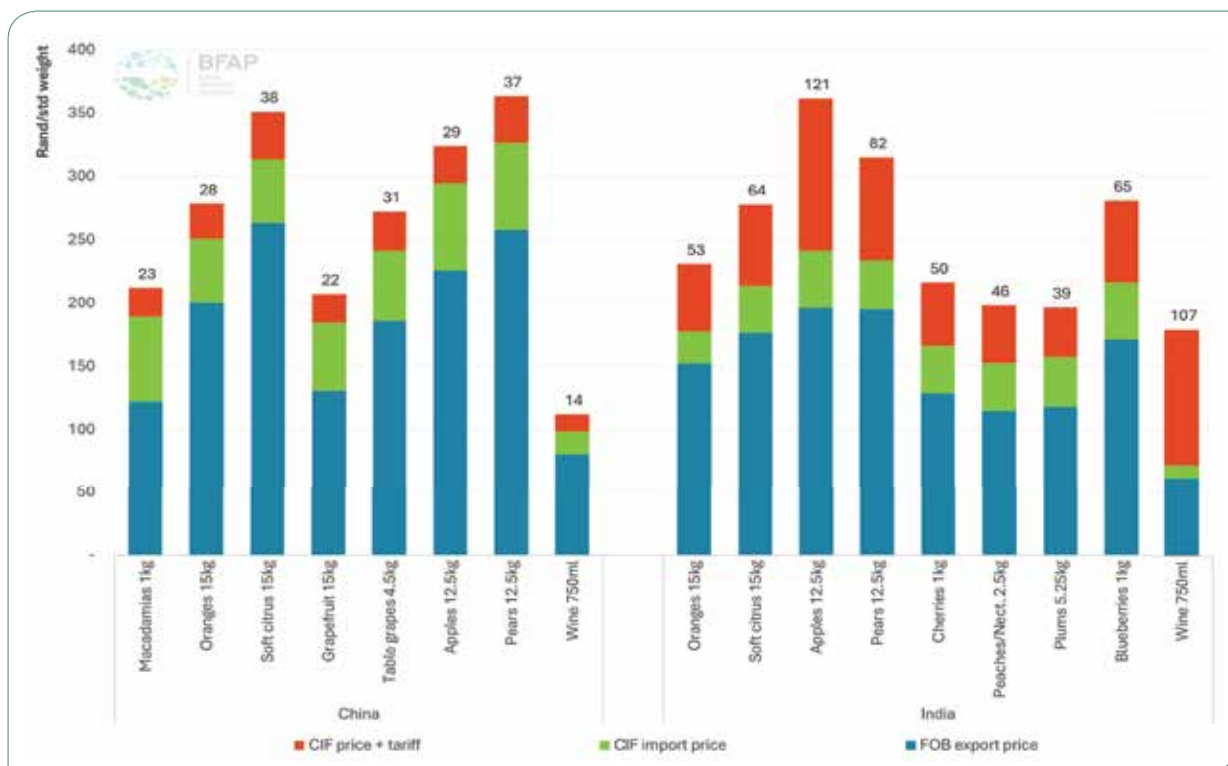


Figure 50: Tariff impact on trade price and competitiveness: 2025

Source: Amended from ITC, 2026; MacMap, 2026

a more sophisticated, data-driven industry is emerging. By prioritising pack-out quality over raw tonnage and investing in technological pillars of climate adaptation and energy resilience, the South African horticulture sector is effectively attempting to de-risk its environment from the inside out.

However, this transition increases the industry's dependency on export markets to generate revenue and drive real GPV per hectare. To succeed in this high-stakes environment with long-term, capital-intensive production systems, the ability to ship product on time is vital to maximising market returns and maintaining international competitiveness. Consequently, the industry requires more than just on-farm resilience; it needs a structural shift in South Africa's port management. The overarching theme of value-chain resilience suggests that the industry must move toward a model of greater logistical control, achieved either through public-private partnerships (PPPs) in port terminals and/or the strategic diversification of exit points, such as the increased utilisation of Maputo or Eastern Cape ports. Without a corresponding diplomatic effort to lower tariff walls in the East and a decisive logistical turnaround at the Port of Cape Town,

the margins required to achieve the growth projected under the baseline conditions will remain under extreme pressure.

VISION 2050: The multiplier effect of success can benefit all

For the horticultural producer of 2026, the decision to establish a new orchard or vineyard is inherently a 20-to-30-year commitment. While the 10-year baseline (2035) provides a roadmap for survival through intensification, the Vision 2050 Scenario examines the structural transformations required to transition from merely surviving to thriving. This horizon shifts the focus from farm-level adjustments to the macro-enablers, namely infrastructure, energy, and policy, that determine whether South Africa can fully capitalise on its biological potential as a global fruit superpower.

To model the path to 2050, the trajectory of the industry from the status quo (the 2035 baseline projection) is extrapolated to 2050 under different scenarios based on the resolution of constraints in water, energy, and logistics.

Table 6: Trajectory of area, production and exports

Growth path	Area (p.a.)	Production (p.a.)	Exports (p.a.)
High Road	0.50%	1.00%	1.50%
Medium Road	0.25%	0.50%	1.00%
Low Road	0.13%	0.25%	0.50%
No Road (fall back to 2026)	0.00%	0.00%	0.00%

Water and energy the key to unlocking additional land

Under the Vision 2050 high road scenario, area expansion is unlocked through the upgrading of aging water scheme infrastructure. Currently, many regions are at ceiling capacity due to leaking distribution systems and limited storage. Fixing these systemic leaks and expanding agricultural water supply is the primary prerequisite for the high road growth of 0.50% per annum in planted area.

Similarly, the transition to a reliable, ESG-friendly energy supply is no longer a niche requirement. For the 2050 horizon, the scenario assumes a regulatory environment that supports large-scale, off-grid/grid-tied alternative energy systems for entire irrigation boards and cold-storage hubs. This transition secures the unlocking of dividends by shielding producers from the electricity cost hikes projected in the short term and ensuring compliance with the increasingly stringent carbon-neutral requirements of EU and UK markets.

The accelerative effect on exports is most visible in the high road scenario (Figure 51). A 0.50% increase in area, combined with an average 1.00% annual increase in yields (driven by the intensification established earlier in this chapter), and a 1.50% annual growth in exports, i.e., pack-outs (quality-first focus) accelerates export growth. By 2050, this compounded growth would supercharge South Africa's foreign currency earnings and rural employment, provided the value chain can absorb the volume.

Quality preservation requires effective service from logistics suppliers

The success of the 2050 scenario is entirely contingent on the ability of the logistics network to handle the projected volume of 40ft container equivalents. A critical finding of the 2050 modelling is the temporal concentration of demand.

While citrus and pome fruit provide a steady baseline of

volume through Durban, Eastern Cape and Cape Town ports, the high-value, highly perishable commodities, i.e., stone fruit, table grapes, and blueberries, are exported almost exclusively over a narrow summer window: currently over 90% of these high-unit-value products are discharged through the Port of Cape Town (CPT).

The annual volume of cartons exported is, on its own, a poor indicator of the sector's long-term competitiveness and viability. Delays at the port do not just delay revenue; they cause perishability claims and quality downgrades that directly erode the farm gate revenue and sustainability, especially for smaller producers. A day of port delay in January is significantly more destructive to industry GPV than a delay in July. For the 2050 potential to be realised, the logistics strategy must move beyond volume capacity to velocity capacity, ensuring that the export growth does not simply result in longer queues at the port.

Climate and technological resilience as non-negotiables

As we move toward 2050, the resilience measures currently viewed as progressive will become standard operational requirements:

- **Climate adaptation:** Shade netting will become a standard capital requirement for new deciduous and grape plantings to mitigate rising temperatures and water stress. However, this shift represents a dual-edged transition: while it secures immediate pack-out quality and yield stability, the industry must manage the accompanying risk of microclimate alteration to ensure long-term ecological resilience.
- **Biological and digital integration:** To maintain global market access, the adoption of regenerative biologicals and digital management systems will shift from a competitive advantage to a baseline necessity. By 2050, automated real-time carbon tracking and chemical residue compliance will be mandatory for every carton shipped.

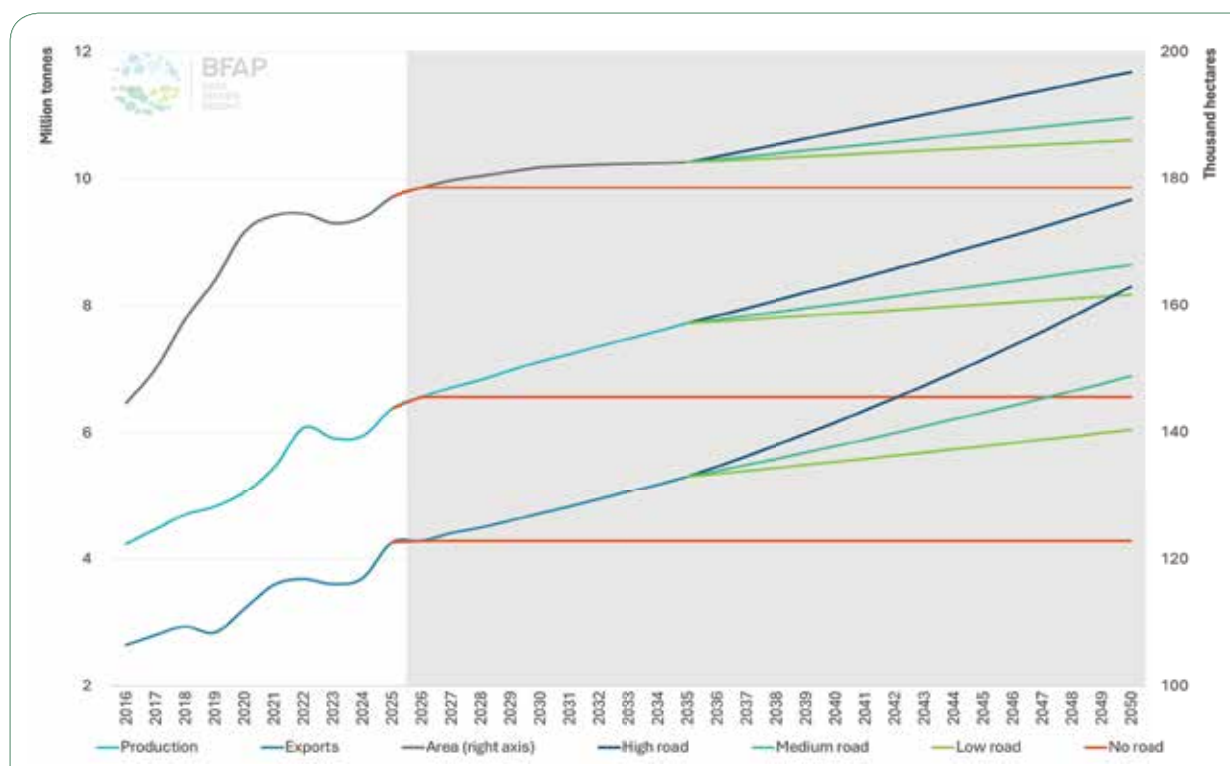


Figure 51: Trajectory of area, production and exports: 2016-2050

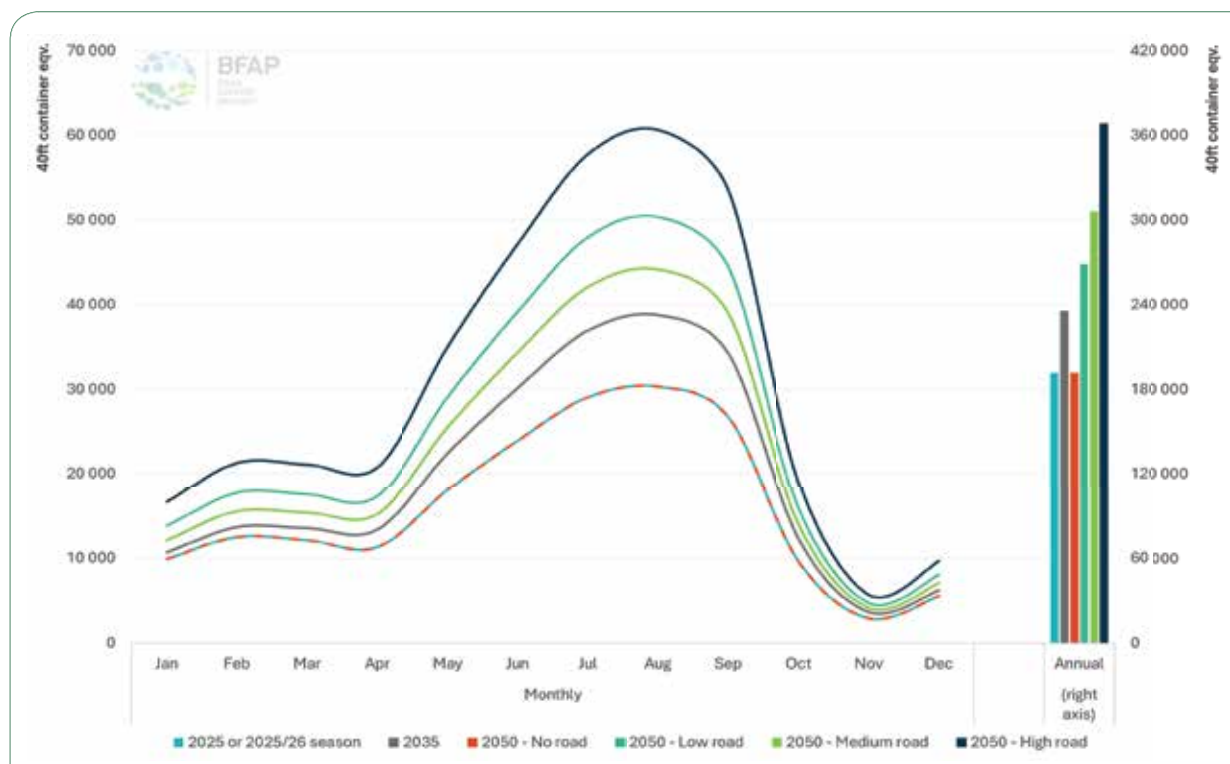


Figure 52: Temporal distribution of demand for logistical services: 2025-2050

POLICY RECOMMENDATION: shifting (quickly) from constraint to enablement

The transition to the 2050 superpower status requires a fundamental shift in the relationship between the state and the producer. Currently, producers are forced to spend significant capital and management time filling the gaps left by failing state infrastructure – building private roads, securing private electricity, and managing private water storage. To prevent the industry from stagnating urgent policy shifts, from constraint to enablement, are non-negotiable. This means:

- Enabling primary inputs: Regulatory changes that fast-track the onboarding of producers into large-scale alternative energy systems and the rehabilitation of state-owned water schemes.
- Reducing the cost of doing business: By fixing the environment beyond the farm gate (energy for cooling, transport networks, and port efficiency), the state allows producers to focus exclusively on production.

Unlocking potential: Reducing post-farm-gate costs directly increases the share of value that accrues to producers, improving cash flow, profitability, and the capacity for reinvestment. This is particularly important for new entrants and emerging producers. While larger

firms may be able to absorb periods of tight margins through economies of scale, a high-cost and high-risk operating environment presents a significant barrier to participation and growth for smaller producers. An efficient, low-cost value chain is therefore not only a driver of competitiveness, but also a prerequisite for meaningful transformation, rural development, and sustainable job creation.

The horticultural sector in 2026 is at a pivot point. The biological potential and producer capacity exist to reach the 2050 high road, but the trajectory depends on whether the full potential can be unlocked. If South Africa can resolve its logistical and energy constraints, the resulting growth will be a primary driver of the national economy. If these systemic risks remain unaddressed, the industry will likely follow the no road scenario, i.e., maintaining 2026 levels through intensification but failing to realise the developmental goals of a prosperous industry by 2050. For the producer planting a tree today, the ultimate success of a 25-year investment may rest as much on the movement of containers through the Port of Cape Town as on the growth of fruit on the tree itself - a stark reminder that the industry's greatest constraints currently seem to lie beyond the farm gate.





THE SOUTH AFRICAN 'PLATE AND GLASS': AN ANALYSIS OF CONSUMER TRENDS AND VALUE CHAIN EFFICIENCY TOWARDS 2050

INTRODUCTION: The integrated South African plate and glass

The South African 'plate and glass' represents more than a simple measure of caloric intake; it serves as a vital barometer of the nation's socio-economic health. As the country navigates a changing economic and social landscape, the composition of this plate is being fundamentally reshaped by a complex interplay of stagnant real incomes, escalating non-discretionary costs, systemic value chain frictions and evolving consumers tastes and consumption motives. While South Africa maintains a robust agricultural sector capable of producing sufficient product at a national level, a profound contradiction persists as aggregate abundance has failed to translate into universal household food security across the socio-economic spectrum.

This chapter provides a comprehensive analysis of the South African consumer landscape, beginning with a retrospective assessment of the transformative decade between 2016 and 2025. During this period disposable income – the residual income available to households

after meeting debt obligations and other essential expenditures, including transport costs associated with growing vehicle dependence – has become the primary determinant of nutritional outcomes. By deconstructing the structural barriers that exist beyond the farm gate, this analysis identifies why accessibility, a core aspect of food security, remains a challenge. Critically, this analysis reveals that the affordability crisis is not a function of inflated commodity prices or excessive producer margins, but rather a systemic collapse in household purchasing power, where spending power is depleted by non-discretionary, non-food obligations before the consumer even sets foot in a retail grocer shop.

Moving beyond historical trends, the chapter establishes a quantitative baseline for commodity consumption through 2035. It concludes by highlighting the strategic interventions and value chain reforms required to improve on current inefficiencies. The ultimate objective is to provide a roadmap for a more resilient food system – one that ensures the South African Plate and Glass

of 2050 is defined by nutritional diversity and economic inclusion rather than survivalist compromise.

THE EVOLVING CONSUMER LANDSCAPE: A 2016–2025 retrospective

Structural shifts in the South African consumer landscape over the past decade

The decade spanning 2016 to 2025 has been defined by significant structural shifts in the South African consumer landscape. It is a period characterised by nominal household income growth and real stagnation, where the domestic 'Plate and Glass' has transitioned away from static, volume-driven consumption toward a more complex and discerning value-seeking environment. To understand this transition, one must first consider the backdrop against which these value-seeking decisions were taken. Ultimate spending power plays a key role in the evolving consumer landscape.

Stagnating real income

While South Africa's Gross Disposable Household Income (GDI) grew at an average annual rate of 5.7% between 2016 and 2025, this nominal growth masks a deepening crisis of affordability (South African Reserve Bank (SARB), 2026). When adjusted for the Headline Consumer Price Index (CPI) increase of approximately 57% over the same period, real disposable income per capita has effectively stalled, and for many contracted, with the impact not evenly distributed over the total consumer base. This divergence is the primary driver of the weak demand observed domestically for food. Agricultural productivity has largely succeeded in maintaining, and growing, supply, but the macroeconomic environment, characterised by high unemployment and the increase in non-food obligations, has failed to sustain the consumer's ability to participate in that supply. The modern consumer is not necessarily choosing to reduce their intake of high-value produce; rather, they simply have less purchasing power available by the time they reach the retail shelf.

Demographic evolution

Beyond income, the demographic profile of the South African consumer has shifted fundamentally. The population aged over the past 10 years, with the median age rising from 25.4 in 2015 to 28.7 in 2025 (United Nations (UN), 2025). This maturing population now sees 43% of its members in the 25–64 (working age) cohort. While this group traditionally drives high-value consumption, fewer of them form part

of the labour market than at the start of the decade. The unemployment rate escalated from 25.4% in late 2015 to 32.4% by 2025, leaving 8.1 million individuals and their dependents financially vulnerable. These unemployed individuals are also disproportionately correlated with lower income households, worsening the financial burden on the working individuals in those households, but also the relative contribution to consumer expenditure.

Simultaneously, urbanisation, as measured by the UN's new geospatially integrated methodology, is approaching 80%, representing more than 50 million people (UN, 2025). This shift has further facilitated a transition toward formal retail systems, but it has coincided with a decrease in average household size from 3.4 to 3.2 persons. The growing fragmentation of households has reduced the economies of scale traditionally associated with larger family units, including small-scale food production, bulk purchasing and communal cooking. These units face higher per capita costs for electricity and rent, further narrowing the residual income available for a diverse food basket.

Debt and the demand for private vehicles

One of the most significant inhibitors of net discretionary spending is a combination of fixed, non-discretionary expenses that absorb an increasing share of consumer budgets. Integrating the data from SARB and the National Credit Regulator (NCR) revealed two core drivers of the reduction in net discretionary spending of South African households.

First, a primary drain on spending power is the escalating cost of consumer credit. By 2025, the national gross debtors book reached R2.44 trillion. While mortgages dominate the total value (52%), it is the high-interest consumption bridge, i.e., store cards, credit facilities, and unsecured credit (62% of interest) that represents a high-velocity drain on disposable income, which already accounts for interest payable. With interest rates on these non-mortgage loans often exceeding 20%, a disproportionate share of income is lost to debt servicing, with about 7% of income deleted from the disposable portion. Households are essentially leveraging future food budgets to pay for current survival, leading to a net reduction in the volume and diversity of current food purchases.

In addition, further pressure arises from the expansive growth in private vehicle ownership – expenditure on

personal transport equipment grew by 8.1% annually (SARB, 2026), with about 75% of vehicles financed. This shift, from relying on public transport, a variable, pay-for-use cost to a non-negotiable fixed-cost burden eroded value from household's gross disposable incomes as well as the net discretionary spending.

THE PLATE - FOOD EXPENDITURE DYNAMICS, AND THE EROSION OF THE NUTRITIONAL BUFFER

To understand the change in food choices by South African consumers it is necessary to understand how changes to total spending power translate into food basket expenditure.

Consumer duality: survivalist vs. lifestyle demand

South African households are segmented into Expenditure Deciles (EDs), where each decile represents 10% of all households. The disposable household income for each decile is determined by the average from all the households in that decile, with expenditure expressed in a similar manner. Across this distribution, the proportion of income allocated to food declines as household wealth increases, reflecting the well-established relationship between income growth and food expenditure. Since 2016, however,

structural economic shifts have intensified this divergence.

At one end is the lifestyle-driven consumer (the two most affluent deciles, representing 20% of households or 4.02 million households (approximately 13.1 million people), and approximately 62% of total income in South Africa (Figure 53). Their food choices are dictated by factors such as convenience, health, indulgence and attributes like sustainability and ethics. Food costs represent a manageable 8-17% of the budget, resulting in significantly lower sensitivity to food price shocks. Ample opportunities for more value-for-money exists, should these consumers feel the squeeze.

At the opposite end is the survivalist consumer (the low-income 40% of households – 8.05 million households, approximately 20.8 million people), for whom food accounts for roughly one-third of all expenditure. The income share of this bottom 40% of households rose from about 10% (2016) to 12% (2025), meaning that the average low-income household is taking home more of the Gross Disposable Household Income (GDI) than 10 years ago. Factors such as increased grant dependence and minimum wage increases over the

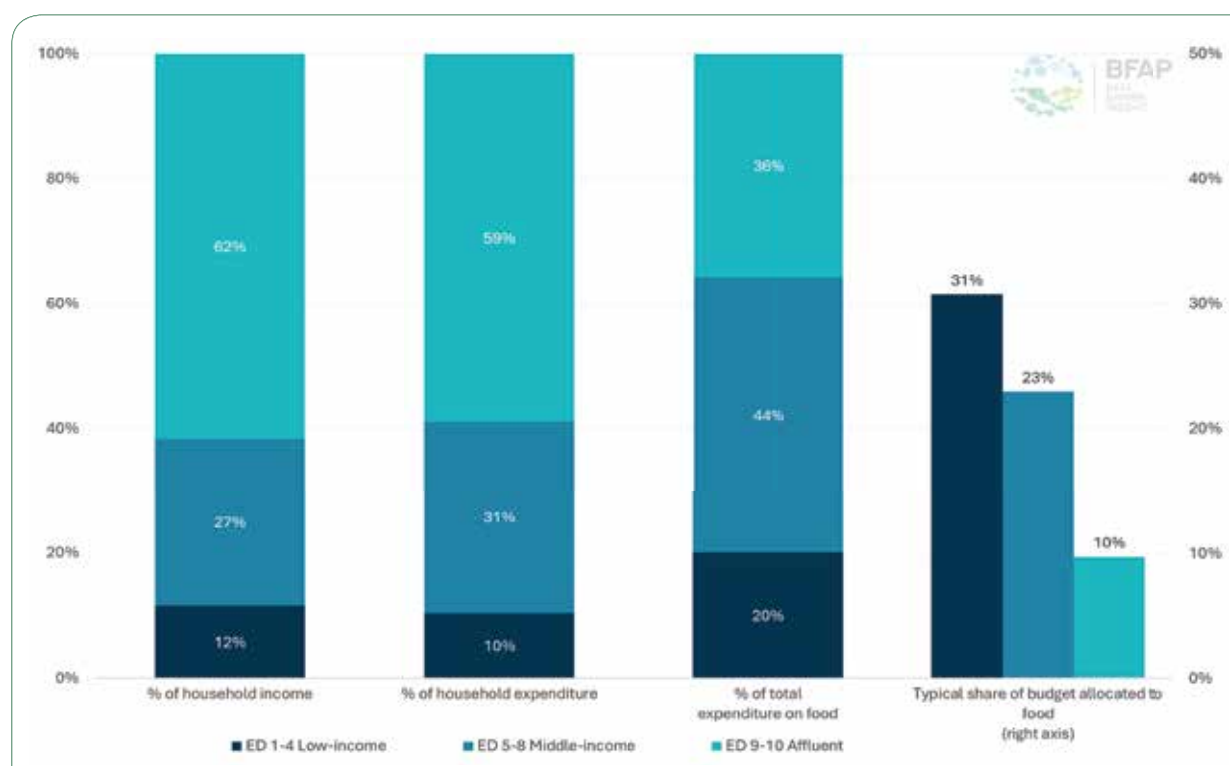


Figure 53: The diverse South African consumer base

Sources: Stats SA Income and Expenditure Survey 2022/2023

past decade have contributed to the change, although these households still face significant challenges in terms of food security and the cost of living. By contrast, the middle-income 40% of households (8.05 million households, approximately 28.3 million people) saw their share of GDI contract from 28% in 2015 to 27% in 2025. As incomes rise, many households in this segment become increasingly dependent on private transport and consumer credit while simultaneously outgrowing access to social grants. The resulting debt burden erodes disposable income, leaving many structurally more vulnerable despite earning more.

For 80% of South Africa's households, spending power remains under constant pressure. With very little in the way of financial buffers, low-income and middle-income households are forced into migrating toward cheaper, often less nutritious calorie-dense carbohydrates, sacrificing nutritional diversity as well as total calorie intake in general, as real purchasing power continues to erode as food prices increase due to rising value chain costs or shocks to food systems.

The stark reality of chronic and often delayed food insecurity is evident in two ways. Firstly, despite allocating around a third of their income to food, the

bottom 40% of households spends between R770 and R1865 per month on food. This highlights how far a healthy, budget-friendly, diversified basket (amounting to approximately R3 900 in 2025 for a household consisting of two adults and two children), remains out of reach for many South Africans. Secondly, the extent to which household expenditure of the middle-income households is exceeding income, signals growing financial strain ahead. Rising dependence on credit-financed consumption is already eroding disposable income, reducing the funds available for essential purchases such as food.

CPI weights: a reflection of shifting household priorities

The Consumer Price Index (CPI) basket weights are indicative of the relative importance of specific food groups within the national basket. A comparison of the weights from 2016 and 2023, the last comprehensive rebase, reveals a significant structural realignment in response to a decade of challenging economic conditions (Figure 54).

- **Contraction in meat:** Meat remains the largest expenditure component of the food basket, but its weight has declined from 31.8% in 2016 to 27.9% in

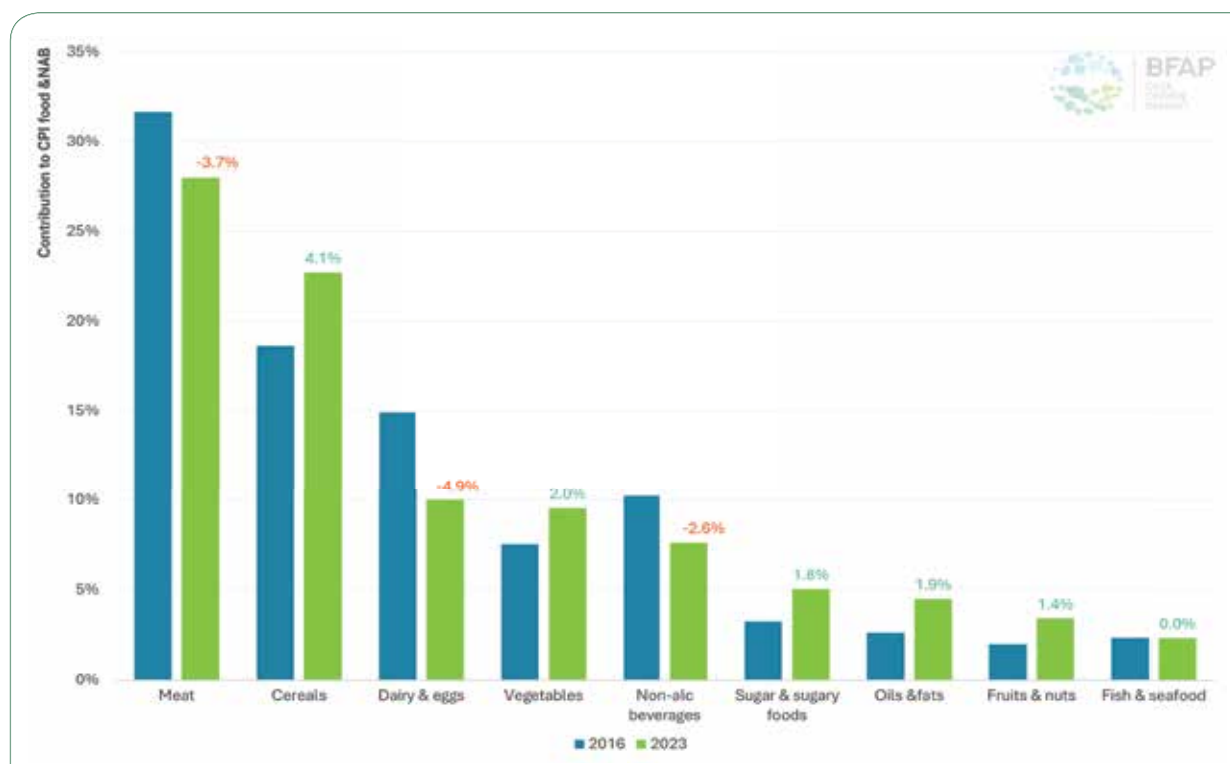


Figure 54: Comparing CPI food and NAB category weights for 2023 vs 2016

Sources: Stats SA CPI weights for 2023 and 2016 published in 2025 and 2017 respectively

2023. While chicken remains the dominant weight in this category, the contraction in the meat category's change in contribution to total food inflation signals a forced trading down as consumers move away from high-value red meats toward more affordable proteins like eggs and pork or simply reduce total meat volume.

- **Dairy and eggs:** The weight contribution of dairy foods to CPI on food and non-alcoholic beverages (NAB), declined from 12.6% in 2016 to 7.4% in 2023, affected by reduced per capita intake due to factors such as household income pressure and spoilage risks due to loadshedding. The increased weight contribution for eggs (2.3% in 2016 to 2.7% in 2023) could be attributed to factors such as increased expenditure due to recurring outbreaks of Avian Influenza, as well as the popularity of eggs as an affordable protein source.
- **Cereal floor:** Conversely, the weight for cereal-based foods rose from 18.6% to 22.7%. This increase reflects the fallback on staples as a survival strategy. As budgets are squeezed by non-food costs and food prices increase, households allocate a larger share of their remaining funds to energy-dense, starch-rich foods.
- **Other changes:** Interestingly, while most categories stagnated, Vegetables (up from 7.7% to 9.5%) and Oils & Fats (up from 2.6% to 4.5%) showed increased CPI weight contributions. The increase in Oils & Fats indicates that these foods have become a more significant component of the average South African's monthly spend over time, as confirmed by FAOSTAT data indicating a 34% increase in plant oils consumption from 2014/15 to 2022/23. This points toward a shift toward oil-heavy processed diets, for

example through increased processed food intake as well as the increased consumption of fried fast-foods or take-away foods.

- In the **NAB** category, mineral water was the only sub-category to see an increased contribution. This shift is dual-purpose: reflecting a health-conscious pivot toward wellness choices such as avoiding calories from alcoholic beverages, and a possible reaction to the deteriorating quality and reliability of municipal water supplies.

Socio-economic disaggregation: resilience vs. vulnerability

The impact of these shifts is not uniform across society (Table 7). Over the past decade, nutritional diversity has faced a significant decline, evidenced by the shrinking per capita consumption of essential, nutrient-dense foods. Specifically, intake levels for protein-rich animal sources (including beef, lamb, and dairy) alongside selected fruits (e.g. apples and oranges), selected vegetables (e.g., tomatoes), and legumes (viewed as alternative protein-source foods), have all declined. This shift represents a critical threat to public health as it compromises both the intake of high-quality macronutrients (e.g., quality proteins) as well as essential micronutrients (vitamins and minerals). The resulting scarcity of vital vitamins and minerals undermines long-term metabolic health and increases the population's vulnerability to chronic nutritional deficiencies.

The rising cost of a healthy, diversified basket, as reflected in BFAP's Thrifty Healthy Food Basket, highlights a growing nutrition security challenge. Even after accounting for changing household sizes and adaptive consumer behaviours such as bargain hunting, the evidence points to a fundamental affordability constraint. Approximately 40% of South African

Table 7: Per Capita Food Intake Dynamics (2015–2025)

Category	Est. % Change Category	Growing Consumption	Declining Consumption
Starch-rich	+1%	Rice (+4%), Wheat (+2%)	White Maize (-1%)
Meat & Eggs	-6%	Pork (+30%), Eggs (+4%)	Lamb (-45%), Beef (-15%)
Vegetables	+7%	Cabbage (+31%), Pumpkin (+22%)	Tomatoes (-16%)
Fruit	-5%	Blueberries (+433%), Soft citrus (+67%)	Oranges (-36%), Apples (-6%)
Dairy	-4%	-	Cheese (-25%), Butter (-17%)

households are unable to allocate sufficient income to food purchases to consistently meet basic nutritional requirements. As household budgets come under pressure, consumers are forced to prioritise affordability and satiety over nutritional quality. The result is a shift towards relatively inexpensive, calorie-dense starchy staples, often at the expense of more nutrient-rich foods. The growing reliance on volume-filling foods such as cabbage illustrates how households adapt to financial strain - stretching limited food budgets while sacrificing dietary diversity and, ultimately, nutritional adequacy.

This data underscores a significant challenge with affordability where food security has become increasingly decoupled from agricultural performance. The structural evidence suggests that the primary inhibitors to a diversified 'Plate and Glass' are rooted in macroeconomic failures rather than agricultural pricing. This is driven by an employment gap of 8.1 million individuals without a primary income, the sequestration of 7% of disposable income by high-interest consumer credit, and the 8.1% annual growth in transport equipment expenditure, all of which act as a fixed-cost drain on nutritional budgets. Ultimately, even if agricultural commodity prices were to stabilise or decline, the largest portion of South African households would remain food insecure due to the structural fragility of their spending power.

THE GLASS – THE ALCOHOL PARADOX

The South African beverage market presents a compelling case study in consumer adaptation and category migration. Despite stagnant real incomes and the broader food basket under pressure, alcohol consumption per adult rose from 6.71 Litres of Absolute Alcohol (LAA) in 2016 to 7.17 LAA in 2025. However, this growth is not uniform, but a reflection of a volatile decade characterised by pandemic-induced shocks and an affordability fragmentation.

The COVID-19 catalyst

The mid-point of this 10-year period (2020-2021) was a radical disruptor. The South African government's multiple bans on alcohol sales fundamentally altered the consumer's purchasing psychology and ultimately demand.

- **Stockpiling legacy:** The pandemic and the intermittent announcements of fluctuations in lockdown levels with associated alcohol sales

restrictions institutionalised bulk buying and at-home consumption. While the on-trade sector (bars and restaurants) suffered, the off-trade retail sector saw a lasting shift toward larger pack sizes and shelf-stable options. At-home consumption now accounts for the bulk of total market volume, driven by a combination of convenience and affordability.

- **The rise of RTDs:** Ready-to-Drink (RTD) products, like ciders and wine and spirit coolers, were the primary beneficiaries of this shift. Offering convenience, a lower price point per unit and diverse flavour profiles, RTDs bridged the gap between beer and wine. Globally, RTDs eroded the traditional boundaries between beer, wine, and spirits, but in South Africa it became a survival mechanism for a consumer seeking small luxuries and alternative taste profiles. In 2025 RTDs represented 12% of the total alcohol market volumes, reflecting a global shift toward lifestyle-convenience beverages.

The wine market duality

The domestic wine industry illustrates the tension between global premiumisation and local affordability. Total domestic still wine consumption declined by 6% over the course of a decade, echoing a global trend where wine volume is under pressure from competing categories, affected by factors such as convenience, consumers' need for novelty and excitement in their alcoholic beverage offering, as well as health perceptions.

- **Premiumisation at the tip:** Mirroring global trends, the South African market has seen strong percentage growth in the premium segment (R150+ per litre). This is driven by the affluent top two deciles (ED 9-10) who prioritise quality over quantity, a trend accelerated by the pandemic as travel budgets were redirected to home-based luxury.
- **Volume-for-money below the tip:** Despite this growth, the market remains overwhelmingly volume-driven and price-sensitive. As of 2025, the budget segment (wine priced at R50 or less per litre) still accounts for 70% of total volume, and the biggest of that is sold in a cost-effective bag-in-box format for immediate consumption. Unlike more mature international markets, South African wine consumption is largely driven by value-for-money. While global consumers are trading up, the majority of South Africans are trading across, seeking the

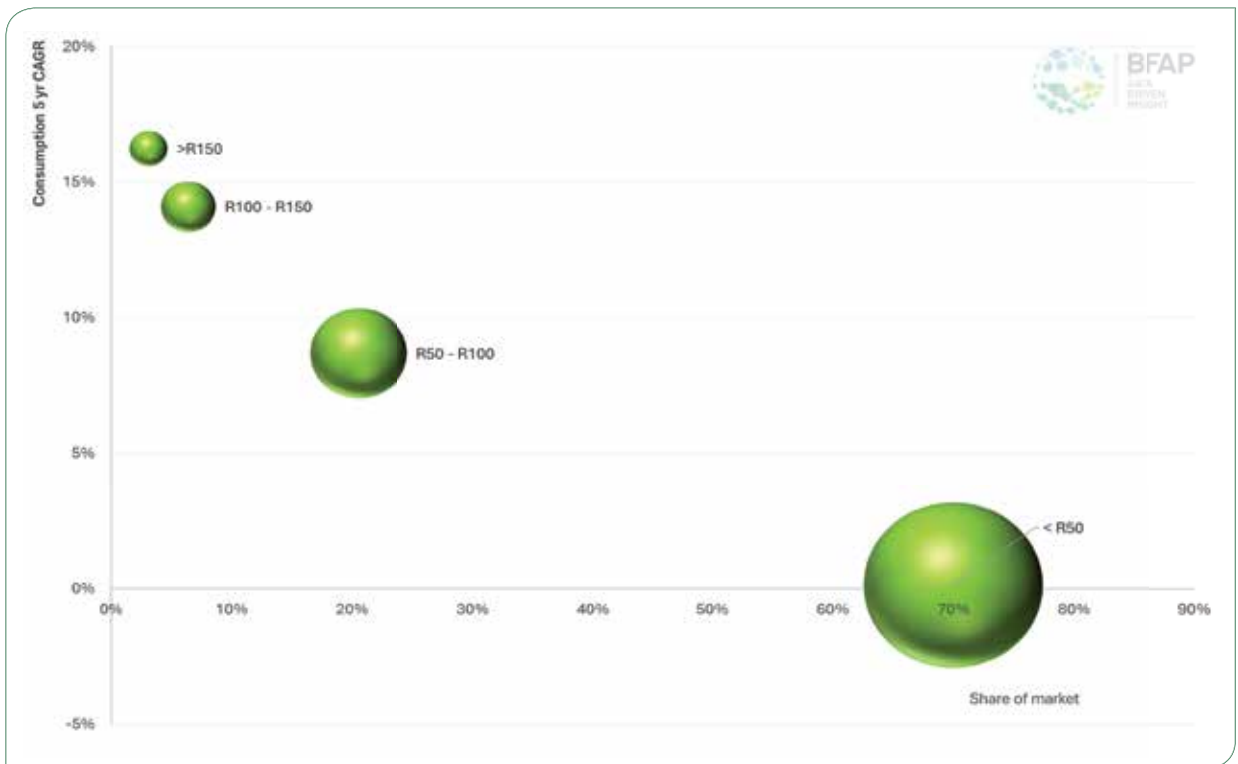


Figure 55: Comparing market share and consumption growth of still wine per price bracket (Rand/litre) for 2020 to 2025

Sources: SAWIS, 2026

most alcohol-per-Rand while restricted themselves to higher-frequency, lower-cost transactions, consequently resulting in an increasingly competitive environment for wine sales, with more affordable alternatives and/or smaller packaging alternatives available.

Solidifying trends in the medium term

While South Africa's total alcohol intake increased, the internal composition of consumption has undergone a radical realignment. Traditional spirits, historically the cornerstone of aspirational consumption, are losing the battle for the consumer's favour as they migrate toward more accessible, per unit categories.

Since 2016, the share of total LAA contributed by traditional spirits has contracted sharply. Whisky volume share fell by 46% and brandy by 12%. For the affluent consumers (ED 9-10), this is a continuation of the tend to favour quality over quantity – similar to what is observed in wine; absorbing price increases as a status-led luxury. Conversely, the contraction by middle-income consumers (ED 5-8) is, at least partially, driven by a high entry price barrier. With the standard

product cost, combined with the sin tax, cost conscious consumers are likely avoiding large lump-sum outlays in favour of higher-frequency, lower-cost transactions.

In return, the lost spirit share has flowed directly into RTD formats. RTDs offer the aspirational branding of spirits at the per-occasion price point of slightly more than beer. This pivot reflects a consumer base functionally optimising short-term/immediate expenditure to fit the narrow margins of an exhausted wallet, even when it's more expensive in the long run.

KEY DRIVERS OF THE DECADE'S TRANSFORMATIVE FORCES

The evolution of the South African food consumption landscape from 2016 to 2025 was not a linear progression but a series of reactive shifts forced by four distinct pressure periods. These periods fundamentally reshaped the consumer's food basket.

Period 1: From a consumer perspective, 2016 was defined by the successive 2014-15 and 2015-16 El Niño-induced drought seasons, with the bulk of the impact on the summer crop. This environmental shock broke



Figure 56: YoY inflation on CPI food & NAB from January 2016 to December 2025

Sources: Stats SA, 2026

the domestic price floor for staples, as South Africa became a net importer of white maize. The resulting 53% surge in grain prices trickled down into every facet of the basket, from maize meal to animal feed.

Period 2: 2020 introduced the unprecedented disruption of the COVID-19 pandemic. While the agricultural sector was designated an essential service, household incomes were severely affected by lockdowns and the subsequent loss of informal sector income. This period accelerated the move toward shelf-stable, energy-dense foods as households sought to minimise shopping trips and maximise shelf-life. The July 2021 civil unrest further compromised supply chains, leading to localised food scarcity and a temporary but sharp spike in food insecurity in KwaZulu-Natal and Gauteng.

Period 3: As households tried to regain control of their income and expenditure post-COVID, a new wave characterised by the convergence of global and domestic friction hit 2022-2023. Globally, freight rates spiralled, and the Russia-Ukraine conflict drove up the cost of imported wheat, vegetable oils, and fertilisers. Domestically, this period marked the peak of the loadshedding crisis. The

lack of reliable electricity forced retailers and processors to invest billions in alternative energy – costs that were inevitably passed on to the consumer. Furthermore, for the urban poor, the inability to refrigerate food due to power outages led to a decline in perishable product purchases and an increased reliance on highly processed, 'open-and-eat' products.

Period 4: The emergence of the biggest biological shock to the domestic livestock sector, with successive outbreaks of Foot-and-Mouth Disease (FMD) and African Swine Fever (ASF). The outbreak disrupted supply as movement restrictions slowed processing activity to contain the spread of the disease. As beef prices increased, consumers shifted toward relatively cheaper protein alternatives, placing upward pressure on prices across the broader meat category.

By 2026, most South African consumers are financially worn out. Spending power is no longer a tool for improving living standards; it is a defensive shield against debt, transport costs, utility hikes, and food inflation. For many, this has meant abandoning dietary diversity in favour of cheaper, starch-rich staples,

effectively reversing years of nutritional progress. Affordability now dictates food choices far more than preference, health and variety.

STRUCTURAL BARRIERS TO FOOD SECURITY: from national sufficiency to household crisis

South Africa presents a profound food security contradiction. At a macro-economic level, the nation maintains aggregate food availability through robust domestic production and strategic trade, remaining a net exporter of key commodities, promoting affordability. Yet, beneath this national sufficiency lies a deepening household-level crisis. The structural capability to produce and import sufficient calories fails to translate into affordable, accessible nutrition for millions, revealing a system where national adequacy does not equate to household security for all social tiers.

MEASURING FOOD SECURITY AND IDENTIFYING THE STRUCTURAL BARRIERS

Domestic trends on household access and regional distribution

Food access initially improved between 2010 and 2019,

with the proportion of individuals with inadequate food access dropping from 25.2% to 19.5%, while those experiencing hunger decreased from 16.1% to 11.1%. However, this progress reversed after 2019. By 2024/2025, hunger and inadequate food access had reverted back to 14.7% and 24.7% respectively (Figure 57).

Current State of Insecurity (2025 Estimates):

- Hunger: 9.4 million individuals experience physical hunger.
- Inadequate access: 15.8 million individuals lack sufficient food access.
- Severe insecurity: 1.8 million households frequently go entire days without a meal.

This vulnerability is spatially concentrated in urban and peri-urban hubs, driven by factors such as household income pressure, high living costs and high inflation. Households with inadequate access:

- Gauteng: 5.0 million
- KwaZulu-Natal: 2.5 million
- Western Cape: 1.9 million

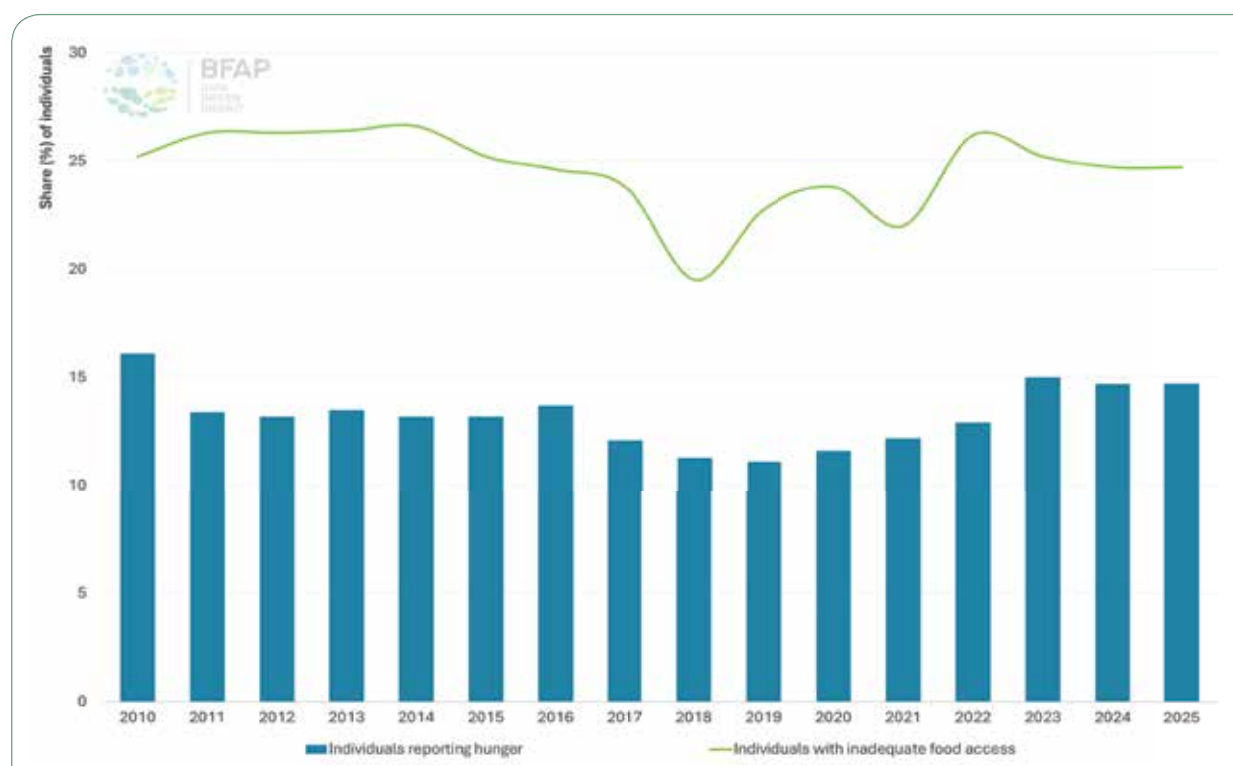


Figure 57: Food access and hunger in South Africa from 2010 to 2025

Sources: Stats SA General Household Survey data for the period 2010 to 2025

Table 8: South Africa youth nutritional indicators (Children younger than 5 years old)

Indicator	2016 (SADHS)	2023 (NFNSS)
Stunting (low height-for-age)	27.4% (1.51 million children)	28.8% (1.60 million children) (Increase of 0.90 million children)
Underweight (low weight-for-age)	5.9% (0.33 million children)	7.7% (0.43 million children) (Increase of 0.10 million children)
Wasting (low weight-for-height)	2.5% (0.14 million children)	5.3% (0.29 million children) (Increase of 0.16 million children)

Nutritional outcomes as evidence of failure

The ultimate indicator of systemic failure is the biological health of the population. Nutritional utilisation, the body's capacity to absorb nutrients, is dictated by what is economically accessible and physically available to purchase in retail locations. When affordable nutrition cannot be delivered, low-income households are structurally incentivised to prioritise inexpensive, empty calories over nutrient-dense foods.

The recent deterioration in food security is visible in the alarming rise of child malnutrition, signalling the inability of the food system to sustain a critical portion of the next generation (Table 8).

Stunting is a marker of long-term deprivation, indicating that proper nutrition has been rendered economically prohibitive for a significant portion of the population. The doubling of wasting reflects an acute state of scarcity where even basic energy requirements are unmet. Rising malnutrition is especially concerning in the face of growing social grant dependence pointing to an urgent need to develop and implement an improved and more targeted social grant system – especially in the context of child support grants.

Deconstructing global metrics to pinpoint systemic weaknesses

South Africa's 2022 Global Food Security Index (GFSI) score of 61.7 (61st of 113 countries and territories) masks intense internal frictions. In Table 9, a disaggregated view of the four pillars of food security reveals where structural integrity is most compromised.

South Africa's performance across the key dimensions of food security reveals a system where relative strengths in production are undermined by systemic friction. The country ranks 45th globally for Sustainability and Adaptation, indicating that South African producers are better positioned than many global peers to mitigate environmental shocks. This resilience is however often decoupled from the consumer experience when facing retail prices, as inaccessibility reduces South Africa's affordability advantage.

THE STRUCTURAL DISCONNECT IN VALUE CHAINS BETWEEN PRIMARY AGRICULTURE AND CONSUMERS

Food insecurity in South Africa is a crisis of economic exclusion rather than a failure of aggregate supply. To understand why national sufficiency does not translate into household security, it is necessary to examine how

Table 9: Key metrics from the Global Food Security Index

Dimension	Score	Key Structural Implication
Quality & Safety	66.1	Standards are robust but only accessible to those with purchasing power.
Affordability	63.4	Crisis of economic exclusion; 50-60% cannot afford a healthy basket.
Availability	60.1	Logistical friction and high distribution costs.
Sustainability	56.9	High exposure to climate shocks; volatility is passed to the consumer.

cost accumulation occurs between the farm gate and the retail shelf. This transition reveals that the primary agricultural producer often has a diminishing influence on the final price paid by the consumer. Instead, cost buildup through the chain has increased substantially and, in many cases, more than inflation.

Quantitative value disparity

The disconnect between farm-gate value and consumer affordability is best exemplified by the value chain composition of high-demand agricultural products. Figure 58 illustrates how the consumer price is constructed across a spectrum of goods, ranging from basic staples to high-value perishables and processed items.

A critical observation from the 2025 data is the disproportionate share of the final price that is derived beyond the farm gate. For many products, particularly those requiring significant processing or specialised logistics, the physical agricultural commodity represents only a fraction of the total retail cost. This cost stack, i.e., processing, packaging, energy, transport, retailer cost and margins, as well as tax, acts as a buffer that prevents lower farm gate prices from reaching the consumer,

while simultaneously risking that inflationary pressure in the mid-stream (such as rising electricity or fuel costs) is passed on to the household.

The data points to a nuanced relationship between production and retail:

- Low-end cost chains: In products with lower levels of processing, there is significant opportunity to improve value chain efficiency. Even here, however, logistical friction often keeps retail prices high relative to producer returns.
- High-value products: For items such as meat and dairy, the primary production component is larger in absolute terms, but the post-farm-gate costs, including cold chain maintenance, risk of spoilage, and retail margins, are far more significant.

Significant cost pressure driving consumer price increases

Figure 59 illustrates the shifting dynamics of inflationary costs across the value chain and their impact on consumer prices for a basket of frequently purchased goods. Given the heavy reliance of producers,

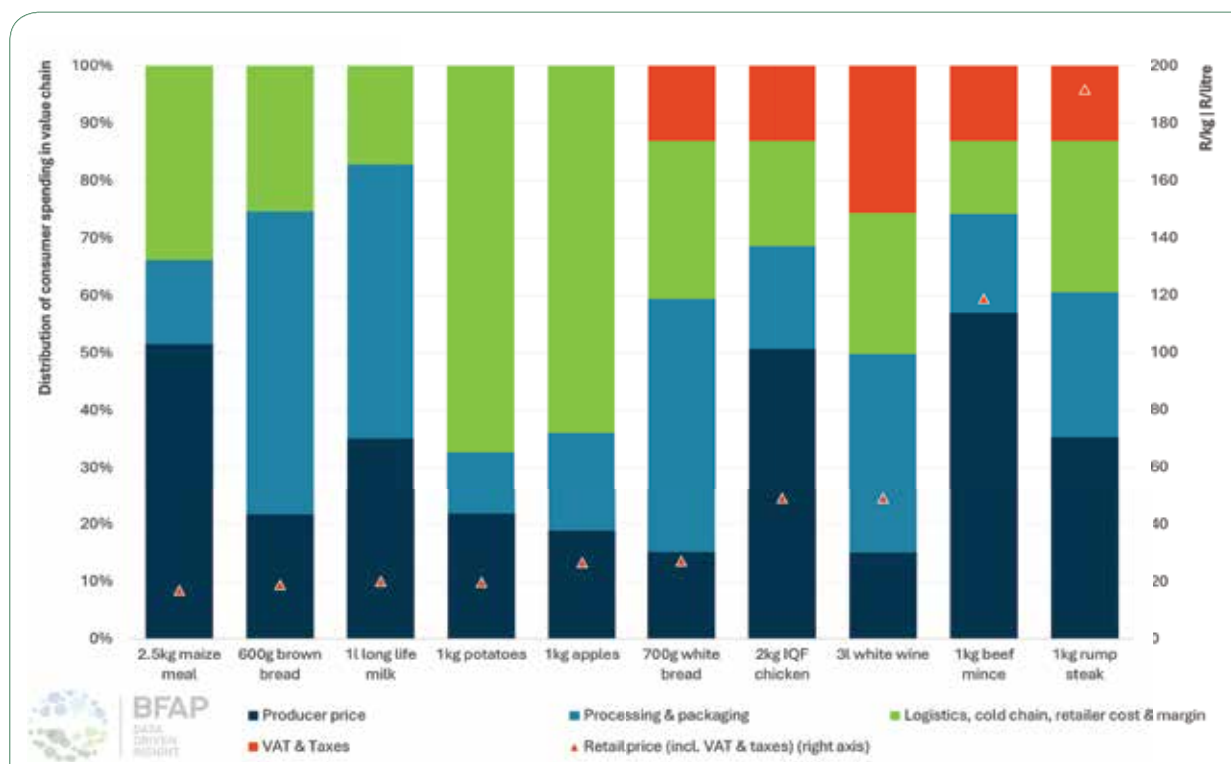


Figure 58: Agriculture's share of value chain: 2025

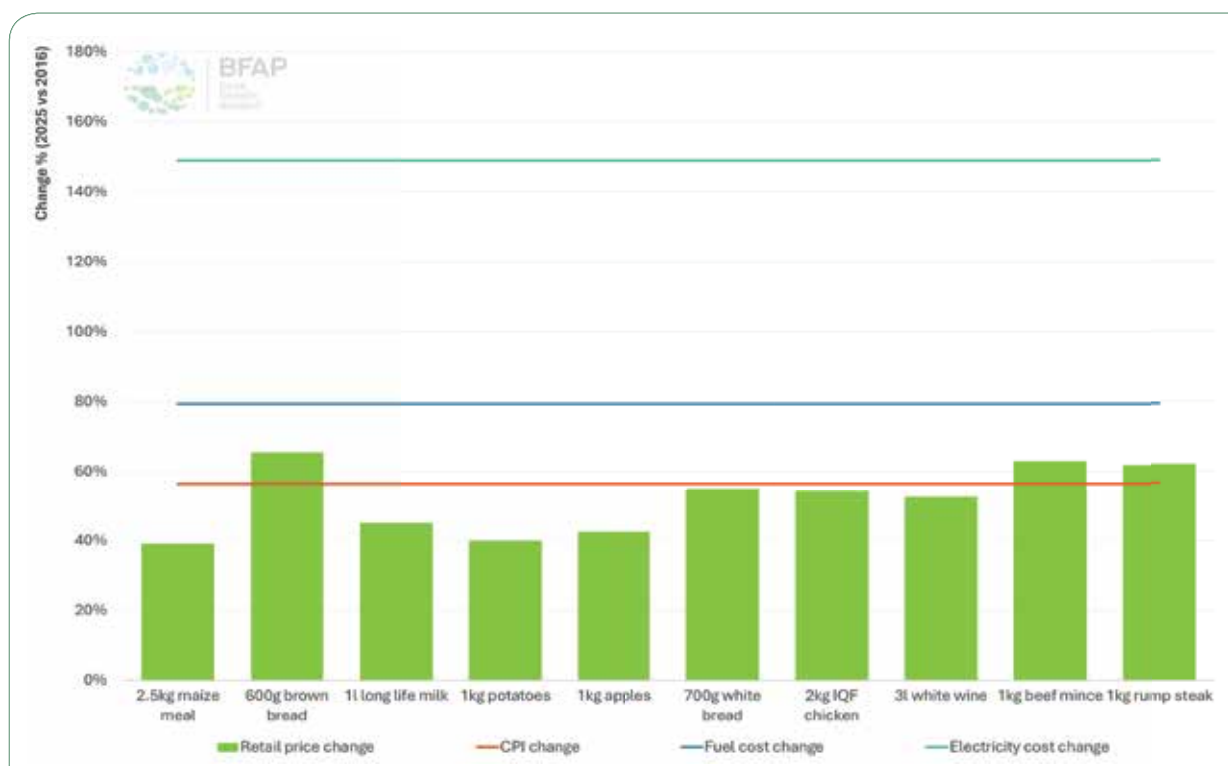


Figure 59: Change in retail prices of selected commodities relative to key cost drivers

processors, and retailers on fuel and electricity to produce, process and bring food to market, the relative affordability of these items is noteworthy. While general inflation (CPI) rose by 57% between 2016 and 2025, fuel and electricity costs increased by 79% and 149%, respectively. Despite this, consumer prices for these products rose by no more than 66% over the same period. This suggests that stakeholders across the chain – producers, processors, and retailers – have either improved operational efficiencies or are absorbing costs through reduced margins. However, the extent to which the value chain can continue to absorb further cost increases without passing them on to consumers remains uncertain. Above inflation increases in these key cost components is a strong driver of retail food prices, and a slow-down in these increases has the potential to significantly improve competitiveness across the value chain and the affordability of final food products.

Retail dynamics and consumer perception

The role of the retailer adds a final layer of complexity to the affordability crisis. Retailers play a key role in efficient distribution of high volumes of food to urban consumers. The environment is also highly competitive and so to maintain foot traffic, retailers frequently operate on thin margins for loss-leader products such

as store-branded bread, milk, and chicken. While this provides temporary relief for specific staples, the lost margin is often recovered through higher markups on other nutrient-dense goods, such as fresh produce or specialised proteins and non-food products. This cross-subsidisation creates a distorted retail environment where:

- Nutritional diversity is penalised: While basic calories (maize or bread) are kept artificially accessible, the broader basket required for a healthy, diversified diet becomes economically prohibitive.
- Consumer choice is constrained: Perception plays a major role in household procurement. When the relative price of nutrient-dense foods (like apples or potatoes) is expressed per kg, while processed staples, like white bread, is expressed per 700g unit, consumers are structurally incentivised to prioritise energy-dense calories that are lacking variety to avoid hunger, further entrenching the hidden hunger mentioned earlier.

Mitigation strategies: Export-led production aiding domestic supply at affordable rates

Contrary to the perception that exports deplete

domestic supply, the South African model suggests that export-led production can be a tool to enhance local food affordability. By scaling for global markets, local producers achieve efficiencies that boost overall domestic availability. In the fruit industry, for example, produce that does not meet stringent export quality standards provides a consistent, lower-cost supply to the local market. Similarly, specific meat cuts and grain parity pricing mechanisms ensure that the domestic market benefits from the competitiveness and infrastructure required for international trade.

A crisis of value-chain cost and efficiency, not production

The evidence from the value chain analysis underscores that primary agriculture is not the main driver of high food prices. Instead, the burden of food insecurity is intensified by the costs of processing, logistics, and retail margin strategies. This cost has increased rapidly in recent years, reflecting energy challenges and high fuel costs. With 50% to 60% of South African households unable to afford a healthy, diversified basket, the solution lies in addressing the structural inefficiencies that exist beyond the farm gate. Until food can move more efficiently and cost-effectively from farm to consumer, South Africa will continue to produce enough food while millions of households remain unable to afford it.

BASELINE OUTLOOK TO 2035

To chart a realistic course for the South African agricultural sector toward 2050, it is imperative to establish the quantitative reality of the next decade. This section utilises projected consumption trends, aligned with established industry baselines, to map the trajectory of domestic consumption volumes for key commodities up to 2035. This projection is not a static forecast; it is a dynamic model that accounts for shifting demographic profiles, urbanisation rates, and the projected macroeconomic environment.

The data presented illustrates that while aggregate demand for food will continue to expand in line with population growth, the composition of that demand is shifting. This creates a critical tension between volume-based primary production and the need for higher-value product differentiation. The commodity basket selected represents a spectrum ranging from essential caloric survival to high-end lifestyle preferences, providing a barometer for the domestic industry's ability to supply both nutrition and value, and whether this can

be improved under the status quo, or whether sharp interventions are required to extend national food security into every household.

PROJECTED DRIVERS OF CONSUMPTION: Short term horizon

BFAP's current expectations for food inflation, based on the Stats SA reference basket, are 4.7% for 2026. The primary drivers of this outlook are the ongoing conflict in the Middle East and its impact on South African fuel prices, which increases costs throughout the value chain. While red meat prices are expected to ease as the industry brings FMD under control, ASF continues to affect pork production, with significant numbers already culled, keeping those prices elevated in the short term. Conversely, grain and oilseed prices are significantly lower than they were a year ago. This decrease is expected to filter through to consumer prices during 2026, offsetting higher post-farmgate costs and restricting overall food inflation to below 5%.

Projections for 2027 carry significantly more uncertainty, caused by the potential impact of the conflict in the Middle East if prolonged, El Niño weather conditions, and the animal health situation. Current baseline projections assume that the war in Iran is resolved in the third quarter of 2026, which limits further direct impacts into 2027. Markets have shown that oil and subsequent fuel costs decline quickly on positive news, which suggests that a swift decline in Brent Crude oil is likely upon resolution of the conflict. This should spill into South African markets in the form of lower transport costs, reversing some of the increases observed through 2026.

For agricultural commodity prices, several factors point to limited upside potential. The baseline projections reflect a conservative yield reduction for the expected El Niño, given that producers will likely enter the season with good soil moisture following late rain in May 2026. Stock levels will likely also be high, which should mitigate some of the price effect that could be expected if South Africa's summer crop is smaller than in the past 2 years. While some increase is expected in summer crop prices, it remains small under current assumptions.

Similarly, continued progress in FMD vaccination should facilitate continued improvements in beef supply, resulting in lower carcass prices. If El Niño conditions cause deterioration in pasture conditions more animals may be moved to market, exacerbating price declines.

Given baseline assumptions, South Africa's food inflation could drop below 2%, noting heightened risks on the upside if a) the war in Iran is not resolved as expected; b) FMD spread escalates again due to ineffective vaccine rollout; or c) the El Niño yield shock is much bigger than currently accounted for. Even at current projections, consumers will remain under some pressure, particularly those in lower-income brackets, due to the high base rate from previous price increases.

PROJECTED CONSUMPTION VOLUMES: Medium term to 2035

This analysis provides a quantitative outlook for the South African consumer through 2035, extrapolating the structural shifts identified in the 2016–2025 retrospective into a ten-year projection of per capita consumption.

Navigating the recovery in spending power

The projected consumption volumes for the decade leading to 2035 reflect a consumer base that remains fundamentally price-sensitive yet is beginning to re-establish dietary patterns disrupted by the volatility of the previous decade. While spending power continues to face pressure from non-discretionary costs, income growth is expected to improve, albeit slowly, hence the baseline points to a gradual stabilisation in per capita intake across several key categories, driven by a combination of normalised supply chains, improved animal health, and the persistent necessity of caloric efficiency.

Staples: the persistence of the maize floor

White maize remains the foundation of South African food security, with annual per capita consumption projected to grow from an average of 89kg between 2023 and 2025 to 96.72kg by 2035 (an 8.7% increase). This steady upward trajectory affirms maize's role as the primary defensive filler for households facing hidden hunger. In contrast, wheat consumption is expected to remain largely stagnant, moving from 57.6kg to 58.3kg (a 1.2% increase) over the same period. This divergence reflects the improvements in relative prices of maize compared to bread and suggests that while urbanised households maintain a preference for convenience-based wheat products, i.e., bread, the economic reality for the bottom 60% of households reinforces a reliance on maize as the most cost-effective caloric delivery mechanism. Sugar consumption, which saw significant declines due to health-focused tax interventions in the prior decade, is projected to stabilise at approximately 22.8kg per capita by 2035, indicating a floor in the reduction of calory-dense category staples.

Consumption of vegetable oil, another calory-dense staple in the average South African household's basket, is projected to increase steadily. Sunflower oil is expected to remain the dominant commodity in the market, with per capita consumption rising by approximately 17% to reach 7.13 litres per capita by the end of the period. Soybean oil, typically the more volatile, is projected to reach levels similar to 2025 by 2035. Although it represents the smallest volume, canola oil is projected to grow substantially, expanding by 14.3%. Together, these projections indicate a consistent upward trajectory for vegetable oil demand throughout the decade.

Protein duality: recovery and value-seeking

The protein sector is characterised by a notable recovery in beef and a continued preference for more affordable animal sourced food with higher purchase frequencies like chicken. Beef consumption is projected to claw back some market share, from an average of 11.8kg from 2023 to 2025 to 12.4kg per person by 2035. This 5% increase is contingent on the successful containment of FMD and successful management of other biosafety risks, and the subsequent normalisation of carcass prices. Despite this recovery, some consumers may not return to their previous beef purchase patterns despite the improvement in relative affordability. Chicken remains the dominant animal protein, with annual per capita consumption projected to grow marginally from 34.9kg to 36.20kg (a 4% increase). Pork is also projected to maintain its gains, reaching 5.7kg, from the 5.4kg per capita on average between 2023 and 2025. However, the most significant growth in the protein basket is observed in eggs. Egg consumption is expected to rise from 6.8kg to 8.5kg per person per year (a 25% increase), though this reflects some recovery from the weak levels in 2023 and 2024 when prices peaked as a result of HPAI. These trends affirm that the value-seeking behaviour solidified during the 2020-2025 shocks has become a permanent feature of the South African plate, with consumers increasingly favouring proteins that offer a lower entry price point per meal.

Dairy and diversification: a shift toward processed nutrition

The dairy sector presents a compelling trend of increasing sophistication within a constrained budget. The total consumption of dairy products measured by milk equivalent is projected to rise significantly from an annual 54kg per person on average from 2023 to 2025 to

62kg in 2035 (a 15.1% increase). This growth comprises a substantial contribution from liquid milk, which expands by 8.5%, but also includes a robust expansion in cheese consumption, which is projected to grow by 19% from 1.4kg to 1.8kg per person per year. This shift suggests that cheese is increasingly used as a versatile, shelf-stable protein substitute or flavour-enhancer in both starch-heavy diets as well as vegetarian meals. Similarly, butter and milk powder show modest but steady growth, reflecting a consumer base that is incrementally reintegrating fats and nutrient-dense dairy components as purchasing power marginally recovers.

Horticulture: the struggle for nutritional diversity

Considering a basket of major fruit types, i.e., pome fruit, citrus, table grapes, stone fruit and blueberries, annual per capita fruit consumption is projected to recover from 9.6kg from 2023 to 2025 to 10.8kg by 2035 (an 11.7% increase), yet it remains below the levels required for optimal nutritional diversity. The growth is concentrated in specific categories: apples are expected to rise to 4.6kg, with blueberries and soft citrus projected to reach 1.3kg and 1.0kg, respectively. The projection indicates that while high-value fruits like blueberries and soft citrus continue to find favour with the affluent top two deciles as well as upper middle-income consumers, the broader population remains restricted by the accessibility limitations of the value chain. For most consumers, fruit remains a discretionary lifestyle purchase rather than a daily staple, a trend that underscores the ongoing challenge of addressing stunting and micronutrient deficiencies through 2035.

Wine: Duality continuation

The domestic wine market enters the next decade under significant pressure, squeezed by declining consumption driven by health concerns, a stagnant economy, and the relentless growth of alternatives such as ciders and other RTDs. Despite commendable growth at the top end of the price spectrum, the market remains tight. The industry relies on existing high-income consumers to increase their frequency of consumption and on new entrants to the middle class to adopt a wine drinking culture to grow sales of premium wine. With global export markets remaining precarious and the decline in local area under vines stabilising, prices will likely remain competitive to attract value-seekers. Consequently, still wine volumes are projected to recover from the 2025 slump.

In summary, the 2035 baseline depicts a consumer in a state of cautious normalisation. While the extreme volatility of the early 2020s has subsided, the structural burdens of debt and logistics continue to dictate the South African diet. The movement toward eggs, poultry, pork, and processed dairy reflects a pragmatic optimisation of limited spending power – a trend that will require the agricultural value chain to prioritise efficiency and affordability to ensure that national food sufficiency finally translates into household food security.

VISION 2050: strategic interventions for value chain reform

Having established the multifaceted drivers of food and nutrition insecurity over the past decade, along with projected food consumption over the next decade, it is evident that the challenges facing South Africa are deeply systemic and interwoven.

Building on the data-driven foundations of the 2035 baseline, the trajectory toward 2050 requires consideration of the tension between typically expected trends towards greater dietary diversity, the extent to which income growth may enable this, and the reversal in historic diversification trends amid cash constraints over the past decade. From an agriculture perspective the ability to improve affordability further despite slow economic recovery hinges on a shift from reactive mitigation to structural value chain reform. The objective is to dismantle the inaccessibility challenges that currently prevents national food sufficiency from reaching the household level. This is an aspect that requires urgent further attention, and BFAP is committed to investigate workable solutions to streamline these value chains, making them more competitive and reducing the cost to consumers of a more diverse national diet.

CONCLUSION AND STRATEGIC IMPLICATIONS

The 2016–2025 decade exposed a critical fracture in the South African food system: national agricultural abundance no longer guarantees household nutritional security. Despite a productive agricultural sector capable of supplying sufficient food to meet national demand, delivering affordable food and maintaining export competitiveness, a growing share of households remain unable to afford a healthy and diversified diet. The contents of the “plate and glass” are increasingly dictated not by availability, but by the realities of

constrained spending power – a household budget stretched by rising transport costs, debt obligations, utility tariffs, housing expenses, and other non-discretionary expenditures.

As these competing demands absorb a larger share of disposable income, food expenditure becomes the residual category within household budgets, forcing consumers to make increasingly difficult trade-offs. For many households, this means substituting nutrient-dense foods with cheaper, calorie-dense staples that provide satiety at the lowest possible cost. While these adaptation strategies may alleviate short-term financial pressures, they often come at the expense of dietary diversity, nutritional adequacy, and long-term health outcomes.

The evidence presented throughout this analysis confirms that South Africa's food security challenge

is fundamentally one of economic exclusion rather than food scarcity. Affordability has emerged as the primary constraint, preventing millions of households from translating food availability into food access. This challenge is further intensified by distributive friction within the food system, where the costs of processing, packaging, logistics, and retail increasingly separate consumers from the efficiency gains achieved at farm level. Consequently, food insecurity persists not because the country produces too little food, but because a growing proportion of consumers cannot afford to participate fully in the food system. Addressing this disconnect will require interventions that extend beyond agricultural production and focus on improving household purchasing power, reducing value chain inefficiencies, and strengthening access to affordable, nutritious food.



REFERENCES

- Agrihub, 2026 *Agrihub*. [Online] Available from: <https://www.agrihub.co.za> [Accessed 5 July 2026].
- Economist Impact. (2022). *Global Food Security Index 2022*. <https://insights.economistenterprise.com/sustainability/project/food-security-index>
- FAO. 2008. *An Introduction to the Basic Concepts of Food Security*. Available at: https://www.fao.org/fileadmin/user_upload/eufao-fsi4dm/docs/concepts_guide.pdf
- FAO. 2024. *FAOSTAT Food Balances 2010 - .* Available at: <https://www.fao.org/faostat/en/#data/FBS>
- International Trade Centre. (n.d.). *Trade Map*. Available at: <https://www.trademap.org>
- Hortgro, 2026 *Hortgro: Statistical Dashboard*. [Online] Available from: <https://www.hortgro.co.za/statistical-dashboard/> [Accessed 5 July 2026].
- International Trade Centre (ITC), 2026. *Market Access Map*. [Online] Available from: <https://www.macmap.org/en/query/compare-market> [Accessed 5 July 2026].
- International Trade Centre (ITC), 2026. *Trade Map*. [Online] Available from: <https://www.trademap.org> [Accessed 5 July 2026].
- Marketing Research Foundation. 2026. *LSM/SEM: January 2025 – December 2025. 2026 MAPS26W2 - (Q1 2025 - Q4 2025)*. Available at: <https://mrfsa.org.za/wp-content/uploads/2026/04/WEBSITE-SEM-APR-2026.pdf>
- May, J. 2025. *South Africa's malnutrition crisis: why a cheaper basket of healthy food is the answer*. 27 February 2025. *The Conversation*. <https://theconversation.com/south-africas-malnutrition-crisis-why-a-cheaper-basket-of-healthy-food-is-the-answer-250308>
- National Credit Regulator. 2025. *Consumer Credit Market Report (CCMR). CCMR Web-Dataset 2007Q4 to 2025Q2*. Available at: <https://www.ncr.org.za/index.php/publications/consumer-credit-market-report-ccmr>
- National Department of Health (NDoH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC), and ICF. 2019. *South Africa Demographic and Health Survey 2016*. Pretoria, South Africa
- OECD-FAO. 2026. *OECD-FAO Agricultural Outlook 2026-2035*, OECD Publishing, Paris/FAO, Rome, <https://doi.org/10.1787/47874669-en>.
- Simelane, T. Mutanga, S.S. Hongoro, C. Parker, W. Mjimba V. Zuma, K. Kajombo, R. Ngidi, M. Masamha, B. Mokhele, T. Managa, R. Ngungu, M. Sinyolo, S. Tshililo, F. Ubisi, N. Skhosana, Ndinda, C. Sithole, M. Muthige, M. Lunga, W. Tshitangano, F. Dukhi, N., F. Sewpaul, R. Mkhongi, A. Marinda, E., 2023. *National Food and Nutrition Security Survey: National Report*. HSRC: Pretoria.
- South African Audience Research Foundation (SAARF). 20015. *All Media and Products Survey (AMPS)*.
- South African Department of Agriculture, Land reform and Rural Development, Directorate Statistics & Economic Analysis. 2025. *Abstract of Agricultural Statistics 2025*. Available at: https://www.fnbagricomms.co.za/Library/_AgricDocuments_Abstract.pdf
- South African Reserve Bank. 2026. *Online Statistical Query. KBP6272 - Disposable income per capita of households*. Available at: <https://www.resbank.co.za/en/home/what-we-do/statistics/releases/online-statistical-query>

South African Table Grape Industry (SATI), 2026. *The South African Table Grape Industry*. [Online] Available from: <https://www.satgi.co.za/knowledge-hub/industry-resources-main/industry-resources/> [Accessed 5 July 2026].

South African Wine Industry Information and Systems (SAWIS). 2025. *South African Wine Industry Statistics*. Available at: https://www.sawis.co.za/info/download/Statistiek_boek_2024.pdf

Statistics South Africa. 2017. *Consumer Price Index (CPI) 2016 Weights*. Available at: <https://www.statssa.gov.za/publications/P01415/P014152016.pdf>

Statistics South Africa. 2017. P0310 - *Living Conditions of Households in South Africa, 2014/2015*. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P0310

Statistics South Africa. 2025. *Consumer Price Index (CPI) 2023 Weights*. Available at: <https://www.statssa.gov.za/publications/P01415/P014152023.pdf>

Statistics South Africa. 2025. P0100 - *Income and expenditure of households (IES), 2022*. Available at: <https://www.statssa.gov.za/publications/P0100/P01002022.pdf>

Statistics South Africa. 2026. P0318 - *General Household Survey (GHS). GHS 2025 Time Series Of Selected Variables, 2002 – 2025*. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P0318

Statistics South Africa. 2026. P0141 - *Consumer Price Index (CPI), April 2026. Time series data: Excel - - CPI(COICOP) from Jan 2008 (202604)*. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P0141

Statistics South Africa. 2026. P0211 - *Quarterly Labour Force Survey (QLFS). Additional downloads - QLFS Trends 2008-2026Q1*. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P0211

Statistics South Africa. 2026. P6420 - *Food and beverage. Excel - Food and beverages (202603)*. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P6420

United Nations Department of Economic and Social Affairs, Population Division. 2024. *World Population Prospects 2024*. Available at: <https://population.un.org/wpp/downloads?folder=Standard%20Projections&group=Most%20used>

United Nations Department of Economic and Social Affairs, Population Division. 2025. *World Urbanization Prospects: The 2025 Revision. Percentage of Population by Degree of Urbanization at Mid-Year by Region, Subregion, Country and Area, 1950-2050 (per cent)*. Available at: <https://population.un.org/wup/downloads>



www.bfap.co.za

Bureau for Food and Agricultural Policy (BFAP)

Block B, Agri Hub Office Park,
477 Witherite Street, Die Wilgers, 0040
admin@bfap.co.za | tracy@bfap.co.za