

## PREFACE

The core business of this directorate is to do analysis on national level in order to produce agricultural economic information and advice for sound decision-making on the South African (SA) agricultural sector. To support this important task the division (Economic Research) concentrates on economic analysis of performance of and external impact on the agricultural sector and its industries.

This publication developed from a need within the Department of Agriculture (DoA) to be regularly informed on developments and expected economic trends in the agricultural sector. The quarterly report has now been established as a regular feature in the Directorate's work plan. Since the beginning of 2004 the report is also published for outside consumption to add value to a number of existing regular economic publications on the agricultural sector. It is our vision to maintain it as indispensable reading for every serious student of the SA agricultural sector.

At this stage most of the content is based on sources outside the DoA. However, progress is being made to incorporate more departmental generated material.

Any new comments on the content of this quarterly report series are most welcome.

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## 1. WORLD ECONOMY

**Industrial production** in Brazil grew by 3,1% at the end of the third quarter, compared to a year ago, whilst China and India grew by 23,6% and 11,2% respectively. Industrial production in the US expanded by 5,1% during the same period, and 6,4% in Germany (*EIU*). The IMF **growth** forecasts for selected countries and regions have remained constant in the last quarter. World economic growth is expected to decrease from 5,1% in 2006 to 4,9% in 2007. The major 7 economies of the world can expect to grow on average by 2,5% in 2007. This is much lower than the 10% growth forecast for China and 7,3% growth for India. Of the emerging world, Latin America is expected to have the lowest growth (*Table 1*). Sub-Sahara Africa grew by 5,2% in 2006 with a decent increase to 6,3% expected in 2007. **Consumer prices** increased by 3,3% in the US by the end of the third quarter, compared to the previous year. In China inflation stood at 1,3% at the same period and in India it was 6,6%. In Europe, consumer inflation decreased to 1,6% by the end of the third quarter, compared to 1,9% in the previous quarter. In Brazil inflation was also low at only 3,8% during the same period. Lending **interest rates** increased in the US from 7,9% in Q2 to 8,3% in Q3. In the Euro Area, Germany, lending interest rates in-

creased from 9,1% to 9,3% in Q3 and in China it increased slightly from 5,8% to 6,1% in Q3. Indian lending interest rates increased from 11,1% to 11,4% in Q3 and in Brazil it was very high at 51,7%, in Q2. In the **stock markets**, the Dow Jones Industrial Index on the New York Stock Exchange were trading around 12 463 points by the end of December, 6,7% up in the last quarter and 16,3% up in the last year. In London the FTSE 100 index increased by 4,4% in the last quarter, and the Japanese Nikkei 225 increased by 6,8%. **News events** that influenced the world economy: The world rice price, said to have increased by 48% in the past year, is expected to rise considerably due to high demand and very tight world stocks. Rice inventories worldwide are already near a 26-year low and anticipated to drop further as fertiliser and irrigation costs are rising with energy prices, forcing many farmers to turn to cheaper-to-grow grains, fruits and vegetables. Iran had test-fired dozens of missiles, including the long-range Shahab-3, during the first hours of new military manoeuvres. The Democrats won a crucial senate seat in Virginia which clinched majorities in both houses of the US congress for the first time since 1994. A seven-member international consortium has agreed to build a multi-billion-dollar experimental nuclear fission reactor in southern France designed to emulate the power of the sun. The International Monetary Fund has warned that

**TABLE 1: The World Economic Outlook-Real GDP growth**

Industrial countries	2005	2006	2007	Developing countries	2005	2006	2007
Major seven	2,4	2,9	2,5	Emerging Asia	9	8,7	8,6
USA	3,2	3,4	2,9	China	10,2	10	10
Japan	2,6	2,7	2,1	India	8,5	8,3	7,3
Euro zone <sup>1</sup>	1,3	2,4	2	Latin America	4,3	4,8	4,2
UK	1,9	2,7	2,7	Emerging Europe <sup>2</sup>	6,5	6,8	6,5
Germany	0,9	2	1,3	Sub-Saharan Africa	5,8	5,2	6,3

Source: IMF <sup>1</sup> The 12 Euro countries <sup>2</sup> Bulgaria, Czech Republic, Hungary, Poland, Slovak Republic, Russia, Turkey

China's emergence as an alternative lender is creating a new wave of hidden debt in Africa. South Korea's Ban Ki-moon has been sworn in as the new UN secretary general at a ceremony in New York.

## 2. SUB-SAHARAN ECONOMY

TABLE 2: Sub Sahara Africa – Economic Outlook

	2006	2007	2008
Growth	5,1	5,2	5,6
Consumer Inflation	13,6	11,7	8
External Debt <sup>1</sup>	22,9	22,3	21,6
Current Account <sup>1</sup>	0,3	0,3	1,0

Source: EIU <sup>1</sup> % of GDP

**Economic growth** in Sub Sahara Africa is expected to increase from 5,1% in 2006 to 5,2% in 2007, and then 5,6% in 2008. While the rise in Chinese investment into Sub-Saharan Africa has received considerable publicity in 2006, the ongoing rise in South African private-sector investment in Sub-Saharan Africa has been overlooked. This, however, is extremely important for two reasons. First, while investment from China, the EU and the US is heavily concentrated in natural resource exploitation, South African investment has tended to be much more diverse. South African companies have invested in telecommunications, packaging, consumer goods, brewing, media, cement, electricity, retail, construction as well as mineral investment (EIU, 2006). **Consumer inflation** is on the decrease in Sub Sahara Africa, reaching more healthy levels. Zimbabwe is the only country with inflationary problems. The 2006 inflation rate in Zimbabwe is expected to be 1216% (IMF, 2006). Within the four sub-regions, inflation continues to remain the low-

est in the Franc Zone. In some ways this is the positive side of the fixed exchange-rate regime and the appreciation of the euro against the US dollar, which has helped to suppress imported inflation, notably the cost of petroleum imports at a time of high global oil prices. **External debt** decreased drastically from 38,6% of GDP in 2005 to only 22,9% in 2006 as a result of debt write offs by the World Bank, the IMF and the African Development Bank (following the Multilateral Debt Relief Initiative (MDRI) announced at the G8 summit in July 2005). A small decrease in external debt is expected in 2007 and 2008 as new interest payments will also be lower. The **current account** balance of Sub Sahara Africa is expected to remain around 0,3% of GDP, though by 2008 it may slowly rise as commodity exports improve (especially as a result of oil). Non-oil exporters tend to have a current account deficit. However, Sub-Saharan Africa runs an invisible trade deficit, owing to its high level of dependence on imported services (notably its heavy dependence on foreign transport operators to ship its exports and imports) (EIU, 2006). **Political** instability remains a problem. The Ethiopian army have entered Somalia and driven out the Islamic courts from Mogadishu. The Ugandan army has resumed military operations against the LRA despite ongoing peace talks to end the war. Heavy fighting between Sudan's army and former rebels in the south has forced the United Nations to evacuate staff from the region. It is possible that presidential or legislative elections will be held in 17 countries in Sub-Saharan Africa in 2007. Starting with the polls in Senegal in February, the political focus will move on to the potentially highly controversial polls in Nigeria

in April, before ending with what may be a close-run race in the Kenyan elections in December (EIU, 2006).

### 3. SOUTH AFRICAN ECONOMY

TABLE 3: South Africa – Economic Outlook

	2006	2007	2008
Growth	4,5	4,3	4,2
Consumer Inflation X	5,0	6,3	5,4
Exchange rate <sup>1</sup>	6,97	7,47	7,61
Interest rate <sup>2</sup>	11,8	12,9	12,4

Source:BER <sup>1</sup> End of year <sup>2</sup>Yearly Average

During 2006 the South African economy performed relatively well, though other emerging economies have done better. **Gross Domestic product** expanded by 4,5% and is expected to remain in this vicinity. Consumer **inflation** is reaching towards 6% and as result the Reserve Bank has increased the prime interest rate from 9% to 11% during 2006. Inflation is forecasted to rise above 6% in 2007, but then dipping below 6% in 2008 again. The **Rand** weaken slightly during 2006 as the interest rate gap with other countries contracted. Higher **interest** rates may assist the Rand to maintain a healthy level in 2007 and 2008. The cabinet has approved the long-awaited codes of good practice on broad-based black economic empowerment (**BEE**), in December. The DTI accused steel giant Mittal Steel SA of abusing its market dominance after the company increased steel prices for the third time in three months. **PetroSA** is said to become a key player in the proposed construction of a new synthetic-fuel refinery to be completed by 2014 as part of government’s strategy to ensure fuel supply security. The South African

cabinet has given its approval to the proposal to create six regional electricity distributors (REDs) which will be established as public entities under the auspices of the **Electricity** Distribution Industry (EDI). Gold theft from South African gold mines was estimated at R2bn annually, the Chamber of Mines announced in November. Since 1980 more than 10,3 million foreigners who entered South Africa legally, never declared their departure, an employment report released in November showed. Tourists to South Africa were breaking all records in 2006, making the **tourism** industry an important leg of the ASGISA initiative to reach 6% economic growth. SA Tourism announced an increase of 11,3% in tourist arrivals with annual arrivals expected to exceed 2005’s record-breaking 7,3 million. By the end of 2006 new and used **car prices** have declined by an average of 3,3% in the past three years. De Beers Fuel Limited plans to produce 16 to 24 billion litres of **bio-diesel** a year from algae within five years with an initial investment of R3,5 billion (\$487,4 million). **Producer inflation** rose above expectations in October, accelerating to 10% year on year, its fastest pace in almost four years. The value added by the **Agriculture**, forestry and fishing industry for the third quarter of 2006 decreased by 12,9% compared with the second quarter of 2006. This was mainly due to the poor performance in the production of field crops. **Implications to Agriculture:** The investment of De beers in bio diesel may create opportunities for agriculture to expand into a new industry: algae production. Higher interest rates and a slowly depreciating Rand will force agriculture to continue to improve its competitiveness.

## 4. MACROECONOMIC VARIABLES AND THEIR IMPACT ON AGRICULTURE

### 4.1 Inflation

TABLE 4: Annual average CPIX inflation rate

2006		2007	2008
5,0	BER	5,9	5,7
	Standard Bank	5,6	5,0
	Absa	7,5	5,4
	Average	6,3	5,4

BER - Bureau for Economic Research

**Recent trends:** By November the official inflation rate was 5,4% (annual increase from the previous Nov), which was the same as the 5,4% rate in October. The corresponding **CPI-X** inflation was 5% in both October and November. Currently inflation is mainly due to relatively large annual contributions in the price indices for food (+2,3%), housing (+0,6%), medical care and health expenses (+0,6%), education (+0,4%) and fuel and power (+0,3%). These annual increases were slightly counteracted by annual decreases in the price indices for clothing and footwear (-0,3%). The price index for food reflects an annual rate of increase of 8,9% by November 2006. Annual **food** price increases occurred in the price indices for meat (+19,9%), fish and other seafood (+11,0%), sugar (+8,9%), fats and oils (+ 7,2%), grain products (+ 6,3%), fruit and nuts (+ 4,3%), milk, cheese and eggs (+ 3,7%), coffee, tea and cocoa (+ 2,8%), "other" food products (+ 2,8%) and vegetables (+ 1,6%) (*Statistics South Africa, November 2006*). The annual increase of 9,7% in the **PPI** for locally produced commodities for consumption in South Africa is mainly due to relatively large annual increases in the price indices for agricultural products (+1,5%), food at manufactur-

ing (+1,5%), mining and quarrying products (+1,1%), basic metals (+0,9%) and, electrical machinery and apparatus (+0,9%). **Forecast:** After inflation expectation were adjusted upwards by all 3 forecasters in the previous quarter, they were mostly adjusted upwards again during the last forecast. Expectation for CPI-X is now to still break through the 6% ceiling in 2007, as set by the Reserve Bank. Inflation in 2008 is forecasted to come down slightly as higher interest rates start to take effect. **Impact on agriculture:** The agricultural sector will continue to be disadvantaged for as long as producer inflation tends to be higher than consumer inflation. A slightly weaker rand may contribute to inflation, especially imported production inputs. Positive expectations for 2007 are lower oil prices that may ease the burden of input costs and the high grain prices that will increase income levels for farmers.

### 4.2 Growth

TABLE 5: Annual real GDP growth rates

2006		2007	2008
4,5	BER	4,1	4,2
	Standard Bank	4,2	4,2
	ABSA	4,5	4,5
	Average	4,3	4,2

BER - Bureau for Economic Research

**Recent trends:** The seasonally adjusted real GDP at market prices for the third quarter of 2006 increased by an annualised rate of 4,7% compared to the second quarter of 2006. This follows the real annualised economic growth rates of 5,0% and 5,5% in the first and second quarters of 2006. The slower pace of growth in the third quarter GDP was mainly due to slower growth in the real value added by the

finance, real estate and business services industry which increased by 1,2%; the wholesale, and retail trade, hotels and restaurants (0,9%) and the manufacturing industry (0,8%). The agriculture, forestry and fishing industry remained volatile, being the only industry which recorded a decline (0,3%) in the seasonally adjusted real value added during the third quarter of 2006 mainly due to the continued contraction in the agriculture sector. However, the overall growth rate of 4,7% in the third quarter is still favourable in the South African economy although indications are that the global economy, including South Africa, is heading for a slowdown in 2007. **Forecast:** Although the real domestic expenditure, which has been boosting the growth rate, is expected to slowdown due to higher interest rates and the deteriorating inflation outlook, the BER predicts this will be compensated by infrastructure investment (in preparation for 2010 soccer world cup) and an expected recovery in net exports (due to a weaker rand). The BER thus forecasts real GDP growth of 4,1% in 2007 increasing slightly to 4,2% in 2008. According to Standard Bank, real GDP is expected to remain constant at 4,2% in 2007 and 2008. Absa also forecasts a constant real GDP of 4,5% for both 2007 and 2008. **Impact on agriculture:** A continued growth rate implies a robust economic activity which in turn may translate to a decline in unemployment as well as an increase in disposable income. The agricultural sector, together with all other sectors, benefits from a decline in unemployment and increasing disposable income as consumer spending increases even on agricultural products. With the growth rate expected to slow down in 2007 and 2008, it also implies a

slowdown in economic activity for all sectors, including the agricultural sector.

### 4.3 Exchange rates

**TABLE 6: End of year R/\$ exchange rates**

2006		2007	2008
R6,97	BER	7,93	8,48
	Standard Bank	7,34	7,11
	Absa	7,14	7,23
	Average	7,47	7,61

*BER - Bureau for Economic Research*

**Recent trends:** In line with predictions by most economists in the previous quarter, the rand continued weakening against the US dollar, reaching a 39-month low of R7,85 at the beginning of the fourth quarter of 2006. However, as international investors regained confidence in emerging markets at the beginning of the fourth quarter, the rand began to show stability, regaining some strength against the US dollar, also supported by high commodity prices and a weaker dollar (which fell to a 20-month low against the euro in late November). The rand reached a year-end close of R6,97 which is 10,3% weaker than R6,32 at the end of 2005.

**Forecast:** As the trade deficit remains volatile – after reaching the largest trade deficit ever recorded of R12,9 billion in October – it is likely to deter foreign investor interests thus reducing prospects of a stronger rand. Whilst the rand managed to return to around R6,90 per dollar in the last quarter of 2006, it is expected to stabilise around R7,60 per US dollar in 2007, even weakening further due to expected weaker commodity prices and the wide domestic current account deficit. The BER forecasts the rand to average R7,75 per US dollar during the first quarter of 2007, Absa R7,10 and Standard Bank R7,39. **Impact on agriculture:** The agricultural sector – being an export-oriented sector – will continue to reap the



benefits of a weaker rand in 2007 as products will remain competitive in the global market. However, imported raw materials will remain more expensive due to a weaker rand implying higher input costs.

#### 4.4 Interest rates

**TABLE 7: Average yearly Prime interest rate**

2006		2007	2008
11,8	BER	12,9	12,2
	Standard Bank	12,5	11,7
	Absa	13,3	13,3
	Average	12,9	12,4

*BER - Bureau for Economic Research*

**Recent trends:** The Reserve Bank’s Monetary Policy Committee (MPC) increased the repo rate by 50 basis points in each of its four meetings since June 2006. In its last meeting of 2006, the MPC hiked the repo rate by 50 basis points from 8,5% to 9% in its stance to counteract the gloomy inflation outlook, and as a result commercial banks also increased the prime overdraft rate by the same basis points from 12% to 12,5%. The key six-year R153 interest rate also closed off the year at a considerably higher rate of 8,76% compared to 7,31% at the end of 2005. **Forecast:** With the CPIX inflation expected to breach the upper level of the inflation target range (mainly driven by food price inflation, particularly meat prices and to some extent grain prices), also coupled with the expected further deterioration of the rand, the interest rate is expected to rise again at least in the first quarter of 2007. The BER forecasts a further 50 basis points hike in the repo rate (to 9,5%) in February. Absa’s forecasts are in line with the BER, whereas Standard Bank forecasts that the repo rate will remain unchanged at 9% during the first quarter of 2007. **Impact on**

**agriculture:** Expected further interest rate hikes imply increased input costs to farmers who rely on debt to finance their businesses.

## 5. OTHER FACTORS IMPACTING ON AND RELATED TO AGRICULTURE

### 5.1 Agri-market indicators

**TABLE 8: Price of maize and wheat per ton**

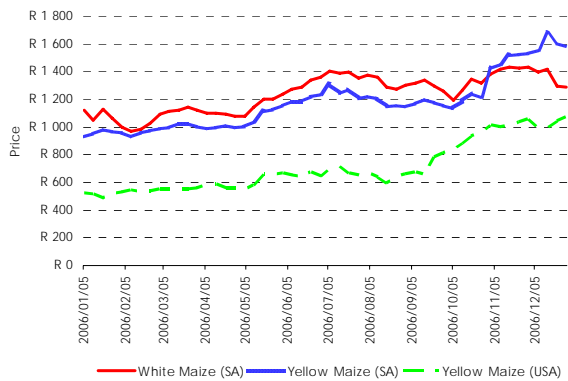
	End December 2005	End December 2006
White Maize price	R1 105	R1 287
Yellow Maize price	R915	R1 580
Wheat price	R1 403	R1 750
Sunflower price	R2 225	R2 410

*Source: Safex*

Generally, grain prices indicated a considerable increase at the end of the fourth quarter of 2006 compared to the same period in 2005 partly as a result of a weaker rand which increased the competitiveness of SA products on the international markets. Prices of grain products have been cited as some of the prices fuelling the domestic food price inflation with grain product inflation reported to have risen to 5,5% in October. Yellow maize price increased significantly by 72,7% at the end of quarter four 2006 compared to the same quarter in 2005 supported by a weaker rand and high global demand due to ethanol production. The price of white maize increased by 16,5% during the same period. On the international market, yellow maize prices in the USA more than doubled from R525,83 (\$85,11) per ton at the end of quarter four 2005 to R1 067,31 (\$152,2) per ton at the end of quarter four 2006. This was mainly due to high demand due to increased ethanol production.



**Figure 1: Domestic and USA maize prices per week - 2006**



Source: Safex

As seen in Figure 1 above, domestic white and yellow maize prices remained fairly stable during the first 19 weeks of 2006 mainly due to excess stocks and a strong rand, however as the rand began its declining trend against the US dollar around June, domestic maize prices increased sharply as SA crops became competitive on the international markets, also boosted by expected low yields for the 2006/2007 season. Around October, domestic white and yellow maize prices experienced a short-lived decline following the announcement of excess stocks in the market. US yellow maize prices also experienced a steady upward trend since the beginning of the year, followed by a sharp increase from week 37 prompted by tight stocks and a higher global demand from the bio-fuels industry. Domestic wheat (having reached a four-year high in early October) and sunflower prices also benefited from a weaker rand and better international prices, increasing by 24,7% and 8,3%, respectively, during the period under review. Following a drastic drop in wheat global ending stocks this season, international wheat prices continued to increase with USA wheat

prices increasing by 64,9% from R784,29 at the end of quarter four 2005 to R1 293,12 at the end of 2006.

## 5.2 Climatic and other conditions

The summer season got off to a slow start with appreciable rains confined to the eastern coastal regions and adjacent interior while some pockets of rain fell over the central and eastern parts of the country. Incidences of heavy falls of rain were reported along the Transkei coast. Temperatures were higher than normal over the larger part of the forecast region. Compared to last year, most parts of the country experienced largely normal vegetation conditions with high vegetation activity mostly over the western and mid-eastern part of the country. Patches of below average vegetation activity were experienced in the far northern parts of the eastern part of Mpumalanga. **Levels of dams:** The levels of dams have significantly improved as compared to last year this time in most provinces. **Crop conditions:** Most farmers under irrigation planted their summer crops in time whereas under dry land there were some delays due to lack of inputs and the late onset of summer rains. Hailstorm damages to crops have been reported in Gauteng, Eastern Cape and Mpumalanga. Although locust outbreaks have been reported in some provinces, the situation has been brought under control. **Livestock condition:** Although veldfires were experienced in some areas veld and livestock condition is still good in most parts of the country. **Forecast of rainfall and temperature:** There is a moderate El Niño over the equatorial Pacific Ocean while the developments over the Indian Ocean do not support favourable rainfall

conditions. Extreme above-normal temperatures coupled with extreme below-normal rainfall conditions are expected over the northern part of the country while also dry with temperatures on the warm side over the remainder. Areas that experienced dry winter conditions are likely to have moisture stress. SADC: Reports shows that production has improved considerably across the region as a result of the better crop growing conditions during the 2005/06 season. Many of the countries that faced production shortfalls last season have shown significant improvements in overall crop production. Significant production increases were recorded in Malawi, Zambia and Zimbabwe, while Mozambique and Lesotho also showed a sizable increase. Swaziland is the only country that did not register an increase — production remained at last year's levels. According to available satellite data, it was largely dry across most of SADC. Extended dry spells were consistent with the projections of the seasonal rainfall outlooks. However, in the northern areas as periodically in the southwest, it was wet. **Conclusions:** Save for some rains in the southeast where heavy at times along the coast, relatively dry conditions prevailed over the country. There is a concern for diseases and pests associated with wet and hot conditions over the coastal areas in the southeast where good rains have been falling. The anticipated dry and very hot conditions warrant a conservative approach in the utilization of available water. Precautions for runaway fires also have to be maintained.

### 5.3 Livestock numbers

Cattle, sheep and pig numbers decreased by 1,86%, 1,38% and 1,99%, respectively from August 2005 to August 2006. However, goat numbers increased by 0,71% over the same period. **Cattle:** The number of cattle in the RSA at the end of August 2006 is estimated at 13,532 million. On a provincial basis, 3,045 million (23%) were present in the Eastern Cape, 2,766 million (20%) in KwaZulu-Natal and 2,237 million (17%) in the Free State. The remaining provinces represent 41% (5,484 million) of the total cattle population in South Africa. **Sheep:** The total number of sheep at the end of August 2006 is estimated at 24,984 million. The provincial distribution of sheep is as follows: 7,331 million (29%) are found in the Eastern Cape, 6,422 million (26%) in the Northern Cape, 4,998 million (20%) in the Free State and 6,233 million (25%) in the remaining provinces. **Pigs:** The number of pigs in the RSA at the end of August 2006 is estimated at 1,623 million. Most of South Africa's pig population are present in the Limpopo Province with a population of 393 000 (24%). The North West Province follows with 339 000 (21%) and Gauteng with 170 000 (10%). The remaining provinces represent approximately 45% (721 000) of the total pig population. **Goats:** Goat numbers at the end of August 2006 are estimated at 6,401 million of which the most goats were present in the Eastern Cape, namely 2,484 million (39%), followed by the Limpopo Province with 1,063 million (17%).

**TABLE 9: Calculated final area and crop figures of summer crops for the 2005/06 season**

Crop	Final area for the 2005/06 season	Change from the 2004/05 season		Final crop for the 2005/06 season	Change from the 2004/05 season	
	Ha	Ha	%	Tons	Tons	%
Total maize	1 600 200	-1 209 800	-43,05	6 618 000	-4 832 000	-42,20
White maize	1 033 000	-667 000	-39,24	4 187 400	-2 353 300	-35,98
Yellow maize	567 200	-542 800	-48,90	2 430 600	-2 478 700	-50,49
Sorghum	37 150	-49 350	-57,05	96 000	-164 000	-63,08
Groundnuts	48 550	8 550	21,38	74 000	10 000	15,63
Sunflower seed	472 480	12 480	2,71	520 000	-100 000	-16,13
Soybeans	240 570	90 570	60,38	424 000	151 500	55,60
Dry beans	54 880	5 580	11,32	67 250	-2 570	-3,68

Source: Directorate Agricultural Statistics

#### 5.4 Crop production and estimates

Table 9 summarises the final calculated areas planted and the final crop size of the most important summer crops for the 2005/06 production season. The calculated final crop for commercial **maize** was 6,62 million tons, which was 42,2% less than the 11,45 million tons of the previous season. The final crop for white maize was 4,19 million tons, which is 36,0% less than the 6,54 million tons the previous season and the yield for white maize was 4,05 t/ha compared to 3,85 t/ha the previous season. In the case of yellow maize the final crop is 2,43 million tons, which is 50,5% less than the 4,91 million tons last season. The yield for yellow maize is 4,29 t/ha compared to 4,42 t/ha the previous season. As a result of large carry-over stocks from the 2004/05 season, farmers were encouraged to plant less maize during the 2005/06 season. This resulted in a reduction in maize plantings and therefore also in a reduced maize crop. The South African farmers planted 1,60 million ha of maize for the 2005/06 season. The ratio of white to yellow maize plantings was 65:35 compared to the previous season's 60:40. The white maize plantings were 1,03 million ha, down by 39,2% from the previous season's plantings of 1,70 million ha, while yellow maize plantings were 567 200

ha, down by 48,9% from 1,11 million ha. The bulk of South Africa's maize is planted in the Free State, North West and Mpumalanga provinces. The **sunflower seed** crop for the 2005/06 season is 520 000 tons, which is 16,1% less than the 620 000 tons of the previous season. The area planted to sunflower seed is 472 480 ha, which is 2,7% more than the 460 000 ha planted the previous season. The yield is 1,10 t/ha compared to 1,35 t/ha the previous season. The **soybeans** crop is 424 000 tons, which is 55,6% more than the 272 500 tons the previous season. The area planted to soybeans is 240 570 ha, which is 60,4% more than the 150 000 ha planted the previous season. The yield is 1,76 t/ha compared to 1,82 t/ha the previous season. The **sorghum** crop is 96 000 tons – 63,1% lower than the 260 000 tons the previous season. The area planted to sorghum is 37 150 ha, which is 57,1% less than the 86 500 ha planted the previous season. The expected yield is 2,58 t/ha compared to 3,01 t/ha the previous season. The **groundnut** crop is 74 000 tons, which is 15,6% higher than the 64 000 tons the previous season. For groundnuts the area planted is 48 550 ha, which is 21,4% more than the 40 000 ha planted the previous season. The yield is 1,52 t/ha compared to 1,60 t/ha the previous season. In the

**TABLE 10: Revised intentions to plant summer crops for the 2006/07 production season**

Crop	Revised intentions as at the end of October 2006	Area planted 2005	2006 vs. 2005
	Ha	Ha	%
Total maize	2 768 000	1 600 200	72,98
White maize	1 767 000	1 033 000	71,06
Yellow maize	1 001 000	567 200	76,48
Sorghum	84 000	37 150	126,11
Groundnuts	50 500	48 550	4,02
Sunflower seed	390 000	472 480	-17,46
Soybeans	220 000	240 570	-8,55
Dry beans	57 000	54 880	3,86

Source: Directorate Agricultural Statistics

case of **dry beans** the production estimate is 67 250 tons – 3,7% lower than the 69 820 tons the previous season. The estimated area planted is 54 880 ha, or 11,3% more than the 49 300 ha planted last season. The expected yield is 1,23 t/ha, compared to 1,42 t/ha the previous season. Table 10 summarises the results of the **revised intentions to plant summer crops** for the 2006/07 season. Based on inputs received from a sample of producers, seed companies, agribusinesses, Provincial Departments of Agriculture, processors, etc. the expected area planted to maize for the 2006/07 production season is estimated at 2,77 million ha, of which 1,77 million ha (63,8%) is for white maize and 1,00 million ha (36,2%) is for yellow maize. Producers intend to plant 734 000 ha (71,1%) more white maize and 433 800 ha (76,5%) more yellow maize than in the previous season. The expected area planted to sunflower seed and soybeans shows decreases of

17,5%, and 8,6%, respectively. The plantings of sorghum, groundnuts and dry beans shows increases of 126,1% 4,0% and 3,9% respectively. Various factors can, however, still influence these intentions up until planting time. Table 11 summarises the estimated area planted and fifth production forecast of the most important winter crops for the 2006 production season. The estimated area planted to **wheat** during the 2006 season is 764 800 ha, which is 5,0% less than 805 000 ha planted the previous season. The expected winter wheat crop is 2,16 million tons, which is 13,5% or 256 170 tons more than the 1,90 million tons of the previous season. The expected yield is 2,83 t/ha as against 2,37 t/ha of the previous season. The expected production forecast for Free State is 828 000 tons, with an expected yield of 2,30 t/ha and for the Western Cape 698 250 tons, with an expected yield of 2,45 t/ha. The production forecast for **malting bar-**

**TABLE 11: Estimated plantings and fifth production forecast of winter crops for the 2006 season**

Crop	Estimated plantings for the 2006 season	Change from the 2005 season		Fifth production forecast for the 2006 season	Change from the 2005 season	
	Ha	Ha	%	Tons	Tons	%
Wheat	764 800	-40 200	-4,99	2 161 170	256 170	13,45
Malting barley	89 700	-300	-0,33	249 060	24 060	10,69
Canola	34 700	-5 500	-13,68	39 725	-4 475	-10,12
Sweet lupines	16 000	1 900	13,48	14 400	300	2,13

Source: Directorate Agricultural Statistics

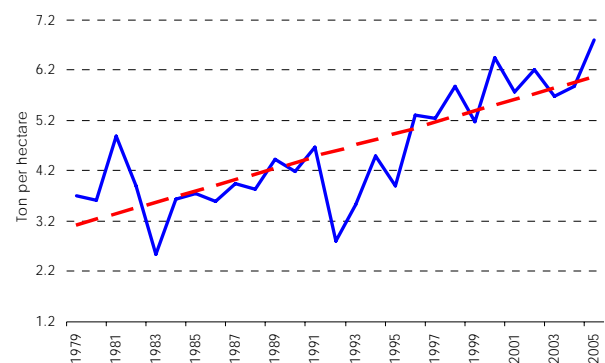
ley is 249 060 tons, with the area planted estimated at 89 700 ha and the yield at 2,78 t/ha. The production forecast for **canola** is 39 725 tons, while the area planted to canola is 34 700 ha and the yield is 1,14 t/ha. The 2006 production estimate for **sweet lupines** is 14 400 tons, which is an increase of 2,1% from the previous season. The area planted to sweet lupines is 16 000 ha and the yield is 0,90 t/ha.

### 5.5 The impact of technology on agriculture

From a study (by the Directorate: Production and Resource Economics) on the impact of technology on agriculture, the following preliminary summary can be presented: Technology in agriculture – which may come in IT, mechanical, chemical, biological or management system forms – has had a huge impact on civilisation in the past 6000 years. Within the South African agricultural sector, the impact can be seen in the drastic decline of farming units, farm workers and farm capital even though farm production has increased. This implies that technology has had a positive impact on productivity and competitiveness. However, a reduction in farm employment due to increased mechanisation may not be considered desirable given the social conditions of high employment in South Africa. Real farm production in South Africa has been increasing at a steady amount in the long run. Over the past half century, agri-output seems to have increased by an average of R403 million per year (real 2005 value). By 1946 agri production stood at R7,8 billion and by 2005 it had increased more than four times to around R32,5 billion. This happened amid fewer farmers, farm workers and land cultivated. Labour saving technology also impacted tremen-

dously in the agricultural sector and the country as a whole as rural labourers who became redundant started immigrating to urban areas. The number of farm workers decreased from over 1,64 million in 1970 to 880 000 in 2005. Animal productivity also increased due to technological factors which resulted in higher fertility as selective breeding programmes improved the genetic stock; better feeding; health; better animal record keeping and improved management.

Figure 2: All crops, Ton per hectare



Source: Department of Agriculture, 2006

Various types of technology, such as biotechnology which improved cultivars through selective breeding and genetic modification; as well as chemical technology used for the control of pests resulted in increased productivity of crops.

## 6. MAIN EXTERNAL SOURCES CONSULTED

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