

# Trends in the Agricultural Sector









Department: Agriculture **REPUBLIC OF SOUTH AFRICA** 

# Trends in the Agricultural Sector 2002

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# Economic review for the 12 months that ended on 30 June 2002

# Summary

Gross farm income from all products for the year that ended on 30 June 2002 is estimated to amount to R57 847 million, which is 18,6 % higher than during the previous corresponding period. Gross farm income from field crops increased by 24 % and amounted to R20 135 million. Income from horticultural products increased by 12,7% to R14 326 million. Income from animal products amounted to R23 386 million—an increase of 17,9%.

Prices received by farmers for agricultural products increased by 19%, while prices paid by farmers increased by 14,1%, causing the terms of trade to strengthen further from 0,74 to 0,77. Prices of field crops increased by 29%, mainly because of increases in the prices of maize, wheat, grain sorghum, oilseeds, cotton, tobacco and sugar cane. On average, the prices of horticultural products increased by 10,8%. The prices of vegetables increased significantly by 22,5%, while prices of fresh fruit increased by 4,4%. Producer prices of animal products also increased, by 17,3%. The largest increase was 39,3% for pastoral products, while prices for milk increased by 26,5% and that of poultry products by 13,2%.

Expenditure on intermediate goods and services amounted to R30 334 million—an increase of 16%. Farm feed remains the biggest expenditure item, accounting for 23,8% of total expenditure, followed by 14,4% for maintenance and repairs, 11,5% for fuel and 9,7% for fertilisers. Net farm income improved significantly and came to an estimated R13 900 million for the 12 months up to 30 June 2002. As a result of this increase, the cash flow of farmers also improved.

Prices paid for farming requisites increased by 14,1%, owing to relatively large increases in the prices of farm feeds and fertilisers.

Consumer prices of all items increased on average by 6,8% compared to an increase of 9% in the case of food items.

#### Volume of agricultural production

During 2001/02, the estimated volume of agricultural production was only 3% higher than during 2000/01. As a result of increases in the production of summer and winter grains, the volume of field crop production increased by 6% compared to the previous year. Horticultural production remained almost unchanged, while animal production increased by 4%.



# **Producer prices**

Producer prices of agricultural products increased, on average, by 19% from 2000/01 to 2001/02, compared to an increase of 6,4% the previous year.



For the period under review, the producer prices of field crops were 29% higher than during the same period the previous year. The prices of oilseeds, maize, cotton, wheat, sugar cane and hay increased by 54,9; 44,9; 30,6; 22,3; 20,3 and 10,1 % respectively.

Producer prices of horticultural products increased by 10,8% compared to that of 2000/01. Prices of fresh vegetables increased significantly by 22,5%, while the prices of fruit increased by 4,4%.

Producer prices of animal products were 17,3% higher in 2001/02 than in 2000/01. Prices of pastoral products increased by 39,3% and those of dairy, slaughtered stock and poultry by 26,5; 13,7 and 13,2% respectively.

#### Gross value of agricultural production

The total gross value of agricultural production (total production during a production season valued at the average basic prices received by producers) for 2001/02 is estimated at R60 639 million (R50 083 million)— an increase of 21 %. This increase can mainly be attributed to a general improvement in the prices producers received for their products.

The gross value of animal products, field crops and horticultural products respectively contributed 38,9, 37,6 and 23,5% to the total gross value of agricultural production. The maize industry made the largest contribution to the total gross value of agricultural production with 16%, followed by the broiler industry, with 13%, and cattle and calves slaughtered, with 8%.



### Farm income

The gross income of producers (total production valued at the average basic prices received by farmers) during the year ended 30 June 2002 amounted to R57847 million (R48772 million)—an increase of 18,6%. This increase can mainly be attributed to higher prices received by producers, although the volumes produced by farmers also increased, in particular, those of field crops and animal products.



The gross income from field crops increased by 24,0% to R20 135 million for the year ended 30 June 2002. This was the result of an increase in the production of some of the major crops such as maize, sunflower seed and grain sorghum; however, the increase in income was mainly because of substantial increases in the prices received by producers.

The gross income from horticultural products increased by 12,7% to R14 325 million (R12 713 million). The income from subtropical fruit increased by 6% to R760 million (R718 million), while that of citrus fruit increased by 4% to R1 789 million (R1 717 million). Income from deciduous and other fruit is estimated to have increased by 12%. The increase in income from horticultural products can mainly be attributed to increases in producer prices.



The income from vegetables amounted to R5 020 million (R4 203 million)—an increase of 19,4 %. Potatoes, which maintained a contribution of approximately 37 % to the gross income from vegetables, increased by 11 %, from R1 687 million in 2000/01 to R1 881 million in 2001/02.

The gross income from animal products was 17,9% higher and amounted to R23 386 million (R19 827 million). Producers earned R4584 million (R3 513 million) from slaughterings of cattle and calves—an increase of 30,5%. The average producer price of beef increased by 19% during 2001/02. The income from slaughterings of sheep increased by 8,6%, and amounted to R1 264 million (R1 163 million). The price of mutton increased by 4,0%. Income from poultry and egg production amounted to R10303 million (R8983 million)— an increase of 14,7%.



The net farm income (after the deduction of all production expenditures, excluding expenditure on fixed assets and capital goods) increased by 53% during 2001/02 and amounted to R13 900 million (R9 076 million). Payments for salaries and wages, representing 18,3% of total farm costs, amounted to R8355 million, while interest payments are estimated at R4 226 million or 9,3% of total farm costs.

### Expenditure on intermediate goods and services

Expenditure on intermediate goods and services (inputs consumed in the production process) increased to an estimated R30 334 million (R26 143 million)—an increase of 16 %.

The expenditure on fertilisers showed an increase of 15,2%, amounting to R2965 million compared to an increase of 19,4% during 2000/01. Expenditure on fuel increased by 16,4%, amounting to R3504 million, compared to an increase of 13,8% in 2000/01. In the case of farm services and maintenance and repairs of machinery and implements, expenditure increased by 11,2%, amounting to R2649 million, and 9,3%, to R4374 million, respectively. Expenditure on seeds and plants increased by 13% to R2 059 million and packing material increased by 7,7% to R2028 million. Expenditure on dips and sprays increased by 9,1%.

# Prices of farming requisites

Prices of farming requisites increased by 14,1% compared to 14,5% during the previous year.

The price index of machinery and implements increased by 14,2%, that of requisites for fixed improvements by 8,5% and the prices of intermediate goods and services by 14,1%.



Prices of trucks and implements increased by12,2 and 12,9 % respectively, as against increases of 16,1 and 9,1% during the previous year. Prices of tractors increased by 20,4% compared to 1,9% in the previous year.



An increase of 27,8 % in the price of farm feeds made the most significant contribution to the increase in the prices of intermediate goods and services. Price increases of 19,3% in the case of fertilisers, 7,6% for main-tenance and repairs and 9% for dips and sprays, occurred. Prices of packing material increased by 4,5%, compared to an increase of 9,5% in the previous year.



# Terms of trade in agriculture (1995 = 1)

The terms of trade indicate the extent to which producer prices in agriculture keep pace with the prices of farming requisites.

The terms of trade in agriculture strengthened from 0,74 in 2000/01 to 0,77 in 2001/02. The terms of trade for field crops strengthened by 13,1 %, from 0,71 in 2000/01 to 0,81 in 2001/02, and by 3%, from 0,73 to 0,75 for animal production. In the case of horticulture, however, the terms of trade weakened from 0,78 to 0,77.



# Contribution of agriculture to value added at basic prices

The value added is the value of total output less the value of intermediate consumption during the production period.

The contribution of agriculture to value added for the year ended 31 December 2001 is estimated at R25305 million. This represents 2,8% of total value added to the economy.

Year	Total Value Added	Contribution of agriculture to the Value Added	Contribution of agriculture as % of total Value Added
	R 'million	R 'million	%
1995	500 352	15 863	3,2
1996	565 473	19 922	3,5
1997	627 167	21 366	3,4
1998	673 860	20 285	3,0
1999	728 761	20 537	2,8
2000	808 241	21 032	2,6
2001*	894 901	25 305	2,8

\* Preliminary

# Branches of the industry

### FIELD HUSBANDRY

#### Maize

#### COMMERCIAL SECTOR

Maize is undoubtedly South Africa's most important field crop, and white maize in particular is the staple food for the major part of the population. Yellow maize is mainly cultivated for animal consumption. Maize contributes approximately 43 % to the gross value of field crops, and the average annual gross value of maize for the past five years amounts to R6 500 million. Maize is produced in most parts of South Africa. However, the major production areas are situated in the Free State, North West and Mpumalanga Provinces.

Maize is planted mainly between mid-October and mid-December. The rainfall pattern and other weather conditions of a particular season mainly determine the planting period as well as the length of the growing season.

Over the past six years, a swing towards the production of white maize has taken place. The present ratio of production is 58 % white and 42 % yellow maize. The estimated area of white maize under irrigation is approximately 3,5 % and dry land 96,5 %, while the estimated area of yellow maize under irrigation is approximately 10 % and dryland 90 %.

During the 2001/02 production season, genetically modified (GM) white maize was planted in South Africa for the first time, and approximately 1 % of the total white maize crop and approximately 16 % of the total yellow maize crop are expected to be genetically modified. The planting of GM yellow maize (which is used for animal feed) began four years ago.

#### Area planted and production

During 2001/02, an estimated 2 833 080 ha were planted to commercial maize—an increase of 5 % compared to the 2 707905 ha planted in 2000/01. Commercial white and yellow maize comprised 1 721 580 and 1 111 500 ha respectively of the total hectares planted to maize. This represents an increase of 8 % in the case of white maize and a 0,04 % decrease for yellow maize. The increase in total plantings can mainly be ascribed to a few factors. Firstly, in many cases producers planted maize instead of sunflower seed, ground-nuts and soya-beans. Secondly, following the smaller maize crop of the previous season (2000/01), which caused a substantial increase in maize prices, together with the depreciation in the value of the rand encouraged producers to increase their plantings.

The maize crop for the 2001/02 production season is estimated to be 8,781 million tons, with an estimated yield of 3,10 t/ha. This represents an increase of 13 % compared to the 2000/01 crop, which was estimated at 7,758 million tons.

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
Plantings (ha)	2 956 000	2 904 700	3 230 440	2 707 905	2 833 080
Production (t)	7 205 000	7 462 000	11 009 000	7 758 000	8 781 000
Yield (t/ha)	2,44	2,57	3,41	2,86	3,10

Plantings, production and yields of maize from 1997/98 to 2001/02 are as follows:

The area planted to and production of maize are depicted in the following graph:



#### Consumption

The local commercial consumption requirements for white maize for 2001/02 are approximately 4,2 million tons, of which approximately 89 % is expected to be used for human consumption. The local commercial consumption requirements for yellow maize are approximately 3,4 million tons. During times of white maize shortages, yellow maize is sometimes mixed with white maize for human consumption. As yellow maize is mainly used as animal feed (90 %), the ratio between the price of maize and that of the animal products will, to a large extent, determine the viability of especially the intensive livestock industry.

Commercial consumption of maize from 1997/98 to 2001/02 is as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			tons		
Consumption	7 500 000	7 327 000	7 789 000	7 909 000	7 635 000

#### Trade balance

The maize industry is an important earner of foreign exchange for South Africa through the export of maize and maize products. The international maize market, especially the US market, has a dominant influence on local imports and exports.

However, in the case of a product such as maize, millers (who are the biggest buyers of the maize crop) have the option of importing maize rather than buying local maize. In a deregulated market, they will buy from domestic and foreign sources for a wide range of reasons. However, the source of the bulk of their purchases will depend mostly on price. When they import the product, the exchange rate has an important influence on the actual rand price they pay.

A depreciation in the value of the South African rand makes it more expensive to import products such as maize, wheat and oilseeds, therefore providing some protection to South African farmers, and an incentive to produce more in the longer term. Yet, if South African, or Southern African, producers are unable to meet the needs of the processors, or if processors are uncertain about South African supplies, they will again look at foreign sources. South African suppliers, on the other hand, will look at the export market if domestic processors are unwilling to pay the prevailing market price. In this manner, the market sets a 'natural' floor and ceiling price, i.e. a price band within which such products trade. The mechanism by which these prices are set is the Agricultural Products Division of the JSE Security Exchange of SA.

There are two conditions that affect this price band in the case of South African produced maize. Firstly, the world price of white maize is largely determined by conditions in the South African market, as Southern Africa is the largest point of production and consumption of white maize in the world.

Secondly, the resulting price is not transmitted automatically into the retail price of the product. Historical evidence suggests that an increase in farmgate prices is almost immediately followed by an increase in retail prices. However, when farmgate prices decrease, retail prices often continue to increase, at least in nominal if not in real terms, and seldom decrease along with farmgate prices. The reason probably lies in the lack of competitiveness in the supply chain beyond the farmgate.

The graph below shows the imports of maize to and exports from South Africa during the past five seasons:



What is disturbing, however, is the high level of import requirements of the other SADC countries, compared to the previous two seasons. Exports of 435 000 tons of yellow maize to SADC and other African countries are expected to take place during the 2001/02 season. Normally, the window of opportunity for exports of domestic maize lasts only until the end of October, when the harvesting of the US crop and US exports start.

#### Maize tariff

The import tariff on maize is another domestic factor that has an impact on the local price of maize.

If the 21-day moving average f.o.b. price of maize in the US Gulf deviates by more than US\$7/ton from the reference price of US\$92,07/ton for 21 consecutive US trading days, a new tariff is triggered. The import tariff for maize was adjusted downwards from R137,40/ton to R47,60/ton on 4 October 2002, and to R0,00/ton as from 23 October 2002.

#### Prices

Two direct consequences of South Africa's exposure to the international market are the direct influence the exchange rate has on domestic prices and the fluctuation of domestic maize prices between the import and export parity prices. In the past, producers received a relatively stable price for their maize, irrespective of geographic location. Currently, prices of maize differ from one area to another and from day to day and can fluctuate between import and export parity prices. Producers negotiate spot, contract or futures prices, based on market forces.

Based on domestic stock levels, the domestic prices move within a band that is determined by world prices. Because of the erratic South African climate, substantial variations in local production occur. The result is that local prices vary substantially from one season to the next.

During periods of shortages, the price is expected to increase towards import parity. During surplus periods, the price is expected to move towards export parity.

The average producer price of maize increased by 34 %, from R804 to R1 079/ton, compared to the previous season (2000/01). The increase in the producer price was caused by a unique combination of a few factors. For example, there were increasing world prices for these commodities; a lack of competition in the supply chain beyond the farmgate, especially at retail level; a fast and severe depreciation in the value of the local currency; as well as the maize deficit experienced in other Southern African countries.

The producer prices of maize from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/t		
Producer prices	574,00	673,00	545,00	804,00	1 079,00

#### Marketing

The maize marketing season in South Africa commences on 1 May and ends on 30 April the following year.

Since 1997, after the termination of the Maize Board, no statutory levies have been applicable and the marketing of maize is free from statutory intervention. All assets of the former Maize Board were transferred to the Maize Trust and are to be used to the benefit of the entire maize industry.

#### Organisations involved

Farmers are represented by Grain South Africa (GSA), which promotes the interests of maize producers at all levels.

Directly affected groups in the marketing of maize and maize products are represented by the Technical Advisory Forum.

The Board of Trustees of the Maize Trust ensures that the income derived from the assets of the Maize Trust is utilised for the benefit of the entire industry.

The South African Grain Information Service (SAGIS), a section 21 Company funded by, amongst others, the maize industry, administers the information function—that is registration, records and returns.

Research is financed with income from the Maize Trust and performed by the Agricultural Research Council, CSIR and other research organisations.

#### DEVELOPING SECTOR

The area planted to maize by the developing sector for 2001/02 is estimated at 516 579 ha, consisting of 407 828 ha white maize and 108 751 ha yellow maize. The total represents a decrease of 0,2 % compared to the 515 310 ha planted in 2000/01. Production by the developing sector is expected to be 317 134 tons—245 119 tons of white maize and 72015 tons of yellow maize. The total production is 22,9 % less compared to a total of 258 124 tons produced in 2000/01. Maize grown by this sector is mainly for own use.

# Sorghum

#### COMMERCIAL SECTOR

#### Plantings and production

Sorghum is indigenous to Africa. Sorghum is mainly cultivated on low potential, shallow soils with a high percentage clay content, that are not suitable for maize cultivation. Less than 1 % of the arable land in South Africa is used for the cultivation of sorghum. Sorghum is planted mainly between mid-October and mid-December. The rainfall pattern and other weather conditions of a particular season mainly determine the planting period as well as the length of the growing season.

During the last few years, sorghum production shifted from the drier western to the wetter eastern production areas. This change in the area of production led to the identification and development of cultivars that are less sensitive to lower temperatures.

Sorghum is mainly produced in the Free State (51 %), Mpumalanga (29 %) and Limpopo (10 %). During the 2001/02 production season, an estimated 75 250 ha were planted to sorghum for commercial use. This represents a decrease of 14,8 % compared to the 88 300 ha planted during 2000/01.

The commercial sorghum crop for the 2001/02 production season is estimated to be 197 275 tons, with a yield of 2,62 t/ha, as against 175 580 tons the previous season.

The average annual gross value of sorghum for the past five years amounts to R224,6 million.

Plantings, production and the yields of sorghum from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
Plantings (ha) Production (t)	131 277 297 699	98 900 185 636	142 200 392 617	88 300 175 580	75 250 197 275
Yield (t/ha)	2,27	1,88	2,76	1,99	2,62

The following graph shows the area planted to and the production of sorghum in South Africa:



From 1997/98 to 2001/02 there was a declining trend in the area planted to sorghum in South Africa, mainly due to poor price expectations and high input costs. The decrease in the cultivated area can also be attributed to a decrease in the usage of sorghum as pet and poultry feed.

#### Consumption

Processors of sorghum products for the consumer market find themselves in an extremely competitive environment in which consumers can easily switch to substitutes such as maize-meal, "clear beer" and rice. Other important factors that have an effect on consumption are western influences as well as the economic climate.

Sorghum is mainly used for human consumption, for example malt, sorghum meal and sorghum rice. Malt is used for manufacturing beer. Sorghum meal, also known as "Mabele", competes directly with maize-meal and is used as a breakfast cereal. Sorghum rice, or corn rice, is served instead of rice.

The stock feed market is the most important outlet channel for surpluses in sorghum production, because it is competitive relative to other grain crops in terms of price and nutritive value. For example, sorghum is used as a substitute for maize as an energy source. No grinding is required, which leads to a cost reduction.

The total consumption of sorghum indicates a decreasing trend and can mainly be attributed to the fact that the sorghum industry is losing its market share in the pet and poultry feed markets. On the positive side it is evident that, while sorghum consumption for malting purposes stayed almost unchanged, the consumption of sorghum meal has increased over time. The average annual commercial consumption of sorghum (human and animal) during the past five years is approximately 222 600 tons, of which 184 600 tons are for human consumption (malt and meal) and 38 200 tons for feed.



The following graph shows the percentage utilisation of sorghum in South Africa:

#### Producer prices

Local producer prices of sorghum increased considerably by 97 %, from R760/ton in 2000/01 to R1 500/ton for the 2001/02 production season, which can mainly be ascribed to the depreciation in the value of the rand.

Year	1997/98	1998/99	1999/2000 2000/01 2001/02		
			R/ton		
Producer prices	550,00	730,00	520,00	760,00	1 500,00

#### Marketing

The Sorghum Forum, consisting of all the participating parties in the sorghum industry (producers, traders, processors, labour, consumers and the Agricultural Research Council (ARC)) meets regularly to discuss various issues relevant to the sorghum industry.

The role-players identified research and information as important functions to be maintained by the sorghum industry. The South African Grain Information Service (SAGIS) performs the information function, while the ARC will continue with research funded partly by the State and partly by the sorghum industry.

Currently, a levy of R5,00/ton is applicable to all producers and first buyers of sorghum, and the payment thereof is shared between the producers and first buyers on a 50/50 basis. The purpose of this statutory levy is to provide financial support for sorghum research and information functions. The Sorghum Forum successfully applied for the extension of the validation period of the current levy for the period 5 March 2002 to 28 February 2003.

#### DEVELOPING AGRICULTURE

It is estimated that between 10 000 and 21 000 tons of sorghum are produced annually by the developing agricultural sector for own use.

# Wheat

Wheat is the second most important field crop of South Africa. Wheat contributes approximately 16 % to the gross value of field crops and the average annual gross value of wheat for the past five years amounts to R2 299 million. Wheat is planted mainly between mid-April and mid-June in the winter rainfall area and between mid-May and the end of July in the summer rainfall area. Most of the wheat produced in South Africa is bread wheat, with small quantities of durum wheat being produced in certain areas.

#### Areas planted and production

The estimated area planted to wheat for the 2002/03 season is 935 100 ha—a decrease of 2,5 % in plantings from the 2001/02 season—of which 427 000 ha (46 %) are in the Free State and 380 000 ha (41 %) in the Western Cape. Approximately 15 % of the total area planted to wheat is cultivated under irrigation and 85 % under dryland conditions. The prospects for wheat for the 2002/03 production season were very favourable, mainly due to good rains in the Western Cape.

The areas planted to and production of wheat are depicted in the following graph:



\* Preliminary

The expected commercial wheat crop for 2002/03 is 2,298 million tons, of which 874 000 tons (38 %) are in the Western Cape, 789 950 tons (34 %) in the Free State, and 280 000 tons (12 %) in the Northern Cape. The expected average yield for commercial wheat is 2,46 t/ha.

Plantings, production and the yields of wheat from 1997/98 to 2002/03 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02*	2002/03*
Plantings (ha) Production (t)	1 382 300 2 449 000	748 000 1 883 500	718 000 1 725 368	934 000 2 353 348	959 400 2 432 000	935 100 2 298 100
Yield (t/ha)	1,77	2,52	2,40	2,52	2,53	2,46

\* Preliminary

#### Consumption

A total of 3,268 million tons of wheat were available for local consumption during the 2001/02 marketing season. Carry-over stocks as at 1 October 2001 amounted to 551 000 tons, deliveries directly from farms during the 2001/02 production season were approximately 2,432 million tons, while 300 000 tons of wheat were imported.

In South Africa, wheat is mainly used for human consumption. It is estimated that, for the 2001/02 marketing year, approximately 2 486 000 tons of wheat were used for human consumption, 24 000 tons for animal feed and 32 000 tons for seed. An additional 36 000 tons were either used on-farm or the use was not specified. During the 2001/02 marketing season, a total of 155 000 tons of wheat were exported—80 000 tons as products and 75 000 tons as whole wheat. The total demand for wheat for the 2001/02 season was therefore estimated at 2 733 000 tons. Carry-out stocks at 30 September 2002 were estimated to be approximately 535 000 tons. This is higher than the required 3 month pipeline stock of 406 000 tons.

#### Imports

Wheat is mostly imported for human consumption. On 23 September 2002, the import duty on wheat was amended from a rate of 4,36c/kg to free and on wheat flour from 10 % plus 6,54c/kg to 10 %.

Wheat imports from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02*
			tons		
Imports	469 000	484 000	624 000	308 000	300 000

\* Preliminary

#### Prices

The basic average producer prices for wheat (grade 1) from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Producer prices	817,75	808,19	960,60	1 165,35	1 421,61

As a result of the upward movement of international prices and the weakening of the Rand, the SAFEX contract price for wheat for delivery in December 2002 closed at R2 008/ton on 23 August 2002.

#### Marketing

The wheat market has been deregulated since 1 November 1997 and wheat can be traded freely. The only government intervention in the market is the tariff on wheat imports. Greater risks and lower profit margins are realities of deregulated markets. World supply of wheat for the 2002/03 season is expected to decrease due to a decrease in production in the United States and Canada. International wheat prices are expected to stay high due to the lower world stock levels.

The Wheat Forum, representing the directly affected groups in the winter cereal industry, was established before the deregulation process started. In April 2000, the Winter Cereal Research and Development Trust and the Winter Cereal General Trust were merged to form the Winter Grain Trust. The Winter Grain Trust is responsible for the allocation of funding and appraisal of relevant research projects in the winter grain industry. Since 1998, statutory levies on sales of winter cereal have been imposed to finance the Winter Grain Trust.

The South African Grain Information Service (SAGIS), a section 21 Company funded by, amongst others, the wheat industry, administers the information function for the wheat industry.

### Barley

Barley is a winter field crop that is mainly produced in the Western Cape. Barley contributes approximately 0,75% to the gross value of field crops, and the average annual gross value of barley for the past five years amounts to R123,6 million.

#### Plantings and production

Barley is mainly produced in the Western Cape (81 %) under dryland conditions and in the Northern Cape (13 %) under irrigation—Vaalharts area. The climate in the southern Cape, where most of the country's barley is grown, has, of late, not been favourable for barley production. Until four years ago, South Africa produced an average of 250 000 tons of barley a year, about 90 % of which was malting grade, compared to an average of 147 000 tons a year during the past four years. Substantially more barley is now produced in the Taung and Vaalharts areas, where yields are better and more stable than in the Western Cape.

The barley plantings for the 2002/03 season are estimated at 72 400 ha, which is 8,6% less than the estimated plantings of 79 190 ha for 2001/02. A total estimated crop of approximately 179 960 tons of barley is expected for the 2002/03 season, which is 14,8 % more than the estimated production of 156 751 tons the previous season.

The areas planted, production and yields of barley from 1997/98 to 2002/03 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03
Plantings (ha) Production (t)	132 000 277 000	112 000 203 821	101 700 92 409	72 220 116 201	79 190 156 751	72 400 179 960
Yield (t/ha)	2,10	1,82	0,91	1,61	1,98	2,49

Season: 1 October to 30 September



\* Preliminary

#### Consumption

Barley is mainly used for the production of malt (which is used for brewing beer), animal feed and pearl barley. Part of the South African barley crop is generally less suitable for malting purposes and is therefore used as animal feed.

An estimated 330 400 tons of barley were available for local consumption during the 2001/02 marketing season. Carry-over stocks as at 1 October 2001 amounted to 51 300 tons, deliveries directly from farms during the 2001/02 production season were approximately 140 000 tons, while 139 000 tons of barley were imported.

It is estimated that, during the 2001/02 marketing season, approximately 245 000 tons of barley were used for human consumption, 41 000 tons for animal feed, 4000 tons for seed and approximately 1 000 tons were exported. The use of an estimated additional 7000 tons were unspecified. The total demand for barley for the 2001/02 season was therefore estimated at 298 000 tons. Carry-out stocks at 30 September 2002 are estimated to be approximately 32 300 tons. This is lower than the required 3 month pipeline stock of 35 800 tons. Barley imported as malt is not included in these calculations.

#### Producer prices

The average producer prices of malting barley from 1997/98 to 2001/02 are estimated to be as follows:

Season	1997/98	1998/99	1999/2000 2000/01 2001/02		
			R/t		
Producer prices	800,00	750,00	758,24	800,00	1 000,00

#### Marketing

Barley is different from most, if not all, other agricultural commodities, as there is only one major barley buyer in South Africa, namely Southern Associated Maltsters (SAM), which supplies its major shareholder, SA Breweries, with malted barley. Barley producers have a guaranteed market (written commitment to source locally) and fixed price forward contracts.

#### Imports

Over the past four years, the weather has caused wide fluctuations in barley quality and yields in South Africa. When the local crop has fallen short of requirements, SAM has imported barley from the EU, where barley production is subsidised, but mostly from Canada and Australia, where no subsidies apply.

Barley and malt imports from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02*
			tons		
Imports: Barley Malt	138 000 112 000	71 186 133 761	157 300 87 300	134 800 67 000	139 100 54 200

\* Preliminary

#### Sunflower seed

Almost 90 % of the sunflower seed crop is produced in the North West (52 %) and Free State (37 %) provinces. Sunflower seed contributes approximately 8 % to the gross value of field crops and the estimated gross value of sunflower seed for 2001/02 is R1 894 million.

#### Plantings and production

During the 2001/02 production season, an estimated 645 510 ha were planted to sunflower seed for commercial use, as against an estimated 521 695 ha during 2000/01. This represents an increase of 24%, which was mainly due to better price expectations (domestic as well as international) and higher demand. The commercial production of sunflower seed during 2001/02 was approximately 840 140 tons, as against 664 499 tons produced during 2000/01. This represents an increase of 38 %, with an average yield of approximately 1,30 t/ha during 2001/02. Developing agriculture contributed an estimated 2 394 tons (0,35 %) to total sunflower seed production in South Africa during 2001/02.

Commercial plantings, production and yields of sunflower seed from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
Plantings (ha)	511 000	828 000	396 350	521 695	645 510
Production (t)	562 167	1 166 184	544 937	664 499	840 140
Yield (t/ha)	1,10	1,41	1,37	1,27	1,30



#### Producer prices

The average producer prices of sunflower seed from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Producer price	1 364	1 258	916	1 293	2 168

The average producer price increased by 68%, from R1 293/ton during the 2000/01 production season to R2 168/ton during 2001/02.



#### Consumption

The total demand for sunflower seed in South Africa increased by 11,9%, from 679 000 tons in 2001 to 760 000 tons in 2002. A breakdown of the total demand for South African sunflower seed is as follows:

Season	1998	1999	2000	2001	2002
Commercial consumption (t) On-farm (unspecified)	612 000	764 000	818 000	670 000	690 000
consumption (t) Exports (t)	13 000 0	45 000 56 000	24 000 0	8 000 1 000	10 000 60 000
Total demand	625 000	865 000	842 000	679 000	760 000

Exports increased considerably, from 1 000 tons during 2001 to a projected 60 000 tons during in 2002.

High-oil sunflower seed is by far the most important cultivar produced in South Africa. Sunflower seed is the most important source of plant oil for human consumption in South Africa. About 50% of the demand for plant oil is satisfied by locally produced sunflower seed. The balance is made up of imports and other local plant oils such as canola, cottonseed and soya-beans. Sunflower oil-cake is an important by-product of the oil extraction process and is a source of protein for animal feed. Although there is a huge demand for protein, the inclusion of sunflower oil-cake in pig and poultry feeds is restricted by the high fibre content of the cake. Due to this constraint, the demand for sunflower oil-cake plays an important part to determine the demand for sunflower seed.

The production of sunflower oil has increased by 3 %, from 224 000 tons during 2000 to 231 000 tons during 2001.

#### Marketing arrangements

On 30 June 1998, the Oilseeds Board terminated its functions. All assets of the Oilseeds Board were transferred to the Oil and Protein Development Trust to be used for the benefit of the whole oilseeds industry. No statutory levies are applicable and the marketing of oilseeds is free from statutory intervention.

Many agricultural commodity traders have since established themselves and producers are able to take advantage of the free market.

With regard to exports, phytosanitary requirements and quality standards must be adhered to and a PPECB certificate must be obtained.

The information function is performed by Grain South Africa and the South African Grain Information Service (SAGIS), a section 21 Company funded by, amongst others, the oilseeds industry. Notices regarding Registration and Records and Returns are also administered by SAGIS.

Research is financed with income from the Trust and performed by the ARC, CSIR and other organisations.

#### Soya-beans

Various soya-bean cultivars are very well adapted to South African conditions. Soya-beans are mainly cultivated under dryland conditions and grown primarily in Mpumalanga (50 %), KwaZulu-Natal (19 %), and the Free State (10 %), while small quantities are also cultivated in the Limpopo, Gauteng and North West Province.

#### Production

During 2001/02, approximately 124 150 ha were planted to soya-beans in the commercial areas—a decrease of 8 % compared to the 134 150 ha cultivated during 2000/01. The estimated crop of 215 000 tons of soyabeans for 2001/02 represents a decrease of 4,3 % compared to the 2000/01 crop of 224 727 tons.

Plantings, production and yields of soya-beans from 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
Plantings (ha)	125 000	130 500	93 787	134 150	124 150
Production (t)	200 900	187 942	153 472	224 727	215 000
Yield (t/ha)	1,61	1,44	1,64	1,68	1,73



#### Consumption

A total of 289 000 tons of soya-beans were available for local consumption for the 2002/03 marketing season. Carry-over stocks on 1 January 2002 amounted to 61 000 tons, and the expected production was 215 000 tons.

In South Africa soya-beans are mainly used for animal feed as well as human consumption. The local commercial consumption of soya-beans for 2002/03 is estimated at 201 000 tons, of which approximately 42 000 tons will be used for human consumption, 149 000 tons for feed and 10 000 tons for oil and oil-cake. The expected exports amount to 1 000 tons. Carry-over stocks on 31 December 2002 are expected to be approximately 76 000 tons. This is higher than the required three months pipeline stock of about 50 000 tons.

The following graph illustrates the utilisation of soya-beans during the period 2001/02:



#### Producer prices

The average local producer price for soya-beans for 2001/02 was approximately R1 790/ton, which is 44 % higher than the price for 2000/01.

The average producer prices of soya-beans from 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/t		
Producer prices	1 101	1 201	1 284	1 243	1 790

#### Imports and exports

During 2001/02, approximately 15 000 tons of soya-beans were imported. Small quantities are exported annually.

#### Marketing

On 30 June 1998, the Oilseeds Board terminated its functions. All assets of the Board were transferred to the Oil and Protein Development Trust to be used for the benefit of the oilseeds industry. No statutory levies are applicable and the marketing of oilseeds is free from statutory intervention. With regard to exports, phytosanitary requirements and quality standards must be adhered to and a PPECB certificate must be obtained.

Grain South Africa and the South African Grain Information Service (SAGIS), a section 21 Company funded by, amongst others, the oilseeds industry, perform the information function. Notices regarding Registration and Records and Returns are also administered by SAGIS.

Research is financed by the Trust and performed by the ARC, CSIR and other research organisations.

#### Groundnuts

#### Plantings and production

Groundnuts are produced mainly in the north western regions of South Africa, namely the western and northwestern Free State (31%); the North West Province (56%), and the Northern Cape (9%).

During the 2001/02 production season, an estimated 94 160 ha were planted to groundnuts for commercial use, as against 165 250 ha the previous season, with estimated crops of 120 000 tons and 200 300 tons respectively. The average yield of the 2001/02 crop is approximately 1,27 t/ha as compared to last season's 1,21 t/ha. The average annual gross value of groundnuts for the past five years amounts to R294,1 million.

Plantings, production and the yields of groundnuts from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
Plantings (ha)	59 100	94 550	82 600	165 250	94 160
Production (t)	65 460	124 343	122 646	200 300	120 000
Yield (t/ha)	1,11	1,32	1,48	1,21	1,27



It is estimated that the developing agricultural sector produced between 7 200 and 22 000 tons of groundnuts per year during the past 5 years.

#### Producer prices

The average producer prices of groundnuts from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/2001	2001/02
			R/t		
Producer prices	1 781	1 626	2 276	2 128	2 353

The average producer price for groundnuts increased by 10,6% to R2 353/ton during 2001/02. The domestic price is more or less on par with the international price and is not influenced much by the size of the local crop.

#### Consumption

A total of 206 800 tons of groundnuts is available for local consumption during the 2002/03 marketing season. Carry-over stocks on 1 March 2002 amounted to 87 000 tons, and the estimated production is 120 000 tons.

In South Africa, groundnuts are mainly used for human consumption. It is expected that approximately 18 000 tons of groundnuts will be used for oil and oil cake during the 2002/03 marketing year, 27 000 tons for peanut butter and 29 000 tons for the edible market. The expected exports amount to 58 000 tons. Carry-over stocks from the 2002/03 season are expected to be approximately 59 000 tons. This is higher than the required three month pipeline stock of 20 000 tons. The *per capita* consumption for 2001/02 is estimated at 1,36 kg, as against 1,93 kg for 2000/01.



#### Marketing arrangements

On 30 June 1998, the Oilseeds Board terminated its functions. All assets of the Oilseeds Board were transferred to the Oil and Protein Development Trust to be used for the benefit of the whole oilseeds industry. Many agricultural commodity traders have since been established and producers are able to take advantage of the free market.

No statutory levies are applicable and the marketing of oilseeds is free from government intervention. With regard to exports, phytosanitary requirements and quality standards must be adhered to and a PPECB certificate must be obtained.

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Research is financed with income from the Trust and performed by the ARC, CSIR and other organisations.

#### Sweet lupins

Sweet lupins is a legume crop that releases nitrogen into the soil, therefore one can expect large yields of crops such as maize and sunflower if these are planted in soil that was planted to lupins the previous season. Sweet lupins is a tasty grain crop with a high protein and energy content and is mainly grown in the Western Cape Province. Smaller quantities of sweet lupins are also planted in the northern production areas. Because the crop is sensitive to high temperatures during flowering and pod formation, it is better suited to the cooler areas of the country and is planted in winter. Sweet lupins is mainly utilised in animal feed rations. There are three species of sweet lupins, namely broad-leaf lupin cultivars (*Lupinus albus*), narrow-leaf cultivars (*Lupinus angustifolius*) and yellow sweet lupins (*Lupinus luteus*). The broad-leaf cultivars produce higher yields with higher protein and oil content, while some of the narrow-leaf cultivars (Wanga and Tanjil) are more resistant to anthracnose.

#### Plantings and production

Official crop forecasts for sweet lupins only started in the 1997/98 production season. The estimated area planted to sweet lupins decreased by 25,6 %, from 14785 ha during the 2001/02 season to 11000 ha during the 2002/03 season, and production is expected to decrease by 19,2 %, from 16 338 tons in 2001/02 to 13 200 tons in 2002/03.

Estimated plantings, production and yields of sweet lupins from 1997/98 to 2002/03 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02*	2002/03*
Plantings (ha)	1 889	16 300	19 000	14 705	14 785	11 000
Production (t)	2 143	9 000	13 000	17 360	16 338	13 200
Yield (t/ha)	1,13	0,55	0,68	1,18	1,11	1,20

\* Preliminary

The areas planted to and production of sweet lupins are depicted in the following graph:



#### \* Preliminary

Through selection and breeding, sweet lupin cultivars were developed from bitter lupin species. Unwanted bitter seeds are still found in sweet lupins when generation of seed takes place. A maximum alkaloid content of 0,03% is permissible. Anthracnose is the most important disease that affects sweet lupins and can cause

extensive crop losses. It is distributed by air as well as through infested seed. The expected decrease in production for the 2002/03 season is mainly as a result of anthracnose infestation. Farmers need to switch to new cultivars that are more resistant to anthracnose and the availability of seed of these cultivars was a problem.

#### Consumption

Sweet lupins are used as a supplement in poultry, ostrich, dairy, beef, horse, sheep and goat rations. It contains between 32 and 37% protein and 10% oil and has an energy value of approximately 11 megajoules per kg. On the local market, sweet lupins compete with other plants that can be used as oil-cake in feed rations, for example soya-beans and canola.

#### Prices

The price of sweet lupins is based on the price of imported soya-bean oil-cake (containing 47 % protein). The price of imported soya-bean oil-cake is currently R2 500 per ton and therefore the relative rand values of sweet lupins are as follows:

#### L. albus (Esta)

Poultry rations (75 % oil-cake with 47% protein)	R1875 per ton
Dairy rations (80 % oil-cake with 47% protein)	R2000 per ton
L. angustifolius (Merrit)	
Poultry rations (53 % oil-cake with 47% protein)	R1325 per ton
Dairy rations (52 % oil-cake with 47% protein)	R1300 per ton
<i>L. luteus</i> (Juno)	
Poultry rations (63 % oil-cake with 47% protein)	R1575 per ton
Dairy rations (73 % oil-cake with 47% protein)	R1825 per ton

These relative values will change as the price of soya-bean oil-cake changes and these values are not producer prices, because costs such as transport, financing, storing, etc have not been deducted yet.

There are currently about four different buyers of sweet lupins in the Western Cape. The buyers offer preplanting contracts to producers and contract prices offered for the narrow leaf-cultivars are between R1 300 and R1 400 per ton for the 2002/03 production season, while contract prices offered for *L. albus* and *L. lutius* vary between R1500 and R1 600 per ton.

#### Marketing

The ARC-Grain Crops Institute and the Protein Research Foundation (PRF) at Elsenburg conduct research and cultivar trials on sweet lupins. The PRF funds most of the research on sweet lupins and has also established a lupins working group to establish and promote the local lupins industry.

#### Canola

Canola is an oilseed crop that is mainly grown in the Western Cape, but since the 2001/02 production season, small quantities of canola have also been planted in the northern production areas. Canola oil has a unique fatty acid composition that makes it a healthy choice for human nutrition, but it is also used as a source of protein in animal feeds. For human consumption, it is used as soft oil and the applications for this market are typically bottled oil for household use, soft margarine, mayonnaise, salad oil and various industrial uses. As a result of the large quantities of imported oils, the international plant oil prices largely determine the local prices of canola.

#### Plantings and production

Official crop forecasts for canola only started in the 1997/98 production season. The estimated area planted to canola increased by 22,2 %, from 27 000 ha during the 2001/02 season to 33 000 ha during the 2002/03

season, and production is expected to increase by 66,4 %, from 25 750 tons in 2001/02 to 42 850 tons in 2002/03. The increase in production of canola is as a result of the local demand for canola exceeding the local supply and producers therefore expect favourable prices.

Season	1997/98	1998/99	1999/2000	2000/01	2001/02*	2002/03*
Plantings (ha) Production (t)	13 000 11 000	17 000 22 562	25 000 18 426	19 145 19 073	27 000 25 750	33 000 42 850
Yield (t/ha)	0,85	1,33	0,74	1,00	0,95	1,30

\* Preliminary

The areas planted to and production of canola are depicted in the following graph:



\* Preliminary

#### Consumption

Canola competes with other plant oils on the local market and South Africa is a net importer of plant oils. Although the physical characteristics of palm oils make them more suitable for use in baking fats, hard margarine and some other sectors of the oil market, the market for soft oils (oil that is liquid at room temperature), of which canola forms part, is still huge. Applications for this market are typically bottled oil for household use, soft margarine, mayonnaise, salad oil and various industrial uses.

The unique fatty acid composition of canola oil makes it a healthy choice for human nutrition. Canola oil contains less saturated fats than the other frequently used plant oils, which makes it effective in the lowering of cholesterol levels. It also has a higher omega-3 fatty acid content than the other frequently used plant oils. Omega-3 fatty acids are important for general health and have been proven to halt the development of cancer. It is therefore expected that the household consumption of canola will continue to increase. Canola is also a good source of protein in animal feed and large quantities of protein for animal feeds have to be imported every year.

It is estimated that a total of 29 150 tons of canola were available for local consumption during the 2001/02 marketing season. Carry-over stocks as at 1 October 2001 amounted to 3400 tons, production during the 2001/02 production season is estimated to be 25 750 tons, while no canola was imported or exported.

It is estimated that, for the 2001/02 marketing year, approximately 23400 tons of canola were used for commercial consumption, of which 8 000 tons were used for animal feed and 15400 tons were crushed for oil and

oil-cake. Seed for planting purposes amounted to about 800 tons. All the locally produced canola is also consumed locally.

#### Prices

The price of canola is based on the local price of soya-bean oil-cake (containing 47% protein). At a price of R2 500 per ton for imported soya-bean oil-cake, the relative rand values of canola are as follows:

Full-fat canola

Poultry rations (53% oil-cake with 47% protein)	R2350 per ton
5	R2500 per ton
Dairy rations (58% oil-cake with 47% protein)	R1450 per ton
Canola oil cake	

Poultry rations (53% oil-cake with 47% protein)	R1325 per ton
Pig rations (65% oil-cake with 47% protein)	R1625 per ton
Dairy rations (60% oil-cake with 47% protein)	R1500 per ton

These relative values change as the price of soya-bean oil-cake changes. These values are not producer prices, because costs such as transport; financing; storing, etc have not been deducted yet.

Prices paid to producers during the 2002/03 season vary between R2400 and R2 500 per ton, depending on the moisture content and whether it is delivered for the feed market or crushed for oil. During the 2001/02 season, the average price for canola was approximately R1 650 per ton at harvesting time—prices paid varied between R1 400 and R2 000 per ton—and for the 2000/01 season, the average price was approximately R1 425 per ton.

#### Research and information

The Western Cape Department of Agriculture conducts research and cultivar trials on canola. The research is funded by the Protein Research Foundation (PRF) and it is the task of the canola working group of the PRF to promote the local canola industry. The information function for canola is performed by SAGIS.

# Cotton

The cotton industry is labour intensive and provides work to roughly one labourer per hectare of cotton planted. Primary production areas are situated in the Limpopo, Mpumalanga, Northern Cape, North West and KwaZulu-Natal Provinces. Temperature is of vital importance in determining areas that are suitable for the economic cultivation of cotton. Cotton is mainly cultivated under dryland conditions, but about 23 % of the crop comes from irrigation schemes (of which more than half comes from Loskop in Mpumalanga and the Orange River in the Northern Cape).

#### Area planted and production

Total cotton plantings for 2001/02 are estimated at 41162 ha, which is 26831 ha or 39,5% less than the plantings during 2000/01. Approximately 77 % (including Swaziland) of the total plantings during the 2001/02 season was cultivated under dryland conditions and the remainder under irrigation, with Swaziland having cultivated 100 % (9606 ha) of its plantings under dryland conditions. It is estimated that 89854 bales of 200 kg each of cotton lint were produced during 2001/02, which is 46,9% less than the production of 169065 bales during the 2000/01 season. The main contributing factors to the downward pressure on production were the international prices hitting a record low in 20 years at planting time and the prices of competing crops looking promising.

Areas planted to cotton and the production of cotton lint from 1997/98 to 2001/02 (Swaziland included) compare as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
Total plantings (ha)	125 851	139 911	74 643	67 993	41 162
Dryland (ha)	103 357	106 613	64 157	49 454	31 711
Irrigation (ha) Production of cotton lint	22 494	33 298	10 486	18 539	9 451
(200 kg bales)	211 905	265 720	131 482	169 065	89 854

Source: Cotton SA

#### Prices

The producer price for seed cotton (lint and seed derived from the ball of the cotton plant before it has been ginned) for 2001/02 was fixed at 330 c/kg for the best grade of handpicked cotton. The price for both cotton lint and seed cotton increased during the period under review.



South African prices for seed cotton and cotton lint compare as follows:

Season	1997/98	1998/99	1999/2000c/kg	2000/01	2001/02
Seed cotton	249,7	253,0	258,0	280,0	330,0
Cotton lint	795,0	810,0	820,0	764,0	962,0

#### Consumption

Consumption of cotton lint by local spinners (South Africa and Swaziland) for the 2002/03 marketing season is expected to be 370 000 bales of 200 kg, compared to the 364 130 bales of 200 kg consumed during the 2001/02 season. During 2001/02, about 76 % of 188 140 bales of 200 kg of imports were imported from SADC countries, with Zimbabwe and Zambia contributing 49 and 24% respectively. Brazil and West African (non-SADC) countries made a contribution of 16 and 4% respectively. No cotton lint was exported during the 2002/03 marketing season.

Consumption of cotton lint compares as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			200 kg bales		
Consumption	418 050	347 315	375 290	325 575	364 130

#### Marketing arrangements

On 5 January 1998, the Cotton Board terminated its functions. All assets of the Board were transferred to the Cotton Trust to be used for the benefit of the entire cotton industry. A statutory levy, which was introduced for

the period April 2000 to April 2004, in terms of the Marketing of Agricultural Products Act, 1996, is applicable (currently 14c/kg cotton lint) to finance research, information, promotion and grading.

Research is coordinated by Cotton SA, a Section 21 company financed by the cotton industry, and performed by the Agricultural Research Council. Cotton SA also administers registration, records and returns.

Both the local marketing and exporting of cotton are free from statutory intervention. In terms of the free trade agreement between countries within SADC that has been in force since 2000, the RSA duty on cotton imports from SADC countries would be scaled down to zero within 5 years from implementation. The duty on cotton lint imports from these countries was reduced from R1,60/kg to R1,20/kg on 1 January 2000, to R0,90/kg on 1 January 2001 and to R0,60/kg from 1 January 2002.

## Dry beans

#### Areas planted and production

During 2001/02, an estimated 44 900 ha were planted to commercial dry beans—a decrease of 42,4% compared to the 77 950 ha planted in 2000/01. The 2001/02 crop of 59 020 tons represents a decrease of 35,6% compared to the 2000/01 crop of 91 630 tons. The average yield of the 2001/02 crop is approximately 1,31 ton/ha. The estimated gross value of dry beans for the 2001/02 season amounts to R325,2 million.

Province	Production (tons)	Share in crop (%)
Mpumalanga	32 500	55,1
Free State	13 750	23,3
Gauteng	4 200	7,1
North West	3 500	5,9
KwaZulu-Natal	2 700	4,6
Limpopo	720	1,2
Western Cape	625	1,1
Eastern Cape	525	0,9
Northern Cape	500	0,8
Total	59 020	100,0

Production per province and their share in the 2001/02 crop are as follows:

Most of the locally produced commercial dry beans are produced in Mpumalanga, followed by the Free State and Gauteng.

Production per type during 2001/02 is estimated to be as follows: 40 920 tons (69,3%) Red Speckled, 9 100 tons (15,4%) Small White, 6 800 tons (11,5%) Large White Kidney and 2 200 tons (3,7%) other dry beans-mainly cariocas.

The most extensive seed production takes place in the Lowveld area in Mpumalanga, followed by the Limpopo and the Northern Cape provinces. There is, however, a drastic decrease in seed production in the Northern Cape.



#### Consumption

Our forefathers enjoyed simple meals, but food preferences have changed during the course of time. With the wide variety of refined and attractively prepared foodstuffs readily available today, problems such as obesity, high cholesterol, coronary diseases and diabetes are prevalent. Research in the medical field showed that a dry bean diet could counter the above-mentioned problems and that dry beans are therefore the ideal health food. Furthermore, dry beans are the most appropriate and suitable food to include in food aid schemes world-wide. An estimated 120 000 tons of dry beans were consumed locally during 2001/02, which represents an increase of 10 000 tons (9,1 %) compared to 2000/01. The estimated *per capita* consumption for 2001/02 is 2,34 kg, which is lower than the 2000/01 figure of 2,43 kg. Because the local demand is sub-stantially higher than local production, large quantities of dry beans have to be imported each year.

The quantities of dry beans produced, imported and consumed from 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			Tons		
Production (including					
developing agriculture)	46 770	82 790	77 680	98 720	65 330
Imports	43 623	44 281	41 098	23 083	15 000
Consumption	83 050	98 350	106 730	109 060	105 160



#### Producer prices

The average prices received by producers of dry beans from 1997/98 to 2001/02 are as follows:

Season	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/t		
Producer prices	2 901	3 221	3 100	2 800	4 500

#### Marketing

The marketing of dry beans is free from statutory intervention and market forces therefore determine the prices of dry beans. Furthermore, the Dry Bean Producers' Organisation, representing all stakeholders in the industry, focuses on the serving of all role-players in the industry. It supplies quality seed and produces disease-free or certified seed by means of its seed company.

#### Research and information

At present, mainly the Oil and Protein Seed Centre (OPSC) in Potchefstroom and, to a certain extent, the Plant Protection Research Institute (PPRI) in Pretoria undertake research on dry beans. The functions of the OPSC mainly comprise the breeding of dry bean cultivars and the evaluation of local cultivars. The PPRI is mainly involved in pathological research, which is especially valuable for the certification of dry bean seed.

The Dry Bean Producers' Organisation performs the information function.

### Sugar

Sugar is mainly produced in the KwaZulu-Natal and Mpumalanga Provinces. The sugar-cane lands are mostly situated on the best soils closest to the main roads for easy access to the mills. Deep and well-drained soils with clay content of between 20 and 25 % are required.

#### Production

The 2001/02 season was not good for the South African sugar industry as compared to the 2000/01 season. Despite an increase of approximately 1 % in the area under sugar cane and an increase of 2 % in the area harvested, the production of sugar cane decreased by 11,4 %, from 23,88 million tons during the 2000/01 season to 21,16 million tons during the 2001/02 season. Production of sugar dropped by 12 %, from 2,73 million tons during the 2000/01 season to 2,40 million tons in the 2001/02 season.

The most challenging and exciting development in the South African sugar industry over more than a decade, has been the substantial growth of the small-scale sugar-cane grower sector. Considerable progress has also been made in addressing problems faced by small-scale growers. The area under cane planted by small-scale growers had increased to as much as 97 000 ha, on which 20 % of the total cane crop was produced, after which it decreased again, to approximately 85 000 ha, on which 14 % of the total crop was produced.



#### Consumption

The total local consumption of 1,24 million tons of sugar during 2001/02 represents a slight increase of less than 1% compared to the 2000/01 consumption of 1,23 million tons.

The production and consumption of sugar from 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			' 000 Tons		
Production Consumption	2 412 1 310	2 646 1 285	2 531 1 195	2 729 1 231	2 396 1 240

The factors contributing to the limited increase in local consumption include the generally poor state of the South African economy and Swaziland's greater access to the Southern African Custom Union (SACU) sugar market.

#### Producer prices

The producer prices of sugar cane from 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Producer price	119,11	125,85	121,36	130,50	160,23

#### Exports

The proportion of sugar exports to sugar production stayed unchanged at 52 % from 2000/01 to 2001/02. A total of 1,26 million tons of sugar was allocated to the export market during 2001/02.

# HORTICULTURE

## **Deciduous fruit**

#### Production areas

The main deciduous fruit producing areas of South Africa are situated in the Western and Eastern Cape provinces, mainly in areas where warm, dry summers and cold winters prevail. The area that produced deciduous fruit during the 2002 season is estimated at 77 207 ha.

#### Production

Although some producers grow fruit both for canning and fresh consumption, it is estimated that there are about 2 420 producers of fruit for fresh consumption and about 1 108 producers of canned and dried fruit in the country. The production of deciduous fruit during 2001/02 is estimated at 1440 509 tons, which is 144 710 tons or 11,1 % higher than in 2000/01. The 2001/02 season reflected an increase in production of all fruit types, except for plums, which decreased by 8,1 %.

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02*
			Tons		
Apples	583 208	564 928	571 966	565 905	583 539
Pears	258 717	278 367	298 076	256 849	315 272
Table grapes	179 138	211 687	204 026	212 314	238 758
Peaches and nectarines	205 751	223 071	216 322	167 992	208 447
Apricots	56 715	58 917	52 133	54 662	59 571
Plums	37 011	47 282	32 832	39 077	35 922
Total	1 320 540	1 384 252	1 375 355	1 296 799	1 441 509

The production per fruit type over the past five years compares as follows:

\* Preliminary

#### Marketing

Both the local and export marketing of deciduous fruit are free from government intervention. The exporting of fruit is subject to compliance with certain quality requirements and obtaining a PPECB (Perishable Products Export Control Board) certificate.

When the industry was deregulated in the early 1990s, single-channel marketing for exports was abolished. At present there are about 110 exporters selling South African fruit abroad.

During 2001/02, deciduous fruit contributed approximately 29% to the gross value of horticultural products. During the 2001/02 season, approximately 363 768 tons of deciduous fruit were sold locally on the 16 major fresh produce markets, other markets and directly to retailers, which represents a 2,1% increase compared to 356169 tons sold during the 2000/01 season.

Indications are that 537 861 tons of deciduous fruit were exported during 2001/02. This represents an increase of 11,6% as against exports during 2000/01. The exporting of deciduous fruit is a very important earner of foreign exchange for South Africa. During the 2001/02 season, about 37% of deciduous fruit produced was exported and approximately 74% of the gross value from deciduous fruit was foreign exchange export earnings.

The following graph indicates deciduous fruit export destinations during 2001:



The average prices of deciduous fruit on the 16 major fresh produce markets during the period 1997/98 to 2001/02 are as follows:

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Apples	1 646	1 772	1 801	1 903	2 197
Pears	1 497	1 428	1 329	1 499	1 712
Table grapes	2 992	2 936	2 781	3 151	3 394
Peaches and nectarines	2 207	2 619	2 644	2 732	2 864
Apricots	1 658	1 854	1 973	2 150	2 177
Plums	1 772	1 850	2 072	2 154	2 368

#### Intake of deciduous fruit for processing

During 2001/02, about 37 % of deciduous fruit produced was taken in for processing-an increase of 18 % compared to 2000/01.

The following graph indicates deciduous fruit taken in for processing during 2001/02:



Over the past five years, most of the deciduous fruit taken in for processing was canned, with the exception of apples, which are mainly used for juice. However, more recently a significant volume of pears was also used for juice. During 2001/02, approximately 95% of apples taken in for processing was used for juice and 5% for canning, while 43% of pears was used for juice and 57% was canned. Producers received an average price of R736 and R563 per ton respectively for apples used for canning and for juice. For pears used for canning

and for juices, producers received averages of R906 and R220 per ton respectively, representing significant increases compared to the 2000/01 season. In the case of both peaches and apricots, approximately 85 % was canned, while 15 % was used for juices. Producers received an average price of R1324 and R827 per ton respectively for peaches and apricots taken in for canning during 2001/02.

#### Domestic consumption

Local per capita consumption and total consumption of deciduous fruit over the past five years are as follows:

Season	1997	1998	1999	2000	2001
Per capita consumption (kg/year)	19,89	16,50	18,16	19,32	15,52
Total consumption ('000 tons)	820	695	782	850	698

# **Dried fruit**

#### Production areas

Dried fruit is produced mainly in the western and southern parts of the Western Cape Province and the Lower and Upper Orange River areas in the Northern Cape Province. Tree fruit, as opposed to vine fruit, is dried mainly in the Western Cape.

The most important dried fruit products are Thompson seedless raisins, golden sultanas, unbleached sultanas, hanepoot raisins, prunes, peaches and apricots. The quantities of dried fruit produced vary per fruit type, depending on the factors that influence production and the competition offered by alternative marketing channels. Apricots are mainly produced in the Little Karoo and prunes are grown almost exclusively in the Tulbagh district in the Western Cape. Most raisins are produced in the area along the Lower Orange River and most currants come from the Vredendal district.

#### Production

From 2001 to 2002, production of dried vine fruit increased by 21,6% to 42 355 tons and that of dried tree fruit by 15% to 4948 tons. Quality was good and the number of exporters of dried fruit increased from four to 20. Adverse weather conditions late in the drying season led to a switch from unbleached and golden sultanas to Thompson seedless raisins, which increased by 94%. Unbleached and golden sultanas decreased by 72 and 24% respectively.

Fruit type	1998	1999	2000	2001	2002
			Tons		
Sultana type					
Unbleached	3 700	5 097	4 709	9 158	2 591
Golden	6 912	8 539	4 028	7 490	5 656
Thompson seedless raisins	10 451	26 722	27 622	16 552	32 092
Currants	1 181	1 702	1 463	1 420	1 837
Raisins	91	534	320	223	179
Total vine fruit	22 335	42 594	38 142	34 843	42 355
Prunes	1 700	2 098	1 300	1 100	1 800
Apricots	1 500	1 848	1 022	1 612	1 423
Apple	314	79	200	110	80
Peaches	1 492	1 526	1 214	1 000	1 049
Pears	766	697	1 180	480	596
Figs	0	0	0	-	_
Other (fruit spreads)*	-	_	_	_	_
Total tree fruit	5 772	6 248	4 916	4 302	4 948
Grand total	28 107	48 842	43 058	39 145	47 303

\*Statistics not available since 1997

#### Marketing

Both the local marketing and exporting of dried fruit are free from government intervention. However, in the case of exports, phytosanitary requirements and quality standards must be adhered to.

The volume of dried fruit exported increased by 51 % to approximately 16487 tons from June 2001 to June 2002.



The following chart depicts dried fruit export destinations during 2001:



#### Prospects

The fruit-producing areas experienced a cold winter during 2002, which gives rise to optimism for good-quality production during the 2002/03 season.

# Viticulture

At present, 106 331 ha are under vines in South Africa. Although ranking 16th in the world in terms of area under vines, South Africa is the sixth-largest wine producer, producing 3,9% of the world's wine.

The wine industry is labour intensive and provides a living to approximately 345 000 farmworkers, including dependants, and 3500 wine cellar personnel. Primary wine producers in South Africa are estimated at 4390. Wine is mainly produced in the Western Cape province and along parts of the Orange River in the Northern Cape Province.
## Production

Wine production from 1997 to 2001 is as follows:

Year	1997	1998	1999	2000	2001
			Gross litres (million)		
Wine production	881	816	914	837	747

During 2001, the production of wine decreased by 10,8 %. During the past five years, a shift from white to red wines took place, causing a dramatic increase in the production of red wine varieties, namely Shiraz, Merlot, Ruby Cabernet, Cabernet Sauvignon and Pinotage. The variety distribution for 2001 is depicted in the following graphical presentation:



### Prices

Producer prices of wine products for the past five years are as follows:

Year	1997	1998	1999	2000	2001
			c/l10 % A/V		
Average price of: Good wine Rebate wine	204,0 126,8	222,9 132,8	214,7 127,4	212,0 119,6	229,2 115,2
Distilling wine	80,0	85,3	73,1	64,9	63,2

#### Income of producers

The production of wine grapes and income of producers from 1997 to 2001, are as follows:

Year	1997	1998	1999	2000	2001
Grape production ('000 tons)	1 121	1 041	1 174	1 098	977
Income of producers (R million)	1 463	1 413	1 436	1 458	1 596

The producers' income increased by 9,5 % during 2001, owing to an increase in income from exports.

### Exports

Total quantities of wine exported during the past five years are as follows:

Year	1997	1998	1999	2000	2001
			Litres		
Natural wine	108 489 119	116 766 480	127 636 278	138 800 203	176 091 525
Fortified wine	1 265 310	1 116 781	695 380	471 538	548 397
Sparkling wine	805 064	524 687	809 625	685 248	779 312
Total	110 559 493	118 407 948	129 141 2873	140 956 989	177 419 234

Exports as a percentage of the good wine crop increased from 11,1% in 1996 to 23,6 % in 2001.

The following graph depicts wine export destinations during 2001:



### Consumption

The per capita consumption of wine products on the domestic market from 1997 to 2001 is as follows:

Year	1997	1998	1999	2000	2001	
			l per capita			
Natural wine Fortified wine Sparkling wine	9,00 0,91 0,19	8,37 0,79 0,20	8,59 0,72 0,23	8,41 0,66 0,13	8,44 0,64 0,14	
Total	10,10	9,36	9,54	9,20	9,22	

#### Prospects

Indications are that the 2002 wine production may be around 829 million litres, approximately 11,0 % higher than the 2001 production.

### **Subtropical fruit**

Measured in terms of the value of production, the subtropical fruit industry earned R761 million in 2001/02, an increase of 6% on the 2000/01 figure of R718 million.

### Production and production areas

The particular climatic requirements of some types of subtropical fruit make the cultivation thereof possible in only certain specific areas of the country. In general, subtropical fruit types require warmer conditions and are sensitive to large fluctuations in temperature and to frost. The main production areas of subtropical fruit in

South Africa are parts of the Limpopo, Mpumalanga and KwaZulu-Natal Provinces. Fruit such as granadillas and guavas is also grown in the Western Cape, while pineapples are grown in the Eastern Cape and KwaZulu-Natal.

The total areas of production of avocados, bananas, mangoes, litchis and pineapples during 2001/02 are estimated at approximately 12000, 11865, 7000, 1000 and 14000 ha respectively. These areas remained virtually unchanged compared to 2000/01, except for bananas, of which the production area decreased by approximately 9%, due to an expansion in the area under sugar cane.

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			' 000 tons		
Avocados	57,1	79,9	68,9	69,5	57,2
Bananas	215,7	226,9	249,8	260,1	273,8
Pineapples	146,5	146,8	160,2	161,2	160,8
Mangoes	41,7	50,6	40,8	48,0	58,1
Papayas	22,4	23,2	23,6	20,3	22,6
Granadillas	0,7	1,1	0,9	1,2	1,4
Litchis	6,4	7,3	5,0	7,5	4,6
Guavas	28,6	18,1	21,9	23,9	24,3

Production of subtropical fruit from 1997/98 to 2001/02 is as follows:

From 1997/98 to 2001/02, total production of subtropical fruit increased by an average of 3,7 % per annum. From 2000/01 to 2001/02, production of bananas increased by 5%, while the total production of avocados showed a decrease of 17,7%. Bananas, pineapples and avocados contributed 45, 27 and 9,5% respectively to the total production of subtropical fruit during 2001/02.

#### Sales

The largest contributors to the sales of subtropical fruit on the 16 major fresh produce markets are bananas, papayas, avocados, pineapples and mangoes, contributing 73, 4,5, 6,5, 7 and 7% respectively. Except for avocados, litchis and pineapples, the quantities of all subtropical fruit types sold on the major fresh produce markets increased during the 2001/02 season.

Total quantities of subtropical fruit sold on the 16 major fresh produce markets (year ending 30 June) are as follows:

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			Tons		
Avocados	20 073	28 051	19 536	26 005	21 996
Bananas	202 013	212 790	227 505	235 920	249117
Pineapples	23 784	18 166	25 994	24 827	23 864
Mangoes	18 170	20 852	19 875	20 277	24 513
Papayas	15 559	17 029	16 831	14 127	15 279
Granadillas	528	749	729	803	1 008
Litchis	3 177	3 717	2 312	4 151	1 807
Guavas	3 946	3 696	3 240	2 960	3 076
Total	287 250	305 050	316 022	329 070	340 660

Intake for processing (year ending 30 June)

The three largest subtropical fruit contributors to the processing industry are pineapples, guavas and mangoes. Pineapples account for approximately 73% of the total intake of subtropical fruit for processing. While the intake of most subtropical fruit for processing increased during 2001/02, the intake of avocados decreased by 49,7%.

Intake of subtropical fruit for processing during the period 1997/98 to 2001/02 is as follows:

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			Tons		
Avocados	2 158	2 017	2 726	1730	870
Bananas	1 233	614	866	87	1551
Pineapples	115 552	121 569	125 619	127748	129 316
Mangoes	8 428	13 230	6 480	10 819	11261
Papayas	242	257	982	1 604	1683
Granadillas	104	142	35	184	184
Litchis	266	465	24	129	302
Guavas	23 883	13 676	18 074	20 345	20 654
Total	151 866	151 970	154 806	163 446	165 821



### Exports

From 1997/98 to 2001/02, total exports of subtropical fruit decreased by an average of 1% per annum, while export prices for all subtropical fruit increased on average by 7% per annum.

The main subtropical fruit type exported is avocados. During 2001/02, exports of avocados contributed 50% to the total value of exports of subtropical fruit. Other subtropical fruit types exported were mangoes, pineapples and papayas.



### Marketing and research

The Institute for Tropical and Subtropical Crops (ITSC) of the Agricultural Research Council (ARC) is responsible for research on all aspects of the cultivation of tropical and subtropical crops countrywide. Some of the organisations involved in the marketing of specific subtropical crops are the Banana Growers' Association, Avocado Growers' Association, Mango Growers' Association and Litchi Growers' Association.

# **Citrus fruit**

#### Areas of production

Citrus is grown in the Limpopo, Mpumalanga, KwaZulu-Natal, Eastern Cape and Western Cape Provinces, where subtropical conditions (warm to hot summers and mild winters) prevail. A survey done during 1999/2000 indicated that there were about 3500 citrus growers who collectively managed more than 16 million trees. Orchard sizes varied from small (less than 100 trees) to estates with up to half a million trees.

### Production

Oranges constitute about 57% of the total production of citrus fruit in South Africa. On average, citrus fruit production increased by 9,7% per annum from 1997/98 to 2001/02.

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			Tons		
Oranges	961 084	989 238	1 048 828	1 119 198	1 091 382
Grapefruit	128 319	141 266	146 753	288 324	432 700
Lemons	91 830	112 219	111 964	118 739	145 527
Naartjes	76 015	90 123	137 095	108 385	147 992
Soft citrus	85 132	79 663	118 920	101 011	104 518
Total	1 342 380	1 412 509	1 563 560	1 735 657	1 922 119

Citrus production for the past five production seasons (1February-31January) are as follows:

### Marketing

South Africa is the third largest exporter of citrus fruit, after the USA and Spain. The South African citrus industry is export orientated and approximately 55 % of total citrus production is exported. Exports increased from 698 994 tons during 1997/98 to 1104 336 tons during 2001/02. During 2001/02, about 750 926 tons of oranges, 59% of the crop, were exported. This was 0,7% higher than the volume exported during 2000/01.



A certificate from the Perishable Products Export Control Board (PPECB) is needed and phytosanitaryrequirements and quality standards must be adhered to for the exportation of citrus fruit.

During 2001/02, about 10 % of citrus production was sold on the 16 major fresh produce markets in South Africa—7,7 % sold directly to retailers and 30,4 % taken in for processing. There has been a noticeable increase in the prices of all citrus fruit sold on the fresh produce markets during 2001/02 compared to 2000/01.

The average prices realised on the major fresh produce markets during the period 1997/98 to 2001/02 are as follows:

Fruit type	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Oranges	619	835	758	603	770
Grapefruit	635	847	817	654	799
Lemons	1 008	1 190	1 168	935	1 182
Naartjes	1 203	1 481	1 320	1 457	1 597
Soft citrus	930	1 115	926	1 145	1 427

### Processing

Approximately 30,4% of the total citrus fruit production was taken in for processing during 2001/02. During the past four years, citrus fruit taken in for processing showed an average annual growth of 16,6%, increasing from 313093 tons in 1997/98 to 583 455 tons in 2001/02. There has been an increase of 37,3% during 2001/02, from 424797 tons in 2000/01.

### Consumption

Per capita consumption of citrus fruit over the past five years is as follows:

Year	1997	1998	1999	2000	2001	
			kg/year			
Per capita consumption	16,95	14,73	11,73	19,69	21,42	

# Vegetables (excluding potatoes)

#### General

Vegetables are produced in most parts of the country, but farmers in certain areas tend to concentrate on specific crops. For example, green beans are mainly grown at Kaapmuiden, Marble Hall and Tzaneen; green peas at George and Vaalharts; onions at Caledon, Pretoria and Brits; and asparagus at Krugersdorp and Ficksburg.

### Production

During the period 2000/01 to 2001/02 (July-June), the total production of vegetables (excluding potatoes) decreased by 1,7 %, from 2,065 million tons to 2,029 million tons. Of the more important vegetables, the largest percentage increase occurred in the case of carrot production, which increased by 4% from 101 000 tons to 105000 tons. Onion and green mealie production increased by 3,4 and 0,6% respectively and the production of cabbages and tomatoes decreased by 9,7 and 4,5% respectively. There was, however, no change in the production of pumpkins.

The production of vegetables (excluding potatoes) in South Africa for the period 1997/98 to 2001/02 compares as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			1 000 tons		
Tomatoes	453	414	405	486	464
Onions	342	386	329	323	334
Green mealies	290	300	298	298	296
Cabbages	204	202	189	195	176
Pumpkins	197	199	201	210	210
Carrots	103	101	96	101	105
Other	495	488	438	452	444
Total	2 084	2 090	1 956	2 065	2 029

### Contribution to gross value of production

Based on gross value of production during 2001/02, the more important vegetables compare as follows:



#### Distribution channels

The following graph shows that approximately 77 % of the volume of vegetables produced is traded on the 16 major fresh produce markets. The total volume of vegetables (excluding potatoes) sold on these markets during 2001/02 amounted to 1,04 million tons, while 1,10 million tons were sold during 2000/01—a decrease of 5,2 %.



The values of sales of the most important vegetables (excluding potatoes) on the South African fresh produce markets for the period 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			R ' 000		
Tomatoes	414 616	428 439	449 966	416 030	485 391
Onions	232 580	200 761	267 759	342 723	355 799
Green mealies	9 799	9 125	10 725	10 771	11 911
Cabbages	63 423	60 948	71 263	61 144	82 641
Pumpkins	28 359	30 743	44 548	38 147	67 713
Carrots	57 641	58 943	67 329	65 396	84 410
Other	333 781	376 386	416 439	428 002	506 755
Total	1 140 199	1 165 345	1 328 029	1 362 213	1 594 620

The value of pumpkins had the largest increase of about 77,5%, from 2000/01 to 2001/02, whereas the values of cabbages, carrots, tomatoes, green mealies and onions increased by 35,2, 29,1, 16,7, 10,6 and 3,8% respectively.

### Prices

The average prices of some of the more important vegetables realised on the fresh produce markets for the period 1997/98 to 2001/02 are as follows:

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			R/ton		
Tomatoes	1 526,82	1 647,79	1 817,06	1 619,59	2 061,28
Onions	955,69	762,37	1 087,82	1 453,04	1 467,69
Green mealies	647,33	676,03	661,45	787,37	971,65
Cabbages	371,45	354,03	435,23	369,99	560,81
Pumpkins	501,28	540,90	628,18	629,55	727,11
Carrots	908,43	900,38	1 056,35	927,05	1 256,51
Other	1 001,63	1 058,49	1 150,10	1 200,07	1 673,11

The price of cabbages showed the largest increase of about 51,6 % from 2000/01 to 2001/02, whereas the prices of carrots, tomatoes, green mealies, pumpkins and onions increased by 35,5, 27,3, 23,4, 15,5 and 1,0 % respectively.



### Consumption

The importance of vegetables in a healthy diet is being strongly promoted by all the stakeholders in the fresh produce marketing chain. The *per capita* consumption of fresh vegetables was 39,24 kg during 2001/02— approximately 0,5% lower than the 39,45 kg consumed during 2000/01.

#### International trade

Fresh vegetables for exporting must be graded, packed and marked according to the prescribed standards promulgated in terms of Act No. 119 of 1990. However, vegetables destined for BLNS countries (Botswana, Lesotho, Namibia and Swaziland) and vegetables exported in consignments of less than 20 kg are exempted from this requirement. Exporters must ensure that the fresh produce conforms to the import regulations of the importing country.

Importing vegetables into South Africa is subject to the issuing of a permit in terms of the Agricultural Pests Act, 1983 (Act No. 36 of 1983). The selling of vegetables, whether produced locally or imported, is prohibited unless the produce is graded, packed and marked according to the regulations promulgated in terms of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990).

# Tomatoes

### Area planted

Tomato plantings for the 2002 season are estimated at 5410 ha, (the same as the area planted during 2001). The Northern Lowveld was the major production area, with 2700 ha or 50% of the area planted. Other important regions in terms of hectares under tomato cultivation are the far northern areas of the Limpopo Province with 550 ha and the Border area in the Eastern Cape, with 450 ha. Growing of tomatoes in tunnels is still on the increase as an important crop production method in South Africa.

### Production

Tomato production in South Africa showed very insignificant changes over the past three years. The total production was approximately 332 940 tons during the 2002 season. The Northern Lowveld and far northern areas in the Limpopo Province presented the largest production—162 000 and 38500 tons respectively, followed by the Border area in the Eastern Cape, with 36 000 tons. According to the Tomato Producers' Organisation, the total production remained virtually unchanged during the past two years.



### Sales

The quantity of tomatoes sold on the 16 major fresh produce markets decreased by 8,8 %, from 256 951 tons during 2000/01 to 234 262 tons during 2001/02.



#### Prices

The average price of tomatoes increased by 26,4%, from R1 631 per ton during 2000/01 to R2061 per ton during 2001/02. Tomatoes are subject to large seasonal price fluctuations, which implies that tomatoes have a high price risk.



### Consumption

The *per capita* consumption of tomatoes in South Africa is 19 kg per annum, compared to 35 kg in Europe. Population growth, urbanisation, income *per capita* and the income elasticity of demand for tomatoes are important factors influencing the demand for tomatoes. The average household in South Africa consumes about five to ten tomatoes per week. Tomato consumption is higher in the northern parts of the country.

#### Exports

South Africa's volume of tomatoes exported has increased by 45,7 % during 2001, from 7106 tons during 2000 to 10358 tons during 2001.

### Research

Research in the tomato industry is undertaken in collaboration with the Agricultural Research Council (ARC), which has found several remedies for different tomato diseases.

#### **Opportunities and threats**

Opportunities for increasing fresh tomato exports are limited, owing to the fact that tomatoes tend to compare unfavourably in terms of value to mass. Sun-dried tomatoes are very popular on foreign markets and it appears that demand is increasing in South Africa.

#### International perspective

The area planted to and production of tomatoes in the world stayed fairly constant over the past five years, with the exception of a moderate decrease during 1997. South Africa is not a major exporter of tomatoes. China is the largest producer of tomatoes in the world, followed by the USA, Italy and Turkey. These four countries represent 44% of world production. The tomato producing countries with the highest yields per hectare are the United Kingdom, the Netherlands, Belgium and Sweden.

## Onions

### Production

Onions are produced in almost all the provinces of South Africa.

During the 2001/02 season, onions contributed approximately 13,6% to the value of vegetables, excluding potatoes, produced in South Africa.

Approximately 334100 tons of onions were produced during the 2001/02 season. This is 13,7% lower than the highest production ever, i.e. 387000 tons, produced during the 1998/99 season. However, the production during the 2001/02 season was 3,4% more than the 323260 tons of 2000/01.



### Sales

Approximately 73% of the total onion production during the 2001/02 season was sold on fresh produce markets, while 7% was exported. The remainder comprises own consumption, direct sales to supermarkets and chain stores, as well as processing. During the period 1997/98 to 2001/02, the sales of onions on the fresh produce markets grew by an annual average rate of 10,6%.



### Prices

The average price of onions sold on the fresh produce markets increased slightly by 2,6%, from R1438 per ton in 2000/01 to R1476 per ton in 2001/02.



#### Processing

Only 1% of the total production of onions was taken in for processing during the 2001/02 season, of which 65% was dehydrated, 20% was canned, while the remaining 15% was frozen or used for oil extraction. From 2000/01 to 2001/02, onions taken in for processing decreased slightly, from 3509 tons to 3496 tons.

### Exports

During the 2001/02 season, onions exported represented about 7% of the total onion crop. Between 2000/01 and 2001/02, onion exports increased by approximately 48%, from 15773 tons to 23316 tons.

# Potatoes

There are 14 potato production regions in South Africa, of which the eastern Free State is the largest, constituting approximately 20 % of the total area planted to onions.

### Area planted

The area planted during the 2001 season was 53786 ha, which is 1,1% or 593 ha more than the plantings for the previous season. Since 1997, there has been a moderate decrease in the hectares planted, from 55 147 to 53786 ha, which represents an average decrease of 0,6% per annum.

### Production

Potatoes contributed approximately 43% to the total gross value of vegetables produced during 2001, i.e. 13,5% of the horticultural products, and 3,5% of all the agricultural products. In terms of world production, South Africa is not an important role-player, as it produces only 0,5% of the world production and it is ranked number 31.



\*Forecast

In 1997, the total average yield was approximately 2 960 x 10 kg pockets of potatoes per ha compared to 3000 x 10 kg pockets per ha in 2001, which is an increase of 1,4%. This increase in the yield of potatoes can be attributed to:

- better quality seed
- improved cultivars becoming available due to the local breeding programme and the importation and evaluation of foreign cultivars
- better utilisation of research results

#### Sales

During 2001, approximately 90 million x 10 kg pockets of potatoes were sold on the 16 major fresh produce markets, as against the 86,8 million of 2000 and the 95,1 million of 1999.



During 2001, approximately 46% of potato sales on the fresh produce markets took place in Gauteng, comprising the Johannesburg, Pretoria and Springs markets. The Johannesburg fresh produce market remains the biggest seller of potatoes, followed by Pretoria, Cape Town and Durban.

Over the five years up to 2001, potato sales on the fresh produce markets showed an average growth rate of approximately 1,5% per annum. During the first six months of 2002, sales decreased by approximately 7,1% compared to the corresponding period in 2001.



#### Consumption

The total gross human consumption of potatoes increased by approximately 9 % during 2001 and the *per capita* consumption decreased by 6,2 %.

Year	1997	1998	1999	2000	2001
Total production ('000 tons)	1 579	1555	1671	1 589	1 602
Gross human consumption ('000 tons)	1331	1 2 8 9	1434	1 347	1 468
Per capita consumption (kg p.a.)	32,28	30,59	33,30	30,61	32,52



### Prices

Between 1997 and 2001, potato prices realised on the major fresh produce markets increased by an average of 7,7% per annum.



\*Forecast

#### Processing

The processing of potatoes showed an upward trend between 1997 and 2001. During 2001, approximately 17% of the total production of potatoes was taken in for processing. About 60% of the potatoes taken in for processing was processed into potato chips, both fresh and frozen, while the remaining 40% was used for mixed vegetables, crisps, canning, etc.

#### Exports

During 2001, about 7% of the total potato production was exported. The quantity of potatoes exported increased by 6% during 2001 as compared to 2000. The rand price of exported potatoes increased by approximately 33 % during 2001. There has been an improvement of trade between South Africa and the other SADC countries. During 2001, approximately 91 % of total potato exports was destined for SADC countries, i.e. Angola, Mozambique, Mauritius and Zimbabwe.

Potatoes offered for export have to comply with the quality standards prescribed in the export regulations, as well as the phytosanitary requirements of the importing countries.

# ANIMAL PRODUCTION

### Livestock numbers

Approximately 59 % of the total land area of South Africa consists of natural grazing and can only be utilised by cattle, sheep, goats, donkeys and wildlife. As rainfall plays a major role in the availability of fodder and grazing, it is logical that a good correlation would exist between rainfall and the size of the national herd.

Good rains during the last quarter of 2001 as well as late summer rains during the first quarter of 2002, over most parts of the extensive livestock producing areas, eased the pressure from grazing and improved the outlook for winter grazing. Good grazing conditions together with high agricultural commodity prices are some of the contributing factors that have led producers to expand their herds and flocks.

### Cattle

Cattle are found throughout the country, but particularly in the Eastern Cape, KwaZulu-Natal, the Free State and the northern provinces. Herd sizes vary by farm type. Dairy cattle herd sizes vary between less than 50 and 300, averaging approximately 110. Beef cattle farms range from fairly small farms (less than 50 cattle) to large farms and feedlots with more than 1 000 cattle per farm.

The total number of cattle in South Africa at the end of May 2002 was estimated at 13,72 million, consisting of various international dairy and beef cattle breeds, as well as indigenous breeds such as the Afrikaner and Nguni. The numbers were approximately 1,6 % higher than the estimate of 13,51 million as at the end of August 2001.

Province	1998	1999	2000	2001	2002*
			' 000 head (Au	igust)	
Western Cape	503	505	509	489	473
Northern Cape	478	460	476	464	471
Free State	2 193	2 190	2 148	2 241	2 299
Eastern Cape	2 937	2 951	2 975	3 039	3 165
KwaZulu-Natal	3 002	2 889	2 797	2 736	2 789
Mpumalanga	1 414	1 367	1 344	1 328	1 338
Limpopo	1 225	1 167	1 173	1 203	1 186
Gauteng	264	303	287	282	265
North West	1 756	1 748	1 752	1 724	1 736
Total	13 772	13 580	13 461	13 506	13 722

Cattle numbers per province since 1998 are estimated to be as follows:

\*May 2002 estimate



#### Sheep

Although sheep farms are found in all provinces, they are concentrated in the more arid parts of the country. The largest numbers of sheep are found in the Eastern Cape, Northern Cape, Free State and Western Cape Provinces.

It is expected that the national sheep herd will increase over the next few years, given the optimism in the industry due to the higher wool and meat prices as well as the improved production conditions as a result of the favourable weather conditions over the past few seasons.

Mutton production is expected to increase, owing to the swing to meat-type sheep over the past few years.

The total number of sheep in South Africa at the end of May 2002 is estimated at 29,1 million—approximately 1,06 % higher than the estimated 28,8 million as at the end of August 2001. The number of sheep in the various provinces since 1998 is estimated to be as follows:

Province	1998	1999	2000	2001	2002*
			' 000 head (Au	gust)	
Western Cape	3 524	3 459	3 349	3 261	3 082
Northern Cape	7 741	7 337	7 741	7 882	8 163
Free State	5 914	5 855	5 831	8 154	6 011
Eastern Cape	8 118	8 067	7 917	8 154	8 263
KwaZulu-Natal	1 058	970	887	888	876
Mpumalanga	1 846	1 848	1 743	1 694	1 691
Limpopo	221	216	206	210	210
Gauteng	88	92	91	91	73
North West	835	836	762	725	721
Total	29 345	28 680	28 551	28 786	29 090



\*May 2002 estimate

### Goats

Most goats are found in the Eastern Cape, Limpopo, KwaZulu-Natal, and North West provinces. It is estimated that there was a 0,6 % increase in the number of goats, from 6,8 million in August 2001 to 6,9 million in May 2002.

Flocks of goats kept for meat tend to be smaller than sheep flocks, averaging approximately 230 head per farm. Angora goats are primarily kept for mohair production.



### Pigs

Pigs are found predominantly in the Eastern Cape, Western Cape and Mpumalanga. Pigs are kept mainly for pork (95 %). The remainder is kept for breeding purposes. It is estimated that pig numbers increased from 1,592 million in August 2001 to 1,599 million (0,44 %) in May 2002.



### **Red meat**

The red meat industry is one of the most important industries in the agricultural sector and contributes approximately 12 % to the gross value of agricultural products produced in the RSA. While sheep farming is mainly extensive, a large portion of beef animals derive from feedlots.

### Slaughtering

The total number of cattle slaughtered stayed virtually unchanged between 2000 and 2001, while the number of sheep and pigs slaughtered increased by 7,5 and 6,8 % respectively.

Commercial slaughtering of red meat producing livestock types over the past five years is as follows:

Year	1997	1998	1999	2000	2001
Cattle	1 567 635	1 750 000	1 907 785	1 927 357	1 928 084
Sheep and lamb	4 064 573	4 475 000	4 872 077	4 351 201	4 679 944
Pigs	1 846 517	1 870 000	1 851 993	1 780 411	1 900 532

#### Auction prices

The prices for red meat are mainly the result of the interaction between demand and supply, which are influenced by the level of the consumers' disposable income, the price of substitute products and import parity prices. In the case of mutton, for example, the level of wool prices influences the domestic supply of mutton.

The average producer price of beef for 2001 amounted to R9,24/kg (average for all classes on all auction markets), which represents a 8,8 % increase compared to the average price of R8,49/kg for 2000.



In view of the ever-stronger influence of international trade on the local mutton industry, both the cyclical and seasonal price patterns for mutton are influenced by imports. The average producer price for mutton and lamb increased by 3,8 % during 2001 to R14,60/kg, compared to the average price of R14,06/kg for 2000.

The average producer price for pork increased by 5,7 % to R8,69/kg during 2001, compared to an average of R8,22/kg for 2000.

The local producer price for red meat during the first six months of 2002 was 20 % higher than during the first six months of 2001.

#### Imports

The exchange rate has an effect on the volumes of beef, mutton and pork imported. The weakening exchange rate decreased imports dramatically towards the end of 2001. Imports from outside the Southern African Customs Union (SACU) for 2001 amounted to approximately 5 208 tons of beef, a significant decrease of 75 % compared to the previous year. During 2001, 49 % of beef imports came from Zimbabwe.

Imports of mutton and lamb decreased by 33 %, from 51 002 tons during 2000 to 34 178 tons in 2001. During 2001, 84 % of total mutton imports from outside SACU came from Australia and 16,3 % from New Zealand.

Imports of pork decreased by 17,7 %, from 10 427 tons during 2000 to 8 579 tons during 2001. During 2001, 70 % of total pork imports came from the European Union, of which 46 % were from France.



The South African Meat Industry Company (SAMIC), with a board of directors drawn from the entire spectrum of the industry, endeavours to promote the long-term global success of the South African red meat industry. As a service provider, facilitator and communicator, SAMIC works towards a common value system with the aim to benefit the red meat industry as a whole.

### Prospects

Imports are expected to remain at relatively low levels due to the weakness of the rand and the new tariff measures of R2/kg on mutton and R2,40/kg on beef. It is expected that maize prices will remain high during 2002 and this will put further pressure on production costs of feedlots. This may lead to a reduction in output and a shortage of good quality meat, which will increase local producer and retail prices.

# Poultry

The poultry industry consists of three distinctly separate branches, namely the day-old chick supply industry, the broiler industry and the egg industry. This article focuses on the broiler and egg industries.

#### Broiler industry

A small number of large producers, less than ten, handle approximately 80% of the total broiler production in South Africa, while many small production units and the informal sector are responsible for the remaining 20%. According to a study done by Liebenberg & Reid in 1993, KwaZulu-Natal and the Western Cape each produces approximately 27% of the total production, followed by Gauteng and Mpumalanga with 13% each, based on gross income figures.

The number of broilers slaughtered by commercial producers during the 12 months up to 30 June 2002 is estimated at 545 million units. This is 1,4% more than the estimated 538 million units that had been slaughtered during the preceding 12 months. The gross value of broilers slaughtered by commercial producers during 2000/01 and 2001/02 are estimated at R5 892 million and R6 590 million respectively.



Prices of broilers tend to follow the red meat and pork cycles, with highs normally reached during Easter and December. The net realisation producer price of broilers (excluding offal) increased by 10,3% during 2000/01 and by 10,2% during 2001/02.



Year	1999/2000	2000/01 c/kg	2001/02
Broiler meat: total realisation (excluding offal)	736	812	895

It is estimated that the ratio of poultry meat consumption to red meat consumption in South Africa varies around 50/50 and that there was a slight decrease in total consumption of poultry meat between 2000/01 and 2001/02, which resulted in a larger decrease in *per capita* consumption.

Due to the antidumping duty instituted in 2000, poultry imports decreased from 93 500 tons during 2000 to 77 482 tons during 2001. There was a further reduction of imports during the first quarter of 2002 as a result of currency movements, making landed prices of imported products more expensive.

After having decreased by 25 % during 2000/01, imports of chicken meat decreased by a further 9,6%, from 77 922 tons to 70 461 tons, during 2001/02. Imports still represent approximately 10% of local poultry meat consumption.

During 2002, the cost of feed increased dramatically, mainly due to the devaluation of the rand. The average cost of feed ingredients to broiler producers increased by 40% from 2000/01 to 2001/02. This represents a 20% increase in overall costs.

### Egg industry

According to the study done by Liebenberg & Reid in 1993, Gauteng and the Western Cape respectively produce approximately 27 and 24% of the total egg production, followed by North West with 15% and KwaZulu-Natal with 13%, based on gross income figures.

The national hen population increased slightly from an average of 17,2 million hens during 2000/01 to an estimated average of approximately 17,3 million hens during 2001/02.



It is estimated that both the local consumption and *per capita* consumption of eggs remained virtually unchanged between 2000/01 and 2001/02.

Producer prices of eggs (average including all sizes) increased by 12,6 % from 2001 to 2002.

Year	1997/98	1998/99	1999/2000	2000/01	2001/02
			c/doz.		
Price of eggs	382,8	352,3	356,2	395,4	445,4

### Prospects

With the threat of imports being curbed by antidumping duties, it can be expected that the broiler industry will look to future expansion should the economy break out of the low 2 to 3% growth pattern. However, it is expected that any increase in production will be gradual, following the stagnation characterising the last 3 years.

The increase in feed costs as a result of the increase in the price of maize and other summer grain crops will impact negatively on the growth and profitability of the industry. Imports of poultry during 2002 are expected to end at a slightly lower level than that of 2001.

The production of eggs is expected to decrease slightly, mainly due to the high level of feed costs that are not being met by retail price adjustments. As a result, the price of eggs is expected to move sideways.

### Milk

Milk is produced in nearly all regions of South Africa. However, the coastal areas are more suitable because of mild temperatures and good rainfall. These conditions make possible low cost production systems possible due to good-quality natural and artificial pastures. In 2001, the Western Cape contributed 26,5% to total production, Eastern Cape 22%, KwaZulu-Natal 20%, North West 12,3%, Free State 10%, and the remaining four provinces 9,3%. Since then, structural shifts have taken place with regard to production areas, towards the coastal areas and away from the interior.



Milk production in South Africa makes a very small contribution to world milk production (approximately 0,5%), but in terms of the value of agricultural production in South Africa, it is the fifth largest agricultural industry in the country. The gross value of milk produced during the 2001/02 production season (March—February), including milk that was produced for own consumption on farms, is estimated at R3898 million. Local production of milk has decreased since 1999. This was in reaction to a decrease in prices due to oversupply during the 1998/99 season. The level of production dropped to such an extent that seasonal undersupplies occurred during the winter months of 2001 and 2002. However, due to high stock levels, no serious shortages in supplying the local market were experienced.

## Imports and exports

During 2000, exports of 29669 tons of products exceeded the imports of 27105 tons and the situation repeated itself during 2001 when 20759 tons of products were exported against imports of 17759 tons. The main products that were imported were concentrated milk and powders, whey, butter and milk fats.

### Prices

The average producer price for 2001/02 came to 142 c/l.

Production season	1997/98	1998/99	1999/2000	2000/01	2001/02
			c/l		
Average producer price	125,3	110,9	113,0	129,0	142,0

### Prospects

It is expected that the production of milk for 2002 will be approximately 5% less than the previous year, mainly because of a bigger seasonal undersupply during the winter months. The producer price of milk increased from approximately 145 c/l during January 2002, to 185 c/l during July 2002. Expectations are that the prices will stabilise. Due to the positive international provision situation, stocks are expected to remain at reasonable levels.

# Mohair

# Production

South Africa's production figures on mohair showed a downward trend from 5,2 million kg to 4,2 million kg during the period 1997 to 2001. This downward trend in production was mild in comparison with those of the USA

(2,5 to 0,8 million kg), Argentina (0,4 to 0,3 million kg) and Australia (0,3 to 0,2 million kg). Production by New Zealand varied around 0,2 million kg during this period. South Africa's share (excluding Lesotho) of the world production during 2001 was 61 %.

Year	1997	1998	1999	2000	2001
			Million kg		
Production	5,2	5,0	4,5	4,3	4,2

Production of mohair by South Africa during the period 1997 to 2001 is as follows:

### Prices

The average realisation of the South African clip improved quite substantially from R25,06/kg in 1997 to R44,55 /kg in 2001. However, the reason for the decrease in price between 2000 and 2001, is a resistance to price on secondary level (against prices of semi-processed mohair) that lead to pressure on producer prices.

Average prices for mohair for the period 1997 to 2001 are as follows:

Year	1997	1998	1999	2000	2001
			R/kg		
Price	25,06	27,85	39,46	52,28	44,55



### Exports

Mohair is in essence an export commodity for South Africa. During 1997, the total mohair exports reached an unsatisfactory level of 3,5 million kg. Within the next two years, exports increased to 7,5 million kg, after which it decreased to 4,4 million kg during 2001. Exports decreased during 2001 due to a drastic decline in mohair imports used for processing and re-exporting.

Export figures for the period 1997 to 2001:

Year	1997	1998	1999	2000	2001
			Million kg		
Exports	3,5	4,9	7,5	5,6	4,4

