

South Africa Yearbook **2020/21**

Agriculture and Rural Development



Agriculture, Land Reform and Rural Development

The mandate of the Department of Agriculture, Land Reform and Rural Development (DALRRD) includes developing agricultural value chains, providing agricultural inputs, and monitoring production and consumption in the agriculture sector, as well as facilitating comprehensive rural development.

Chapter 6 of the National Development Plan (NDP) envisions an integrated and inclusive economy that involves the expansion of agricultural activity, the need for effective land reform and the promotion of sustainable rural development. This vision is expressed specifically in terms of Priority 1 (economic transformation and job creation) of government's 2019 – 2024 Medium Term Strategic Framework, with which the work of the DALRRD is directly aligned.

The nature and extent of the department's interventions are, therefore, underpinned by reducing poverty and inequality, and creating employment by allocating adequate resources and requisite skills to address the persistent challenges associated with agriculture, land reform and rural development in South Africa.

Accordingly, over the medium term, the DALRRD will focus on improving agricultural production and revitalising essential agricultural infrastructure through the implementation of the Agriculture and Agro-processing Master Plan, accelerating land reform by implementing the Comprehensive Land Agrarian Strategy and finalising land restitution claims, and mitigating and preventing the outbreak of diseases among livestock and products within the agricultural value chain.

Improving agricultural production and revitalising infrastructure

The Agriculture and Agro-processing Master Plan aims to expand production and food security through agricultural production schemes; provide comprehensive post-settlement support, extension services and farmer training; and facilitate the revitalisation of essential infrastructure and equitable access to critical factors of production.

Over the Medium Term Expenditure Framework (MTEF) period, spending in the Agricultural Production, Biosecurity and Natural Resources Management programme is expected to contribute R70 billion in gross production value and support an estimated 1.3 million households. Over the same period, the bulk of spending in the Rural Infrastructure Development subprogramme will be directed to revitalising infrastructure and providing equitable access to critical factors of production, such as land, water and technology.

Infrastructure revitalisation projects that will be prioritised over the period ahead include five irrigation schemes, to make crop production schemes functional in rural areas and 21 fresh produce markets across the country. To carry out these and other activities, the Rural Infrastructure Development subprogramme has been allocated R2.3 billion.

The DALRRD will continue to provide comprehensive post-settlement support and farmer training. It is currently working on plans to reduce the ratio of extension officers to farmers from 1:850 to 1:250. This will be achieved by recruiting approximately 10 000 extension officers across the country, as part of extension recovery services. To this end, R923.5 million is allocated over the MTEF period in the Food Security, Land Reform and Restitution programme to fund the Comprehensive Agricultural Support Programme (CASP) Grant.

Accelerating land reform

The Comprehensive Land Agrarian Strategy seeks effective land reform and administration. In implementing the strategy, the department plans to spend R2.9 billion in the Food Security, Land Reform and Restitution programme to acquire 79 602 hectares (ha) of strategically located land.

The DALRRD also expects to finalise 1 409 restitution claims, over the medium term, with an allocation of R9.3 billion in the Restitution subprogramme.

Mitigating and preventing outbreaks

The DALRRD has allocated R495 million over the medium term in the Agricultural Production, Biosecurity and Natural Resources Management programme to mitigate and prevent the outbreak of diseases.

This will be achieved through increasing capacity for research and development, expanding South Africa's biosecurity measures to improve safety and the quality of agricultural products, and working with the Agricultural Research Council and Onderstepoort Biological Products to strengthen the policy and legislative framework.

Legislation and frameworks

The DALRRD executes its legislative mandate by implementing, managing and overseeing the following key pieces of legislation, among others:

- the Restitution of Land Rights Act, 1994 (Act 22 of 1994), which makes provision for the restitution of rights to land to people or communities dispossessed of such rights after 19 June 1913 as a result of racially discriminatory laws or practices of the past. To administer this task, the Act established a Commission on the Restitution of Land Rights and a Land Claims Court;
- the Provision of Land and Assistance Act, 1993 (Act 126 of 1993), which makes provision for the designation of certain land, the regulation of the subdivision of such land and the settlement of persons thereon. It also provides for the acquisition, maintenance, planning, development, improvement and disposal of property, and the provision of financial assistance for land reform purposes;
- the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013), which seeks to enable the transformation of South Africa's settlement patterns by adopting a new approach to spatial planning and land use management;
- the Agricultural Product Standards Act, 1990 (Act 119 of 1990), which provides for control over the sale and export of certain agricultural products, and the sale of some imported agricultural products; and
- the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983), which makes provision for control over use of the country's natural agricultural resources to conserve soil, water sources and vegetation.

Budget and funding

The initial allocation for the DALRRD, in 2020/21, was R16.8 billion. This budget was re-adjusted to R14.4 billion during the Supplementary Budget Vote in June 2020. The budget cuts did not affect the department's medium-term allocations for biosecurity and supporting exports, amounting to R495.1 million and the R500 million to finalise land claims.

Furthermore, the cuts were not extended to the Agricultural Research Council (ARC) which was already experiencing cash flow challenges. The allocation also includes transfers to provincial departments of agriculture. These allocations relate to:

- Ilima/Letsema conditional grants – R428 million;
- CASP Infrastructure Grant – R965 million;
- CASP upgrade of colleges – R25 million; and
- CASP extension services – R214 million.

Agriculture

Within the global context, South Africa's agricultural sector has the characteristic of having a greater degree of mechanisation and technological application than other African countries. The sector contributes to less than 5% of South Africa's gross domestic product (GDP) and provides employment to nearly 6% of the total labour force.

All elements of the agricultural value chain, including production, research, transport, manufacturing, retail and waste of agricultural products are at a vital point of change. There is growing discourse and attention being paid to impacts on health and well-being, nutrition and the environment. Within this context, national policy aims to accomplish sustainable and inclusive economic growth while feeding a growing population and reducing disparities regarding land ownership and distribution.

In 2021, the outlook on agriculture was positive and the sector was expected to show strong growth figures and create employment. This was supported by good weather, expansion in area plantings and improving business confidence in the agriculture and agribusiness sectors. Effective public-private

partnerships and transparency in policy making partly underpin the positive business confidence in the sector.

The agriculture sector recorded strong growth in 2020, with an annual gross value added of 11.3% in the first three quarters of the year, relative to the same period in 2019. Growth in each quarter was underpinned by production recoveries in horticulture, grain and livestock. The outlook for 2021 is positive, although growth is not expected to match that of 2020.

Favourable weather conditions and strong international demand for agricultural exports will continue to support production growth. Trade disruptions, for example through resumptions of global lockdowns, could threaten the sector's strong export performance. Over the medium term, policy uncertainty and non-tariff barriers, such as quotas and quality standards, pose challenges to the sector.

Agriculture's role in the national and international economy

According to the *Agriculture Survey, 2019*, published in May 2021, total income earned in the agriculture and related services industry was R351.4 billion in 2019, compared with R314.0 billion in 2017.

The total income figures reflect an annualised increase of 5.8% between 2017 and 2019. In 2019, animals and animal products generated the largest sales (R153.1 billion), followed by horticultural crops and products (R86.3 billion) and field crops (R61.9 billion).

The highest annualised percentage increase was recorded for income earned from the sale of animals and animal products (9.1%), followed by horticultural crops and products (8.0%) and field crops (2.2%). The total number of persons employed in the agriculture and related services industry as at the end of June 2019 was 768 171, compared to 764 428 in June 2017, an annualised increase of 0.2%.

According to the *Economic Review of the South African Agriculture 2019/20*, the value of agricultural production in South Africa increased by 11.9% and amounted to R319 732 million in 2019/20, compared to R285 604 million in the previous financial year. This was mainly driven by the increase in the value of field

crops by 21.7%, horticultural products by 17.9% and animal products by 3.7%.

The contribution of agriculture to the GDP decreased by 9.8% and was estimated at R81 337 million in 2019. The primary agricultural sector has shown a growth of 7.6% annually since 1994, while the country's economy grew by 10.5% per annum over the same period.

Despite its relatively small share of the total GDP, primary agriculture is an important sector in the South African economy. It remains a significant provider of employment, especially in the rural areas, and a major earner of foreign exchange.

Agriculture's prominent, indirect role in the economy is a function of backward and forward linkages to other sectors. Purchases of goods such as fertiliser, chemicals and implements, form backward linkages with the manufacturing sector, while forward linkages are established through supplying raw materials to the manufacturing industry. About 70% of agricultural output is used as intermediate products in the sector. Agriculture is, therefore, a crucial sector and an important engine of growth for the rest of the economy.

Gross farming income from all agricultural products increased by 10.2% to R307 851 million for the year ended 30 June 2019, from R279 478 million the previous period. This was mainly driven by the increase in gross income from horticultural products by 18%, field crops by 11.6% and animal products by 4.3%.

The weighted average price received by farmers for their agricultural products increased by 2.4% due to the increase in prices of field crops by 9.5% and horticultural products by 2.1%.

The weighted average price of field crops increased by 9.5% as the result of the increase in the prices of oilseeds by 13.2%, summer grains by 10.0%, hay by 8.8%, sugar cane by 8.6% and winter grains by 8.4%. The weighted average price of horticultural products increased by 2.1% due to the increase in the prices of viticulture by 7.5%, fruit by 1.8% and vegetables slightly by 0.8%.

The weighted average price of animal products decreased slightly by 0.7% due to the decrease in prices of pastoral products and poultry meat by 15.8% and 1.7%, respectively.

The prices paid for farming requisites, including machinery and implements, material for fixed improvements, together with intermediate goods and services, increased by 2.8%, compared to 4.3% the previous period. The prices of animal health and crop protection, seed and feed increased by 4.5% each, fencing material by 2.3%, building material by 2.1%, fertilisers by 1.9%, tractors by 1.7%, packing material by 1.6% and trucks by 1.2%.

The domestic terms of trade showed a decrease of 1.0% due to the increase in production costs by 2.8%, as opposed to the increase of 2.4% in prices earned by farmers. The net farming income increased drastically, by 27.5%, and amounted to R164 667 million for the period ended June 2020, compared to R154 948 million the previous period.

Agricultural performance during COVID-19

On 26 March 2020, South Africa went into a total shutdown in order to contain the spread of COVID-19 and save lives. The agricultural and food sectors were declared essential services, implying that they were allowed to continue operating, except exports of wool, wine, mohair, cotton and floriculture. As such, the sector was not heavily affected, except the aforementioned few industries.

The processing of food was also not heavily affected on the supply side, although there were disruptions in certain inputs and ancillary services, especially for small- and medium-size enterprise agro-processors. The demand side was, however, significantly affected by the closure of schools (affecting feeding schemes), restaurants, hospitality and limitations within informal trading systems, which all affected the aggregate demand for food.

Port capacity and operations were also impacted by the hard lockdown, which affected the exports and imports of agriculture and food products such as citrus, wheat and maize.

To protect and support farmers during the COVID-19 lockdown, the State and its social partners developed some measures which were implemented immediately.

These include:

- the creation of a R1.2 billion fund to assist smallholder farmers with harvesting and planting, focusing on poultry, vegetables and other crops;
- sustaining trade and food pricing during COVID-19 shutdowns;

- the creation of food banks to support poor communities; and
- accelerating the approval of statutory measures to support the financing of industry functions.

As a result, South Africa's agricultural sector performed remarkably well during the pandemic. In 2020, South Africa became the world's second-largest exporter of citrus, with strong export growth in wine, maize, nuts, deciduous fruit and sugar cane. The favourable weather conditions in 2020 and the beginning of 2021 mean that agriculture was likely to grow in the near term – providing an opportunity for further public-private partnership in agriculture, to promote transformation and ensure sustainable growth.

This provided an opportunity for the acceleration of land redistribution through a variety of instruments, such as land restitution and expropriation of land, in order to boost agricultural output. Government has redistributed over five million ha of land, totalling around 5 500 farms, to more than 300 000 beneficiaries. This is in addition to the land restitution process, which has benefited over two million land claimants and resulted in the transfer of around 2.7 million ha.

Government is also pursuing programmes to assist smallholder and emerging farmers with market access, to develop skills across the entire agricultural value chain and increase the number of commercial black farmers. During the course of the next financial year, government plans to establish a land and agrarian reform agency to fast-track land reform.

GDP results for the fourth quarter of 2020 showed that the agriculture, forestry and fishing industry increased by 13.1%, while general government increased by 0.7% in 2020. This surpassed the initial expectation of 10% by analysts in the sector. Positive numbers for the agricultural sector are a good testimony to the collaborative efforts that government, farmers, industry captains and other value chain players embarked on in 2020, in the midst of the worst pandemic in recent history.

Volume of agricultural production

The estimated volume of agricultural production in 2019/20 was 5.4% more than the previous year. The field crop production volume for 2019/20 increased by 13.4%, mainly as a result of increases in the production of summer crops (maize and

sorghum) and oilseed crops (soya bean, sunflower seed and groundnuts). Maize production increased by 4.3 million tons (t) (36.0%) and sorghum by 13 670 t (9.4%) from 2018/19. Soya bean production increased by 120 410 t (10.3%), sunflower seed by 91 450 t (13.0%) and groundnuts by 37 050 t (168.8%).

Horticultural production for 2019/20 increased by 0.2% from the previous season, which can mainly be attributed to increases in the production of vegetables and deciduous fruits. The production of tomatoes increased by 32 250 t (5.8%), pumpkins by 10 354 t (3.9%), sweet potatoes by 6 164 t (7.5%), cabbage by 2 738 t (1.7%), lettuce by 1 127 t (3.6%) and cucumbers by 425 t (1.5%), which all contributed to an increase in the production of vegetables, compared to 2018/19. Furthermore, the production of apples increased by 49 056 t (5.5%), wine and table grapes by 35 884 t (1.9%) and 13 109 t (4.2%) respectively, peaches by 12 987 t (9.3%) and plums by 1 635 t (2.8%), which all led to an increase in the production of deciduous fruit from the previous season.

Animal production increased by 5.0%, mainly as a result of increases in the production of stock slaughtered (cattle and calves, sheep and lamb, pork and goats), poultry (poultry meat and eggs) and fresh milk for 2019/20, as compared to the previous year. The production of stock slaughtered for cattle and calves increased by 26 332 t (3.2%), sheep and lamb by 18 476 t (18.9%), pork by 15 829 t (6.2%) and goats by 26 t (1.8%) compared to 2018/19. Furthermore, the production of poultry meat increased by 90 451 t (5.1%), eggs by 57 532 t (9.8%) and fresh milk by 31 504 litres or 0.8%, compared to the previous season.

Farming income

According to the *Crops and Markets Fourth Quarter 2020*, gross income from all agricultural products increased by 15.8%, to an estimated amount of R327 138 million, for the period ended 31 December 2020. This was mainly the result of the increase in income earned from field crops by 37.2%, horticulture by 17.8% and animal products by 5.8%.

The income from field crops increased significantly by 37.2%, due to the increase in income obtained from groundnuts by 161.5%, grain sorghum (66.0%), wheat (57.2%), soya beans

(45.9%), maize (41.9%), sunflower seed (26.8%), sugar cane (25.2%) and dry beans (8.6%).

The income from horticultural products increased by 17.8%, due to the increase in income made from citrus fruit by 53.4%, deciduous and other fruit (11.2%), vegetables (7.5%), viticulture (7.3%) and subtropical fruit (2.9%).

The increase of 5.8% in income from animal products resulted from the increase in income from sheep slaughtered by 14.8%, milk by 12.6%, cattle and calves by 5.9%, poultry meat by 5.1% and eggs by 2.7%.

Consumer prices

The consumer prices of all agricultural products increased by 3.7% for the year ended June 2020, compared to 4.4% the previous period. The consumer prices of food and non-food items increased by 3.9% and 3.6% respectively. The consumer prices of grain products increased by 6.1%, milk, eggs and cheese by 4.1% and meat by 2.9%.

The consumer prices of fruit increased by 7.1%, sugar (6.1%), fish (5.8%), fats and oils (4.6%), other food (4.3%), vegetables (2.2%) and coffee and tea (1.6%).

Imports and exports of agricultural products

According to the 2020 agricultural export figures, citrus fruit (R27 808 million), grapes (R10 471 million), apples, pears and quinces (R9 493 million), wine (R9 314 million) and maize (R6 952 million) were the five most important export products in terms of value.

With regard to agricultural imports during 2020, rice (R8 939 million), wheat (R8 037 million), palm oil (R5 323 million), meat and offal of fowls (R5 110 million) and food preparations (R3 188 million) were the five major products in terms of value.

In terms of exports of agricultural products by South Africa during 2020, the five-largest trading partners were the Netherlands, with exports to the value of R16 991 million, the United Kingdom (R13 077 million), China (R10 595 million), Mozambique (R8 091 million) and Zimbabwe (R7 232 million).

Products

Crop estimates

According to the first production forecast for summer crops by the Crop Estimates Committee for the 2021 production season, the expected South African maize crop was 15.849 million t, – 3.6% more than the 15.300 million t for the 2020 season, and 24.4% or 3.112 million t more than the five-year average of 12.737 million t up to 2020. This is the second-largest maize crop ever produced in South Africa.

The estimated area that South African commercial producers planted to maize during the 2021 season was 2.751 million ha. This was 5.4% or 140 100 ha more than the 2.611 million ha planted in the previous season. Of this area, 1.325 million ha (48.2%) were in the Free State, 573 000 ha (20.8%) in North West and 525 000 ha (19.1%) in Mpumalanga.

The plantings of maize in the Free State increased by an estimated 8.6%, from 1.220 million ha in 2020 to 1.325 million ha in 2021, and in the North West, it increased by 1.4%, from 565 000 ha to 573 000 ha.

Plantings in Mpumalanga increased by an estimated 2.3%, from 513 000 ha in 2020 to 525 000 ha in 2021. The ratio of white to yellow maize plantings for 2021 was 61:39, as against 62:38 the previous season. The estimated white maize plantings were 1.682 million ha – 4.1% more than the previous season's 1.616 million ha, while the yellow maize plantings were estimated to be 1.069 million ha – 7.4% more than the 994 500 ha for 2020.

Most of the country's maize crop was produced in the Free State (44.3%), Mpumalanga (22.4%) and North West (17.0%). The production forecast for white maize was 8.799 million t, which was 3.0% or 251 860 t more than the 8.548 million t of 2020 and 2.008 million t more than the average of the five years up to 2020. The expected yield for white maize was 5.23 t/ha, as against 5.29 t/ha the previous season.

In the case of yellow maize, the production forecast was 7.050 million t – 4.4% or 297 100 t more than the 6.752 million t the previous season, and 1.104 million t more than the five-year average up to 2020. The yield for yellow maize was expected to be 6.60 t/ha, as against 6.79 t/ha in 2020.

The expected sunflower seed crop was 712 940 t – 9.6% less than the 788 500 t of the previous season, and 9.9% less than the average of 791 500 t for the five years up to 2020. The area planted with sunflower seed was estimated at 474 800 ha, which was 5.1% less than the 500 300 ha planted in 2020. The expected yield was 1.50 t/ha, against 1.58 t/ha in the previous season.

The production forecast for soya beans was 1.621 million t, – 30.1% more than the 1.246 million t in the previous season. This is the largest soya beans crop ever produced in South Africa. The estimated area planted was 826 500 ha, which was 17.2% or 121 500 ha more than the 705 000 ha planted in 2020. The expected yield was 1.96 t/ha, as against 1.77 t/ha in 2020.

The expected groundnut crop was 58 425 t – 16.7% or 8 345 t more than the 50 080 t in the 2020 season and 11 183 t more than the five-year average of 47 242 t per annum up to 2020. The area planted with groundnuts was an estimated 40 050 ha – 6.8% or 2 550 ha more than the 37 500 ha planted the previous season. The expected yield was 1.46 t/ha, as against 1.34 t/ha in 2020.

The production forecast for sorghum was 170 590 t – 8.0% more than the 158 000 t of the previous season. The area planted to sorghum was estimated to be 46 200 ha, which was 8.7% or 3 700 ha more than the 42 500 ha planted in 2020. The expected yield was 3.69 t/ha, as against 3.72 t/ha the previous season.

The production of dry beans was expected to be 65 467 t – 1.0% or 667 t more than the 64 800 t of the previous season, and 4 570 t more than the five-year average of 60 897 t per annum up to 2020. The estimated area planted was 51 990 ha – 3.7% more than the 50 150 ha planted the previous season. The expected yield was 1.26 t/ha, as against 1.29 t/ha for 2020.

Grains

The DALRRD announced that South Africa would have sufficient staple grains supply in the 2020/21 marketing year, which started in May 2020 and ended in April 2021.

Data released by the DALRRD, in May 2020, showed that the 2020 summer grains harvest could amount to 17.5 million t, which is the second-biggest harvest in the history of this country.

South Africa will continue to export agricultural commodities and products, which are crucial for generating foreign exchange. The largest contributor towards the gross value of field crops for the past five seasons is maize (46.7%), followed by sugar cane (13.3%), wheat (9.8%), soya beans (8.8%) and sunflower seed (6.2%). The gross value of maize for 2019/20 amounted to R40 238 million, which is 42.8% more than in the previous year.

Despite the impact of COVID-19 and the measures imposed to flatten the curve, 2020 was a very good year for summer crops. By the time the lockdown measures were imposed, the crop was almost ready for harvest and weather conditions had been favourable, particularly in the western production regions.

Maize

Maize is the most important grain crop in South Africa, being both the major feed grain and the staple food of the majority of the country's population. The maize sector comprises both commercial and non-commercial farmers; the latter mostly in the Eastern Cape, Limpopo, Mpumalanga and northern KwaZulu-Natal provinces.

According to the *Trends in the Agricultural Sector 2020*, 56.7% of maize produced in South Africa is white and the remaining 43.3% is yellow. White maize is primarily used for human consumption, while yellow maize is mostly used for animal feed production. The gross value of agricultural production is determined by the quantity produced and prices received by producers.

The two main white maize-growing provinces in South Africa – the Free State and North West, produced about 81% of the white maize harvest in 2020, whereas the Free State and Mpumalanga produced about 67% of the yellow maize harvest.

Maize is planted during late spring/early summer, with optimal planting times in November and December. However, planting can start as early as October and extend to January. In a particular season, the rainfall pattern and other weather

conditions determine the planting period as well as the length of the growing season. Most of the maize is harvested from late May up to the end of August.

Sorghum

Sorghum is an indigenous crop in Africa, and is regarded as the fifth most important cereal in the world. There are two types of sorghum, namely bitter and sweet sorghum cultivars. Preference is given to the sweet cultivars. Bitter sorghum is planted in areas where birds are a problem because it contains tannin, which gives a bitter taste and consequently birds tend to avoid feeding on it.

Sorghum for commercial purposes is mainly produced in the western Free State, Mpumalanga, the drier parts of the North West and Limpopo provinces. Sorghum, like other grains, has two basic markets that it serves – the human component and the animal feed component. It is consumed mainly in the human food market and, as in the case of maize, consumers tend to replace sorghum-based products with preferred products as the household income increases.

During the 2020 production season, sorghum contributed only approximately 0.7% to the gross value of field crops. The projected commercial utilisation of sorghum for the 2020/21 marketing season was approximately 165 265 t, of which 154 600 t would be for human consumption (malt, meal and other uses) and 10 665 t for animal feed (poultry, pet, pigeon and ostrich feeds). Other uses would amount to 3 350 t. Projected exports during the 2020/21 marketing season were 8 000 t.

Wheat

In terms of value of production, wheat is the fourth most important field crop produced in South Africa and plays an important role in national food security. Most of the wheat produced in the country is bread wheat. Small quantities of durum wheat, used to make pasta, is produced in certain areas. In South Africa, wheat is mainly used for human consumption (including bread, biscuits, breakfast cereals and rusks) and the remaining as seed and animal feed.

Other non-food uses include the production of alcohol for

ethanol, absorbing agents for disposable diapers, adhesives and industrial uses, such as starch on coatings.

Wheat is mainly planted 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. The crop is harvested from November to January.

Wheat is generally classed as hard or soft. Hard wheat tends to have higher protein content than softer wheat and is used mainly for bread. Soft wheat, on the other hand, is more suitable for confectionery. The estimated area planted to wheat for the 2020 season was 509 800 ha.

South Africa is a net importer of wheat. The price farmers get for their crop is, therefore, tied to import parity. There is also an import tariff.

A quota of 300 000 t can be imported duty free from the European Union (EU) under the Economic Partnership Agreements. South Africa is expected to import almost two million t by 2026. South Africa remains the largest wheat producer in Sub-Saharan Africa, after Ethiopia.

Barley

Barley is one of the most important grain crops in South Africa, surpassed only by wheat and maize, and is following wheat, the most important small grain type.

The cultivation area for malting barley under dryland conditions is at present restricted to a very specific region, namely the southern Cape, which stretches from Bot River in the west to Heidelberg in the east. It would not be economically viable to cultivate malting barley on dryland in an area that does not receive 350 millimetres of well-distributed rainfall during the growing season (April to October).

The concentration of the production of a relatively minor commodity, for instance malting barley, in a specific area, has various advantages, for example, it facilitates transport, storage, control, extension and research, which also implies cost advantages.

However, because of the risk of unpredictable weather conditions in the southern Cape, barley production has also been introduced to the cooler central irrigation areas in the Northern Cape. There are also farmers in other areas of South Africa, such as North West, Limpopo and the Free State, who plant small quantities of malting barley under irrigation.

Malting barley under irrigation has a higher yield and is more stable than in the southern Cape, where the crop is dependent on rainfall. The area planted to malting barley for the 2020 season was estimated at 141 690 ha. For the 2020/21 marketing season, the total supply of malting barley was expected to be 813 700 t.

Barley is mainly used for the production of malt (for brewing beer), animal feed and pearl barley. The South African Breweries (SAB) has completed the construction of a new greenfield malting plant in Alrode. The new plant produces 110 000 t to 150 000 t of malt per year. This means malt is almost completely manufactured in South Africa, creating more jobs in the country. The new plant allows the SAB to reduce the amount of barley it imports.

Dry beans

Dry beans are warm-season annual legumes. Gross returns from dry beans can easily be higher than for soya beans. While yields are typically lower, dry beans fetch a relatively higher price.

South Africa has a dry bean deficit and relies on imports. This provides an opportunity for the whole of southern Africa to increase production. The crop is mainly produced in the Free State, KwaZulu-Natal, Limpopo, North West and the Northern Cape. Producers sell directly to the trade or to wholesalers and cooperatives.

The expected imports of dry beans increased by 102.3%, from 10 606 t in 2019/20 to 21 460 t in 2020/21. An estimated amount of 10 156 t and 1 872 t of dry beans were imported from Botswana and Ethiopia respectively, for the first nine months of 2020, representing 3% and 8.7% respectively, of the projected 21 460 t to be imported during the 2020/21 marketing season.

The projected exports of dry beans increased by 1.9%, from 15 699 t in 2019/20 to 16 000 t in the 2020/21 marketing season. An estimated amount of 5 559 t and 5 382 t of dry beans were exported to Zimbabwe and Eswatini respectively, during the first nine months of the 2020/21 marketing season.

This represents 34.7% and 33.6% respectively, of the projected exports of 16 000 t during the 2020/21 marketing season.

Oilseeds

Groundnuts

Groundnuts are grown mainly in the Free State, North West and Northern Cape. They are also produced in Limpopo, Mpumalanga and KwaZulu-Natal but production is lower in these provinces.

Oil made from groundnuts can be used for cooking and to make peanut butter. It can also be used to manufacture soap, massage oil, and shaving and hair creams.

According to the *Trends in the Agricultural Sector 2020*, an estimated total of 84 580 t of groundnuts was expected to be available for use during the 2020/21 marketing season. Carry-over stocks on 1 March 2020 amounted to 7 500 t and the estimated production was 50 080 t. Projected imports amount to approximately 27 000 t.

In South Africa, groundnuts are mainly consumed in two forms – as edible nuts and processed peanut butter. The local commercial consumption of groundnuts for 2020/21 was estimated at 73 300 t – 700 t for oil and oilcake, 40 500 t for peanut butter, 31 800 t for the direct edible market and 300 t as pods. Other consumption amounts to 2 100 t. The projected exports for 2020 were 8 600 t.

Sunflower seeds

Sunflower seeds can be planted from the beginning of November to the end of December in the eastern parts of the production areas, and up to the middle of January in the western parts. Sunflowers grow best when planted in midsummer, to ensure that less moisture is lost from the soil during the crucial growing phases. The Free State and North West are the major producers of sunflower seeds, followed by Limpopo, Mpumalanga and Gauteng.

South Africa is the world's 10th-largest producer of sunflower seeds. During the 2020 production season, the bulk of the crop was produced in the Free State (52.0%), North West (33.4%) and Limpopo (13.0%). Commercial seed production was approximately 785 910 t, while non-commercial agriculture contributed an estimated 31 204 t (3.8%) to total sunflower seeds production.

Compared to other crops, sunflower performs well under dry conditions. This is probably the main reason for the crop's popularity in marginal production areas in South Africa. A close link exists between the area planted to maize and the area planted to sunflower seed because farmers can easily switch to sunflower if the normal period for maize planting has passed.

Major exporters of sunflower seeds to South Africa are Romania, Botswana, Bulgaria and Argentina. Importing from the Southern African Development Community (SADC) countries utilises the SADC Free Trade Agreement, which facilitates the flow of commodities among countries in the region at no tariff charges.

The sale of sunflower seeds is mostly to the domestic market, with very small quantities destined for the export market. Mostly, South Africa remains a net importer of sunflower seeds.

Soya beans

Soya beans are produced mainly in Mpumalanga, the Free State and KwaZulu-Natal. Small quantities are also produced in Limpopo, Gauteng and North West. Various soya bean cultivars have adapted quite well to South African conditions. Depending on prevailing local conditions, soya beans are usually planted in November and December.

In South Africa, soya beans are mainly used for animal feed. The local demand for soya bean meal, as the preferred source of protein for animal feed, has increased in correlation with the increase in poultry production in South Africa and more than doubled over the past decade.

During the 2020 season, soya beans were grown primarily in the Free State (315 000 ha or 44.7%), Mpumalanga (260 000 ha or 36.9%), North West (40 000 ha or 5.7%), Gauteng (36 000 ha or 5.1%) and KwaZulu-Natal (35 000 ha or 5.0%). An estimated 705 000 ha were planted for commercial use, compared to an estimated 730 500 ha the previous season – a decrease of 3.5%.

From being one of the most dynamic sectors in the South African agriculture sector over the past decade, the soya bean industry is now maturing and further expansion is expected to occur at a much slower rate. Total soya bean processing capacity in South Africa (crush and full fat) is derived from a

combination of dedicated soya bean processing facilities, as well as plants with the ability to switch between soya beans and sunflower seeds.

A return to longer-term trend yields and the substantial area expansion projected in 2021 was expected to be sufficient for dedicated soya bean processing facilities to reach a benchmark use rate of 80%. Combined with dual plants, however, total capacity is more than two million t, suggesting that South Africa has ample capacity to process (crush and full fat) the projected volumes until 2026, provided that crush margins are sufficient to induce switching of dual plants into soya bean crushing.

Canola

Almost the entire canola crop in South Africa is produced in the Western Cape. Over time, farmers in areas such as the Eastern Cape, KwaZulu-Natal, Limpopo and North West also started to plant small quantities of canola. Canola competes on the local market with other oilseeds, such as sunflower seeds and soya beans.

Local and international investors in the oilseed crushing sector are boosting South Africa's capacity to process oilseed crops, such as soya beans, canola and sunflower seeds. This forms part of efforts to meet growing domestic demand for proteins and to be less dependent on imports of these crops.

Canola is primarily used for the manufacturing of canola oil and oilcake. Canola meal is used as an animal feed for dairy cows, pigs and poultry. Its unique characteristics are especially valuable in the dairy industry, where it has been shown that by including 20% canola meal in a feed ration improves milk production by one litre per cow per day.

For the 2020/21 marketing season, the total supply of canola was estimated at 160 980 t (the estimated canola crop of 148 460 t, together with carry-over stocks of 12 530 t). Domestic demand for canola was estimated at 112 320 t, while carry-out stocks at the end of September 2021 was expected to reach 48 660 t.

Cotton

In South Africa, cotton is grown in the warm regions of Limpopo, Mpumalanga, Northern Cape, North West and KwaZulu-Natal, where minimum night temperatures are at least 15 °C during the growing season.

The cotton industry is labour-intensive and provides work for roughly one worker per hectare of cotton planted. Oil extracted from cotton seed can be used for cooking and salad dressings. Extracted seed can also be used as a fertiliser or as feed for livestock, poultry and fish.

As part of the cotton industry's objective to broaden participation by emerging farmers, a training programme has been established by Cotton South Africa and other stakeholders, including the private sector and government. Lack of knowledge and expertise among smallholder cotton farmers are among major constraints that impede success in the emerging cotton farming sector. More than 1 000 smallholder farmers have attended these training courses.

Tobacco

Tobacco is tropical in origin, but is grown successfully under tropical, subtropical and temperate climates. Normally, it requires about 100 to 120 days, in a frost-free climate, with an average temperature of 20 °C to 30 °C between transplanting and harvesting.

In South Africa, tobacco is grown in five provinces – Limpopo (Lephalale, Mokopane, Mookgophong and Sterkkrivier); North West (Brits, Groot Marico and Rustenburg); Mpumalanga (Loskop, Groblersdal and the Lowveld: Mbombela and Barberton); the Eastern Cape (Gamtoos Valley); and the Western Cape (Oudtshoorn). The areas are classified according to the production of different types of tobacco.

Flue-cured tobacco is produced mainly in Limpopo, Mpumalanga and North West, while air-cured tobacco is produced in the Eastern Cape, Western Cape, Limpopo and North West.

Sugar

Sugar cane is a ratoon crop, which means that after cropping, new shoots emerge from the roots. It yields up to 10 crops from the original rootstock, after which it is uprooted and the field is replanted. This is done on a rotational basis, with approximately 10% of the area under cane being replanted each season. Planting usually coincides with the first spring rains.

South Africa produces cost-competitive, high-quality sugar. The sugar sector is a diverse industry, combining the agricultural activities of sugar cane cultivation with the industrial factory production of raw and refined sugar, syrups and specialised sugars, as well as a range of by-products.

The R14 billion South African sugar industry is cost-competitive, consistently ranking in the top 15 out of approximately 120 sugar producing countries worldwide. The industry makes a positive difference to the lives of more than a one million people and is a catalyst for economic growth and development. Sugar cane is a strategic crop for KwaZulu-Natal and Mpumalanga, where sugarcane production is located, comprising nearly 50% of field crop gross farming income across the two provinces.

Sugar cane is grown by approximately 21 926 registered growers, farming predominantly in KwaZulu-Natal, with substantial operations in Mpumalanga, and some sugar cane production in the Eastern Cape. Employment within the industry is estimated at 435 000 people (direct and indirect) and the industry produces an average of approximately 2.2 million t of sugar per season.

In November 2020, government together with stakeholders in the sugar industry, signed the Sugar Industry Master Plan. The plan seeks to take urgent action to protect thousands of jobs, rural livelihoods and businesses. The plan also aims to create a bold new ambition for the future, which seeks to create diversified revenue streams for sugar producers and create new job opportunities.

As part of the master plan, industrial users and retailers agreed to a minimum offtake of sugar for a period of three years; with at least 80% of sugar consumption to come from South African farms and millers during the first year, increasing to 95% by 2023. During this period, the sugar industry has agreed to price restraint, and to begin a process of managed restructuring for the industry to help diversify revenue sources.

Deciduous fruit

The deciduous fruit industry in South Africa, including fresh, dried and canned fruit for local consumption and export, is a multimillion-rand industry. The exporting of deciduous fruit is a major earner of foreign exchange for South Africa.

Deciduous fruits grown in South Africa include apples, pears, apricots, nectarines, peaches, plums, grapes, olives, figs and cherries.

Although some producers grow fruit both for processing (canning, juice and drying) as well as fresh consumption, it is estimated that in South Africa there are about 1 152 producers of fruit for fresh consumption, 1 066 producers of dry and table grapes, 887 producers of stone fruit and 624 producers of pome fruit.

The main deciduous fruit producing areas in South Africa are situated in the Western Cape and Eastern Cape, mostly in areas where warm, dry summers and cold winters prevail.

Dried fruit

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

The most important dried fruit products in terms of volume are Thompson seedless raisins, golden sultanas, unbleached sultanas, currants, peaches, pears, apricots and prunes.

Apricots are grown mainly in the Little Karoo and prunes are produced almost exclusively in the Tulbagh District in the Western Cape.

Most raisins are produced in the area along the Lower Orange River and currants are mainly from the Vredendal District in the Western Cape. The total production of dried vine fruit and dried tree fruit increased by 11.6% in 2020. According to the Dried Fruit Technical Services, this increase resulted from the demand for dried fruit of good quality, especially raisins.

Honeybush and rooibos tea

Honeybush production is a young, growing industry that is unique to South Africa. Honeybush is part of the fynbos that grows wild in the Western Cape and is not produced anywhere else in the world.

The plant grows naturally on the wetter and cooler southern slopes of mountains. Some species are mostly harvested in the wild, while others are cultivated commercially.

The cultivated tea comes from a few farmers who have established successful honeybush plantations, as well as a handful of community-based projects. Rooibos tea is exclusively farmed in the Cederberg and Sandveld areas of the Western Cape. On average, South Africa produces about 15 000 t of rooibos tea a year. According to the South African Rooibos Council, out of the 15 000 t of rooibos tea produced a year, 50% of it is consumed in South Africa.

In June 2021, rooibos became the first African food to be registered by the European Commission as having a protected designation of origin and protected geographical indications. This means South Africa is acknowledged as the designation of origin for rooibos. For tea to be labelled as rooibos, it has to be made using leaves that were cultivated or wild-harvested in designated local municipalities of the Western and Northern Cape provinces.

The registration will also allow South Africa's Rooibos industry to use the EU logo that is well recognised by consumers in Europe, which will indicate its value as a unique and exclusive product.

Wine

South Africa is the eighth-largest wine producer in the world, with a contribution of 4.1% to the world's wine production.

The wine industry is labour intensive and provides employment to approximately 290 000 people directly and indirectly. The number of primary wine grape producers in South Africa is estimated at 2 778. Wine is produced mainly in the Western Cape and along parts of the Orange River in the Northern Cape. The traditional wine-growing areas along the coastal zone benefit from its cooling breezes that moderate the summer temperatures. The Cape mountain ranges form a backdrop to what is internationally recognised as one of the most beautiful wine-producing areas of the world.

The vineyards lie in valleys and mountain foothills in some areas, and in flatter plains in others. One of the potential competitive advantages of the Cape winelands is a great variety of soils.

Nietvoorbij, the internationally acclaimed research farm of the ARC, is synonymous with quality research in oenology and viticulture. Annually, 1 000 different wines (10 – 20 l) are made for research purposes in the modern experimental cellar. Next door, in the old, thatched roof cellar, traditional and modern winemaking methods are combined to create unique wines for enjoyment.

The ARC Infruitec-Nietvoorbij is responsible for managing nine genebanks. The genebanks include field collections of various deciduous tree fruit crops, grapevines, olives, indigenous flowers of the Proteaceae and honeybush, in vitro collections of yeasts, fungi and bacteria as well as some tree fruit and berry crops in medium term cold storage.

The main purpose of the field genebanks is to conserve genetic diversity of fruits, grapes and indigenous crops, particularly in support of breeding programmes; the yeast collection contributes to oenological research; and the fungal and bacterial collections provide for research and diagnostics.

Citrus and subtropical fruit

South Africa has become the second-largest exporter of fresh citrus in the world, after record-breaking exports that delivered 146 million cartons of citrus in 2020.

Citrus is one of South Africa's most important subsectors in the agricultural sector. It provides a significant contribution to job creation and economic activity in South Africa's rural communities.

Government is committed to working with the industry and other stakeholders to expand market access to destinations such as the United States of America, China and India, and the EU and other countries that already enjoy South African citrus.

The growth projections for soft citrus, lemons and Valencia oranges alone indicate an expected additional R6.8 billion in foreign exchange earnings and the creation of 22 250 sustainable jobs over the next three years.

Citrus fruit is grown in Limpopo, the Eastern Cape, Mpumalanga, the Western Cape and KwaZulu-Natal, in areas where subtropical conditions (warm to hot summers and mild winters) prevail. The area under citrus production is estimated at 81 638 ha.

The Western Cape and Eastern Cape are considered cooler citrus growing areas and production is focused on Navel oranges and lemons. The cooler climate enables farmers to respond to consumer demand for easy peelers like clementines and satsumas. Farm sizes are also smaller and most citrus in the Western and Eastern Cape is packed by privatised cooperatives in facilities that are amongst the largest in the world.

In Mpumalanga, Limpopo and KwaZulu-Natal, the climate is warmer and better suited to the cultivation of grapefruit and Valencia oranges. Farms in these regions are larger and many farmers pack in smaller privately-owned facilities.

Pineapples are grown mainly in the Eastern Cape and northern KwaZulu-Natal.

Subtropical crops, such as avocados, mangoes, bananas, litchis, guavas, papayas, granadillas and macadamia and pecan nuts, are produced mainly in Mpumalanga and Limpopo, as well as in the subtropical coastal areas of KwaZulu-Natal and the Eastern Cape.

The largest contributors to the sales of subtropical fruit on the major fresh produce markets are bananas, pineapples and

avocados, followed by mangoes and papayas. The cultivation of some types of subtropical fruit is only possible in specific areas of the country because of particular climatic requirements.

In general, subtropical fruit types need warmer conditions and are sensitive to large temperature fluctuations and frost. Fruit types such as granadillas and guavas are also grown in the Western Cape, while pineapples are cultivated in the Eastern Cape and KwaZulu-Natal.

Vegetables (excluding potatoes)

Vegetables are produced in most parts of the country. However, in certain areas farmers tend to concentrate on specific crops, such as green beans that are grown mainly in Kaapmuiden, Marble Hall and Tzaneen; green peas, grown in George and Vaalharts; and asparagus, grown mainly in Krugersdorp and Ficksburg.

Tomatoes are produced countrywide, but on the largest scale in Limpopo, the Mpumalanga Lowveld and Middleveld, the Pongola area of KwaZulu-Natal, the southern parts of the Eastern Cape and the Western Cape. In Limpopo, South Africa's main tomato-growing area, most of the crops are found in Letaba, Mooketsi and Musina.

Onions are grown mainly in Mpumalanga, certain areas of the Western Cape and the southern Free State and in all areas of Limpopo, with the main production areas being Polokwane and Mokopane.

Cabbages are grown countrywide, but the largest crops are in Mpumalanga and the Camperdown and Greytown districts of KwaZulu-Natal.

Potatoes

There are 16 distinct potato-production regions in South Africa, which are spread throughout the country. The main regions are situated in the Free State, Western Cape, Limpopo and Mpumalanga.

Potatoes are planted at different times because of climate differences in the production areas, resulting in fresh potatoes being available throughout the year.

In the early 1990s, there was a major shift in production from dryland to irrigation and, currently, almost 80% of plantings are under irrigation.

The year 2020 was recognised as the International Year of Plant Health (IYPH) – a year to celebrate plant health under the slogan; "Protecting Plants, Protecting Life." South Africa joined countries around the world to celebrate plant health as part of recognising the importance of plants to human and animal health, environmental care and biodiversity, socio-economic, agriculture and rural development.

The IYPH 2020 celebration activities in South Africa were premised on six key messages:

- Keep plants healthy to achieve Zero Hunger and the United Nations Sustainable Development Goals.
- Be careful when bringing plants and plant products across borders.
- Make trading in plants and plant products safe by complying with international plant health standards.
- Keep plants healthy, while protecting the environment.
- Invest in plant-health capacity development, research and outreach.
- Strengthen monitoring and early warning systems to protect plants and plant health.

Livestock

Extensive livestock farming is vast in the country, appropriating four-fifths of the agricultural land in South Africa. However, livestock is also found in areas where there is a combination with other farming enterprises.

Below normal rainfall over recent years has meant that the area involved in cattle, sheep and goat farming, which is approximately 590 000 square kilometres, has been negatively affected. Representing 53% of all agricultural land in the country, this badly affected grazing area has not recovered in the past year as near normal to normal rainfall has not been recorded in most provinces.

Livestock conditions recorded were reasonable to good in most provinces over the same period. Commercial sheep farming also takes place in other areas, such as Kgalagadi, the winter rainfall area and the grasslands of Mpumalanga, as well as the eastern Free State and KwaZulu-Natal, with challenges of wild animals and stock theft threatening the successful farming thereof.

The past couple of years have seen below normal rainfall in most provinces, with scarce availability of fodder and grazing and requiring farmers to supplement with feed. As such, it is logical that a good correlation would exist between rainfall and the size of the national herd, particularly cattle.

Cattle

Cattle are found throughout the country, but mainly in the Eastern Cape, KwaZulu-Natal, the Free State and North West. Herd sizes vary according to type of cattle, ranging between less than 50 and 300 for dairy cattle, while beef cattle herds range from fairly small (less than 20 head of cattle) to large farms and feedlots (more than 4 000).

Some farms in North West and Gauteng have been found to have some of the largest cattle herds in the country. The production of weaners for the feedlot industry is the main form of cattle farming – feedlots account for approximately 75% of all beef produced in the country.

The total number of cattle in South Africa at the end of August 2020 was estimated at 12.30 million, comprising various international dairy and beef cattle breeds in addition to indigenous breeds such as the Afrikaner and the Nguni.

Beef cattle contribute approximately 80% to the total number of cattle in the country, while dairy cattle make up the remaining 20%. Holstein-Friesian, Jersey, Guernsey and Ayrshire are the four major dairy breeds found in South Africa.

Although milk is produced in all the areas of South Africa, the coastal areas are the most suitable because of their mild temperatures and good rainfall conditions, which lead to improvements in animals and pasture conditions.

The industry comprises various economic activities, with significant differences in farming methods, and the processing of dairy products, including the production and marketing of raw milk, pasteurised milk and cream, fermented milk, long-life milk and cream, yoghurt, and cheese and its by-products.

Sheep

Although sheep farms are found in all provinces, these are concentrated in the more arid parts of the country.

Flock sizes vary between less than 50 and 1 800 animals. Sheep flocks in the Eastern, Western and Northern Cape provinces tend to be much larger than those in other provinces. The animals are kept mainly for wool and mutton production and the industry is therefore represented by organisations from the mutton and the wool industry.

The sheep breed with the highest wool production per head is the South African Merino, followed by other dual-purpose Merino breeds, such as the Dohne Merino, South African Mutton Merino, Afrino and Letelle breeds. Dual-purpose breeds are bred with the specific aim of maximising wool and mutton produce. Limited numbers of indigenous fat-tailed and Karakul sheep are still found in the more arid areas.

The total number of sheep in South Africa at the end of August 2020 were estimated at 21.60 million, 2.22% lower than the previous year. For August 2020, the largest numbers of sheep were estimated to be in the Eastern Cape (30%), Northern Cape (24%), Free State (20%) and Western Cape (12%).

Goats

Goats are found mainly in the Eastern Cape, Limpopo, KwaZulu-Natal and North West. The indigenous meat-producing Boer goat accounts for about 40% of all goats in South Africa.

Herds of goats intended for meat production are usually smaller than sheep flocks, averaging approximately 300 goats per farm. Angora goats are kept primarily for mohair production, while Boer goats are mainly for meat production. According to the SA Milch Goat Breeders' Society, there are also farmers who have adopted a market differentiating strategy by producing goat milk and these are increasing in numbers.

Through selective breeding and farming techniques, the Angora goat farmer plays a crucial role in promoting the constant availability of quality natural fibres. Most of the world mohair production is imported to South Africa for further processing, after which it is exported together with locally (including Lesotho) produced mohair. China remains the leader in mohair imports from South Africa, followed by Italy and Taiwan.

Pigs

The South African pork industry is small in terms of the overall South African agricultural sector. It contributes 2.2% to the primary agricultural sector. Pigs are found predominantly in Limpopo, North West, Gauteng and the Western Cape. There are approximately 400 commercial pork producers and 19 stud breeders in South Africa. It is estimated that pig numbers decreased from 1.389 million in August 2019 to 1.357 million as of August 2020, a drop of 2.30%.

The gross value of pork production is dependent on the quantity produced and the price farmers receive. The trend in gross value follows a pattern of prices, because the industry is characterised by volatile prices.

Pork is produced throughout South Africa, with Gauteng and Western Cape being the largest producers, contributing to 40% and 21%, respectively, to total production. There are about 132 commercial, four stud and about 400 smallholder pig farmers. They own about 120 000 sows (100 000 commercial and 10 000 smallholder sows) and employ about 3 005 workers, comprising about 2 200 farm workers and 805 workers in the abattoir sectors. The 145 registered pig abattoirs use modern technology to ensure a streamlined slaughtering process.

The total number of employees in the formal pork production industry in South Africa is estimated to be approximately 10 000, comprising about 4 000 farm workers and 6 000 workers in the processing and abattoir sectors.

Poultry farming

The poultry industry consists of the day-old chick, broiler and egg supply. The broiler industry continues to dominate the agricultural sector in South Africa as the main supplier of animal protein. The distribution of broiler birds (including broiler breeders) per province is as follows: North West (23.2%), Mpumalanga (20.0%), the Northern and Western Cape (18.0%), the Free State (12.8%), Gauteng (9.8%), the Eastern Cape (6.8%), KwaZulu-Natal (6.1%) and Limpopo (3.3%). During the first six months of 2020, an average of 20.4 million broilers were slaughtered per week.

Following a drop in demand owing to lockdown measures implemented in an effort to contain COVID-19, the year 2020 realised an average growth in production of 4.9% and fluctuating year-on-year changes averaging a 2.8% increase when compared with 2019. In December 2020, hatcheries projected 20.49 million chicks per week – an increase of 3.4% from the previous year. The broiler industry projected a production of 20.06 million per week – an increase of 7.1% compared to 18.73 million in 2019.

The distribution of layers per province is as follows: Gauteng (24.4%), Northern and Western Cape (21.5%), Free State (15.2%), North West (11.0%), KwaZulu-Natal (10.1%), Mpumalanga (9.4%), Limpopo (5.5%) and the Eastern Cape (3.0%).

Poultry Master Plan

For the past decade, poultry production in South Africa has been static despite the fact that consumption has continued to grow. This was due to the fact that imported poultry has come into the economy in large quantities, displacing South African meat, especially at the lower end.

In an effort to address threats to the local production of poultry, government, together with a number of stakeholders in

the industry, including poultry producers, farmers, processors, exporters, importers and organised labour, developed the Poultry Master Plan.

The plan provides a framework for a determined effort to grow jobs in the industry through a number of measures that will be implemented over a number of years. Signed during the second South African Investment Conference in November 2019, the plan is also expected to ensure that locally produced products make up an increasingly larger proportion of consumption over time.

As of March 2021, the poultry industry had invested R870 million to upgrade production and grow poultry production by 5%. The money would also create markets for 50 black contract growers and facilitate exports to create local jobs. The industry had also paid for business studies for 19 black farmers who were in a programme with the DALLRD. A year after the plan was signed, 13 black contract grower farmers were established and 960 jobs were created.

The industry was also assisting a further 40 independent black farmers by providing them with poultry-related advice and training.

Since the master plan was signed, government has implemented higher tariffs on certain cuts of poultry, and has further triggered an investigation into the structure of tariffs to provide a more effective trade environment for poultry.

Chicken producers have committed to R1.5 billion in fresh investment in their own production facilities within the next four years towards the investment drive. This is expected to result in nearly 4 000 additional jobs in the production of chicken in pursuit of these outcomes.

In addition, the industry and various government agencies will invest R1.7 billion in the establishment of 50 commercial scale contract farmers.

Information for international travellers

Pests and invasive species are not only introduced through formal trade, but are also brought into South Africa by tourists.

Once a pest has entered South Africa, climate change may influence its establishment and spread, as well as the damage it causes.

When travelling to South Africa, tourists should make sure that they do not bring in prohibited agricultural products. These products may harbour pests that occur in other countries and their introduction may endanger South Africa's competitiveness in trade and agricultural productivity.

Animals and animal products such as meat and dairy products, plants and plant products, honey and honey products as well as other regulated goods, are all potentially high-risk materials. These materials may only be imported into South Africa by means of an import permit, unless exempted, and must be declared with the DALRRD inspectors for inspection at ports of entry before entering South Africa. Inspectors from the department conduct luggage and consignment inspections at the ports of entry, with the help of sniffer dogs to ensure compliance with the import permit requirements.

Prohibited products will either be confiscated, destroyed or returned to the country of export and those found carrying them may face a fine of up to R20 000 or imprisonment.

Food import and export standards

Internationally, standards for food imports and exports are harmonised through various international standard-setting bodies subscribed to under the World Trade Organisation, to which South Africa is a signatory. This includes the Sanitary and Phytosanitary Measurements Agreement, the World Organisation for Animal Health, Codex Alimentarius Commission and the Intergovernmental Panel on Climate Change. These requirements aim to protect consumer rights, the environment, animal life and public health.

The DALRRD collates information regarding the standards for sanitary and phytosanitary measures applicable to trade in animal and plant products. The department also coordinates promotion and awareness programmes addressing crosscutting standards and legislative requirements for food safety, quality, and plant and animal health.

The DALRRD and the Perishable Products Export Control Board (PPECB) work closely to assist South Africans to export their products successfully in a highly competitive global arena.

National Analytical Services (NAS)

There are two in-house laboratories within NAS – one situated in Stellenbosch and the other in Pretoria.

The laboratories provide and coordinate the analysis of certain agricultural products (fresh fruit and vegetables, grains, wines and spirits, dairy products and processed food) in support of the enforcement of the food safety and quality standards and requirements as laid down in the Agricultural Product Standards Act of 1990 and the Liquor Products Act, 1989 (Act 60 of 1989).

Disaster and risk management

The National Agricultural Disaster Risk Management Committee provides strategic guidance on policy and advises government on issues relating to agricultural disaster risk management.

The committee comprises members from provincial departments of agriculture, organised agriculture, such as the National African Farmers' Union of South Africa (NAFU SA), Agri SA, Transvaal Agricultural Union of South Africa (TAU SA) and the ARC and relevant directorates within the DALRRD.

The National Drought Task Team, chaired by the DALRRD, advises the National Disaster Management Advisory Forum on drought management. The task team comprises provincial disaster management centres, organised agriculture and relevant directorates within the department.

The DALRRD frequently responds to hazards such as droughts, veld fires, floods and outbreaks of pests and disease, which includes the control of migratory pests such as locusts and quelea. It is also responsible for the control of blackfly.

Weather and climate

Climate change

The agricultural sector in South Africa faces considerable impact from climate change, which affects the livelihoods of most people, especially those who are vulnerable to food insecurity. South Africa responds to international obligations regarding climate through various government departments.

The Climate Change Programme implemented by the DALRRD includes programmes on raising awareness, policy development, the development of sector mitigation

and adaptation plans, conducting vulnerability assessments countrywide, and identifying and coordinating climate-related research projects. The Climate Change Adaptation and Mitigation Plan outlines useful mitigation and adaptation options promoting soil, water and nutrient conservation for agricultural production.

The DALRRD's Crop Suitability programme is aimed at promoting best adaptation management practices and enhancing adaptive capacity and resilience of the agricultural systems to minimise the risk of the negative impacts of climate change as drastic increases in temperature have a negative impact on crop growth and crop yields.

South Africa is a full member of the Global Research Alliance which, among other objectives, aims to enhance collaborative research into reducing agricultural emissions and increasing support and resourcing for agricultural emissions research.

South Africa has already been involved in stock takes and regional workshops run by the Livestock Research Group.

Early warning unit

The increasing risk of disaster is reduced by strengthening early warning systems and disseminating early warnings, as well as raising awareness through campaigns. This helps to build resilient farming communities.

The DALRRD has, therefore, developed and implemented an Early Warning System (EWS) that disseminates extreme weather warnings to farming communities. The EWS communicates monthly advisories and daily extreme weather warnings, in support of reducing disaster risk.

The implementation of the EWS is continuously monitored and evaluated to identify and address gaps in the system. National Agro-Meteorological Committee meetings are held quarterly.

Other risk reduction activities include continuous research to identify areas and measures in addressing and improving disaster risk management, including awareness campaigns and education and training so as to strengthen disaster risk management. In addition, the DALRRD continues to encourage integration of disaster risk management into all departmental programmes and projects.

The DALRRD also encourages the strengthening of EWS by all relevant role players to be prioritised, including the creation of disaster units in provinces.

Sustainable resource management and use

The DALRRD and the ARC's Institute for Soil, Climate and Water have developed an inventory of soils, terrain forms and climate (land types). The National Land Type Survey, available for use at a 1:250 000 scale, aims to assist and guide land-use planning and decision making at national level.

All available natural resource spatial information and other required data sets, including the latest Spot-5 satellite imagery and agricultural information, are found on the internet-based Agricultural Geo-Referenced Information System (Agis). Using interactive web-based applications, Agis provides access to spatial information, industry-specific information and decision-support tools.

The Advanced Fire Information System tracks all fire outbreaks in the SADC region through the use of Moderate- Resolution Imaging Spectroradiometer satellite imagery. The information may be viewed at afis.meraka.org.za.

Soil degradation

Soil degradation is largely related to the decline in organic soil matter. Monoculture cereal production, intensive tillage, short-term fallow periods and limited crop rotation have contributed to this in the commercial sector.

Excessive fuel-wood collection, inappropriate land use, population density and overgrazing are the main causes of soil degradation in communal areas.

South African soils are extremely prone to serious soil compaction, particularly under intensive mechanised cultivated agriculture, in both dryland and irrigated land. It is a problem throughout the country and much more widespread and serious than the global norm.

Human-induced soil acidification is a major problem. Its effect is severe since it impacts on the country's scarce, arable land, especially the limited high-potential agricultural land. In commercial agriculture, there has been capital-building of some nutrients, especially phosphorus and zinc. In some cases, phosphorus has built up to excessive levels, where it starts to reduce crop yields.

Genetically modified organisms (GMOs)

GMOs provide a way to meet the growing demand for food without placing greater pressure on scarce resources. South Africa has commercialised three different genetically modified crops, namely maize, cotton and soya beans.

The country is also the ninth-largest producer of genetically modified crops in the world and remains the pioneer for the adoption of genetically modified crops. This is aligned to Section 24 of the Constitution, which advocates for sustainable use of biodiversity.

National LandCare Programme

This is a government-supported community-based initiative, which is active throughout the country. Driven by both the public and private sectors through partnerships and cooperation, it seeks to:

- conserve natural resources;
- use them in a sustainable way;
- create a conservation ethic through education and awareness; and
- create jobs and address poverty by launching various natural resource rehabilitation, improvement and conservation projects. Serious concerns about land and water degradation are identified in each province and specific projects address these issues. Projects have been implemented in all nine provinces through the LandCare Conditional Grant, whereby ring-fenced funding is transferred to provinces.

The National LandCare Programme is aligned with government's broader objective of job creation. The temporary jobs created under the programme are funded through the Expanded Public Works Programme (EPWP). The programme adheres to the target of 55% women, 40% youth and 2% people with disabilities as specified by the EPWP.

Funding for these projects is transferred quarterly to the respective provincial departments as implementing agents, as conditional grants under the Division of Revenue Act, 2013 (Act 2 of 2013). Assessment and reporting requirements are specified in the Act, as well as by the EPWP. The provincial departments use the reporting tools provided by the EPWP to report on the number of jobs created.

Provincial departments forward additional quarterly and annual reports to the DALRRD to monitor performance and the impact of the programme on the state of the natural agricultural resources.

Extension and advisory services

The National Policy on Extension and Advisory Services for the agricultural sector recognises and calls for the involvement of a wide array of stakeholders involved in the delivery of extension and advisory services through a pluralistic and integrated approach.

The implementation process of the National Policy on Extension and Advisory Services commenced with the establishment of the Provincial Extension Coordinating Forum (PECF). The PECF is operational in all provinces and meetings are held on a quarterly basis. The DALRRD provides support to the PECF to ensure provincial integrated service delivery.

Training

The agricultural sector boasts state-of-the-art training and research facilities. South Africa has a number of regular schools offering a range of agricultural subjects as well as specialised agricultural high schools, such as Bekker High School in North West, Harry Oppenheimer Agricultural High School in Limpopo and Boland Agricultural High School in the Western Cape.

Prospective farmers and technicians are trained at the country's colleges of agriculture, such as Grootfontein Agricultural Development Institute in the Eastern Cape, Cedara College of Agriculture in KwaZulu-Natal and Madzivhandila College of Agriculture in Limpopo.

In September 2020, Cabinet approved the establishment of agricultural colleges as the competency of higher education colleges in terms of the Higher Education Act, 1997 (Act 101 of 1997), as amended.

The relocation of these colleges to the Department of Higher Education and Training will align them to the prescribed Higher Education Act of 1997 and improve their governance and management.

Universities, some with designated faculties of agriculture, offer degree courses. Veterinary surgeons are trained at the University of Pretoria's Faculty of Veterinary Sciences at Onderstepoort.

Research and innovation

It is only through proper research that the country can be able to increase productivity, come up with disease resistant plants and animals, and alleviate the impact of climate change.

The ARC, several universities and various private-sector organisations, as well as some provincial departments of agriculture, which are responsible for technological development and transfer aimed at improving managerial efficiency on farms, conduct agricultural research.

Through the Agricultural Science, Technology and Innovation Activities Coordination Committee, the DALRRD engages with the Department of Science and Innovation on joint issues of national importance within the National System of Innovation.

The research unit is also involved in the development and implementation of national research policies and strategies, such as the National Agricultural Research and Development Strategy. This encompasses the national priority-setting process, developing guidelines, administering a national research and technology fund and overall monitoring and evaluation.

The National Agricultural Research Forum (NARF) provides a platform for stakeholder consultations on research and development while the Government Agricultural Research and Development Action Group provides a platform for government and state-owned entities to plan research and technology development within the national agricultural research system.

The NARF facilitates consensus and makes recommendations to government on the coordination of research, development and transfer of technology to enhance national economic growth, social welfare and environmental sustainability.

Animal identification

Any owner of cattle, sheep, goats or pigs is compelled by law to mark their livestock. The registered mark is put on the National Register of Animal Identification System. This register is available to the South African Police Service (SAPS) to help it trace individual animals in cases of stock theft.

However, this can only be implemented successfully if all cattle, goats, pigs and sheep are marked in accordance with the Animal Identification Act, 2002 (Act 6 of 2002).

Pest control

The South African Pest Control Association (SAPCA) is the official representative of the pest, termite and woodborer-control industries. All SAPCA-qualified inspectors have to register with the DALRRD.

South Africa regularly liaises with other countries and international organisations to ensure the transfer of pest-control technology.

To respond comprehensively to the management of regulated plant pests and diseases, the DALRRD, in close collaboration with the South African fruit industries, has developed an early warning surveillance programme for the quarantine of fruit flies. The technical forum continues to identify, prioritise and manage quarantine pest risks, such as the African invader fruit fly.

Rural Development

Rural development creates and maintains an equitable and sustainable land dispensation, and acts as a catalyst in the development of rural areas, to ensure sustainable rural livelihoods, decent work and continued social and economic advancement for all South Africans. Approximately 33.7% of the South African population lives in rural areas. This figure is below the global average of 44.7%, and has been declining gradually over the past ten years, owing to rapid urbanisation.

While rural areas were a key development priority in the early 2000s, an increasing global focus on cities through the development of the New Urban Agenda and Sustainable Development Goal 11 focusing on sustainable cities, has meant that rural areas have been deprioritised to a certain extent. This has been a contributing factor to the state of rural poverty and underdevelopment.

In South Africa, rural areas have the highest poverty concentration. It is estimated that 59.7% of the population living below the poverty line is found in rural areas. This is illuminated when the provincial distribution of poverty is analysed. There is a correlation between low poverty levels and highly urbanised

provinces, such as Gauteng and the Western Cape – and conversely, between high poverty levels in provinces where the majority live in rural areas, such as the Eastern Cape and Limpopo.

This illustrates that there are spatial patterns of economic development in South Africa, which result in acute poverty in rural areas. While the disconnected nature of rural areas may be an explanatory factor of this phenomenon, the spatial configuration of national value chains and broader economic climate are also key factors.

The characteristically poverty-stricken nature of rural South Africa is both a cause and effect of poor performing socio-economic indicators, including education, healthcare and employment. The majority of rural South Africa fell under the homelands system during colonialism and apartheid, emphasising their historic exclusion from service delivery.

Limited access to quality education and healthcare is an acute challenge in rural areas because of undeveloped infrastructure and limited economic activity. There are 11 252 schools in rural areas across South Africa, many of which face infrastructural challenges, teacher shortages and other critical challenges.

While there are a number of factors affecting this disparity, the rural-urban divide is chief among them. A contributing factor to rural poverty and underdevelopment is the rapid rate of rural-urban migration that is taking place in South Africa.

The rate of rural-urban migration has almost doubled over the past two decades, increasing from 15 people per 1 000 to 28 people per 1 000.²³ Both economic and non-economic reasons cause citizens to move from rural areas to urban areas, including hopes of employment and higher wages, better access to social services, such as healthcare and education, and to reunite with family living in cities. While the promise of the city may seem appealing to rural residents, prosperity in urban areas is not necessarily guaranteed, as the rapid influx of people into the cities has put pressure on social services and housing requirements.

In rural areas, the outflow of citizens who constitute the majority of the economically active population exacerbates underdevelopment. This results in decreased economic activity and investment in rural areas. It is within this context that the DALRRD is mandated to serve residents in rural

areas by providing economic stimulation in a three-pronged manner by stimulating the agricultural sector, coordinating rural development and promoting access to and productivity of land.

In the face of rapid rural-urban migration, the DALRRD plans to focus specifically on stimulating economic activity and uplifting social conditions in rural areas through its mechanisms of agricultural support, land administration and tenure, and rural development coordination.

Economic structure of rural South Africa

Agriculture and mining are traditionally thought to be the foundations of rural economies, as these sectors tend to be the key drivers of external investment into rural areas. While this chiefly refers to commercial agriculture, it is worth noting that subsistence agriculture plays an important role in meeting the needs of residents in rural areas. Beyond agriculture and mining, there are also a number of other components of the rural economy, which can be leveraged for rural development.

While secondary sector activities such as manufacturing, processing and construction are most often developed in urban or peri-urban settings, they also form an important economic driver in rural and semi-rural areas. In terms of the tertiary sector, there are critical activities that support rural communities, in the form of both local business and chain stores. Overall, all of these components of the rural economy are interconnected and connected to industrial activity and the urban economy.

There are two key inflows of support for social infrastructure aside from external investment – international or local aid and government programmes. In terms of aid, there are a myriad of multilateral, bilateral and local non-governmental organisations, such as the United Nations Development Programme, the Belgian Development Agency and the Rural Development Support Programme, which have programmes in areas that contribute to rural development.

Government has various schemes and programmes that support the rural economy. One of government's largest contributors to the social infrastructure of rural areas is the Social Grant Scheme, which includes financial stipends for old-age pensions, child support, care dependency, war veterans, foster child support and disabilities. A total of 44.3% of households

in South Africa are receiving at least one grant, the majority of which reside in rural areas.

Provinces with a higher rural population such as the Eastern Cape, Northern Cape and Limpopo have a higher proportion of households receiving social grants. This illustrates that social grants play an important role in supporting the social infrastructure of rural economies.

Rural development remains a strategic and important element of national economic development. As outlined in the NDP, the country is working towards achieving an inclusive and integrated rural economy. The DALRRD plays a fundamental role in coordinating national efforts in order to reduce rural poverty and create gainful socio-economic development in rural South Africa.

However, as the face of rural South Africa is rapidly changing, there are certain considerations that need to be taken into account, specific to challenges and trends emerging in the sector. Key considerations for the DALRRD are:

- The decreased profitability of the mining sector may result in less investment in rural communities and potential job losses.
- Agricultural productivity challenges threaten existing and new farmers, resulting from climate change, increased water scarcity and a lack of training available for new farmers.
- A decreased economically active population in rural areas further limits economic activity.
- Decreased funding and social programmes for South Africa and rural areas – while South Africa experienced a boom in foreign aid post-1994, this has declined as there is currently increasing competition for aid globally. This coupled with decreasing contributions from donors and implementing regulations that are more rigorous will have adverse effects on funding for rural areas in South Africa.
- The commercialisation of the retail sector in rural areas has increased competition for previously owner-run businesses.
- The department is uniquely positioned to tackle these challenges strategically through the coordination of rural development efforts in the private and public sectors. Over the medium term, the department will prioritise the inclusion of rural areas in the economic activities of this country by providing social and economic opportunities to overcome

the triple challenges associated with poverty, unemployment and inequality. It requires better planning and coordination in the provision of basic services, food security and rural town development.

The land reform landscape

One of the most critical areas of redress in South Africa is the issue of land. Throughout South Africa's history, dispossession of land has been systemic, embodied in policies such as the Native Land Act, 1913 (Act 27 of 1913), and the Group Areas Act, 1950 (Act 41 of 1950), during the apartheid era.

In 1994, it was estimated that 83% of agricultural land was owned by white capital. Therefore, from the onset of democracy, land reform as a mechanism for redress has been a focus of the South African Government, historically carried out by what is currently the DALRRD.

Over the past 25 years, there have been a number of policies and legislation put in place in order to implement land reform in South Africa. Predominantly, the national position on land reform has been a willing buyer-willing seller model mediated by government, coupled with a legal restitution process.

Despite headway made by both the restitution and redistribution programmes, it is estimated that only 9% of South African agricultural land has been redistributed, well below the initial target set of 30%.

While this target was adjusted down to 16.5 million ha (approximately 20%) in the NDP, there is still substantial work to be done by government to acquire land and redistribute it. To accelerate the land reform process, there has been a political shift to allow land expropriation without compensation.

In April 2021, government handed over 764 000 ha of land to the Covic community, in the Western Cape, after a successful land settlement claim – as part of efforts to accelerate land reform. The land is expected to positively impact 411 households' ability to gain financial freedom.

During the same month, over two million land claimants benefitted from land restitution, resulting in the transfer of around 2.7 million ha.

As of May 2021, 436 563 ha of the 700 000 ha vacant state-owned land earmarked for the Land Distribution Programme had been released and approved for allocation, and over 5 540 ha of the land had been approved for disposal and the remainder for leasing. The releasing of the state-owned land aims to address development pressures around urban and rural human settlements, agricultural production and industrial development. The process is targeted at vulnerable groups, and is expected to empower women, youth and people with disabilities.

To ensure that the land is productively utilised by beneficiaries, government is paying attention to the provision of effective post-settlement support. It is focusing on improving the coordination of integrated post-settlement packages to beneficiaries of land, including finance, infrastructure and access to water resources for development.

Land Court Bill

In February 2021, Cabinet approved the submission of the Land Court Bill to Parliament for processing. The Bill establishes a specialist Land Court, with its judgements, orders and decisions appealable at the proposed specialist Land Court of Appeal.

The Bill will resolve the challenges that were experienced under the Restitution of Land Rights Act of 1994, such as backlogs in land claims and dispute resolution mechanisms when disputes arise. It will also contribute immensely in the implementation of the Land Reform Programme.

The Bill seeks to ensure stronger judicial oversight over claims, which is expected to lead to better settlements, reduce the scope for corruption and avert the bundling of claims into dysfunctional mega-claims that lead to conflict. It also seeks to address the systemic hurdles that make it difficult for land claimants to obtain land restitution. For instance, the Bill allows for hearsay evidence for families who have to rely on oral history and the existence of elders with knowledge of description, location and extent of land which their descendants previously occupied. It allows for expert evidence regarding historical and anthropological facts relevant to any particular land claim.

The Land Court Bill gives effect to the mandate of the Sixth Administration, namely; to ensure the country's approach to land reform is based on three elements – increased security of tenure, land restitution and land redistribution.

This Bill is a concrete intervention to improve the functioning of all three elements of land reform. It creates a policy framework to ensure that land reform is guided by sound legal and economic principles and contributes to the country's investment objectives and job creation initiatives.

Programmes and projects

Agricultural Production, Biosecurity and Natural Resources Management

The programme oversees livestock production, game farming, animal and plant health, natural resources and disaster management. Its objectives include managing biosecurity and related sector risks.

Over the medium term, this will be achieved by conducting nine countrywide surveys of plant pests and diseases, in particular the exotic fruit fly, citrus greening disease and banana bunchy top virus, to manage their spread and incursion, and eradicating them, as well as conducting nine planned animal risk surveillance exercises on foot-and-mouth disease, ovine rinderpest and Newcastle disease.

In addition, the programme plans to ensure access to primary animal healthcare services through the implementation of compulsory community services by deploying 100% of veterinary graduates to rural areas by 2023/24. It will enforce an animal disease regulatory framework to reduce the level of disease outbreaks and reduce interception at export channels in production areas to a minimum level by conducting three planned animal risk surveillance exercises on foot-and-mouth disease and goat plague in each year over the medium term.

Furthermore, the DALRRD will implement regulatory compliance and monitoring interventions to prevent plant and animal pest and disease outbreaks through quarantine inspections, surveillance, and testing and registration of products used in agriculture by 2023/24.

Food Security, Land Reform and Restitution

Under the programme, the DALRRD aims to acquire and redistribute land, and promote food security and agrarian reform. The programme's objectives include:

- redressing equitable access to land by conducting research and finalising land claims.
- coordinating the implementation of the National Policy on Food and Nutrition Security by providing production inputs such as seeds and fertilisers, and cultivating underutilised land in communal areas over the medium term.
- improving delivery capacity in support of sustainable growth in the sector by implementing policies to develop capacity in agricultural sectors, such as the National Policy On Extension and Advisory Services, facilitating collaborations with commodity organisations to build the capacity of extension officers by the end of 2023/24 and providing strategic leadership and support, such as research, training and extension services, to targeted subsistence and smallholder producers by transforming all agricultural colleges into agricultural training institutions by the end of 2023/24.
- coordinating comprehensive support systems and programmes provided to producers by supporting subsistence and smallholder producers, supporting the commercialisation of smallholder producers through the blended finance model, placing unemployed agricultural graduates in farms and further supporting access to resources for agribusiness development.

The National Food and Nutrition Security Plan (NFSNP) 2017 – 2022 embodies a collective response by government to the challenges of food insecurity and malnutrition in the country. It reflects a common vision across government departments and entails a unified set of national goals and objectives, indicators and targets for monitoring progress and a common budget for implementation of activities.

It enables the country to address problems, such as hunger, malnutrition and micronutrient deficiencies that affect physical growth and cognitive development, especially among children, as directed by the NDP 2030.

The goal of the NFSNP is to implement a priority set of actions and establish the necessary institutional architecture to lead, coordinate, budget and monitor the implementation of these actions to deliver significant improvements in food and nutrition status by 2030.

The NFSNP actions are guided by six strategic objectives which were derived from a consultative process aimed at establishing a governance and leadership system, to review current policies and strategies, reform the current duplicated and uncoordinated delivery of food and nutrition security (FNS) interventions and ensure the implementation of strategic and comprehensive FNS initiatives in a coordinated manner.

It also took into account the recommendations from Cabinet; the Policy on FNS, and the diagnostic/implementation evaluation of nutrition interventions for children from conception to five years, which compared South Africa to Brazil, Colombia, Malaysia, Malawi and Mozambique.

The DALRRD also worked with the private sector to develop the Agricultural Policy Action Plan (APAP), which plans to bring one million ha of underused land into full production over the next few years.

Through the APAP, the DALRRD aims to bring more smallholders into the mainstream as envisaged in the NDP. However, the effective participation of the previously excluded black majority in agriculture and food production will only occur meaningfully when they have access to land and the means to work it.

An inclusive and scientific process will be used to assess the situation in terms of land capability for different commodities and in different localities, so as to inform land acquisition and allocation for different categories of producers across the country.

Rural Development

The purpose of the programme is to facilitate rural development strategies for socio-economic growth. Its objectives include promoting an integrated and inclusive rural economy through the coordination and implementation of rural development strategies over the medium term.

Economic Development, Trade and Marketing

The purpose of the programme is to promote economic development, trade and market access for agriculture products; and foster international relations for the sector. The programme's objectives, over the medium term, include:

- upskilling 600 agro-processing entrepreneurs by training them on food manufacturing norms and standards;
- increasing market access and maintaining existing markets by certifying and accrediting producers of fresh produce for exports through good agricultural practice certification and an accreditation programme;
- building national skills capabilities in international market research by providing for the transfer of marketing skills to small and medium agro-processing entrepreneurs;
- providing technical sector leadership in trade negotiations and implementing trade agreements to improve market access by linking producers to high-value markets; and
- ensuring shared growth by developing the agricultural value chain and improving market access.

Land Administration

The purpose of the programme is to provide and maintain an inclusive, effective and comprehensive system of planning, geospatial information and cadastral surveys; legally secure land tenure; and conduct land administration that promotes social, economic and environmental sustainability.

Over the medium term, the programme aims to ensure spatial transformation and efficient land administration by rolling out and implementing the electronic deeds registration system and reducing the number of days taken to process general plans, sectional plans and diagrams to 14 days.

The Braille atlas for the visually impaired is a first in South Africa and is primarily intended to give visually impaired people access to geospatial information.

Deeds registration

The core responsibility of South Africa's deeds registries is to:

- register real rights in land;
- maintain a public land register;

- provide registration information; and
- maintain an archive of registration records.

There are deeds registries in Bloemfontein, Cape Town, Johannesburg, Kimberley, King William's Town, Mthatha, Nelspruit, Pietermaritzburg, Pretoria and Vryburg.

These offices register deeds and documents relating to real rights in more than eight million registered land parcels consisting of township erven, farms, agricultural holdings, sectional title units and sectional title exclusive-use areas in terms of the Deeds Registries Act, 1937 (Act 47 of 1937), and the Sectional Titles Act, 1986 (Act 95 of 1986).

The Deeds Registry is open to any member of the public to access information regarding:

- the registered owner of a property;
- the conditions affecting such property;
- interdicts and contracts in respect of the property;
- the purchase price of the property;
- rules of a sectional title scheme;
- a copy of an antenuptial contract, deeds of servitude and mortgage bonds;
- a copy of a sectional title plan;
- township-establishment conditions; and
- information relating to a property or deed.

Entities

Agricultural Land Holding Account

The Agricultural Land Holding Account was established in 2009 in terms of the Provision of Land and Assistance Act of 1993. The Act authorises the Minister of Agriculture, Land Reform and Rural Development to purchase land to enable the DALRRD to accelerate the land redistribution process, acquire land in nodal areas and other areas of high agricultural potential, improve the process of identifying and selecting beneficiaries and the planning of land on which people could be settled, and ensure the maximum productive use of land acquired.

The entity's strategic objective over the period ahead is to promote equitable land redistribution and agricultural development by acquiring 79 602 ha of strategically located land at an estimated cost of R2.9 billion. About 78 900 ha of this land will be allocated to farmers who are women, youth and

people with disabilities. Expenditure is expected to decrease at an average annual rate of 3.5%, from R1.2 billion in 2020/21 to R1.1 billion in 2023/24.

The entity's main cost driver is transfers and subsidies, accounting for 73.6% (R2.3 billion) of expenditure over the period ahead. The entity derives 71.9% (R2.9 billion) of its revenue over the MTEF period from transfers from the DALRRD.

Agricultural Research Council

The ARC was established in terms of the Agricultural Research Act, 1990 (Act 86 of 1990) and is the main agricultural research institution in South Africa. The council's primary mandate is to conduct research and development, and effect the transfer of technology to promote agriculture and industry, contribute to a better quality of life, and facilitate and ensure the conservation of natural resources.

Over the MTEF period, the council will continue with the construction of the foot-and-mouth disease vaccine production facility in Onderstepoort, Gauteng, to reduce reliance on vaccine imports. For this purpose, the council is allocated R400 million over three years, beginning in 2019/20. It also received a grant of R1.271 billion from the DALRRD.

Expenditure is expected to increase at an average annual rate of 3.1%, from R1.4 billion in 2020/21 to R1.6 billion in 2023/24. The council's main cost driver is compensation of employees, spending on which accounts for 54.2% (R2.4 billion) of expenditure over the period ahead.

The council derives 67% (R3.1 billion) of its revenue from transfers from the DALRRD, increasing at an annual average rate of 2.5%, from R962.3 million in 2020/21 to R1 billion in 2023/24.

The KwaZulu-Natal Ingonyama Trust Board

The KwaZulu-Natal Ingonyama Trust Act, 1994 (Act 3KZN of 1994) makes provision for the 2.8 million ha of land spread across the province to be held in trust and managed on behalf of communities. The affairs of the trust are administered by the KwaZulu-Natal Ingonyama Trust Board, which was established in terms of the Act.

The board is responsible for providing land tenure rights to an estimated 4.5 million people living on trust land under the jurisdiction of 241 traditional councils. The board's focus over the medium term will be on improving land tenure administration, protecting land from illegal occupiers and providing appropriate spatial planning for integrated development.

The board received a transfer of R22 million from the DALRRD. Expenditure is expected to decrease at an average annual rate of 6.7%, from R40.8 million in 2020/21 to R33.1 million in 2023/24. Revenue is derived through transfers from the DALRRD, which amount to R71.7 million over the MTEF period, mainly to fund the board's operational expenses. The board's total budget for 2020/21 was R121 million.

The Office of the Valuer-General

The Property Valuation Act, 2014 (Act 17 of 2014) prescribes that the Office of the Valuer-General must be impartial in exercising its powers and performing its functions, and be accountable to the Minister of Agriculture, Land Reform and Rural Development. The Act states that the office must value all land to be acquired for the purpose of land reform in accordance with a defined set of criteria based on Section 25(3) of the Constitution.

Expenditure is expected to decrease at an average annual rate of 1.7%, from R142.6 million in 2020/21 to R135.6 million in 2023/24, mainly due to reduced spending on goods and services in line with Cabinet-approved budget reductions.

The entity's main cost driver is compensation of employees, spending on which increases at an average annual rate of 2.5%, from R76.5 million in 2020/21 to R82.4 million in 2023/24. Revenue is derived mainly through transfers from the DALRRD, which are expected to decrease at an average annual rate of 2.8%, from R147.5 million in 2020/21 to R135.6 million in 2023/24, in line with Cabinet-approved budget reductions. The office's total budget for 2020/21 was R142.6 million.

Ondersteenberg Biological Products

The entity was established as a public company in terms of the Ondersteenberg Biological Products Incorporation Act, 1999 (Act 19 of 1999). Its mandate is to prevent and control

animal diseases that impact food security, human health and livelihoods. This is achieved through the continued development and efficient manufacturing of innovative pharmaceutical products, including vaccines and related products.

Over the medium term, the entity will continue to focus on developing and manufacturing vaccines and other related products to prevent and control animal diseases that impact on food security and animal health; and maintaining a reserve stock of vaccines for government, to be used in the event of an outbreak of animal diseases.

Expenditure is expected to increase at an average annual rate of 6.7%, from R146.1 million in 2020/21 to R177.6 million in 2023/24, due to increases in spending on goods and services, and compensation of employees.

The company will also make vaccines more accessible to smallholder farmers through conducting various research projects on animal vaccines, and other research and development programmes at a cost of R50 million over the medium term.

Revenue is mainly generated by the sale and supply of livestock vaccines, and is expected to increase at an average annual rate of 4.6%, from R178.3 million in 2020/21 to R203.7 million in 2023/24, due to newly projected markets and increased capacity in the sales team.

The entity's total budget for 2020/21 was R209.5 million.

National Agricultural Marketing Council

The National Agricultural Marketing Council derives its mandate from the Marketing of Agricultural Products Act, 1996 (Act 47 of 1996), which provides for the authorisation, establishment and enforcement of regulatory measures to intervene in the marketing of agricultural products, including the introduction of statutory measures on agricultural products.

Over the medium term, the council will continue to coordinate the work of agricultural industry trusts; undertake thorough research aimed at advising the Minister of Agriculture, Land Reform and Rural Development and affected groups on marketing matters; and work directly with farmers to address their marketing matters.

Expenditure is expected to increase at an average annual rate of 1.6%, from R47.4 million in 2020/21 to R49.8 million in 2023/24. As the council is primarily involved in conducting research and development, it relies on highly skilled personnel, such as agricultural economists, scientists and researchers to fulfil its mandate.

Accordingly, compensation of employees is the main cost driver, spending on which accounts for an estimated 70.1% (R101.7 million) of expenditure over the medium term.

All of the council's revenue is derived from transfers from the DALRRD, which amount to R145.6 million over the period ahead. Transfers from the department increase at an average annual rate of 1.6%, from R47.4 million in 2020/21 to R49.8 million in 2023/24.

Perishable Products Export Control Board (PPECB)

The PPECB is an independent service provider for quality assurance, food safety and cold chain management services for producers and exporters of perishable food products.

It is mandated by government in terms of the Perishable Products Export Control Act, 1983 (Act 9 of 1983), which broadly requires the board to ensure the orderly export of perishables and monitor the proper maintenance of a continuous cold chain for exports; and the Agricultural Products Standards Act, 1990 (Act 119 of 1990), which broadly requires the board to monitor the minimum quality standards of perishable exports as required by government and bilateral agreements with importing countries.

Expenditure is expected to increase at an average annual rate of 5.9%, from R484.6 million in 2020/21 to R575.7 million in 2023/24, mainly due to increases in spending on operational activities. The board's largest cost driver is compensation of employees, accounting for about 68.9% (R1.1 billion) of expenditure over the medium term and increasing at an average annual rate of 4.9%, from R341.2 million in 2020/21 to R393.7 million in 2023/24. Revenue is mainly generated by levies and tariffs charged on perishable products, and is expected to increase at an average annual rate of 5.5%, from R490.6 million in 2020/21 to R575.8 million in 2023/24.

The Registration of Deeds Trading Account

The Deeds Registries Act of 1937 makes provision for the administration of the land registration system and the registration of rights to land.

The main goal of the trading account is to contribute to effective land planning, administration and property registration. Over the medium term, the entity will implement a secure, scalable and cost-effective electronic deeds registration that provides accurate and reliable land administration and information in South Africa.

Expenditure is expected to increase at an average annual rate of 2.7%, from R915.7 million in 2020/21 to R991.6 million in 2023/24.

As the entity's work is labour intensive, with about 2 016 funded posts, compensation of employees is its main cost driver, spending on which accounts for about 66.9% (R2 billion) of its expenditure.

The entity mainly generates its revenue by selling deeds information and registering properties. Revenue is in line with expenditure. The board's total budget for 2020/21 was R494.3 million.

players**Commission on the Restitution of Land Rights**

The Restitution of Land Rights Act of 1994 created the Commission on the Restitution of Land Rights under a chief land claims commissioner and seven regional commissioners. In addition, the Act established the Land Claims Court to address land claims and other land-related issues though later amendments enabled an administrative process of settling claims with court referrals only in cases of dispute.

The DALRRD is authorised to administer the Act, including by negotiating on behalf of the State, acting as a respondent before the court, and managing the implementation and finances of the restitution process. Legally, all land claims are against the State and not against past or current landowners. Consultants are extensively used as part of the pre-settlement of claims, and are a major cost driver in the restitution programme.

Agri-parks

The agri-parks initiative supports rural enterprises, develops rural industries and facilitates the efficient movement of rural produce to markets.

The initiative develops networked systems of agro-production, processing, logistics, marketing, training and extension services in district municipalities and developments on underused land.

Each agri-park supports smallholder farmers by providing capacity-building, mentorship, farm infrastructure, extension services, and production and mechanisation inputs. Smallholder farmers own 70% of an agri-park, while the remainder is owned by government and commercial farmers.

Agri-parks are expected to contribute to government's targets of creating one million new jobs in rural economies by 2030.

Communal Property Associations (CPAs)

The CPAs Act, 1996 (Act 28 of 1996) is aimed at enabling communities to form juristic persons, to be known as CPAs – to acquire, hold and manage property on a basis agreed upon by members of a community in terms of a written constitution and to provide for matters connected therewith.

The DALRRD has facilitated the establishment of CPA district forums to assist in the provision of support to the associations and serve as a platform for them to share experiences, approaches and lessons on how to handle matters.

Credit and assistance**Land and Agricultural Development Bank of South Africa (Land Bank)**

Established in 1912, the Land Bank is a government-owned development finance institution with the mandate of financing agricultural development to achieve food security, and to drive economic growth and development in South African agricultural sector.

The bank is a specialist agricultural bank guided by a government mandate to provide financial services, including crop insurance, to established commercial farmers, developing farmers and agri-enterprises.

Through its direct lending, the Land Bank currently supports approximately 1 500 black farmers and relinquished approximately R74 million of its profits to subsidise interest rates to these farmers.

The bank provided support to farmers impacted by the drought, disbursing more than R240 million in loans under its drought relief programme, administered in conjunction with the Industrial Development Corporation.

As part of its transformation objective, the Land Bank Insurance Company subsidiary launched and implemented the Agricultural Insurance Assessors Development Programme to train agricultural economist graduates (or equivalent) in crop insurance assessment protocols to service the agricultural sector.

It is charged with promoting agricultural and rural development, as well as providing a range of financial products and services, including crop insurance to farmers and agribusinesses.

Micro Agricultural Financial Institutions of South Africa (MAFISA)

The MAFISA provides production loans to smallholder operators within the agriculture sector. The scheme's operations are guided by the MAFISA Credit Policy.

Loans are provided at a low interest rate and accessed through a network of institutions accredited by the DALRRD as retail intermediaries.

Intermediaries submit monthly and quarterly reports to the DALRRD as part of its monitoring process. Regular workshops and inspection visits to intermediaries are also conducted as part of monitoring.

The scheme offers production loans of up to R500 000 per person, with the repayment terms structured according to the income cycle of the enterprise. The loans are limited to South African citizens who meet the eligibility criteria set in the MAFISA Credit Policy.

The MAFISA loans are available for the entire value chain of agriculture though most of the loans are still in respect of primary production and largely in agriculture. To date, most of

the loans are in respect of livestock, sugar cane, vegetables and grain crops.

Currently, the MAFISA is accessed through the following intermediaries:

- National Emergent Red Meat Producer Organisation – livestock in all provinces.
- South African Sugar Association – sugar cane in KwaZulu-Natal and Mpumalanga.
- Peulwana Agricultural Financial Services – grains, vegetables, sugar cane and fruits in KwaZulu-Natal.
- Mpumalanga Economic Growth Agency – various agricultural commodities in Mpumalanga.
- Eastern Cape Rural Development Agency – various agricultural commodities in the Eastern Cape.

Farmers' organisations

Agri SA

Agri SA was established in 1904 as the South African Agricultural Union. Its mission is to promote the development, profitability, stability and sustainability of agriculture in South Africa by means of its involvement and input on national and international policy and the implementation thereof.

Agri SA, through its affiliated membership, represents a diverse group of individual farmers. Agri SA's policy advocacy includes work on trade negotiations, industrial policy, taxation, financing, land reform, labour laws, training, farmer development, environmental affairs, water rights and water pricing, other input-related issues, farm safety, law and order, infrastructure, technology development and transfer, statistical information and local government.

Furthermore, the organisation maintains an extensive communication network with its members and other affected communities, organisations and individuals. Agri SA is a member of high-level business, trade and agricultural entities that includes Business Unity South Africa, the International Chamber of Commerce, the World Farmers' Organisation, the Southern African Confederation of Agricultural Unions and the Cairns Group Farm Leaders.

Agri SA is committed to ensuring a safe environment for all people involved in the agricultural sector. A sound working relationship has been established with the SAPS at both policy and operational level, with a view of addressing the relevant rural safety problems.

Agricultural Business Chamber (Agbiz)

The Agbiz is a voluntary, dynamic and influential association of agribusinesses operating in South Africa and southern Africa. The function of Agbiz is to ensure that agribusiness plays a constructive role in the country's economic growth, development and transformation, and to create an environment in which agribusinesses of all sizes and in all sectors can thrive, expand and be competitive.

The Agbiz is the only organisation that serves the broader and common overarching business interests of agribusinesses in South Africa. It addresses the legislative and policy environment on the many fronts that it impacts on the agribusiness environment. The Agbiz facilitates considerable networking opportunities so that South African agribusinesses can play an active and creative role within the local and international organised business environment.

The strategic intent of the Agbiz is to advocate for and facilitate a favourable agribusiness environment in order for its members to perform competitively and sustainably.

Transvaal Agricultural Union of South Africa

The TAU SA was established in 1897 as the Transvaal Agricultural Union. In 2002, the union reorganised to become a national agricultural union serving commercial farmers. It also renders services to its members in terms of property rights, economic issues, and safety and security. The TAU SA conducts various projects to enhance the concept of successful agriculture.

National African Farmers' Union of South Africa

The NAFU SA is an independent, autonomous farmers organisation governed by and representing farmers in South Africa, united for the purpose of analysing their problems and

formulating action to achieve economic emancipation and development through production efficiencies, access to market opportunities and education.

It was formed in 1991 as part of the broader process of economic liberation and empowerment of, mainly, black farmers who were excluded from mainstream economic landscape of South Africa. Its predecessor, the National African Chamber of Commerce and Industry, for many years had fought against economic oppression and marginalisation of African people in this country.

Over many years, the union has acted as an advocacy and pressure group calling for policy reforms and the support and development of farmers. Through its interventions and contribution to policy formulation, the NAFU SA has contributed to the following:

- access to productive land being made available to farmers;
- access to finance and other support for farmers;
- access to markets and information for farmers; and
- skills development and technical support.

The NAFU SA pursues these items by implementing the following broad programmes:

- advocacy, lobbying and policy research,
- cooperatives and commodity group development, and
- farm enterprise development.

African Farmers' Association of South Africa (AFASA)

The objectives of AFASA are to create a sustainable united body of African farmers with capacity to influence policies through lobbying and advocacy, to facilitate development of competencies of African farmers in order for them to participate meaningfully in formal and informal markets, and to mobilise resources for the benefit of African farmers.

Grain SA

Grain SA was established in June 1999. Its mission is to provide commodity strategic support and services to South African grain producers, as well as to support sustainability.

Grain SA is a voluntary association of grain farmers established to represent the interests of its members. It aims

to be recognised as an autonomous and independent grain producers' organisation.

The organisation also aims to be involved in all matters bearing on the well-being of the industry and to be consulted about policy issues relating to the industry. The association is controlled by farmers and structured to ensure members' democratic control over their elected office bearers.

Female Entrepreneur Awards

The Female Entrepreneur Awards are a joint venture between the provincial departments of agriculture and key partners in the sector. They honour female farmers and recognise their role in the sector and their entrepreneurial skills in mainstream agriculture, forestry and fisheries. The major thrust of the awards is to underline the fact that women play a significant role in food security, job creation, economic growth and poverty alleviation.

World Food Day

South Africa joins the world in marking World Food Day on 16 October every year, to highlight the plight of millions of undernourished people in the world. World Food Day is commemorated annually around the world in remembrance of the founding of the Food and Agriculture Organisation in 1945.

In South Africa, October has been declared Food Security Month. The objective of Food Security Month is to create a platform for heightening public awareness on issues pertaining to food security in the country.

World Food Day 2020 marked the 75th anniversary of the founding of the Food and Agriculture Organisation, with a view to looking towards the future and building on the theme; "Grow, nourish, sustain. Together. Our actions are our future".

Regional and international cooperation and trade

Regional cooperation

South Africa has strong and mutually dependent economic links with countries in southern Africa through the SADC and the Southern African Customs Union (SACU) regions.

As a contribution to the African regional development, the DALRRD continues to implement South Africa's foreign policy

objectives, through the facilitation of the SADC and African Union engagements and implementation of the South-South Cooperation.

The International Relations Strategy is an instrument put into place to interact with various sector stakeholders at regional and international level in support of producers to access international markets.

Regional trade

South Africa, as a member of the SACU and a signatory of the SADC Treaty, is committed to sharing its objectives with other nations in the region. The SACU opened its markets to the countries of the SADC region by implementing its tariff reduction commitments under the SADC Trade Protocol.

The signatories to the SADC Trade Protocol are Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, Eswatini, Tanzania, Zambia and Zimbabwe. Angola and the Democratic Republic of Congo are still in the process of acceding to the protocol.

The first objective of the trade protocol is to remove both tariff and non-tariff barriers to trade between SADC countries. The SADC has set up an electronic reporting system for non-tariff barriers, in which the DALRRD is involved as a contact point to receive traders' complaints.

South African agriculture products continue to benefit from the Tripartite Free Trade Area Agreement of the SADC, Common Market for Eastern and Southern Africa and the East African Community.

