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Report Name: The South African Animal Feed Industry

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Report Highlights:

The animal feed industry in South Africa is well established and highly scientific. Efficient formulations have enabled significant expansion of the livestock sector driven by a surge in local meat consumption. Today, the animal feed industry is generally self-sufficient with little imports of either animal feed products or raw material inputs of corn or soybeans. The future growth of the industry is largely dependent on the demand for animal products, and in particular feed intensive industries such as poultry, dairy and pork.

Introduction

Interest in the scientific feeding of farm animals in South Africa dates to the 1930s, when drought and economic depression stimulated experimentation in maximizing returns for poultry and livestock. Over the past 80 years, the animal feed industry in South Africa developed into a key manufacturer of nutritious feed for animal production and a major buyer of grains, oilseed products, and other raw materials. The value of animal feed sold in 1993 was R2.4 billion (\$134 million), while the local animal feed industry generated almost R100 billion (\$5.6 billion) of sales in 2023, playing a notable role in South Africa's agricultural economy.

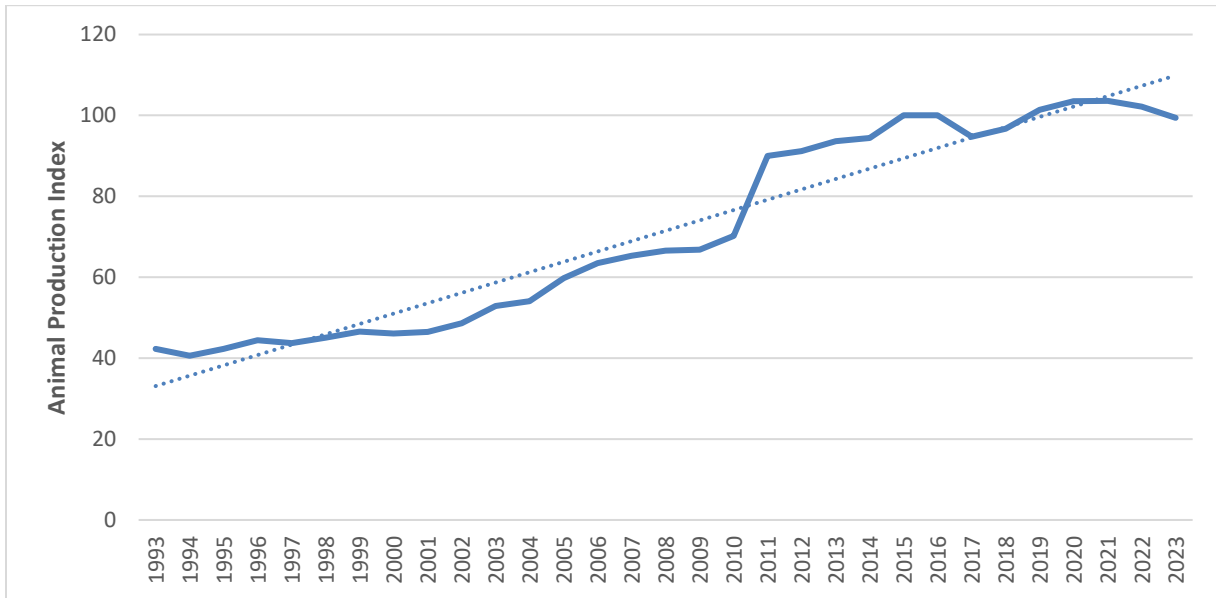
This report focuses on the animal feed industry in South Africa and includes discussion of the South African livestock sector, local meat consumption, and the animal feed value chain. The report concludes with a review of the two most important raw materials used by the animal feed industry and South Africa's trade in animal feed.

South Africa's Livestock Sector

The expansion of the livestock sector in South Africa played an integral part in the development of the animal feed industry. Animal production more than doubled over the past 30 years in South Africa driven by higher meat demand (see Figure 1). The major industries in the livestock sector include poultry, cattle, dairy, layers, pigs, wool, and sheep. The livestock sector also includes well-developed value-added cold chain activities such as the slaughtering, processing, and preserving of products. Animal production is the largest agricultural sector in South Africa and contributes about 42 percent to total agricultural output in value terms. Field crops and the horticultural sector each contribute 29 percent contribution, (see Figure 2). The poultry industry is South Africa's largest individual agricultural industry, boasting a gross value of almost R63 billion (\$3.5 billion) and contributing 14 percent to the total gross value of agricultural products (see Figure 3). Commercial broiler meat production accounts for approximately 90 percent of the poultry meat industry in South Africa, with the remaining 10 percent comprised of subsistence farming production and spent hens. The poultry industry is followed by cattle production at R48 billion (\$2.7 billion), dairy production (\$1.4 billion), egg production (\$0.7 billion), pigs (\$0.6 billion), and sheep (\$0.5 billion).

Figure 1

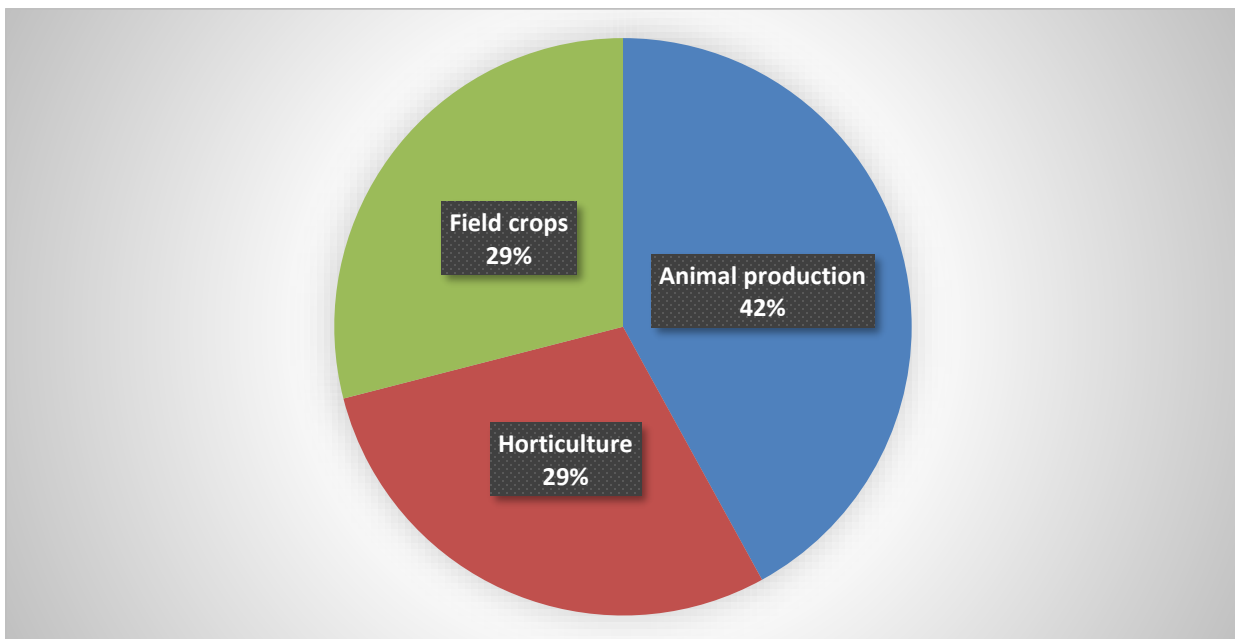
Index of the Volume of Animal Production in South Africa



Source: FAS/Pretoria using Department of Agriculture, Land Reform and Rural Development data

Figure 2

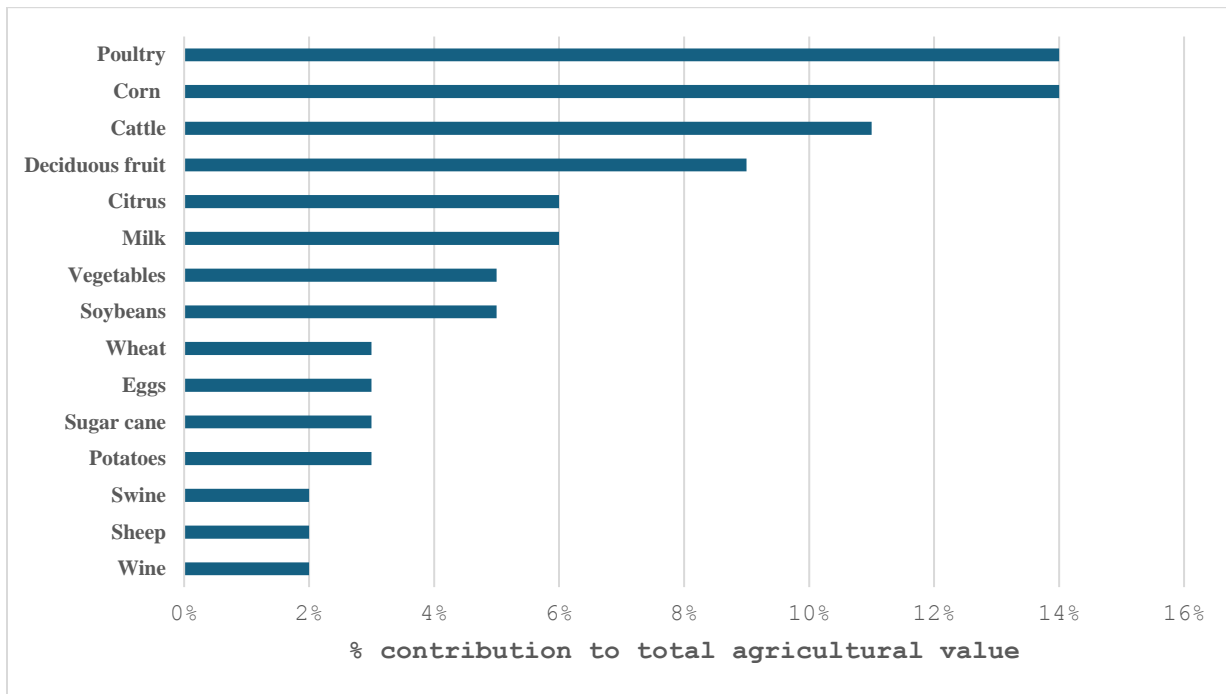
Sector Distribution of Value of South African Agricultural Production



Source: FAS/Pretoria using Department of Agriculture, Land Reform and Rural Development data

Figure 3

Percentage Contribution to Total Agricultural Production Value



Source: FAS/Pretoria using Department of Agriculture, Land Reform and Rural Development data

Meat Consumption in South Africa

Expansion of the livestock sector in South Africa has been driven primarily by a surge in local meat consumption, particularly chicken meat. From South Africa’s first democratic elections in 1994 until the financial crisis in 2009, steady economic growth and higher disposable incomes pushed large numbers of consumers towards protein-filled diets, and as a result, meat consumption levels skyrocketed. In 1994, per capita consumption was 38 kilograms (kg) of meat a year, while 15 years later in 2009, that figure increased to 64kg of meat a year – an increase of almost 70 percent over the period.

However, over the next 15 years slower economic growth and lower disposable income dampened the meat consumption surge (see Figure 4). Relatively high inflation and interest rates, coupled with an unemployment rate of more than 30 percent, put growing pressure on consumer spending. As a result, the growth in meat demand softened as consumers on tight budgets cut back on expenditures for non-staple foods.

South Africa’s economic growth outlook over the medium term continues to be lackluster. The country’s Gross Domestic Product (GDP) grew by 0.6 percent in 2023 and is expected to expand by only 1 percent in 2024 and 2025. This has implications for expansion in the animal feed industry, of which the demand is mainly derived from the domestic consumption of meat and

other animal products. While South Africa has exported a growing volume of product to neighboring African markets where demand is steadily rising, there has been limited success in accessing markets abroad due to challenges with animal diseases. These outbreaks take a significant toll on domestic protein production. For example, the South African poultry industry had a major outbreak of Highly Pathogenic Avian Influenza in 2023, which impacted local production and chicken meat prices.

Poultry meat represents 60 percent of total meat consumption and annual per capita consumption is about 35kg per person. As poultry meat is relatively inexpensive and ubiquitous, it has grown to be the most important protein source in the diet of the majority of South Africans. However, in addition to income and affordability dynamics, expansion of the population and persistent urbanization, with the associated access to more frequent purchases and refrigeration facilities also contribute to meat consumption growth.

Figure 4

Per Capita Consumption of Meat, Dairy, and Poultry Products in South Africa



Source: FAS/Pretoria estimates and data from Department of Agriculture, Land Reform and Rural Development

South Africa Animal Feed Value Chain

The South African animal feed industry can be divided into three important groups, namely the feed manufacturers (dedicated processors of feed for direct sales), the feedlot sector, and informal feed milling. Feed manufacturers can further be divided into balanced feed

manufacturers and pre-mix manufacturers. The local feed manufacturers are represented by the Animal Feed Manufacturing Association ([AFMA](#)). The feed manufacturers contribute to most feed sales in South Africa and represent about 60 percent of South Africa's total animal feed production of approximately 13 million metric tons (MMT).

Feed manufactures play a particularly important role in the poultry industry. The South African poultry industry is highly concentrated and dominated by vertically integrated companies with the five major players producing approximately 70 percent of local poultry. These vertically integrated businesses produce significant volumes of feed for internal consumption and sell the excess to non-integrated poultry producers. Key activities include the manufacturing of animal feed, broiler genetics, production and sale of day-old chicks and hatching eggs, breeder and broiler production, abattoir and further processing operations and sales and distribution of various key poultry brands. This model, which connects the entire production chain from the breeders, feed mills, farms and hatcheries to the processing plants, is essential for achieving economies of scale.

Feed produced by the feedlots is used as an on-farm input and does not necessarily end up in the general animal feed market. The feedlot sector is an intensive production system with the goal of growing and fattening livestock for slaughter. The feedlot industry produces approximately 75 percent of all beef products consumed in South Africa. The South Africa Feedlot Association ([SA Feedlot](#)) represents the approximately 100 locally operated feedlots. Informal feed milling is done on-farm, and the feed is mainly for own use.

Table 1 illustrates the animal feed value chain in South Africa. The animal feed manufacturers source various raw materials, including primary commodities and by-products from processing, to manufacture scientifically formulated feed for specific animals. The major primary commodities used are corn (primarily yellow corn), oilseeds (mostly full-fat soybeans), and other grains and dry materials such as hay. By-products from processing used as inputs for animal feed include oilseed meals (from oil crushing), various flour, germ, and hulls (from grain milling), molasses & bagasse (from sugar processing), and animal & fish meal (from meat processing). Additional products are sourced from mining (limestone & phosphates) and chemical manufacturing (vitamins & medicine).

Each manufactured feed follows strict formulations based on the nutritional requirements of various animals. For every animal type, different feed products are developed to support optimized development within the different growth stages of the animal. The market for manufactured feed is given on the far right of Table 1 and Figure 5 and includes poultry, dairy, beef, sheep, and pigs. The importance of the poultry industry is clear, with broiler and layer feed representing 40 percent of total feed sales totaling more than 5 MMT. The poultry industry is followed by feed for cattle and sheep feedlots (3.2 MMT), dairy (2.6 MMT), and pigs (1.2 MMT).

Table 1

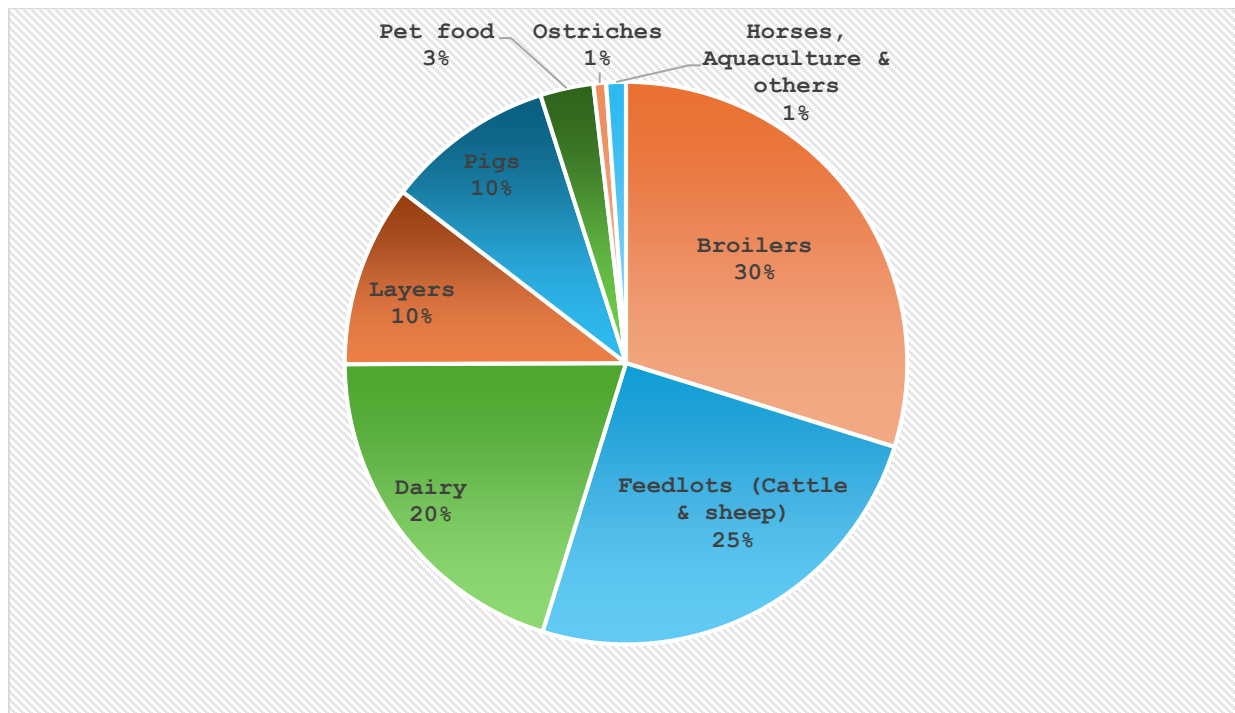
The South African Animal Feed Value Chain

RAW MATERIALS			PROCESS AND OUTPUTS	
Primary Commodities	By-products from Agri-processing		Feed Manufacturing	Feed Market
<u>Corn</u> 6.0 MMT yellow corn (primarily), white corn	<u>Oil Crushing</u> 2.0 MMT soybean meal (mainly), sunflower meal, rapeseed, cotton	Distribution & storage	13.0 MMT Grading Grinding Extrusion Mixing Pressing Cooling Pelleting Crumbling Bagging	<u>Broilers</u> 3.7 MMT
<u>Oilseeds</u> 0.2 MMT Full-fat soybean (mostly), cotton, canola	<u>Grain milling</u> 3.0 MMT Byproducts from corn and wheat milling			<u>Cattle & sheep</u> 3.2 MMT
<u>Other Grains</u> 0.2 MMT Barley (mostly) wheat, sorghum, oats	<u>Sugar milling</u> 0.9 MMT Molasses, bagasse			<u>Dairy</u> 2.6 MMT
<u>Hay</u> 0.2 MMT Mainly lucerne	<u>Meat processing</u> 0.1 MMT Poultry meal, fish meal			<u>Layers</u> 1.3 MMT
<u>Minerals</u> 0.6 MMT Phosphates, sulfates, lime, urea, salt	<u>Supplements</u> 0.2 MMT Premixes, vitamins, medicine			<u>Pigs</u> 1.2 MMT
				<u>Pet food</u> 0.4 MMT
				<u>Horses,</u> 0.1 MMT
		<u>Ostriches,</u> 0.1 MMT		
		<u>Aquaculture, others</u> 0.3 MMT		

Source: FAS/Pretoria adapted from the Bureau of Food and Agricultural Policy, Protein Research Foundation and Animal Feed Manufacturing Association

Figure 5:

Animal Feed Production in South Africa by Type



Source: FAS/Pretoria using Animal Feed Manufacturing Association (AFMA) data

Review of the Two Most Important Raw Materials Used by the Animal Feed Industry

Corn

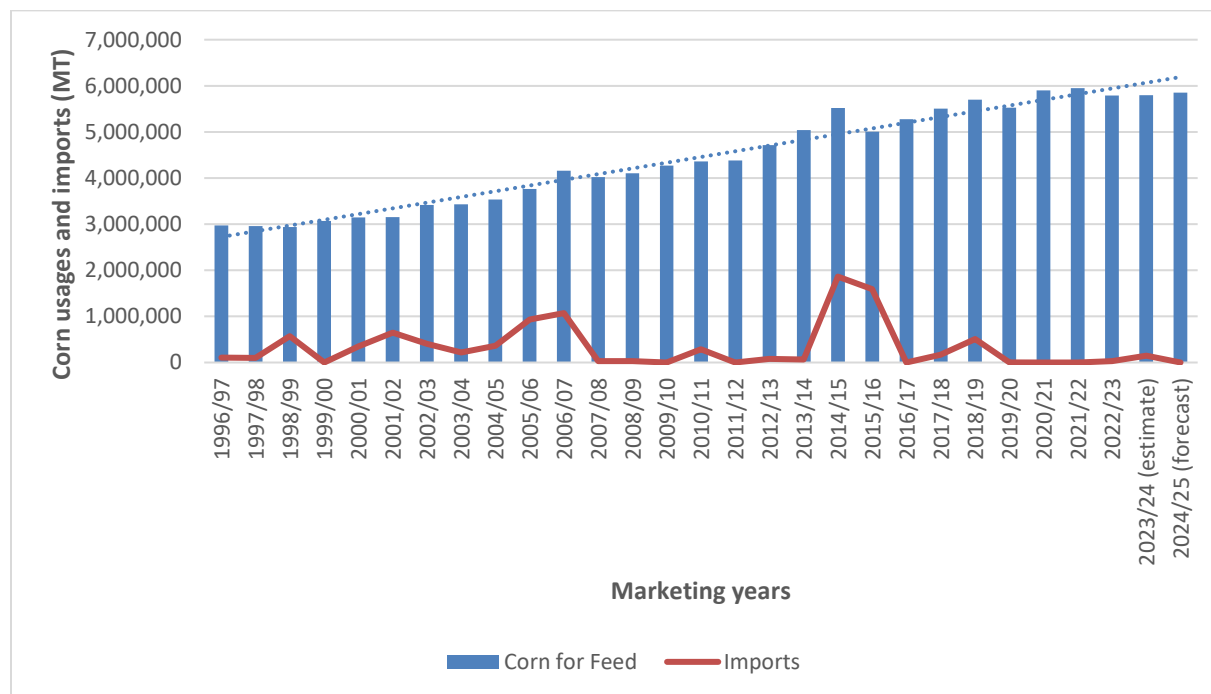
Corn (mostly yellow corn) is the most important ingredient used by South Africa's animal feed manufacturers with an inclusion rate of between 50 percent and 60 percent in feed rations. Like many countries in Southern Africa, South Africa consumes both white and yellow corn. White corn, in the form of a meal, is the staple food for many households as it is a relatively inexpensive source of carbohydrates. Meanwhile, the bulk of yellow corn is destined for the animal feed sector as it is the primary ingredient of most feed rations, particularly in the broiler industry. While white corn can also be used as animal feed, depending on availability and price levels compared to yellow corn, yellow corn is not considered culturally acceptable for human consumption. South Africa consumes about 6 MMT of corn as animal feed with an average growth rate of 2 percent over the past 10 years (see also Figure 6).

South Africa is mostly self-sufficient in corn production and imports are limited to years when extreme drought impacts production. The long-term trend in corn production indicates that South Africa is producing more corn on less area. South Africa's corn yields have more than doubled in the past 30 years with the use of new production technologies, such as genetically engineered seed and more efficient and effective farming practices, including precision and conservation

farming. More than 80 percent of corn plantings in South Africa are from genetically engineered (GE) seeds. Indications are that this trend of producing more corn on fewer hectares will continue in the future.

Figure 6

South African Corn Feed Consumption and Imports



Source: FAS/Pretoria using South African Grain Information Services data

Soybeans

Oilseed meal is an important source of protein for animal feed manufacturing. Soybean meal is the most important protein used by feed manufacturers in South Africa and typically represents more than 70 percent of protein meal usage in animal feed. Soybean meal is followed by sunflower seed meal, and together these two commodities represent about 85 percent of protein usage by feed manufacturers in South Africa. The average inclusion rate of protein meal in feed rations is between 20 and 30 percent. The bulk of soybeans produced in South Africa are crushed to produce protein meal for inclusion in animal feed rations.

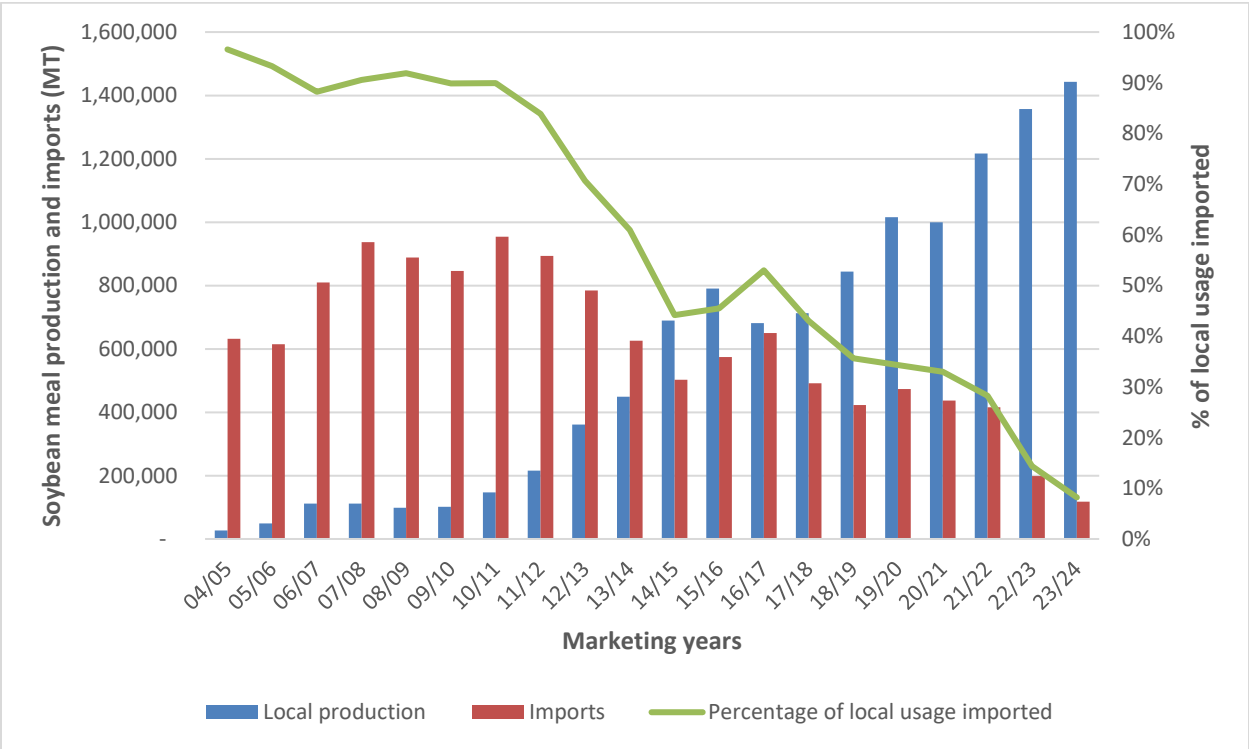
South Africa expanded its soybean area by 8-fold during the past 20 years. Farmers planted a record soybean area of 1.2 million hectares in the 2023/24 production season. Twenty years ago, South African farmers planted a mere 135,000 hectares with soybeans. Soybeans now represent more than 25 percent of the area planted with summer rainfall field crops, compared to just four percent 20 years ago. This surge has been driven by farmers’ growing interest in using soybeans as a rotational crop with corn (due to nitrogen fixation), a growing local demand for soybeans through extensive investments in oilseed processing plants, and the adoption of GE soybeans.

GE soybeans were first approved for commercialization in South Africa in 2001 and by 2006, 75 percent of the soybean crop grown was GE. Today, more than 95 percent of soybeans in South Africa are planted with GE seeds.

Figure 7 illustrates the trend in the replacement of soybean meal imports with locally produced oilseed meal over the past 20 years in South Africa, after investments that enlarged crushing capacity. Currently, less than 10 percent of locally consumed soybean meal originate from imports. However, the high cost of transportation (mainly by road) from South Africa’s summer rainfall regions in the north to the Western Cape province in the south, suggests that South Africa will continue importing soybean meal to the coastal regions. Most of South Africa’s oilseed meal imports originate from Argentina.

Figure 7

Replacement of Oilseed Meal Imports with Locally Produced Meal in South Africa



Sources: FAS/Pretoria using Trade Data Monitor LLC and South African Grain Information Services data

South Africa’s Trade in Animal Feed

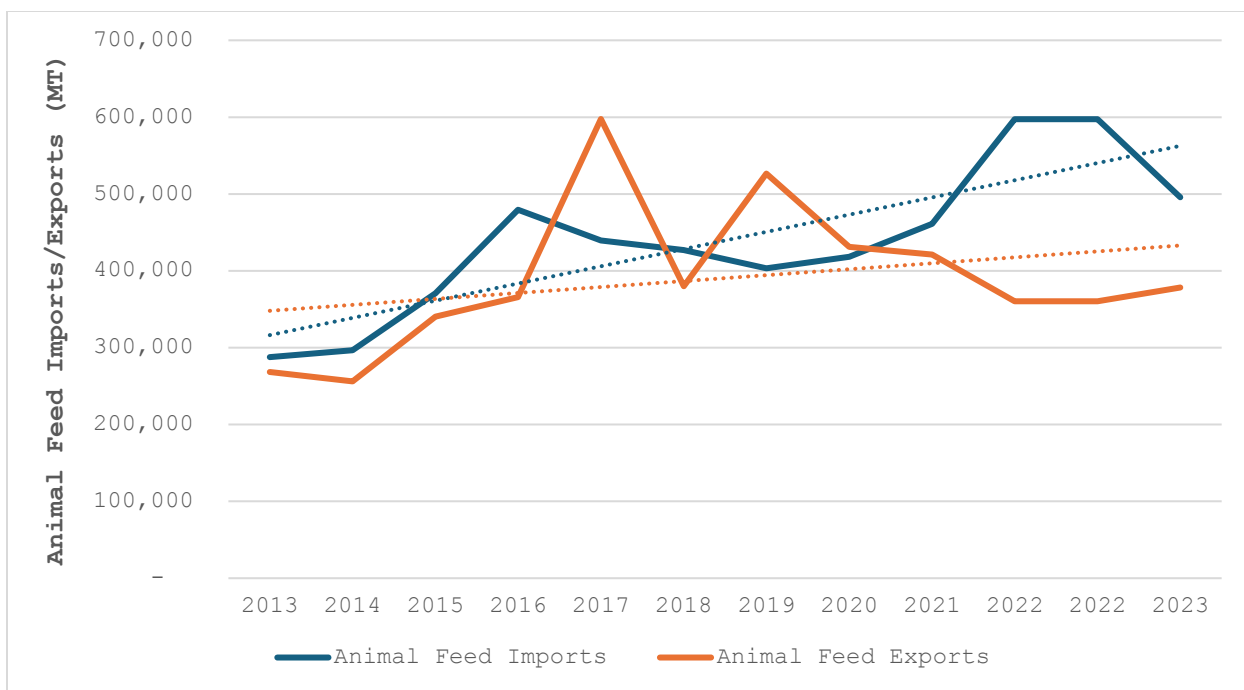
South Africa is generally self-sufficient in the production of animal feed and imports are minimal, representing less than 5 percent of domestic consumption. However, animal feed (including pet food) imports grew by more than 70 percent over the past 10 years (see also Figure 8), averaging at about 440,000 MT per year. The growth in the imports of animal feed is largely dependent on the demand for animal products, and in particular feed intensive industries

such as poultry, dairy and pork and the response of the local industry to expand production competitively.

South Africa's exports of animal feed are also relatively small and average less than 400,000 MT per annum over the past 10 years. South Africa's neighboring countries are the main markets with Namibia, Botswana and Lesotho the top three destinations. South Africa also exports small amounts of alfalfa (lucerne) meal and pellets to the United Arab Emirates and Saudi Arabia.

Figure 8

South Africa's Trade in Animal Feed



Source: FAS/Pretoria using Trade Data Monitor LLC data

Attachments:

No Attachments.