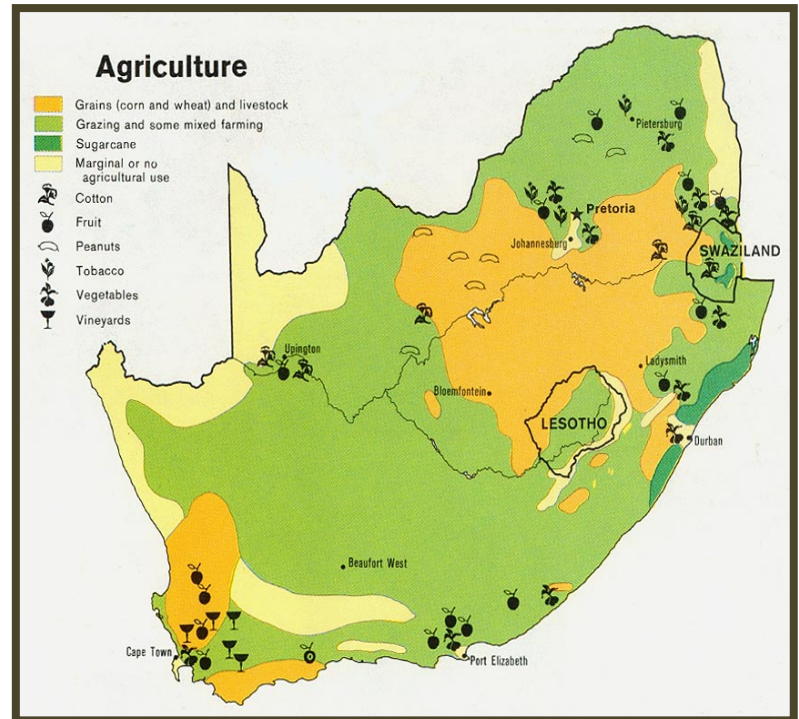


Republic of South Africa

Veterinary Capabilities

Executive Summary

- **The Republic of South Africa** is the southernmost country on the African continent. The country includes a surface area of 1.2 million square kilometers and over 2,500 km of coastline.¹
- **The population** exceeds 50 million with varied cultural backgrounds, though almost 80% report as indigenous African.²
- **South Africa** boasts the largest African economy with a per capita gross domestic product of nearly \$500 million US (2008).³
- **The agriculture industry**, which includes livestock farming, accounts for 10% of reported employment and creates employment for another 16% in auxiliary sectors.⁴
- **Agriculture** accounts for approximately one-third of all exports.
- **50%** of available fresh water is used for agricultural purpose.⁵



15 July 2010 National Zoological Gardens in Pretoria, South Africa

¹ <http://www.southafrica.info/about/geography/geography.htm#.ULjjqOTAeZA>

² OED Stat Extracts - <http://stats.oecd.org/index.aspx?queryid=23123>

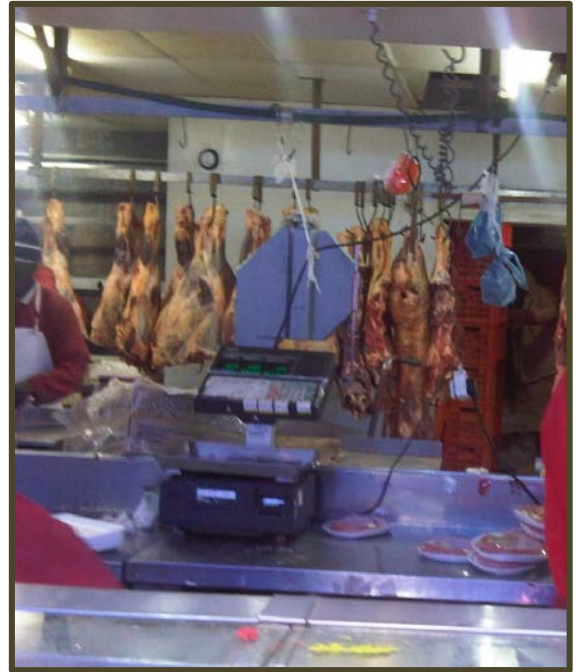
³ Ibid

⁴ <http://www.dst.gov.za/images/pdfs/FORESIGHT%20AGRICULTURE%20REPORT.pdf>

⁵ Ibid

Livestock Industry

- Livestock is the largest agricultural sector in South Africa, contributing up to 49% of agricultural output with a population of approximately 13.8 million cattle, 28.8 million sheep, and 6.4 million goats.⁶
- The livestock sector produces an estimated 900,000 tons of red meat each year.
- The poultry industry, with at least 11 million chickens, produces about 960,000 tons of meat annually.
- Industry estimates show that farmers own roughly 1.2 million pigs.
- South Africa is also responsible for 65% of global sales of ostrich products –leather, meat, and feathers.
- The country consistently ranks among the top ten wool producers with an annual output of about 100,000 tons.
- South Africa has over 4,000 milk producers, employing about 60,000 farm workers and indirectly providing jobs to 40,000 more people.
- South Africa produces almost 85% of its own meat, leaving only about 15% to import.⁷



10 July 2010 Butchery in Johannesburg, South Africa



10 July 2010 Butchery in Johannesburg, South Africa

Agricultural Trade

- The agriculture import/export industry is jointly regulated by the Department of Agriculture and the National Executive Officer (NEO) in accordance with criteria set forth by **Codex Committee on Food Import and Export Inspection and Certification**.
- An **Export Health Certificate** issued by the NEO is required for all animals exported.⁸
- Security is managed by the **Border Control Operations Coordinating Committee**.⁹
- Current regulations do not authorize the inspection of all animal derived food manufacturers. This creates a gap in the quality assurance of such exports.¹⁰

⁶ <http://www.southafrica.info/business/economy/sectors/agricultural-sector.htm>

⁷ <http://www.southafrica.co.za/about-south-africa/environment/agriculture-forestry-and-land/>

⁸ <http://www.info.gov.za/view/DownloadFileAction?id=93620>

⁹ <http://www.borders.sars.gov.za/>

¹⁰ <http://www.info.gov.za/view/DownloadFileAction?id=93620>

In 2008, South Africa had an estimated 2,739 registered veterinarians and 865 registered veterinary practices. Veterinarians are employed in a variety of sectors¹¹:



19 July 2010 Animal Emergency Clinic in Oakdene, South Africa

Small Animal Practices

- All larger towns and cities have veterinary practices specializing in small animals. These range from small clinics with only basic equipment to large, sophisticated veterinary hospitals.

Rural Practitioners

- Provide veterinary services to local farmers. They manage the health of the cattle herds and offer advice to farmers regarding medications and vaccinations

Wildlife Veterinarians

- A small group of veterinarians associated with wildlife conservation and game farming. A few are employed full-time by the government's National Parks Board.

Equine Practices

- Since South Africa has a thriving horseracing and breeding industry, many veterinarians specialize exclusively in equine health.

Pharmaceutical Industry

- Serve as liaisons between veterinary pharmaceutical companies and their customers

Welfare Veterinarians

- Welfare societies such as the Society for the Prevention of Cruelty to Animals (SPCA) and the Animal Anticruelty League (AAL) provide services in impoverished communities.

Community Veterinary Clinics

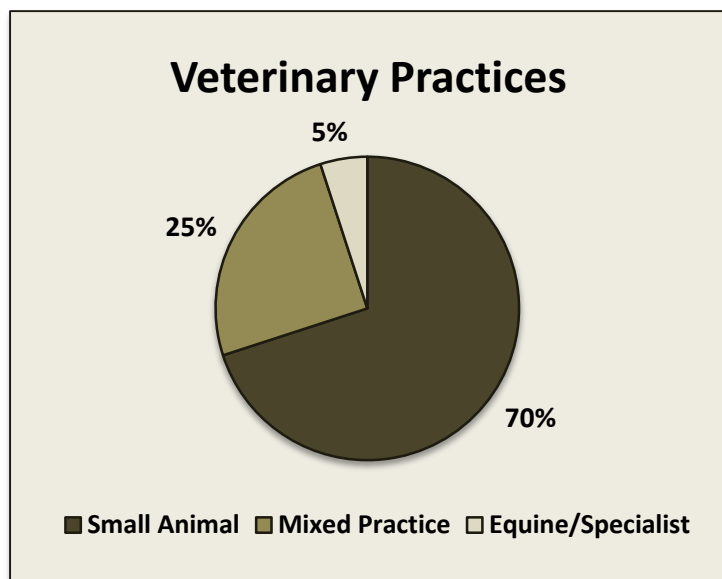
- In some emerging communities, small animal practitioners work with welfare organizations to provide free veterinary services.

Public Health

- Work in abattoirs and laboratories where they are responsible for enforcing basic meat and milk hygiene standards and ensuring that processing plants meet national and international food safety standards

Academia

- The internationally recognized **University of Pretoria Faculty of Veterinary Science** in Onderstepoort employs 60-80 veterinarians as teaching and support staff.



¹¹http://web.oie.int/eng/VETMED08/pdf_manuscripts/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

The National Directorate of Veterinary Services (NDVS)¹²

- Veterinary services in South Africa are centralized under the NDVS within the Department of Agriculture, Forestry, and Fisheries (DAFF)
- Each of the nine provinces in South Africa has an independent veterinary department whose director reports to the Central Directorate of Veterinary Services.



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The South African Veterinary Council^{13&14}

- Falls under the authority of the Minister of Agriculture
- Legislative and judicial body responsible for the registration of veterinary professionals
- Controls the standards for veterinary education
- Responsible for setting and maintaining ethical standards of veterinary practice

The South African Veterinary Association (SAVA)^{15&16}

- Key representative organization for South African veterinary professionals
- Works closely with the Veterinary Council to guarantee representation for the veterinary profession
- Each province has a branch with a representative serving on the Federal Council

University of Pretoria Faculty of Veterinary Science

- Offers an internationally recognized Bachelor of Veterinary Science (BVSc) degree¹⁷
- The school has 5 academic departments¹⁸
 - Anatomy and Physiology
 - Companion Animal Clinical Sciences
 - Para-clinical Sciences
 - Production Animal Studies
 - Veterinary Tropical Diseases
- The **Veterinary Tropical Diseases** department offers training in integrated livestock and wildlife health and management. It plays a leading role in research and training of postgraduate students in tropical animal health.¹⁹

Key Legislation

- **Animal Health Act of 2002**²⁰
 - Provides guidelines for the promotion of animal health and the control of animal diseases
 - Allows the Minister of Agriculture to designate a veterinarian as **National Executive Officer** who is responsible for carrying out the provisions of the Act
- **Veterinary and Para-Veterinary Professions Act, 1982**²¹
 - Describes the services and authorities of South African veterinarians and para-veterinary professionals

¹²http://web.oie.int/eng/VETMED08/pdf_manuscripts/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

¹³<http://savc.co.za>

¹⁴http://web.oie.int/eng/VETMED08/pdf_manuscripts/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

¹⁵ <http://www.vetassociation.co.za/>

¹⁶http://web.oie.int/eng/VETMED08/pdf_manuscripts/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

¹⁷ <http://web.up.ac.za/default.asp?ipkCategoryID=1127&subid=1127&ipklookid=13>

¹⁸ <http://web.up.ac.za/default.asp?ipkCategoryID=58&subid=58&ipklookid=13>

¹⁹ <http://web.up.ac.za/default.asp?ipkCategoryID=270&subid=270&ipklookid=13>

²⁰ <http://www.info.gov.za/view/DownloadFileAction?id=68108>

²¹ http://www.savc.org.za/pdf_docs/act_19_of_1982.pdf



Animal & Zoonotic Disease Response

15 July 2010 National Zoological Garden in Pretoria, South Africa

The National Directorate of Veterinary Services²² (NDVS) is responsible for the control and prevention of animal/zoonotic disease events. The NDVS has seven sub-directorates:

1. Disease Control
2. Animal Health
3. Import and Export Policy
4. Epidemiology
5. Veterinary Hygiene
6. Quarantine and Inspection Services
7. Veterinary Public Health

The important and far-reaching **Animal Health Act of 2002**²³ provides measures to promote animal health and control animal diseases. It also regulates the import/export of animals and related product and establishes response plans regarding animal health.

Major Animal Diseases of South Africa^{24&25}

- African Horse Sickness
- Anthrax
- Bluetongue
- Bovine Tuberculosis
- Brucellosis
- Crimean Congo hemorrhagic fever
- Dourine
- Foot-and-Mouth Disease
- Lumpy Skin Disease
- Newcastle Disease
- Q Fever
- Rift Valley Fever



15 July 2010 National Zoological Garden in Pretoria, South Africa

²² http://web.oie.int/eng/VETMED08/pdf_manuscripts/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

²³ <http://www.info.gov.za/view/DownloadFileAction?id=68108>

²⁴ <http://www.nda.agric.za/>

²⁵ <http://www.oie.int/wahis/public.php>

Research and Laboratory Capabilities

- The **South African Society for Animal Science (SASAS)**²⁶ is the country's key association of animal scientists. They work toward advancing animal science and promoting viable animal production systems throughout the country.
- The **Agriculture Research Council-Onderstepoort Veterinary Institute (ARC-OVI)**²⁷ is a nationally and internationally recognized veterinary center of excellence. Its mission is to provide scientific support for veterinary services for all of South Africa. It provides comprehensive diagnostic services and produces vaccines against livestock diseases such as foot-and-mouth disease (FMD)
 - ARC-OVI collaborates with the **World Organization for Animal Health (OIE)** and the **Food and Agriculture Organization of the United Nations (FAO)** in the surveillance and control of animal diseases in Africa. It also hosts **OIE reference laboratories** for Foot-and-Mouth Disease, Lumpy Skin Disease, Rift Valley Fever, Bluetongue, African Horse Sickness, and African Swine Fever.
- The **National Institute for Communicable Diseases** is South Africa's national public health institute.²⁸
 - It's **Center for Emerging Zoonotic Diseases**²⁹ (CEZD) aims to be a national and international center of excellence in the area of zoonotic disease.
 - The CEZD aims to support the surveillance, detection, and outbreak response systems for zoonotic diseases using innovations in science and technology
 - The CEZD hosts the **Special Bacterial Pathogens Reference Laboratory** and the **Special Viral Pathogens Reference Laboratory**.

Epidemiology & Surveillance

- Surveillance and control of animal disease is partially carried out through the expertise of the ARC-OVI³⁰
- The **National Directorate of Veterinary Services** has a sub-directorate devoted to epidemiology. The website of the Department of Agriculture, Forestry, and Fisheries (DAFF) provides disease maps, statuses, and reporting forms for prevalent livestock diseases.³¹

Isolation, Disposal, & Compensation³²

- In order to prevent the spread of animal diseases and parasites the **Animal Health Act of 2002** authorizes the National Executive Officer to make decisions regarding isolating, detaining, seizing, or slaughtering of affected animals.
- The government of South Africa has established formal procedures regarding compensation to livestock owners affected by the actions and decisions of the National Executive Officer.

²⁶ <http://www.sasas.co.za/>

²⁷ <http://www.arc.agric.za/home.asp?pid=2564>

²⁸ http://www.nicd.ac.za/?page=about_us&id=49

²⁹ http://www.nicd.ac.za/?page=emerging_zd&id=19

³⁰ <http://www.arc.agric.za/home.asp?pid=2564>

³¹ <http://www.nda.agric.za/>

³² <http://www.info.gov.za/view/DownloadFileAction?id=68108>