UNCLASSIFIED - 4/12/2011



South Africa Veterinary Capabilities Study

General background

With a surface area of 1.22 million km² and a population of 50,492 million¹ South Africa is one of the largest countries on the African continent. It is also the largest African economy, with a per capita gross domestic product of \$493.49 US (2008),² more than four times the African average. Agriculture contributes less than 4% to the GDP but accounts for 10% of the total reported employment, creating employment for another 16% of the workforce in other sectors.³ South African agriculture is increasingly export-oriented with about one third of total production exported. Agricultural export revenues reached almost 9% of the total value of national exports.

Livestock background, distribution, and demographics

Livestock is the largest agricultural sector in South Africa, contributing up to 49% of agricultural output with a population of some 13.8 million cattle, 28.8 million sheep and 6.4 million goats. Stock breeders concentrate on the development of breeds that are well adapted to diverse climatic and environmental conditions.⁴ South Africa produces 85% of its meat requirements, with 15% imported from other countries.⁵ Local demand generally outstrips production, even though there are untapped reserves in the communal farming areas. The livestock sector produces an estimated 900,000 tons of red meat each year. Poultry and pig farms are also present, with most large commercial farms near metropolitan areas. Industry estimates that farmers own roughly 1.2 million pigs. The poultry industry, with at least 11 million chickens, produces about 960,000 tons of meat annually. Broiler production contributes about 80% to total poultry meat production. A small but growing ostrich-raising industry in South Africa produces 65% of the world's sales of ostrich products -leather, meat and feathers. Wool is an important agricultural export. South Africa became the world's fourth-largest exporter of wool by the late 1940s, consistently ranked among the top ten wool producers with an output of about 100,000 tons in most years. Dairy production is found throughout the country, especially in the eastern half and, except for periods of extreme drought, is sufficient to meet domestic needs. The dairy industry is important to South Africa's job market with over 4,000 milk producers employing about 60,000 farm workers, indirectly providing jobs to some 40,000 people. The predominant dairy breeds are Holstein, Friesian and Jersey cows. The price of milk was deregulated in 1983 resulting in lower prices. Industry regulations enforce strict health precautions. All wholesale milk buyers pay a compulsory levy to the National Milk Board. This money is pooled in a stabilization fund used to subsidize dairies manufacturing butter, skim milk powder and cheese when a surplus exists. The indigenous meat-producing Boer goat accounts for about 30% of all

¹ OED Stat Extracts - http://stats.oecd.org/index.aspx?queryid=23123

² Ibid

³ Foresight Agriculture Report 2/2/2007 - - http://www.dst.gov.za/publications-policies/foresight-

reports/documents/FORESIGHT AGRICULTURE REPORT.doc/view?searchterm=NSI Agriculture

⁴ http://www.southafrica.info/business/economy/sectors/agricultural-sector.htm

⁵ South Africa Online - http://www.southafrica.co.za/about-south-africa/environment/agriculture-forestry-and-land/

commercial goats. The Angora goat is used for mohair production. South Africa has more game and a wider variety of game species than most countries.^{6&7}

Relative proportions of livestock distribution in South Africa⁸ General information on the status of veterinary medicine

			01011101	30.0			
l livestock n	umbers per	province for	or the perio	d Novemb	er 2004 - N	lovember 2	2005
Cattle		Sheep		Pigs		Goats	
Nov-04	Nov-05	Nov-04	Nov-05	Nov-04	Nov-05	Nov-04	Nov-05
Thousands							
493,898	499,000	2,654,071	2,637,000	188,141	175,000	241,369	241,000
474,892	479,000	6,493,882	6,355,000	26,201	23,000	579,302	564,000
2,293,312	2,324,000	5,176,957	5,184,000	132,010	127,000	224,593	224,000
3,099,458	3,125,000	7,722,471	7,763,000	158,076	150,000	2,565,074	2,545,000
2,851,155	2,857,000	776,123	775,000	164,533	164,000	930,881	938,000
1,379,570	1,385,000	1,759,065	1,740,000	133,889	133,000	98,740	99,000
1,176,454	1,207,000	216,916	216,000	399,278	399,000	1,036,955	1,047,000
275,786	285,000	92,396	91,000	169,848	176,000	42,146	43,000
1,772,514	1,811,000	615,559	584,000	305,470	301,000	725,398	740,000
13,817,039	13,972,000	25,507,440	25,345,000	1,677,446	1,648,000	6,444,458	6,441,000
	Ca Nov-04 493,898 474,892 2,293,312 3,099,458 2,851,155 1,379,570 1,176,454 275,786 1,772,514	Cattle Nov-04 Nov-05 493,898 499,000 474,892 479,000 2,293,312 2,324,000 3,099,458 3,125,000 2,851,155 2,857,000 1,379,570 1,385,000 1,176,454 1,207,000 275,786 285,000 1,772,514 1,811,000	Cattle She Nov-04 Nov-05 Nov-04 493,898 499,000 2,654,071 474,892 479,000 6,493,882 2,293,312 2,324,000 5,176,957 3,099,458 3,125,000 7,722,471 2,851,155 2,857,000 7,76,123 1,379,570 1,385,000 1,759,065 1,176,454 1,207,000 216,916 275,786 285,000 92,396 1,772,514 1,811,000 615,559	Cattle Sheep Nov-04 Nov-05 Nov-04 Nov-05 493,898 499,000 2,654,071 2,637,000 474,892 479,000 6,493,882 6,355,000 2,293,312 2,324,000 5,176,957 5,184,000 3,099,458 3,125,000 7,722,471 7,763,000 1,379,570 1,385,000 1,759,065 1,740,000 1,176,454 1,207,000 216,916 216,000 275,786 285,000 92,396 91,000 1,772,514 1,811,000 615,559 584,000	Cattle Shep Pi Nov-04 Nov-05 Nov-04 Nov-05 Nov-04 493,898 499,000 2,654,071 2,637,000 188,141 474,892 479,000 6,493,882 6,355,000 26,201 2,293,312 2,324,000 5,176,957 5,184,000 132,010 3,099,458 3,125,000 7,722,471 7,763,000 168,076 2,851,155 2,857,000 776,123 775,000 164,533 1,379,570 1,385,000 1,759,065 1,740,000 133,889 1,176,454 1,207,000 216,916 216,000 399,278 275,786 285,000 92,396 91,000 169,848 1,772,514 1,811,000 615,559 584,000 305,470	Cattle Sheep Pigs Nov-04 Nov-05 Nov-04 Nov-05 Nov-04 Nov-05 493,898 499,000 2,654,071 2,637,000 188,141 175,000 474,892 479,000 6,493,882 6,355,000 26,201 23,000 2,293,312 2,324,000 5,176,957 5,184,000 132,010 127,000 3,099,458 3,125,000 7,722,471 7,763,000 164,533 164,000 1,379,570 1,385,000 1,759,065 1,740,000 133,889 133,000 1,176,454 1,207,000 216,916 216,000 399,278 399,000 275,786 285,000 92,396 91,000 169,848 176,000 1,772,514 1,811,000 615,559 584,000 305,470 301,000	Nov-04 Nov-05 Nov-04 Nov-05 Nov-04 Nov-05 Nov-05<

Industry Overview

Source: NDA

As of March 2008 the veterinary profession in South Africa had 2,739 registered veterinarians, about 250 working in other countries. There are 865 registered practices. Seventy percent of these practices are small animal practices, 25 % are mixed practices, and 5 % are equine and specialist practices. The profession is governed by the South African Veterinary Council which is the legislative and judicial body responsible for the registration of veterinarians, veterinary nurses, technologists and specialists. The Council falls under the Minister of Agriculture and lies within the Department of Agriculture. The Veterinary Council controls the standards of primary veterinary education and ensures that practicing veterinarians maintain their standards. The Veterinary Council is also responsible for setting and maintaining the ethical standards of practice and compliance with legislation such as the Veterinary Act⁹ and Medicines Control Act.¹⁰ The South African Veterinary Association is responsible for representing the profession and its interests and consists of a Federal Council with branches in each of the provinces of South Africa. Each branch has a representative on the Federal Council. The Federal Council of the South African Veterinary Association (SAVA), the key representative organization for South African veterinarians, ¹¹ has a close liaison with the Veterinary Council to ensure that the veterinary profession in South Africa is represented.¹²

⁶ Agricultural Policy Reform in South Africa - The OECD Policy Brief is prepared by the Public Affairs Division, Public Affairs and Communications Directorate. They are published under the responsibility of the Secretary-General. South Africa Organization for Economic Co-Operation and Development, www.SourceOECD.org

⁷ Agricultural Policy Reform in South Africa - The OECD Policy Briefs Internet site: www.oecd.org/publications/Policybriefs

⁸ http://www.kzntransport.gov.za/public_trans/freight_databank/kzn/industries/poultry_production/index_xml.html

⁹ Veterinary and Para-Veterinary Professions Act No. 19 of 1982 http://home.intekom.com/animals/info/legislation/vpvpa.html ¹⁰ http://www.nda.agric.za/vetweb/Legislation/Other%20acts/R Medicines and related substances.htm

¹¹ South African Veterinary Association - http://www.sava.co.za/

¹² Veterinary profession and practices in South Africa OIE Conference on veterinary medicinal products in Africa, Dakar, 25-27 March 2008, R.D. Sykes, Veterinary Regulatory Consultant

Municipal veterinary services

Veterinarians working in public health are employed by larger municipalities. They are usually situated at abattoirs (slaughterhouses) where they are responsible for enforcing the basic meat and milk hygiene standards and ensuring that slaughter and hygiene in meat processing plants meet national and international standards. They also inspect and recommend approval of meat and offal rendering plants. They are responsible for enforcing the standards regulating milk collection, transport and processing. Many are associated with laboratories that perform the microbiological and analytical tests on meat and milk products.

Rural practitioners

These veterinarians are concentrated in areas where livestock numbers are adequate to support their practice. In most cases, they are located in a fair sized town that services a farming population consisting mainly of dairy and semi-intensive beef production. The veterinarian is involved in managing the farmer's herd health, in part by providing advice concerning which medications, vaccines and animal health products to use and their administration.

Equine practice

South Africa has a thriving horse-racing and horse-riding community. As a result, a number of veterinarians have specialized in equine practice, providing care for the training stables and breeding establishments. It is estimated that about one hundred and fifty veterinarians perform veterinary procedures on equines in South Africa. Also, about ten veterinarians who are located mainly near race tracks specialize in equine practice to the exclusion of other animals. Other veterinarians who do an appreciable amount of equine practice are associated with riding, show jumping, polo ponies and horses used for endurance trials.

Veterinarians in industry

Approximately fifty veterinarians are employed full time by companies associated with the development, marketing and servicing of veterinary medical remedies. These veterinarians are required to maintain international contacts concerning drug developments. They provide a valuable service not only to the client (e.g., farmer, pet-owner, etc.) but also to the veterinary pharmaceutical industry.

Academia

The Faculty of Veterinary Science of the University of Pretoria, based at Onderstepoort, on the outskirts of Pretoria is internationally recognized. It has a teaching and support staff of approximately sixty to eighty veterinarians. The full degree course takes six years and consists of a basic Bachelor Degree of three years followed by the intensive veterinary degree course culminating in the final Bachelor of Veterinary Science (BVSc) degree.¹³

Wild-Life veterinarians

A small group of veterinarians are associated with wild-life conservation and game farming... They are employed full-time or part-time and are mostly involved with wildlife capture and control. A few are in the full time employ of the National Parks and Natal Parks Boards.

Welfare veterinarians

A number of welfare organizations work in the poorer communities. These include the Society for the Prevention of Cruelty to Animals (SPCA), Animals in Distress (AIDS) and the Animal Anticruelty League (AAL). The larger societies employ full time veterinarians.

¹³ http://web.up.ac.za/default.asp?ipkCategoryID=50/

Community veterinary clinics

In a number of larger centers where a need has been identified, small animal practitioners offer their services free of charge to emerging communities. They complement the services of welfare organizations and concentrate on areas where veterinary services are not available.

Small animal practice

All larger towns and cities have veterinary practices that specialize in small animals. There are over 350 veterinarians belonging to the clinicians group. Practices range from solo practitioner clinics utilizing basic equipment for routine operations and emergency treatment to very sophisticated veterinary hospitals.¹⁴

Veterinary infrastructure

Veterinary administrative authorities, laws, regulations and bills

Veterinary services in South Africa are centralized. Overall control of animal health is the responsibility of the National Directorate of Veterinary Services (NDVS). 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; and 7. Veterinary Public Health. Each of the nine provinces in South Africa has an autonomous veterinary department that controls activities and services within the province. The Director of each province reports to the Central Directorate of Veterinary Services. Each province has autonomy but the overall control still lies with the central department.¹⁵ The important and far reaching Animal Health Act of 2002¹⁶ provides measures to promote animal health and control animal diseases; assigns executive authority with regard to certain provisions of the Act to provinces; regulates the importation and exportation of animals and things (related products); establishes animal health schemes; and assigns specific functions concerning animal health to provincial executives. Under this Act the National Executive Officer, who is a veterinarian, is designated by the Minister of Agriculture to carry out all of the provisions of this Act under the Minister's control and direction. Topics where the National Executive Officer exercises prime powers and duties include investigations, experiments and research, manufacturing and evaluation of certain products concerning animal diseases and animal vaccines, issuing export health certificates, establishing transport restrictions, detentions and disposal of imported products, control over land, disease incidence reporting, determining fitness of health, entering, searching and carrying out inspections and controlled veterinary procedures and taking the lead in dealing with the determination of compensation due to losses, evidence, offenses, and penalties.¹⁷

Key national government structures that assist in the control of high consequence animal diseases

Minister of Agriculture

After consultation with the National Health Council, the Minister can declare by notice in the Government Gazette any notifiable communicable disease if in his/her opinion it meets criteria to: 1. be a threat to the local Province; 2. require action by National or Provincial government entities or; 3. be regarded as a public health risk of international concern.¹⁸ Specific diagnostic criteria are used by the

¹⁴ Veterinary profession and practices in South Africa OIE Conference on veterinary medicinal products in Africa, Dakar, 25-27 March 2008, R.D. Sykes, Veterinary Regulatory Consultant State Veterinary Service -

 $http://www.oie.int/eng/VETMED08/pdf_manuscrits/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf^{15}\ Ibid$

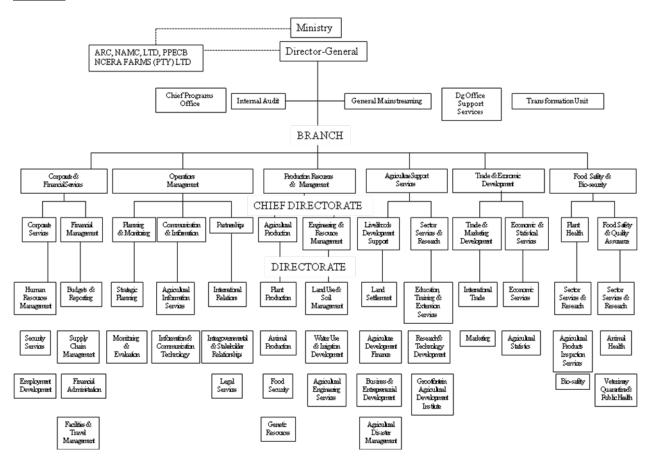
¹⁶ 2002 ANIMAL HEALTH ACT, 2002 - http://www.info.gov.za/view/DownloadFileAction?id=68108

¹⁷ Animal Health Bill – 2001 http://www.info.gov.za/view/DownloadFileAction?id=67230

¹⁸ 25 January 2008, Department of Health, National Health Act, 2003 (Act No. 61 of 2003) Regulations Regarding Communicable Diseases, No. 30681 31

Minister as a basis for making this notification of a disease.¹⁹ Also, there are official protocols such as the Foot-and-Mouth Disease Control Protocol of 2005 that specify how the government deals with specific high consequence diseases. The objective of this protocol is to provide for the prevention of spread of FMD in the country. The protocol makes provision for inspections, vaccinations and movement control for the early detection of FMD. In case of an outbreak, or suspected outbreak of FMD, this protocol is overruled by the FMD contingency plan and/or control campaign protocol. However, the protocol still serves as a Procedural Manual for all role-players who are involved with FMD control.²⁰

<u>Organizational Chart South Africa Department of Agriculture, Forestry & Fisheries (DAFF) –</u> <u>8/3/2009²¹</u>



Central Directorate of Veterinary Services confers on Veterinary Services

In accordance with the Animal Diseases Act No. 35 of 1984, the Central Directorate of Veterinary Services provides the Veterinary Services with the power to search vehicles and to confiscate and destroy any animal or animal product presenting a risk for spreading an animal disease.²²

¹⁹ Ibid

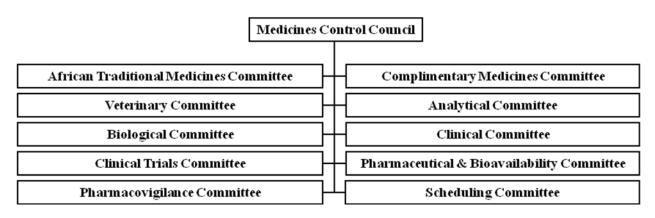
²⁰ August 2005, Republic of South Africa National Department of Agriculture, Foot-and-Mouth Disease Control Protocol 2005, http://www.nda.agric.za/vetweb/DiseaseControl/Protocols/FMDMovementControlProtocolSOUTHAFRICA2005_2_.pdf

²¹ http://www.nda.agric.za/doaDev/topMenu/aboutUs/doc/DAFF_Structure_3August2009.pdf

²² Pamphlet on South African Chief Veterinarian - 2007 <u>www.nda.agric.za/publications</u>

Veterinary Medicines Control Council of South Africa

The dissemination of information regarding pharmaceutical guidelines in veterinary medicine falls under the Veterinary Medicines Control Council. Their responsibilities include providing general information on veterinary medicines, bioavailability and bioequivalence of veterinary medicines, veterinary drug recalls, efficacy of veterinary biologicals, efficacy of and Good Clinical Practice including guidelines on preclinical safety studies for veterinary medicines and the safety of veterinary biologicals.²³ **Veterinary Medicines Control Council of South Africa**²⁴



Local-level entities

The municipality in which the disease has occurred is required to take all the needed measures to prevent the spread of the disease, ²⁵ which includes control over all "land and animals." ²⁶

Personnel, education and training

South Africa	Veterinary	Services	<i>personnel</i> – 2007 ²⁷
South 11,100	,	50177005	

Service	Veterinary Staff		Administrative Staff		Technical Staff		Auxiliary Personnel Border & Redline	
	Filled Posts	Vacant Posts	Filled Posts	Vacant Posts	Filled Posts	Vacant Posts	Filled Posts	Vacant Posts
National	26	20	35	2	88	8	0	0
Provincial	187	104	226	54	1079	305	530	184
Total	213	124	261	56	1167	313	530	184
%	63	37	82	18	79	21	74	26

²³ Vet Medicines Control Council South Africa – ref: http://www.mccza.com/showdocument.asp?Cat=20&Desc=Guidelines-VeterinaryMedicine

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

²⁷ Veterinary profession and practices in South Africa OIE Conference on veterinary medicinal products in Africa, Dakar, 25-27 March 2008, R.D. Sykes, Veterinary Regulatory Consultant State Veterinary Service -

²⁴ Ibid

²⁵ January 2008, Department of Health, National Health Act, 2003 (Act No. 61 Of 2003) Regulations Regarding Communicable Diseases, No. 30681 31)

²⁶ Government Gazette, Vol. 445 Cape Town 30 July 2002 No. 23675 No. 7 of 2002: Animal Health Act, 2002

http://www.oie.int/eng/VETMED08/pdf_manuscrits/pdf_anglais/SYKES_2503_Session1_manuscript_eng.pdf

Veterinarians and Para- Veterinary Professionals

All services of South African Veterinarians and Para- Veterinary Professionals are described in the Veterinary and Para-Veterinary Professions Act, 1982 (Act No. 19 of 1982), which has been amended several times.²⁸

Veterinarians

Services provided

Under this Act services provided by the veterinarian include: 1. the diagnosis, treatment, prevention of, or advice on a disease, physiological or pathological condition in an animal; 2. a surgical or dental operation or procedure on an animal; and 3. the prescribing or administration of medicine to an animal.

Training and registration

All practicing veterinarians must be registered with the South African Veterinary Council. ²⁹ Regarding training, the University of Pretoria School of Veterinary Science is South Africa's major veterinary university. It is located on the Onderstepoort campus of the university some 20 km northwest of the Hatfield main campus and some 15 km due north of the city centre of Pretoria (Tshwane). The Faculty of Veterinary Science dates back to the early 1920s. The Bachelor of Veterinary Science (BVSc) degree of the University of Pretoria is recognized by the veterinary authorities of several countries including the Royal College of Veterinary Surgeons in the UK, the Australasian Veterinary Boards Council in Australia, New Zealand and Tasmania as well as by the relevant authorities in Malaysia. The university is comprised of five academic departments including; Anatomy and Physiology, Companion Animal Clinical Sciences, Para-clinical Sciences, Production Animal Studies, and Veterinary Tropical Diseases.³⁰ The key training in integrated livestock and wildlife health and management in South Africa is located at the Department of Veterinary Tropical Diseases, Faculty of Veterinary Science of the University of Pretoria.

The Department of Veterinary Tropical Diseases is one of the few establishments on the continent of Africa that has a comprehensive offering of postgraduate training with a primarily web-based Masters of Science degree program in Veterinary Tropical Diseases. Most of the modules in this course can also be taken for Continuing Professional Development purposes. The Department of Veterinary Tropical Diseases plays a leading role in research and the training of postgraduate students in tropical animal health. As a further positive factor, the Faculty of Veterinary Science and the Onderstepoort Veterinary Institute (OVI) are in close proximity to each other. This affords unique opportunities for cooperation in terms of facilities and expertise to study tropical and subtropical infectious and parasitic diseases.

Para-veterinary professionals (animal health technicians)

Services provided

The para-veterinary professional (animal health technician) provides the following services: 1. surveillance and inspection of all livestock, poultry and game; 2. reporting of all diseases listed by the Office International des Epizootics (OIE) guidelines in disease control areas, livestock auctions, sales and during routine farm visits and inspections; 3. implementation of vaccination programs and administration of vaccines in livestock; implementation of parasite control programs in livestock; 4. abattoir inspections with reports in writing to the Veterinary Public Health Directorates of the National Department of Agriculture and Provincial Department of Agriculture; 5. meat inspections and other duties if authorized thereto by the Provincial Executive Officer; 6. performing delegated duties pertaining to regulated animal diseases; 7. taking samples for the diagnosis by a veterinarian of Brucellosis and testing animals for

³⁰ University of Pretoria School of Veterinary Science -

²⁸ Veterinary and Para-Veterinary Professions Act No. 19 of 1982 http://home.intekom.com/animals/info/legislation/vpvpa.html
²⁹ South African Veterinary Council - http://www.savc.co.za/index.php?option=com_content&view=article&id=127&Itemid=65

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

Tuberculosis using the intra-dermal tuberculin test (provided that the animal health technician passed a course approved by the Department of Agriculture; 8. Providing extension services (including training and education) to farmers, community members and their children to protect and promote the health and well being of animals; 9. collection and evaluation of data and the compiling of reports while assisting with epidemiological and research projects; 10. collection of specimens to assist in the investigation of reproductive and fertility problems in livestock; collection of samples, excluding the collection of samples by biopsy; 11. examination and analysis of samples including blood smears, skin and wool scrapings, urine analysis and fecal samples and elementary clinical chemistry; 12. carrying out basic post mortem examinations with the collection and submission of samples for microbiological, toxicological, histopathological and serological investigation. Also, in case of emergency an animal health technician or a veterinary nurse may render other services which fall within their scope of training and experience that are essential to save lives or relieve suffering in animals, on condition that a report thereon is made to the appropriate official who is registered to practice the veterinary profession as soon as possible and further treatment of such animal is entrusted to that person or another person registered to practice the veterinary profession.³¹

Training and requirements for registration

The following training and requirements are required to practice as an animal health technician: 1. completion of at least three academic years of study as a registered animal health technician student; 2. successful completion of the curriculum for the para-veterinary profession of animal health technician; and 3. capability to demonstrate sound knowledge of farm animals and production systems along with the capacity to identify problems related to the breeding, feeding, management and economics of livestock production³²

Continuing Professional Development

All registered veterinary professionals who provide veterinary services are required to comply with the Continuing Professional Development system to retain their registration to practice in terms of the Veterinary and Para-Veterinary Professions Act of 1982.³³

Information on occurrences, events, outbreaks of animal/zoonotic diseases of concern to South Africa

Animal and zoonotic diseases occurring in 2009 as listed on the South African government's Department of Agriculture, Forestry and Fisheries website and the OIE website ^{34 & 35}

- 1. African horse sickness
- 2. Anthrax
- 3. Bluetongue
- 4. Bovine tuberculosis
- 5. Brucellosis (B. abortus)
- 6. Crimean Congo hemorrhagic fever Confirmed infection/infestation without clinical signs
- 7. Dourine
- 8. Foot-and-mouth disease (FMD) *Exception –on 02/01/2011 there was an initial report of FMD in South Africa to the OIE*

³¹ 24 August 2007, Veterinary and Para-Veterinary Professions Act, 1982 (Act No. 19 of 1982) Rules Relating to the Practicing of Veterinary Nursing Professions: Amendment

³² 4 June 2004, Veterinary and Para-Veterinary Professions Act, 1982 (Act No. 19 OF 1982) Regulations Relating To Veterinary and Para-Veterinary Professions: Amendment, No. R. 679 (http://www.info.gov.za/view/DownloadFileAction?id=63131)

 ³³ 25 November 2005, regulations relating to continued professional development of veterinary professions - No. R. 1129
 ³⁴ www.daff.gov.za

³⁵ OIE Detailed country disease incidence - http://www.oie.int/wahis/public.php

- 9. Lumpy skin disease
- 10. Newcastle disease
- 11. Q fever
- 12. Rift Valley fever

Note: the South African Department of Agriculture, Forestry and Fisheries site provides information on control zones for:

- 1. African Swine Fever
- 2. Foot-and-Mouth Disease
- 3. For more Control Zone details go to the Agricultural Geo-referenced Information System website (http://www.agis.agric.za) open the Comprehensive Atlas and activate the control zones under Risks and Hazards and activate the Animal Disease Control Zones." Moreover, the site provides information in the form of a pdf as a List of Controlled and Notifiable Animal Diseases under the South African Act 35 0f 1984.³⁶

Diagnostics and research and development (R&D)

General Agricultural R&D

The 20th Century saw shifts in the structure of agriculture and agricultural production in South Africa. Farms grew in size, farm numbers declined and production emphasized higher-valued commodities. The gross value of agricultural output declined by 0.21 percent per year from 1982-2008. South African agricultural R&D has been affected by a series of major policy changes. A number of trends have been seen, including a flat line growth in total agricultural R&D spending, an erratic path of funding per scientist and a loss of scientific personnel in recent decades. South Africa has lost ground relative to its competitors in international commodity markets such as the United States and Australia in terms of the intensity of investment in agricultural R&D. These developments are likely to have long-term detrimental consequences for the productivity, performance and competiveness of South African agriculture.³⁷ Reflecting this decline, there were only forty-one R&D projects amounting to forty two million South African rands (R) or \$6,098,400 (US), commissioned in the 2006-2007 financial year for South Africa.³⁸

Biotechnology

South Africa remains behind most advanced nations with regard to modem biotechnology, particularly in areas such as genomics and proteomics. There is a shortage of highly skilled personnel in biotechnology in general, including agricultural biotechnology. The shortage of personnel spreads across and includes technicians, scientists and managers.³⁹

South African agricultural assistance program

Livestock production in South Africa is severely limited by disease. Many of the world's worst livestock diseases are indigenous to Africa. South Africa experienced an increased demand by African countries for technical assistance support in the field of agriculture. A Technical Assistance Program called the African Agricultural Development Programme was established as a contribution towards regional stability and the sustainable development of the economies of African countries. The department has completed desktop studies for selected countries. Through the assistance of the Food and Agriculture Organization's (FAO) technical co-operation support, the department has coordinated the development of a National Medium-

³⁶ http://www.nda.agric.za/vetweb/Disease Control/List of controlled notifiable Animal Diseases 2007.pdf

³⁷ South African Agricultural Research and Development: A Century of Change - Liebenberg, Frikkie, et. al., Issue Date: 2010-

⁰¹ Series/Report no.: Staff Paper - http://ageconsearch.umn.edu/handle/56688

³⁸ http://www.daff.gov.za/#

³⁹ Government Gazette Republic of South Africa - Vol. 482 Pretoria 26 August 2005 No. 27936

term Investment Program as a framework for implementation of the Comprehensive African Agricultural Development Programme.⁴⁰

International cooperation on R&D for human and animal diseases in Africa

Interdisciplinary cooperation in the area of international development occurs between the UK and South Africa. The diseases plague, ebola hemorrhagic fever and Rift Valley fever are targeted as part of an international partnership involving African researchers and the London International Development Centre. The Southern Africa Centre for Infectious Disease Surveillance (SACIDS) links medical and veterinary institutions from five African countries and the UK. SACIDS improves the capacity of African institutions to detect, identify and monitor infectious diseases affecting humans and animals, including new infectious human diseases of animal origin. SACIDS is primarily supported by the Wellcome Trust - UK's largest charity. The SACIDS network involves researchers from Tanzania, Mozambique, Zambia, Democratic Republic of Congo, South Africa, and the UK. This interdisciplinary partnership embodies the "one health" approach, promoting collaborations between human and animal health sectors.

Veterinary Laboratories ⁴¹

Laboratory accreditation, administrative requirements/procedures

The South African National (laboratory) Accreditation System (SANAS)

The lack of a National audit system for South African veterinary laboratories necessitated the establishment of requirements by DAFF addressing the matter for approval of laboratories. In 2009, the Directorate Veterinary Services approved veterinary laboratory requirements that ensure their results are acceptable both nationally and internationally. The SANAS was mandated through the new Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, No. 19 of 2006 and is the only body in South Africa for the accreditation and monitoring of Good Laboratory Practice activities.⁴² The SANAS has its office at the Department of Trade and Industry Campus, Sunnyside, Pretoria, South Africa. It is directed and legally represented by a Board of Directors, whose members are appointed by the Minister of Trade and Industry. Approval Committees of the Board make decisions concerning the granting and continuation of accreditation and GLP compliance.

DAFF Approved Veterinary Laboratory Requirements

These provide general requirements that a laboratory needs to meet if it is to be recognized as competent by DAFF to perform tests for controlled animal diseases and for import/export purposes. To comply with OIE requirements, DAFF makes use of laboratories audited and approved by the Directorate of Animal Health as well as SANAS Accredited Laboratories. Also, public or private Veterinary Laboratories requesting DAFF approval are audited and approved by the Directorate of Animal Health. In addition, so that there is confidence in test results at both the National and international levels, laboratories doing animal testing must independently demonstrate their competence to be recognized by DAH as an approved laboratory. In addition, South African laboratories approved by the OIE as reference laboratories are required to comply with OIE Standards and must obtain SANAS Accreditation.

⁴⁰ Vision and Mission of the African Agricultural Development Programme (AADP) http://www.daff.gov.za/#

⁴¹ DAFF - Directorate Veterinary Services DOA Approved Veterinary Laboratories: the Requirements – The South African National Accreditation System (SANAS) -

http://www.nda.agric.za/vetweb/epidemiology/Laboratories/DAFF%20002%20ED%2006%20DAFF%20Lab%20requirements.pdf

⁴² Government Gazette Republic of South Africa - Vol. 501 Cape Town 16 March 2007 No. 29712 No. 19 of 2006:

 $[\]label{eq:accreditation} Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 - http://www.sanas.co.za/genpdfs/accreditation_act.pdf$

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The major laboratory support organization

The South African Society for Animal Science is the country's key association of animal scientists who have as their common objectives to advance animal science and promote viable animal production systems while sustaining natural resources and the environment. Their scope of interests include all facets of livestock husbandry and as well as products derived from them. These include: 1. ensuring that high standards of education, research, technology and science-based public policy are upheld with regard to animal production and animal products; 2. upholding professional integrity and ethical codes; 3. fostering the scientific interests and professional status of members; 4. organizing symposia on a regular basis; 5. publishing a scientific journal; 6. serving as spokespeople on all matters relating to animal production and animal products in compliance with public welfare and general interests; and 7. to practice and report on animal agriculture based on science.⁴³

South African Members include:

Academic Institutions

- Animal Science and Poultry Science, University of KwaZulu-Natal, South Africa⁴⁴
- Department of Animal and Wildlife Sciences, University of Pretoria, South Africa⁴⁵
- Department of Animal Science at the University of Stellenbosch, South Africa⁴⁶
- The University of Tropical Agriculture Foundation⁴⁷
- Department of Animal, Wildlife & Grassland Sciences, University of the Free State⁴⁸

Societies

- South African Veterinary Association⁴⁹
- Grassland Society of Southern Africa⁵⁰
- Nutrition Society of South Africa (NSSA)⁵¹

Organizations

- PigTrop: Pig Production and Wild Suids in Tropics⁵²
- African Large Predator Unit (ALPRU), University of the Free State⁵³
- SA Ostrich Business Chamber (SA Volstruisbesigheidskamer)⁵⁴ E-mail: Anton Kruger akruger@saobc.co.za
- The Pet Food Industry Association of Southern Africa⁵⁵
- Milk Producers Organization⁵⁶
- Heifer Project South Africa⁵⁷
- Cattle Network⁵⁸

⁴³ The South African Society for Animal Science (SASAS) - http://www.sasas.co.za/

⁴⁴ http://www.ansi.unp.ac.za/

⁴⁵ http://web.up.ac.za/default.asp?ipkCategoryID=2053

⁴⁶ http://academic.sun.ac.za/animal/

⁴⁷ http://www.utafoundation.org/

⁴⁸ http://www.ufs.ac.za/animal

⁴⁹ http://sava.co.za/

⁵⁰ http://www.gssa.co.za/

⁵¹ http://www.nutritionsociety.co.za/

⁵² http://www.sasas.co.za/pigtrop.html

⁵³ http://www.uovs.ac.za/alpru

⁵⁴ http://www.saobc.co.za/

⁵⁵ http://www.pfi-sa.co.za/

⁵⁶ http://www.mpo.co.za/

 ⁵⁷ http://www.sasas.co.za/Hpsa.htm
 ⁵⁸ http://www.cattlenetwork.net/

Name	Location	Disciplines
ARC- Onderstepoort Veterinary	Onderstepoort	Flagship institute – wide variety of
Institute		diagnostics/testing, e.g., molecular diagnostics,
		vaccine production, and international
		collaboration center
Botswana National Veterinary	Botswana	Microbiology, serology, virology, histopathology
Laboratory		& chemistry
Capricorn Veterinary	Polokwane	Microbiology
Laboratories		
Central Veterinary Laboratory,	Zimbabwe	Bacteriology & virology
Zimbabwe		
Deltamune (Pty) Ltd	Pretoria	Microbiology & Serology
Onderstepoort Veterinary	Onderstepoort	Toxicological diagnostics
Institute		
Onderstepoort Veterinary	Onderstepoort	General bacteriology, serology & Tuberculosis
Institute – Bacteriology Division		diagnostics
Onderstepoort Veterinary	Onderstepoort	Microbiology & chemistry
Institute – Residue Laboratory		
Rainbow Veterinary Laboratory	Western Cape	Microbiology
Rainbow Veterinary Laboratory	Rainbow Farms,	Microbiology
– KwaZulu Natal	Hammarsdale	
Rainbow Veterinary Laboratory	Rustenburg	Microbiology
– Northern Region		
The National Horseracing	Turffontein	Biological & chemical testing
Authority of Southern Africa		-
Zimvet Laboratory	Zimbabwe	Microbiology (bacteriology) & serology

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Key research institutes under the South African Agricultural Research Council (ARC) ⁶⁰

The ARC-Onderstepoort Veterinary Institute (ARC-OVI) ⁶¹

Location: On a farm 12km north of Pretoria, at the juncture of several railway lines Subordinate to: Agricultural Research Council (before 1992, the Department of Agriculture) Size: OVI comprises a large block of buildings surrounded by a 512-acre farm. An additional 1770 acres of land has been leased to the north.

Primary Function: OVI is a veterinary research center affiliated with the Veterinary School at the University of Pretoria. The ARC was established by the Agricultural Research Act 86 of 1990 (as amended) and is the principal agricultural research institution in South Africa. It is nationally and internationally recognized as a veterinary centre of excellence. The ARC-OVI is a flagship institution of the Agricultural Research Council. The mission of ARC-OVI is to provide scientific support for Veterinary Services for all of South Africa. Research activities focus on the development and improvement of vaccines and diagnostic tests. The Institute provides comprehensive diagnostic services. It also produces vaccines against foot-and-mouth and tick-borne diseases. The ARC-OVI is the collaborating center for both the OIE surveillance and control of animal diseases in Africa and theFAO

⁵⁹http://www.sanas.co.za/directory/vetlab_default.php

⁶⁰ South African Agricultural Research Council (ARC) - http://www.arc.agric.za/home.asp?pid=1

⁶¹ The ARC-Onderstepoort Veterinary Institute, http://www.arc.agric.za/home.asp?pid=2564

for the emergency preparedness for transboundary animal diseases for Africa. The ARC-OVI also hosts six OIE reference laboratories for economically important viral diseases namely: African horse sickness, bluetongue, lumpy skin disease, Rift valley fever, rabies and African swine fever. The ARC/OVI is involved in the production of foot-and-mouth disease and blood vaccines, executing veterinary research to improve existing vaccines, diagnostic products and the development of new ones and providing diagnostic services for enhanced disease prevention, control and surveillance.⁶² Compared to plant biotechnology relatively few researchers are active in animal health, most of them associated with the Onderstepoort Veterinary Institute or the University of Pretoria, BioPAD. OVI has produced a number of animal vaccines for diseases such as anthrax, botulism and bluetongue virus. In addition, the center has developed a number of diagnostic tests that are in the market place. Innovations from this institute are manufactured and marketed by Onderstepoort Biological Products (OBP) which supplies veterinary vaccines to countries across the continent and overseas. OBP is a State owned company established in 1998.⁶³

There are five broad areas of research carried out at this institute 64

- 1. New generation vaccine development
- 2. Molecular epidemiology & diagnostics
- 3. Food, feed and veterinary public health
- 4. Transboundary animal diseases
- 5. Parasites, vectors and vector-borne diseases
 - a. Examples of research projects as of January, 2010
 - i. African horse sickness recombinant vaccines, nucleic acid based diagnostics and development of a complete recombinant subunit vaccine
 - ii. Heartwater genetic sequencing of the genome for *Ehrlichia ruminantium* to produce an inexpensive, safe and efficacious recombinant vaccine
 - iii. Poxvirus vectored recombinant vaccines (Lumpy skin disease virus)
 - iv. Trypanosomiasis studies of the molecular epidemiology of the disease in South Africa
 - v. Molecular studies on malignant catarrhal fever
 - vi. Avian influenza and Newcastle disease development of improved diagnostics and epidemiological elucidation of the diseases in South Africa
 - vii. Bovine tuberculosis development of a gamma interferon assay for the diagnosis of the disease in rhinoceros
 - viii. Bovine brucellosis evaluation of the FPA and ELISA for the disease
 - ix. Paratuberculosis evaluation of a method used to detect Mycobacterium bovis and M. avium subsp. in formalin-fixed, paraffin-embedded tissues of domestic and wild animals
 - x. Bovine brucellosis evaluation of a rapid test for the disease
 - xi. Tuberculosis molecular epidemiology of the diseased animal in South Africa
 - xii. Rabies diagnostics (at the OIE Regional Rabies Reference Centre Southern and Eastern Africa located at OVI)
 - xiii. Transboundary animal disease research
 - 1. Diagnosis of transboundary animal diseases
 - 2. Development of novel diagnostics
 - 3. Production of an effective FMD Vaccine

⁶² http://www.arc.agric.za/home.asp?pid=219 & http://www.arc.agric.za/home.asp?pid=2564

⁶³ Notice 1591 of 2005 - National Department of Agriculture - Draft Discussion Document on Agricultural Biotechnology -Government Gazette Republic of South Africa - Vol. 482 Pretoria 26 August 2005 No. 27936

⁶⁴ Agriculture Research Council, the OVI research: http://www.arc.agric.za/home.asp?pid=4126

<u>H. A. Grové Research Centre</u>

Other Names: H. A. Grové Navorsingsentrum (in Afrikaans); later renamed Pretoria Biomedical Research Centre Location: On the campus of the University of Pretoria Subordinate to: University of Pretoria Size: no information available Primary Function: H. A. Grové was a biomedical research center affiliated with the Faculty of Medicine and the H. F. Verwoerd Hospital (later renamed Pretoria Academic Hospital) at the University of Pretoria.

National Institute for Virology (NIV)

Other Names: None; later renamed the National Institute for Communicative Diseases **Location:** On the Rietfontein farm near the northeastern boundary of Johannesburg, across the road from the Rietfontein Hospital for infectious diseases

Subordinate to: South African Department of Health

Size: NIV consists of a complex of buildings located on a large farm

Primary Function: This is a public health institute that "functions as the national resource center for viral diseases in South Africa." It may have carried out some subsidized biological warfare (BW) virus research under the auspices—knowingly or not—of Project Coast [the former covert offensive South African Chemical and Biological Warfare (CBW) program].⁶⁵

The controlled/notifiable animal diseases listed by the 2009 Directorate Veterinary Services of the South African Department of Agriculture⁶⁶

- 1. Any animal disease or infectious agent that is not known to occur in South Africa
- 2. African horse sickness (AHS)
- 3. African swine fever (ASF)
- 4. Anthrax
- 5. Aujeszky's disease
- 6. Bacterial kidney disease (in fish)
- 7. Bluetongue
- 8. Bovine spongiform encephalopathy (BSE)
- 9. Brucellosis (in all animal species)
- 10. Classical swine fever (CSF)
- 11. Contagious bovine pleuropneumonia (CBPP)
- 12. Contagious equine metritis (CEM)
- 13. Corridor disease or Buffalo disease (Theilerioses)
- 14. Dourine
- 15. East coast fever
- 16. Equine infectious anemia (EIA)
- 17. Equine influenza (EI)
- 18. Equine viral arteritis (EVA)
- 19. Foot-and-mouth disease (FMD)
- 20. Glanders
- 21. Hemorrhagic septicemia (in fish)
- 22. Highly pathogenic avian influenza (HPAI) and all other avian influenza (AI)
- 23. Infectious haemopoeitic necrosis (in fish)

⁶⁵ http://www.nti.org/e_research/profiles/SAfrica/Biological/facilities.html

⁶⁶ Directorate Animal Health SOP: DAFF 002 - Edition: 06 DAFF Approved Veterinary Laboratories: The Requirements by the Director Animal Health (DAH) Dr. W. F. Ungerer: 5/11/2009 – 11pages

- 24. Infectious pancreatic necrosis (in fish)
- 25. Johne's disease (in sheep, cattle and goats)
- 26. Lumpy skin disease
- 27. Nagana (Trypanosomosis)
- 28. Newcastle disease
- 29. Psittacosis
- 30. Rabies
- 31. Rift Valley fever
- 32. Rinderpest
- 33. Salmonella enteriditis
- 34. Scrapie
- 35. Sheep scab
- 36. Skin conditions in sheep
- 37. Swine erysipelas
- 38. Swine vesicular disease
- 39. Tuberculosis (in all animal species)

<u>OIE Animal Disease Reference Centers and contact information in South Africa (as of January,</u></u> <u>2010) for the following diseases are;</u>

1. Foot-and-mouth disease:

Onderstepoort Veterinary Institute, Exotic Animal Health, Exotic Diseases Division <u>Contact information:</u> Private Bag X05, Onderstepoort 0110 SOUTH AFRICA - Dr R. M. Dwarka -Tel: (27.12) 529.95.92 Fax: (27.12) 529.92.49- Email: dwarkar@arc.agric.za

2. Lumpy Skin Disease:

Onderstepoort Veterinary Institute <u>Contact information</u>: Private Bag X 05, Onderstepoort 0110 SOUTH AFRICA - Tel: (27-12) 529.91.17 Fax: (27-12) 529.94.18 Dr G.H. Gerdes - Email: oneillm@arc.agric.za

3. Rift Valley Fever:

Onderstepoort Veterinary Institute <u>Contact information</u>: Private Bag X 05, Onderstepoort 0110 SOUTH AFRICA - Tel: (27-12) 529.91.17 Fax: (27-12) 529.94.18 - Dr G.H. Gerdes - Email: oneillm@arc.agric.za

4. Bluetongue:

Onderstepoort Veterinary Institute <u>Contact information:</u> Private Bag X 05, Onderstepoort 0110 SOUTH AFRICA - Tel: (27-12) 529.91.17 Fax: (27-12) 529.94.18b - Dr G.H. Gerdes - Email: oneillm@arc.agric.za

5. African Horse Sickness:

Onderstepoort Veterinary Institute <u>Contact information:</u> Private Bag X 05, Onderstepoort 0110 SOUTH AFRICA - Tel: (27-12) 529.91.17 Fax: (27-12) 529.94.18 - Dr G.H. Gerdes - Email: oneillm@arc.agric.za

6. African Swine Sickness:

Onderstepoort Veterinary Institute <u>Contact information:</u> Private Bag X 05, Onderstepoort 0110 SOUTH AFRICA - Tel: (27.12) 529.95.60 Fax: (27.12) 529.95.95 - Ms Alison Lubisi - Email: lubisia@arc.agric.za

Epidemiology of animal or zoonotic disease events and outbreaks

Surveillance and control of animal diseases in Africa is partially carried out through their key facility, Onderstepoort Veterinary Institute of the ARC. The epidemiological assessment, modeling and surveillance of animal or zoonotic disease events and outbreaks program resides in the Animal Health and Welfare/Infectious Diseases section, linked to the key topics of concern, some of which include: ⁶⁷

- 1. African horse sickness (AHS) control area in South Africa 68
- 2. FMD control zones in South Africa⁶⁹
- 3. Pig diseases
 - a. National serological survey February 1999⁷⁰
 - b. National serological survey March 2000⁷¹

Note - some of the collection, capturing, evaluating data, and compiling of reports while assisting with epidemiological and research projects is officially done as a service by para-veterinary professional animal health technicians.⁷²

Manufacturing vaccines and other biologicals

The Animal Health Act of 2002 specified that without the written authority or contrary to any condition imposed by the NEO, no one can conduct any investigation, experiment or research with any vaccine, serum, toxin, antitoxin, antigen or other biological product that consists of or originates wholly or partially from any animal for the purpose of any investigation, experiment or research, infect or contaminate any animal with any animal disease or parasite. ⁷³ The licensed exporter and registration holder of the importing country of the biological has the responsibility to comply with the legal registration information approved by the relevant Ministry of Health to ensure that any product is produced under the guidelines of the Medicines Control Council.⁷⁴

Measures required to combat vectors and to prevent the transmission of vector-borne diseases

The local government has the responsibility to appoint an authorized health officer and charge him with the responsibility to conduct environmental health investigations, enter and search premises and manage discovered offenses in order to prevent the transmission of a communicable disease to people by or from animals, insects or parasites contained in goods, conveyances, parcels, premises or any other vehicle of transmission.⁷⁵ An environmental health officer can order the owner or occupier of premises where mosquitoes are found to take reasonable measures to prevent the survival and breeding of mosquitoes. If the owner or occupier fails to carry out proper measures within the time period designated by the environmental health officer, the local government concerned can take measures to enforce compliance by the owner or occupier. The owner or occupier of any premises must, if ordered by an environmental health officer, within the period determined in the order: 1. effectively spray, fumigate, disinfect, or treat

⁷¹ http://www.agis.agric.za/agisweb/IDc1aec475cc12e8/\$WEB_HOME?MIval=/content2.html&id=Animal_pig_survey00

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

⁶⁷ ARC Onderstepoort Veterinary Institute http://bigmedia.co.za/arc/livestock/onderstepoort/div.php

 ⁶⁸ http://www.agis.agric.za/agisweb/IDc1aec475cc12e8/\$WEB_HOME?MIval=/content2.html&id=Animal_ahs_control1
 ⁶⁹ Ibid

⁷⁰ http://www.agis.agric.za/agisweb/IDc1aec475cc12e8/\$WEB_HOME?MIval=/content2.html&id=Animal_pig_survey9

⁷² Veterinary and Para-Veterinary Professions Act, 1982 (Act No. 19 Of 1982)

⁷³ Vol. 445 Cape Town 30 July 2002 No. 23675 Act No. 7, 2002 ANIMAL HEALTH ACT, 2002 -

⁷⁴ Department of Health No. 757 6 June 2003 Medicines Control Council Medicines and Related Substances Act (Act 101 of 1965) Guidelines with Respect to the Medicines and Related Substances Act (Act 101 Of 1965, as Amended) - http://www.info.gov.za/notices/2003/25054/25054g.pdf

the premises or building, structure, goods or article on the premises, with a specific residual insecticide or other agent; and 2. take all measures to prevent the entry of mosquitoes into any building or structure in which people live, work or meet.⁷⁶

Animal identification and traceability

The Animal Identification Act, No. 6 of 2002 (revised in 2008) serves as a national regulatory mandate that provides for an Animal Identification System (AIS). The AIS serves as the first line of defense against stock theft, enhances the identification of property and supports the tracing of animals. The Act establishes the AIS as a computerized national registry of animal identification marks managed by the Department of Agriculture ⁷⁷ Any individual who violates the provisions of this Act by alteration, mutilation or cancellation of an identification mark on an animal or who sells the animal illegally to another person is guilty of an offense and is liable to conviction, a fine or imprisonment for a period of up to six months, or to both a fine and imprisonment⁷⁸

Compensation for the loss of animals

Based on the Animal Health Act of 2002, the South African government established formal procedures that allow for equitable compensation to an owner regarding losses of any animal that was destroyed and/or disposed of in response to any requirement that was established by the NEO (or by his/her authority). The government of South Africa has effective procedures where any owner can submit an application to the NEO requesting compensation for the loss of an animal. Then, after consideration of a variety of factors prescribed in the Animal Health Act, the NEO can fix a fair amount of settlement to adequately compensate the owner for losses.⁷⁹

Isolation, detention, seizure or disposal of animals

In order to ensure that relevant animal diseases or parasites do not spread there are numerous circumstances prescribed in the Animal Health Act of 2002. The NEO has the overall responsibility for all decisions regarding isolation, detaining, seizing, or disposing (e.g., slaughtering) of relevant animals. In the case of an animal disease outbreak, the NEO is responsible for the isolation, detention, seizure or disposal of animals if the disease is not native to, or will have a detrimental effect on South Africa's animal disease free status. Also, under conditions stipulated by the Animal Health Act, the NEO is responsible for determining if and when an animal can be returned to the owner. Depending on the purpose or conditions of the isolation, detention, seizure or disposal, the NEO is responsible for the determination as to whether the owner or the State should be reimbursed for expenses incurred.⁸⁰

 ⁷⁶ Department of Health No R. 27 - No. 30681 - National Health Act, 2003 (Act No. 61 of 2003 – Report Dated 25 January 2008
 - Regulations Regarding Communicable Diseases - http://www.info.gov.za/view/DownloadFileAction?id=77000
 ⁷⁷ Ibid

⁷⁸ Original source document - Animal Identification Bill – 2001 and Procedural Notice - Animal Identification Animal Identification Act (AIDA) (ACT No. 6 of 2002) - http://www.info.gov.za/view/DownloadFileAction?id=68097 & http://www.nda.agric.za/vetweb/Animal%20Identification/VPN%20AIDA%20Feb2009.pdf

⁷⁹ Government Gazette, Vol. 445 Cape Town 30 July 2002 No. 7 of 2002: Animal Health Act, 2002 http://www.info.gov.za/view/DownloadFileAction?id=68108

Agricultural Trade – live animals and animal products

Importing and exporting agricultural products

As a result of illegal importation or exportation of products and the associated increased risk of introducing diseases and pests into the country caused by these unlawful actions, the government of South Africa included regulated agricultural products as items controlled by the National Regulatory Services. Another important component in border protection is the Border Control Operations Coordinating Committee. Mandated in 2005 to strategically manage the South African border environment in a coordinated manner, the BCOCC is affiliated with the justice, crime prevention and security communities. The government institutions involved in the border control and security framework and general enforcement structure include: the National Departments of Home Affairs; Intelligence; Transportation, Public Works, Agriculture, Health and Defense; as well as the South African Police Service and the South African Revenue Service.⁸¹ Overall, South Africa claims to have reduced the number of noncompliant exports. Interceptions for noncompliant imports has increased by the employment of additional staff at strategic locations and the deployment of the Sedupe K9 (sniffer dog) inspections at the OR Tambo International Airport. Additional efforts include extensive surveillance of all ostriches and chickens throughout the country, and the drafting and implementation of an avian influenza contingency plan which includes a national media awareness campaign on avian influenza and an enhancement of engagements with trading partners to maintain existing markets and access new ones.⁸²

Export certification for animals and animal products

Under the Constitution of South Africa, the Veterinary Services of both the National and Provincial Departments of Agriculture are identified as the competent authority. Veterinary Services are responsible for: 1. implementing animal health measures; overseeing the international veterinary certification process following the recommendations of the OIE; and 3. supervising and auditing their application. Veterinary Services conducts audits to ensure compliance with national and internationally accepted guidelines established by the OIE for export certification concerning animals and animal products. This policy document representing the competent authority along with relevant veterinary procedural notice's make up the foundation of export certification from South Africa is based on the criteria and requirements specified in the guidelines developed and published by the Codex Committee on Food Import and Export Inspection and Certification (CCFICS). CCFICS deals with internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety.⁸³

Certification by Veterinary Services of live animals and animal products that leave South Africa

Certification for live animals and animal products that leave South Africa is done on the basis of contributions from all departments and organizations involved in the production and processing chain. Provincial state veterinarians provide certification for most products leaving South Africa. Some products are also certified by national state veterinarians at the ports of exit. There is good communication between provincial and national state veterinarians. As expected by most countries, the competent authority of the country sets the required conditions of registration for export purposes and provides guidelines for export certification. Standards for veterinary export certification are done in collaboration with the various provincial veterinary services. The provincial state veterinarians are knowledgeable with the disease

⁸¹ The BCOCC - http://www.wcoesa.org/

⁸² Vision and Mission - National Regulatory Services (NRS)- http://www.daff.gov.za/#

⁸³ Government Gazette No.31680 – pdf - 12 December - government notices- department of agriculture - South African policy on export certification for animals and animal products P.12-14 http://www.info.gov.za/view/DownloadFileAction?id=93620

situation in their provinces and national state veterinarians have an overall understanding of the disease situation throughout the country. Current provisions of the Meat Safety Act, the Animal Diseases Act and the legislation of the health sector do not authorize the Department of Agriculture to inspect some aspects of animal derived food establishments for the purposes of export. This creates a gap in the assurance process and can often lead to state veterinarians either refusing to certify export consignments or certifying such export consignments without being certain of some conditions in the food production process. For more reliable certification to take place, departmental officials will need to be authorized to inspect all processes in the production of food of animal origin.⁸⁴

Exporting and importing animals

An Export Health Certificate issued by the NEO is required for all animals exported from South Africa. The certificate must contain: 1. the health status of the animal exported; 2. the occurrence (or non-occurrence) of particular animal diseases in the area of origin of the animal exported and 3. any other information required. An application for a certificate must list the importing country authorizing the importation. If the exporter can provide the NEO with written proof that the country of import does not require a certificate of health, the requirement for a health certificate can be waived. The NEO can prohibit the exportation of any animal for consignment to any country.⁸⁵ Also, Tariffs are imposed for the issuance of permits pertaining to the importation of animals and animal products.⁸⁶

Importing meat

Animal products, including venison and meat from domestic species but excluding meat from wild and domestic pigs which are imported for an individual's use cannot be sold or disposed of in any other way. A South African veterinary import permit is required for all products derived from wild or domesticated pigs. Permits for these products are considered on an individual basis and veterinary import permits must be obtained from the permit office of the Department of Animal Health. A veterinary import permit is required for the importation of specified quantities and types of meat or meat products, such as dried sausage. Large specified quantities and types of meat must comply with all of the requirements for commercial importation.

 ⁸⁴ South African Policy on Export Certification for Animals and Animal Products - Gazette 12 December 2008 – Government Notices - P19 - 6.2 Department of Agriculture, Department Van Landbou, No. 1325, 12 December 2008
 ⁸⁵ Ibid

⁸⁶ Republic of South Africa "Animal Diseases Act, 1984 (Act No. 35 of 1984) Tariffs on Import and Master Permits." edited by Agriculture, 2: Minister of Agriculture, 2005

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- 17. Animal Health Bill 2001 http://www.info.gov.za/view/DownloadFileAction?id=67230
- 18. 25 January 2008, Department of Health, National Health Act, 2003 (Act No. 61 of 2003) Regulations Regarding Communicable Diseases, No. 30681 31
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