

agriculture, forestry & fisheries

Department: Agriculture, Forestry and Fisheries REPUBLIC OF SOUTH AFRICA

SOUTH AFRICAN VETERINARY STRATEGY (2016-2026)

We preserve the health and welfare of our animals, to produce enough for ourselves and share with the world

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Abbreviations

AHT	-	Animal Health Technician
AIDA	-	Animal Identification Act
AIRT	-	Animal and products Identification, Recording and Traceability
APAP	-	Agriculture Policy Action Plan
ARC	-	Agricultural Research Council
AU	-	African Union
BMA	-	Border Management Agency
CA	-	Contagious Abortion (Brucellosis)
CAC	-	Codex Alimentarius Commission
CCS	-	Compulsory Community Service
CVO	-	Chief Veterinary Officer
DAFF	-	Department of Agriculture, Forestry and Fisheries
DEA	-	Department of Environmental Affairs
DoH	-	Department of Health
DST	-	Department of Science and Technology
EU	-	European Union
FAO	-	Food and Agriculture Organisation
FBD	-	Foodborne diseases
FMD	-	Foot and Mouth Disease
GAP	-	Good agricultural practice
GFSI	-	Global Food Safety Initiative
GIS	-	Geographic Information System
HACCP	-	Hazard Analysis Critical Control Point
HEI	-	Higher Education Institute
HPCSA	-	Health Professions Council of South Africa
ID	-	Identification
IMI	-	Independent meat inspection
IPAP	-	Industrial Policy Action Plan
ISO	-	International Organisation for Standardisation
LIMS	-	Laboratory Information and Management System
MoU	-	Memorandum of Understanding
MRL	-	Maximum Residue Levels
NDP	-	National Development Plan
NGO	-	Non-Governmental Organisation
NGP	-	New Growth Plan
NRF	-	National Research Fund

NSG	-	National School of Government
NSPCA	-	National Society for the Prevention of Cruelty to Animals
OBP	-	Onderstepoort Biological Products
OIE	-	Office international des Epizooties (World Organisation for Animal Health)
OSD	-	Occupational Specific Dispensation
OTC	-	Over The Counter
OVI	-	Onderstepoort Veterinary Institute
PAHC	-	Primary Animal Health Care
PPP	-	Private Public Partnership
PVS	-	Performance of Veterinary Services
QA	-	Quality Assurance
SA	-	South Africa
SABS	-	South African Bureau of Standards
SACNASP	-	South African Council for Natural Scientific Professions
SADC	-	Southern African Development Community
SANAS	-	South African National Accreditation System
SAVC	-	South African Veterinary Council
SLA	-	Service Level Agreement
SOE	-	State Owned Entity
SOP	-	Standard Operating Procedure
SPS	-	Sanitary and Phytosanitary
ТВ	-	Tuberculosis
VPH	-	Veterinary Public Health
VS	-	Veterinary Services
WTO	-	World Trade Organisation

Foreword by the Minister

The agricultural sector is of crucial importance to the country as it is the primary source of food and fibre for the nation. Economic stability demands that food safety, accessibility and availability be one of the nations' highest priorities. When a new era was ushered in by the people of South Africa in 1994, animal production was cited as the major form of land use in rural South Africa and as most of South Africa's land is suitable for grazing, livestock farming became the largest agricultural sector. Protecting the health of the nation's livestock and the safety of our animal based food products by applying scientific knowledge is the responsibility of the Department of Agriculture, Forestry and Fisheries (DAFF).

The biggest challenge to veterinary services nowadays is to ensure expanded animal and aquaculture production by small-scale farmers and in underdeveloped areas, which brings advantages in increasing total production of food and fibre, and higher incomes for farmers and Agro-processors. The absence and/or inadequacy of affordable and accessible primary health care services for many animals species pose a number of problems including a threat to human health and a negative impact on livestock production (particularly with respect to diseases of economic importance in which those animals form part of the cycle of infection), which places a burden on limited food supplies. Changes are necessary to guide private practitioners and animal producers and encourage the establishment of rural veterinary practices.

Food security also requires protection of consumers from excessive levels of food hazards. DAFF deems it inappropriate to retain and strictly apply excessive regulations that prevent informal marketing of affordable produce, as has happened in the past. Enacted Legislation will be updated to ensure that basic food safety and hygienic standards are strictly enforced throughout the livestock and food value chain. Similar measures are required to protect consumers from being sold sub-standard or underweight products of animal origin.

The provision of safe, sound and wholesome food for human consumption requires the cooperation of the medical profession and animal health services (One Health Initiative). The knowledge, expertise and resources of the veterinary public health profession need to be deployed effectively to protect and improve human health. Hence veterinary public health personnel should be part of a multidisciplinary team tasked with control and eradication of zoonotic diseases, monitoring of food hygiene processes and production and processing of food of animal origin. To address these issues means re-organisation of the veterinary services so that it can effectively manage and deliver its mandate. The DAFF supports the formulation of policy and legislation that encourages and enables a holistic approach to animal resource management, as well as production of safe, sound and wholesome food for the nation and beyond.

Overview by the Director General

The proposed Veterinary Strategy provides a broad framework for the fulfilment of the government of South Africa's commitments and responsibilities to guarantee citizens of South Africa "the right to have access to sufficient and safe food of animal origin". The State must take reasonable measures (legislative and other), within its available resources, to achieve the progressive realisation of the right to safe food for each citizen. The strategy aligns itself with the New Growth Plan (NGP), the National Development Plan (NDP) and Industrial Policy Action Plan (IPAP) through the Agriculture Policy Action Plan (APAP) which seeks to assist in the achievement of decent employment through inclusive growth, and comprehensive rural development and food security. The strategy builds on South Africa's risk based studies as well as the objectives of the relevant international standards.

Given the ever changing economic situation in the world, the role of the Department of Agriculture, Forestry and Fisheries (DAFF) has emerged as critical on the National Developmental Agenda and is the stay apparatus in addressing developmental priorities of the country. These priorities hinge around creating jobs, agrarian reform, food security and protection of environmental assets and natural resources which are central to the responsibilities of DAFF as clearly outlined in the Medium Term Strategic Framework as components of the 12 key outcomes of government of which DAFF is directly involved in outcomes 4, 7 and 10 and indirectly involved in outcomes 2, 5, 8 and 11

Executive Summary

Veterinary Services play a key role in ensuring that the health and welfare requirements for animal production and trade are properly adhered to and that food and other products produced from animals are safe for use.

According to the OIE evaluation: "The Veterinary Services of South Africa, is generally still of a very high standard, but it is at a cross-roads between a bright future and a rapid decline.

The "bright future" requires restoration of the chain of command with unity of the different veterinary domains and the development of a comprehensive VS system including official delegation to private veterinarians. It will be necessary to develop improved interaction with all stakeholders and consumers, with priority given to addressing public good.

The "rapid decline" will result from continued fragmentation of the VS by local authorities or by function, activities will be market-driven by private interests, double standards will persist in animal and veterinary public health, and there will be a failure to address public good." The same sentiments have been shared by other external evaluations.

Over the years, new challenges have emerged. Some diseases, which were almost unknown a decade ago, have made a drastic global impact on animal and public health while foot and mouth disease, avian influenza and antimicrobial resistance, have recently presented new challenges, reminding us that they remain very serious risks. In addition, more emphasis has recently been placed on animal welfare for production and trade.

Trading conditions have changed radically as the volume of trade in animal products has increased, locally, regionally and globally. It is important that government provides national leadership to ensure that South Africa's Veterinary Services are positioned effectively, in order to protect both animal and human health and to ensure economic growth and wealth generation.

The Department of Agriculture, Forestry and Fisheries' veterinary strategy envisions a cohesive, science-based and pro-active Veterinary Services. It is based on the current South African legal framework, the internal and external evaluation reports and the stakeholder consultation on the Animal Diseases Management Plan. The current veterinary strategy has been developed with the mission to promote the wellbeing of animals and humans by creating systems and mechanisms for provision of effective and efficient veterinary services with the capacity to prevent, detect, contain and eliminate animal and public health risks.

The purpose of this veterinary strategy is to provide direction for the improvement on the delivery of veterinary services to higher standards in South Africa. It will facilitate the establishment of

priorities that are consistent with an agreed foundation and strategic pillars and the revision of, and agreement on, acceptable and appropriate standards. In this manner, the strategy will ensure consistency with key priority outcomes of the government of the Republic of South Africa to ensure a seamless, infallible, consistent and equal access to services across the country.

Thorough analysis of the current veterinary services delivery highlighted several shortcomings. This strategy thus charts a new direction for rendering of efficient, effective, developmental veterinary services, supporting broader societal and governmental strategic objectives. Thus the veterinary services would contribute incremental value to South Africa, SADC, Africa and the world. Specifically, the strategy aims to:

- Improve on technical capabilities needed to address current and new animal health, welfare and production issues based on scientific principles
- Support acquisition of sufficient financial capital to attract adequate human resources and retain professionals with technical and leadership skills
- Promote and strengthen collaboration and partnership between government and nongovernmental sector
- Create and maintain a recognised animal and public health environment to facilitate access to local and international markets

The suggested foundation with associated pillars for a transformed veterinary strategic framework in South Africa includes:

Foundation:	Strengthen the Veterinary Authority for better governance and service	
	delivery	
Pillar 1:	Strengthening competencies for Animal Health	
Pillar 2:	Strengthening competencies for Veterinary Public Health	
Pillar 3:	Strengthening competencies for Veterinary Laboratory Diagnostics	
Pillar 4:	Development and implementation of an Animal and Products Identification and Traceability system	
Pillar 5:	Strengthening competencies for Animal Welfare	

Strategic Objectives

These objectives intend to address specific areas of concern that have been raised by both internal and external assessments. They have been set to focus on specific areas of weakness and are believed, if attained, to be able to improve competitiveness of South African goods, to create jobs within the agricultural sector and lead to investments that will contribute to developmental plans of the country.

- Restore national chain of command for all aspects of veterinary services and form the legislative and procedural basis to effectively further animal health and welfare, food safety, food security and market access in South Africa.
- To strengthen animal disease control and eradication programmes to improve animal production, market access and contributing to the one health initiative.
- To strengthen control systems for enhanced public health, feed and food safety and trade.
- To strengthen competencies and accreditation for food safety and animal health diagnostic laboratories and research.
- To improve animal identification and traceability, which will aid in the control of animal diseases, promote food safety and the quality of livestock data for trade purposes.
- To improve animal welfare legislation and standards and ensure that animal keepers fulfil their responsibilities.

CHAPTER 1: INTRODUCTION

Livestock production in South Africa is a fundamental element of socio-economic development and a significant contributor to food security and good quality protein. Seventy percent of agricultural land in South Africa can only be utilized by livestock (including game), and on a weight basis, livestock products contribute 27% of the consumer food basket.

At the time of the PVS evaluation (2012), real gross value of animal products¹ accounted for 48% of the total agricultural income. The gross income generated by the agriculture sector in 2012 was estimated at R167 billion of which the contribution originating from animal products was R80.8 billion. The contributions by various animal production industries to the total number was R18.1 billion (cattle and calves), R32.9 billion (poultry meat for 2013), R8.6 billion (eggs in 2013), R11 billion from milk and R2.1 billion from wool. The gross annual income of the pork industry in 2014 was estimated at R3.7 billion. In 2016, the biltong hunting industry alone was worth R8.55 billion annually while the ostrich industry continues to make a meaningful contribution despite its recent disease challenges. Many animal value chains such as apiculture, crocodile, rabbit, have not been exploited due to lack of services in the country.

From 2012 to 2022, the growth (increase of 47%) in the consumption of chicken meat is projected to outpace the growth for all the other types of meat, mainly due to its competitive price relative to other proteins. The consumption of eggs is also expected to increase by 33% while beef consumption is expected to grow by 27%. Although the sheep meat market is relatively small, growth of 16% is expected over the next decade. Pork consumption is projected to grow by 41%. South African milk production is utilised in 2 different market segments; liquid milk products (including pasteurised milk, UHT milk, yoghurt and buttermilk) account for just under 60% of total dairy consumption, while concentrated products (including cheese, butter, milk powders and condensed milk) make up the balance. Consumption of fresh milk is expected to increase from 2012-2022 at an annual average of 2.1% per annum. The consumption of cheese is projected to increase by 7.6% per annum to reach approximately 125 000 tons by 2022.

In contrast, meat consumption in many developed regions has reached saturated levels and, given slow population growth, it is not expected to increase significantly. Poultry continues to dominate the meat complex and represents an accessible meat type that remains free of the cultural barriers that impact pork consumption and consequently poultry will account for just over half of the additional meat demand globally by 2024, followed by pork (26%), beef (15%) and sheep meat (6%).

¹ Updated statistics available from: http://www.bfap.co.za

1.1 Definition of veterinary services in South Africa

In the context of this strategy, veterinary services means a South African governmental and/or non-governmental organisations including individuals who implement animal health, food security and safety, welfare measures and other standards and recommendations on the animal and aquaculture value chain (farming, slaughtering/harvesting, processing). Any private sector organisations, veterinarians, para-veterinary professionals or aquatic or bee health professionals accredited or authorised by the veterinary authority are under the overall control and direction of the Chief Veterinary Officer. The veterinary services domain is shown in the figure below:





1.2 Legislative and other mandates

According to section 27(1) (b) of the Constitution, "everyone has the right to have access to sufficient food and water among others" and "the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of these rights". The state guarantees the right to sufficient healthy food of animal origin through various policies, strategies and Acts which govern state veterinary services in South Africa. These include the

Animal Diseases Act, 1984 (Act No 35 of 1984) and the Meat Safety Act 2000 (Act 40 of 2000), as amended, together with the regulations.

In addition, the Veterinary and Para-veterinary Professions Act, 1982, (Act No of 1982), as amended provides for the establishment, powers and functions of the South African Veterinary Council (the Council), a statutory body responsible for the registration of persons practicing the veterinary and para-veterinary professions; for the control over the practicing of the veterinary and para-veterinary professions; and for matters connected therewith.

The welfare of animals in South Africa is regulated under the Animal Protection Act, 1962 (Act No. 71 of 1962) and Performing Animals Protection Act, 1935, (Act No. 24 of 1935).

Other pieces of legislation that provide the necessary mandate for the provision of veterinary services include the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947), the Medicines and Related Substances Control Act, 1965 (Act No. 101 of 1965), Animal Improvement Act, 1998 (Act No. 62 of 1998), Animal Identification Act, 2002 (Act No. 6 of 2002), Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), National Environmental Management Act, 1998 (Act No. 107 of 1998) and the National Environmental Management Act, 2008 (Act No. 62 of 2008).

Food production is also regulated under the Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972) and the Health Act (Act 61 of 2003) by the Department of Health.

This strategy builds on the priority outcomes as defined by government, the constitutional and legislative mandate, the National Development Plan as well as the international conventions and guidelines of the World Organization for Animal Health (Office international des Epizooties- OIE), Food Agriculture Organization of the United Nations (FAO) and *Codex Alimentarius.*

The veterinary strategy supports the National Development Plan (NDP – Vision 2030). The Medium-Term Strategic Framework (2014-19) outlines the priorities that must be achieved in the medium term in contribution to the long-term vision of the National Development Plan which has a vision of '*An Integrated and Inclusive Rural Economy*' by supporting the commercial agriculture with high growth potential while aiming at ensuring consistency with South African policies and its international commitments. The Agriculture Policy Action Plan (APAP), which is a consensus document around a job creation strategy within Agriculture, Forestry and Fisheries, proposes various interventions which this strategic framework will align with, key among them is an effective and efficient biosecurity systems.

CHAPTER 2 PURPOSE

2.1 Purpose and scope of the veterinary strategy

The strategic intent is to ensure that the national and provincial departments, and stakeholders including relevant industries have a common vision and understanding and develop a commitment to work together cohesively to improve veterinary services in the country with the common aim of improving supply and competitiveness of South African products.

The purpose of this veterinary strategy is to provide an effective and cohesive veterinary service in South Africa. It will facilitate the establishment of priorities that are consistent with agreed strategic pillars and the revision of, and agreement on, acceptable and appropriate standards. In this manner, the strategy will ensure consistency with key priority outcomes of the government of the Republic of South Africa to ensure a seamless, infallible, consistent and equal access to services across the country.

Thorough analysis of the current veterinary service delivery highlighted several shortcomings (refer to Chapter 3). This strategy thus charts a new direction for rendering of efficient, effective, developmental veterinary services, supporting broader societal and governmental strategic objectives. Thus the veterinary services would contribute incremental value to South Africa, SADC, Africa and the world. Specifically, the strategy aims to:

- Improve on the technical capabilities to address current and new animal health, welfare and production issues based on scientific principles
- Support the acquisition of sufficient financial capital to attract adequate human resources and retain professionals with technical and leadership skills
- Promote and strengthen collaboration and partnership between government and nongovernmental sector
- Create and maintain a recognised animal and public health environment to facilitate access to local and international markets

The strategy builds on the priority outcomes as defined by government, the constitutional and legislative mandate, the National Development Plan as well as the international conventions and guidelines of the World Organization for Animal Health (*Office international des Epizooties*- OIE), Food agriculture organization of the United Nations (FAO) and *Codex Alimentarius* Commission (CAC). The strategy takes cognizance of the recognised considerations for government intervention which help determine DAFF policy and outcomes namely: Food security impact; Socio-economic impact; Public health impact; Animal welfare and International trade.

The veterinary strategy covers the health and welfare of all terrestrial and aquatic animals in South Africa kept for conservation, entertainment, education, food, farming, recreation and companionship. It includes wild animals and animals used in research, as well as, national and international trade and transit of animals and animal products where there is a risk of disease transmission to other animals or to humans and welfare infringements.

The implementation of the plans developing from this strategy will encompass the entire country, including animal owners and producers, the veterinary profession, food chain business operators dealing with animals and their products, animal health and production industries, animal interest groups, researchers and teachers in the veterinary and related fields, government bodies, veterinary pharmaceutical and feed manufacturers and distributors, sport and recreational organisations using animals, educational facilities, consumers, travellers and general public.

2.2 Vision

A cohesive, science-based and pro-active Veterinary Services

2.3 Mission

Promote the wellbeing of animals and humans by creating systems and mechanisms for provision of effective and efficient veterinary services with the capacity to prevent, detect, contain and eliminate animal and public health risks.

2.4 Values

In conjunction with the vision driving this strategy, the VS will subscribe to these values:

- Professionalism
- Responsiveness
- Inclusiveness
- Transparency
- Objectivity

CHAPTER 3: SITUATIONAL ANALYSIS

3.1 Historical perspective and background to Veterinary Services in South Africa

The role of the veterinary profession is to promote animal health, animal welfare, public health and the protection of the environment. Before 1972 veterinary services (including academia, laboratories and research) in South Africa functioned under the umbrella and control of the then equivalent of the Department of Agriculture, Forestry and Fisheries (DAFF). The Faculty of Veterinary Science was removed from the Department after 1972 and transferred to the University of Pretoria. Onderstepoort Veterinary Institute (OVI) was separated from the Department in 1992, the Onderstepoort Institute for Exotic Diseases was separated in 2001 and Onderstepoort Biological Products (OBP) became a State Owned Entity (SOE) in 2002.

The Constitution of the Republic of South Africa (Act No. 108 of 1996) decentralised veterinary services, making it a concurrent function to be performed by both national and provincial veterinary authorities. In Schedule 5 (Part A) of the constitution, "abattoirs" and "veterinary services, excluding regulation of the profession" and in Schedule 5 (Part B) "municipal abattoirs" are identified as functional areas of exclusive provincial legislative competence, however the definition and scope of exclusive is not clearly defined. In Schedule 4 (Part A) "animal control and diseases" is identified as a functional area of concurrent national and provincial legislative competence. Section 156 of the constitution further makes provision to assign these functions to municipalities. It is on sections 40(1), 40(2), 41(1), 44(2), 100 and 146 that role and function of the national authority can be identified by implication.

The constitutional arrangements assigned the national Department of Agriculture, Forestry and Fisheries the mandate (although not sole responsibility) to set the norms and standards for the delivery of veterinary services, national disease control programs and the control of the import of animals and animal products. The provincial veterinary authorities are made primarily responsible for implementation and enforcement of the national veterinary services standards, thereby enabling the sanitary guarantees for both the import and export of animals and animal products, in accordance with national and international norms and standards that must be provided by the national veterinary authority to our international trade partners.

The constitutional prescripts therefore require that a good relationship between the provinces and the national department be established to avoid the unintended erosion of the line of command required for and effective and seamless control of diseases. In order to negate this effect, DAFF and the Provincial Departments of Agriculture signed a Memorandum of Agreement which would support the implementation of the spirit of the Intergovernmental Relations Framework Act, 2005 (Act 13 of 2005).

It is important that within the framework of the above organisational restructuring processes the unintended consequences such as the decline in the quality of disease diagnostics, the decline in the output of veterinary research and the inability of the state to supply strategic vaccines and biological products to the livestock industry, which places the country at major risk of serious animal disease outbreaks be addressed.

3.2 WTO Sanitary and Phytosanitary (SPS) Agreement Commitments

South Africa is a member of the OIE. This veterinary strategy is consistent with the country's commitment as specified in international agreements and instruments under the WTO, *Codex Alimentarius* and the OIE. In developing this strategy, the country would like to fulfil its international sanitary commitments in a consistent and sustainable manner, and exercise its rights under both the WTO SPS Agreement and SADC SPS Annex.

3.3 Evaluation by trade partners and disease outbreaks

Despite the achievements of the past to control and eradicate animal diseases of public health, trade and economic importance, the risks for some of these animal diseases are still present in South Africa. During disease outbreaks, farming and trade activities are disrupted, rural livelihoods are jeopardised, food security is threatened, scarce personnel resources are mobilised and emergency funds have to be requested from National Treasury. These disease outbreaks adversely affect routine or planned disease control efforts and international trade of some agricultural products.

Countries that import animals and animal products from South Africa may exercise their right in terms of international trade rules, that South Africa must give guarantees regarding animals and animal products to be exported, that they do not pose a risk of transmitting these diseases within the country of destination. In addition, they also may request to evaluate and assess the standard of veterinary service delivery on site before accepting the guarantees provided by the country. South Africa is then responsible to cover the cost of such visits.

In the last few years South Africa has had inspection audits conducted by several countries and international organizations, targeting different commodities. These inspection audits are conducted in thorough detail encompassing the assessment of public health protection guarantees and the

management and control of important diseases at National and Provincial Veterinary Services levels.

Although South Africa has managed to secure some export markets, the number of commodities allowed to access these markets has been declining over the years. Ostrich meat and venison exports to the EU have been suspended on several occasions mainly because of outbreaks of diseases. The EU has made it clear that unless their concerns are addressed satisfactorily, there will be no guarantees of the continuance of exports to the EU in future. The concerns from other markets are similar. It is therefore critically important to restructure veterinary services in such a manner as to maintain sustainability in the delivery of veterinary services – especially in respect of veterinary public health, food hygiene, disease surveillance, disease control, diagnostic services and veterinary research.

The stricter food safety controls and more thorough veterinary services demanded largely by importing countries compared to weaker and less thorough control towards food of animal origin intended for the local market is undesirable. This has major potential to erode the confidence of the local consumers in locally produced products. It could also lead to exclusion of small scale producers and processors who are unable to give guarantees on the safety and wholesomeness of their products by lucrative retail distribution chains.

3.4 PVS evaluation by the OIE, PVS gap analysis and animal disease management plan

The OIE evaluated the performance of veterinary services of South Africa in 2012 and identified the strengths and weaknesses thereof. This was followed by a gap analysis in 2014 during which stakeholders throughout South Africa were consulted on the gaps identified by the PVS and the proposed activities to address these gaps in VS. The Department subsequently published these reports together with the Animal Disease Management Plan, which were consulted with relevant stakeholders. These documents were used as the basis for this veterinary strategy.

3.5 Consultation of stakeholders

Following the identification of gaps and activities in the VS, strategy consultations were held with certain institutions (November 2015). Wider consultations with stakeholders were held in Gauteng (January 2016), North West, Free State, KwaZulu-Natal (February 2016), Western Cape, Eastern Cape and Northern Cape (February 2016), Mpumalanga and Limpopo (March 2016). The stakeholders included other governmental departments, veterinary services at national and provincial levels, private veterinarians, industry representatives, academic institutions, research institutions, welfare institutions, private and public laboratories as well as members of the general public.

CHAPTER 4: CONSTRAINTS AND CHALLENGES

4.1 Management of animal health

The detrimental impact that animal diseases have on the production and food security in the country and ultimately the economy will inevitably have a negative impact on the level of trust in South Africa as a reliable exporter of disease free animals and animal products. In 1994, the government committed in addressing shortage of essential scarce skills in many rural areas and in 1997 cabinet approved the concept of a one year Compulsory Community Service (CCS). The aim of CCS and Primary Animal Health Care (PAHC) is therefore to provide small farmers (estimated 1.2 million, owning 40% of cattle and 20% of small ruminants) with clinical veterinary services and to empower animal owners and the public through training and extension services, in order to improve animal health.

A paradigm shift is needed to ensure and promote more regular contact and communication between farmers/animals and veterinarians. This is required to increase the sensitivity and accuracy of disease surveillance, for early detection and rapid response. Official delegation, whereby private veterinarians and veterinary paraprofessionals are accredited and registered to perform some state functions, should link hundreds of private veterinarians with the chain of command of the VS.

There is a lack of comprehensive national programmes for the prevention, control and eradication of endemic diseases. Though the constitution supports a national response in cases of emergency, the chain of command cannot be simply and quickly restored at local level for early detection and rapid response. Future policies should also clearly define "public and private good" activities. Official programmes that were established to control zoonotic diseases, epizootic diseases and diseases of major economic importance should be reviewed to prevent "private good" services benefits to individuals or companies. The needs for para-veterinary professionals should be re-evaluated taking into account OIE standards and the demands for a modern VS and livestock sector.

Over the past few years, the country experienced an upsurge in demand for veterinary services among small scale farmers and a declining funding in the Agriculture sector together with an increase in the frequency and magnitude of serious infectious diseases, some of which were exotic diseases. An outbreak of any infectious disease is an indicator of the failure in the ability to create awareness among farmers and consumers, poor collaboration with role players and disease outbreak management chain. Culprit disease outbreak management chain failings may include lack of an early warning system which relies on effective disease surveillance and diagnostics, lack of emergency disease preparedness, and/or insufficient herd immunity which rests on the ability to produce high quality vaccines and ability to get effective vaccination campaigns implemented. The increase in the frequency of the disease outbreaks in the country is therefore a concern that needs to be addressed as a matter of extreme urgency.

In light of the relative ease of international transportation of people, animals and animal products, an increased understanding of veterinary public health and food safety matters by both the international and local consumers is important. Due to the changing international standards for trade, increased welfare considerations, climate change and more opportunities facing countries to trade, VS should adopt a broader mandate and vision, and provide new services that complement the portfolio of existing services. This will entail stronger alliances and closer cooperation with stakeholders in the livestock industry value chain, national veterinary service counterparts of countries in the region and beyond, within the stipulations of the WTO rules.

4.1.1 Aquaculture and Apiculture

Aquatic and bee diseases must be included in the scope of work for veterinarians. The Animal Diseases Act, 1984 (Act No. 35 of 1984) as well as the Meat Safety Act, 2000 (Act No. 40 of 2000) have to be adapted to cater for this new mandate. The training of veterinarians and paraveterinary professionals at both undergraduate and post graduate levels must take into consideration this new mandate, including the training of farmers. Bee diseases such as American foulbrood are required to be reported internationally to the OIE by state veterinary services.

There is a potential for the development of the aquaculture sector in South Africa and as such, DAFF has prioritised this sector. While the local abalone sector has grown to become the third largest producer in the world, the growth of other sectors, such as trout and marine finfish has been hampered in part by the lack of fish health and quality assurance services.

This lack of services in aquatic and bee health extends to the lack of a national diagnostic and surveillance centre. In addition, most veterinarians are not trained in aquatic and bee health matters, neither is there specialisation at post graduate level in the country. There is also a need for DAFF and Department of Science and Technology (DST) and NRF to support tertiary institutions in funding post graduate training and research in aquatic and bee health and fish and honey harvesting hygiene. Animal health and meat safety legislation will need to be reviewed to ensure it addresses aquatic and bee health and safety assurance issues.

4.1.2 Game Ranching and Farming and Trans-Frontier Conservation Areas

The game ranching industry is a largely unsung success story that now ranks as SA's sixthbiggest agricultural sector. The past decade has seen a surge in the conversion of previously beef ranches into game farms to take advantage of booming game safari tourism and game and trophy hunting demand. A census in 1964 revealed that SA had a mere 557 000 heads of game, however this had since increased to 18.6 million by 2005. Currently, there are approximately 10 000 game farms in the country and new ones are being established. Considering game ranching has such massive potential and is one of South Africa's unique forms of agriculture, which provides SA with a competitive edge, it should be prioritised to be promoted and export markets opened.

The wildlife conservation movement in the SADC region has also actively promoted the development of trans-frontier wildlife conservation areas. A number of these trans-frontier parks encroach into predominantly communal livestock grazing areas and animal disease control areas, which increases the likelihood of contact between wildlife and domesticated animals with resultant disease transmission. The risk of transfer and spread of endemic and exotic diseases at this wildlife-livestock animal interface is magnified manifold. The need for a better coordinated game ranching and farming industry and disease management would certainly appear critical given its rapid growth and scale and its emergence as a larger component of the agricultural sector.

4.2 Compliance and enforcement

The Department of Agriculture, Forestry and Fisheries has a range of compliance and enforcement responsibilities which extends beyond veterinary services and is currently responsible for undertaking a range of traditional compliance and enforcement functions.

Compliance and enforcement in the Department is currently conducted on a line function basis, which limits the potential for strategic approaches and/or optimisation of current capacity. The capacity to conduct compliance, monitoring and enforcement is lacking in the majority of the provincial veterinary departments which places the country and the general public at great risk and the department has initiated very few prosecutions. Furthermore, the focus of compliance and enforcement is reactive and based almost exclusively on traditional approaches. This emphasis does not contribute adequately to the requirements of sustainable development and policy principles of prevention of transgressions.

In short, the current status of compliance and enforcement in the department does not meet the legislative requirements adequately. Therefore, DAFF needs to progressively implement a more effective and holistic compliance monitoring and enforcement system.

4.3 Declining research and diagnostic capacity

Prior to 1990, South Africa was amongst the leading nations in veterinary research and

diagnostics worldwide. The Onderstepoort Veterinary Institute is accredited by the OIE as a reference diagnostic centre for a number of animal disease causing agents. This status is at risk of being lost because the diagnostic and research capacity has been steadily declining.

This loss would also imply that veterinary services will be unable to diagnose existing and emerging animal diseases and foodborne pathogens. This capacity is necessary for the competiveness of the South African terrestrial and aquatic animal sectors and to manage the challenges of increasing livestock productivity. The world increasingly embraces new scientific technologies and bio-economy strategies to effectively control infectious diseases and improve food safety. Decline in the research and diagnostic capacity at OVI, ARC and Government in general is a source of serious concern to the livestock industry. Capacity to produce vaccines of strategic importance timeously and in sufficient volumes needs to be addressed.

4.4 Skewed delivery of Veterinary Services

Of the veterinarians registered with the SAVC, about 70% are in private practice, and 70% of these are predominantly in urban small animal practice. The level of private veterinary practice in South Africa is comparable to that of the developed countries and the scale of practice varies from one-man practices to multi-member corporate practices supported by sophisticated animal hospitals and specialist veterinary support services. Prior to 1994, the main emphasis of delivery of service by state veterinary service was biased towards regulatory work. The exception was in the former homelands where there was an effort to provide some basic primary animal health services to the farming communities and the general public. The new dispensation required veterinary service delivery to be geographically expanded but the current situation fails to ensure an even distribution of veterinarians between the different production systems and geographic areas.

The current government has added a developmental role to the mandate of veterinary services which has placed an increased responsibility and budget requirement on the state veterinary services. The provision of veterinary services does not reach communities living in townships and informal settlements, which has serious public health and animal welfare implications.

The accessibility, availability and affordability of veterinary services to all South Africans is skewed towards urban dwellers and commercial farmers, in spite of the fact that approximately 40% of South Africa livestock is in the hands of the rural communities. The opportunity to use this veterinary strategy for the upliftment of livelihoods in rural communities should be prioritised and pursued.

4.5 Training

There are a number of challenges pertaining to training and development of veterinary and paraveterinary professional skills and competencies in South Africa. These challenges include:

- The tertiary education system is inadequately financed and should be addressed as envisaged in the report of the ministerial committee for the review of the funding of Universities (October 2013) and existing government funding structures.
- The current veterinary and para-veterinary profession training institutions are insufficiently geared to address the diverse needs of the South African livestock sector and of government.
- Too few historically disadvantaged individuals entering the veterinary profession as a result
 of a myriad of reasons. Of note is due to South African conditions of service for
 veterinarians that do not compensate for the time and effort expended in getting a
 veterinary qualification compared to fields of studies such as legal, medical and commerce.
 The only faculty of Veterinary Science in South Africa is currently in a process of
 performing a comprehensive review of its current recruitment and selection procedures.
 Such a process may go a long way towards addressing some of the current challenges.
- There is inadequate innovation in the training and skilling of veterinarians and paraveterinary professionals in some emerging and critical veterinary competence areas by the academic training institutions and Universities. The expanding requirement of day one competencies, the curriculum content as well as the sophistication of veterinary and paraveterinary professionals training needs make it increasingly difficult within the allocated time, to train a person with the required scope of skills and knowledge to address the specified needs in a single programme as is currently structured. To date, the respective academic institutions have not been able to provide post-graduate training for some specialised services required by the state in a world which is increasingly becoming globalised and complex.
- Lack of recognition and utilisation of existing training institutions other that registered academic institutions. This is notable in the animal welfare and meat inspection sector.

4.6 Low ratio of veterinarians per livestock unit and lack of career path development for veterinarians

FAO recommends a ratio of 1 field veterinarian per 100 000 livestock units and 1 para-veterinary professional per 5 000 livestock units. Using this norm would result in the South African state veterinary services requiring 253 field state veterinarians in contact with livestock for basic regulatory services such as disease control programmes, each supported by at least 20 para-Page 26 of 60

veterinary professionals. Additional veterinary and para-veterinary staff would be required for laboratory diagnostics and veterinary public health, which are the minimum requirements for a basic service. In a globalised, trade oriented world, the state service needs veterinarians for the management of international trade in animal and animal products, disease diagnostics, surveillance, risk assessments, apiculture, aquaculture, etc.

The current post establishments at national and provincial level do not necessarily reflect the optimal numbers of veterinary and para-veterinary personnel per livestock unit as well as for other emerging critical areas of veterinary science, making the actual deficit in technical human resources capacity much worse than reported in various audits.

The scope of state veterinary services in a modern and developmental economy is broad. However there is no provision made for career path development (there is no provision for the recognition of veterinary specialities required by the state veterinary service for efficient and effective service delivery) in the veterinary profession unlike with other professions which are recognised in the Occupational Specific Dispensation (OSD). It is inevitable that lack of recognition of veterinary professionals and specialists will have a pronounced effect on the standards of services provided and contribute to the inability of the state veterinary services to attract and retain the necessary specialised human resources to execute its duties satisfactorily.

4.7 Animal welfare

Every society needs to have a culture of caring for all animals supported by effective legislation and regulations. Animal welfare matters are not only for social considerations but are important for providing assurances both locally and internationally for animal health and constitute part and parcel of protocols for certification for trade on animals and animal products. The Department has already identified the need to review both the Animal Protection Act, 1962 (Act 71 of 1962) and the Performing Animals Protection Act, 1935 (Act 24 of 1935), particularly to take new developments into consideration.

Whilst it desires to incorporate all guiding principles for animal welfare and those of the OIE, DAFF understands that aspects of animal welfare are interpreted differently by the public and some aspects are culturally sensitive. Scientific considerations will form the most important part of the new policy which will guide our legislation.

Undoubtedly, the strongest driving force for improved welfare is public opinion. This is reflected by activities of various lobbying organisations through the media and ultimately at policy level,

bringing improved legislation. However, legislators have been careful to be led by and act within the scope of scientific advice on animal welfare issues.

The practice in most countries is for animal welfare legislations to fall under the Departments of Agriculture, which is consistent with OIE recommendations. Prior to 1997, the Animal Protection Act and Performing Animal Protection Act were under the Department of Justice. Upon transfer to the Department of Agriculture, Forestry and Fisheries in 1997, they were initially placed under the Directorate of Animal and Aquaculture production and not with Veterinary Services. The transfer to Veterinary Services was only carried out in 2009.

4.8 Traceability of animals and animal products

Animal identification and traceability are tools for analysing and addressing animal production, disaster management, animal health (including zoonoses) and food safety issues. These tools have the potential to significantly improve the effectiveness of, among others, activities such as:

- the management of animal disease control programmes,
- the combating of disease outbreaks and food safety incidents,
- vaccination programmes,
- herd/flock husbandry,
- zoning/compartmentalisation,
- surveillance, early response and notification systems,
- animal movement controls and recording, inspection, certification, stock theft,
- fair practices in trade
- utilisation of veterinary drugs, feed and pesticides at farm level.

At the moment, South Africa does not have an integrated and comprehensive Animal Identification, Recording and Traceability (AIRT) system. There are currently voluntary AIRT standards with regard to products destined for local and export markets. Currently, several (legislation) referring to AIRT principles are not harmonised. Resources (human, financial and physical) to implement and maintain an effective AIRT system are limited.

4.9 Veterinary Public Health, Feed and Food Safety

Veterinary public health is a fundamental component of veterinary services that safeguards human health and well-being through approaches aimed at assuring a high level of prevention and control of zoonosis and food safety through coherent farm-to-table measures. Broadly, it is defined as the contributions to the physical, mental and social well-being of humans through an understanding and application of veterinary science. There is general public and consumer dissatisfaction with the rendering of veterinary public health service with a perception that veterinary public health services are skewed towards urban areas and to animal products destined for the export market. The rural areas are generally neglected for meat inspection and other activities. The level of monitoring of veterinary medicines, pesticide, hormone, antibiotic residues and antimicrobial resistance is limited. The fragmented legislation regulating the food industry causes gaps in the hygiene control of products as it traverses the food processing and distribution chain.

Currently, there is limited level of independent meat inspection as well as residue monitoring of veterinary medicines, pesticide, hormones and antibiotics in products of animal origin. Currently the scope of VPH is fragmented horizontally between DAFF and DoH. Moreover both DAFF and DoH authorities suffer the same vertical fragmentation of their chain of command between national, provincial and local levels. In addition, the processing of animal products is under the responsibility of the VS when they are exported and under the responsibility of the DoH when they are sold on national market. VPH activities are currently in different Chief Directorates in the central VS which may negatively influence information flows, increase the number and timing of procedures etc. The involvement of provincial authorities in export certification further complicates the system.

4.10 One Health Initiative

The One Health Initiative has assumed centre stage in the agenda of both international organisations concerned with human, animal and environmental health. The collaboration between the animal, human and environmental health sectors in South Africa has been limited, and as is the experience in other parts of the developing world, driven largely by collaboration between interested and networking officials rather than a full-fledged national initiative. This is an area where greater collaboration is required to address future challenges where it is projected that 80% of new infectious diseases in humans are link to either domestic or wild animals; and the emergence of diseases is linked to global environmental challenges such as climate change.

4. 4.11 Veterinary Statutory Body

A veterinary statutory body is necessary to regulate and maintain the level of veterinary and paraveterinary education and the level of ethical responsibility and professionalism in the veterinary field. Not all para-veterinary professionals in South Africa are licensed to practice and subject to legal disciplinary provisions for professional misconduct by an autonomous veterinary statutory body (South African Veterinary Council). This is evident in the case of meat examiners, veterinary public health officers and technical laboratory staff.

4.12 Market access

World meat production is anticipated to grow modestly in the near future. Growth is anticipated to be concentrated in the developing countries, which are also the main centres of rising demand. Market access for many countries is centred on traceability and the animal health and food safety status of the entire territory of an exporting country or part of it. Increased rigor in sanitary demands on export and potential export countries has dramatically increased the importance of maintaining a favourable animal health status, if existing markets are to be kept and new ones found. The ability to effectively manage sanitary risks underpins access to high value domestic, regional and international markets for animals and animal products. South Africa has encountered many challenges in accessing export markets due to animal diseases, traceability and resource constraints such as lack of government veterinarians in abattoirs and dedicated personnel to facilitate export negotiations.

4.13 Awareness and extension

Insufficient awareness and extension to animal owners due to lack of contact with animals on ground level has resulted in low understanding of the importance of general disease prevention, biosecurity and welfare. Consumers are not sufficiently informed on food safety and labelling related matters, such as proper handling, maintenance of the cold chain and proper cooking. Awareness and extension programmes thus need to be added to all veterinary services initiatives.

CHAPTER 5: INTERVENTIONS REQUIRED AND RECOMMENDATIONS

The goal of this strategy is to improve the contribution of veterinary services to the attainment of the key priorities of the South African public at all spheres whilst building a cohesive and effective service that caters for the needs of all stakeholders over and above improving the competiveness of South African agriculture at regional and international levels. The strengthening of the veterinary authority for better governance is an overarching requirement for all the pillars depicted below. A functioning system will also require human and capital investment into all the pillars and components.



Human and Capital Investment; Risk Analysis; Epidemiology & Surveillance; Economics; Emergency Response; Specialised Legal Support; Research; Auditing and Quality assurance; Professional development; Extension and Awareness The core strategies are depicted in the table below:

COR	E STRATEGIES	OBJECTIVES
	Strengthening of the veterinary authority for	Restore national chain of command for all
	better governance and service delivery	aspects of veterinary services and form the
		legislative and procedural basis to effectively
tion		further animal health and welfare, food safety,
Foundation		food security and market access in South
Fol		Africa.
	Strengthening competencies for animal	To strengthen animal disease prevention,
	health	surveillance control and eradication
		programmes to improve animal production,
Pillar 1		market access and contributing to the one
Pille		health initiative.
	Strengthening competencies for veterinary	To strengthen control systems for enhanced
Pillar 2	public health, feed and food safety	public health, feed and food safety and trade.
Pill		
	Strengthening competencies for veterinary	To strengthen competencies and accreditation
Pillar 3	laboratory diagnostics	for food safety and animal health diagnostic
Pilli		laboratories and research.
	Development and implementation of an	To improve animal identification and
	Animal and Products Identification,	traceability, which will aid in the control of
Pillar 4	Recording and Traceability (AIRT) System	animal diseases, promote food safety and the
Pill		quality of livestock data for trade purposes.
	Strengthening competencies for animal	To improve animal welfare legislation and
Pillar 5	welfare	standards and ensure that animal keepers fulfil
Pill		their responsibilities.

CRITICAL SUCCESS FACTORS

Critical to the success of the implementation of this strategy is to ensure:

- (a) A clear chain of command for animal disease management.
- (b) Establishment of an animal identification and traceability system.
- (c) Ensuring overall ownership and participation of government and all industry stakeholders irrespective of level of development and the necessary awareness creation.
- (d) Obtaining the necessary financial support for the identified improvement areas.
- (e) Preparation of supporting legislation and regulations.

This strategic framework is intended to support the development, implementation and monitoring of sanitary risk management strategies and other sanitary measures covered in the scope. The effective and efficient implementation is the primary responsibility of DAFF executive management, together with the respective provincial structures. Strong political will and commitment to the veterinary strategic framework by all the respective national and provincial departments and key stakeholders through alignment with national and provincial policies, strategies and programmes are a prerequisite.

Adequate funding from national treasury and establishment of a strong monitoring and evaluation system are necessary tools. The execution of the legislation will be aligned with other relevant national laws and or standards. It is important for provincial Veterinary Services, to realign their functions and structures as closely as possible to the selected approach in this strategic framework for national uniformity. The implementation shall highlight regulatory and developmental functions.

5.1 FOUNDATION: STRENGTHENING OF THE VETERINARY AUTHORITY FOR BETTER GOVERNANCE AND SERVICE DELIVERY

5.1.1 Purpose

The optimal strategy is to restore the national chain of command for all aspects of the VS. Dividing responsibilities and functions between national and provincial VS authorities to inevitably minimise loss of information, inability to react promptly and inconsistency in the implementation of veterinary activities.

This core strategy addresses elements that bridge over several of the pillars in terms of chain of command challenges in the management of veterinary services. The central veterinary authority shall be driven by delivery of veterinary services of national interest and will have clarified roles and responsibilities of different spheres of government and other strategic partners.

Restoring the national chain of command for all aspects of the VS, includes the following:

- Official appointment/designation of a country Chief Veterinary Officer (CVO) with the alignment of DAFF, provincial and private units with veterinary responsibilities, functions and activities² to be coordinated under the CVO at central level.
- The appointed CVO is to be represented on the boards of State Owned Entities (SOEs) who are active players in animal health sector e.g. ARC and OBP to strengthen VS inputs into SOEs annual strategic plans (realignment to VS needs).
- The incorporation of missing critical veterinary functional areas in the veterinary structure i.e. specialised legal team, Epidemiology, Risk analysis, Auditing and Quality Assurance will be paramount in the functional national structure.

A part of the strategy of the VS is to secure international and national trade, by preventing introduction of diseases in the country through relevant border and quarantine security, by securing exports through a relevant process of international certification that meets both international standards and importing country requirements, and by safeguarding internal trade. Thus there are elements of animal health, animal production, veterinary public health, traceability and animal welfare involved for the promotion of trade.

5.1.2 Veterinary Governance model in South Africa

² veterinary trade, animal identification and traceability, veterinary public health, aquatic and bee health, animal health, veterinary extension and advisory service, meat safety, veterinary medicines and biological control, animal feeds, export and imports of livestock and livestock products with due reference to the need for appropriate backing of such a system by epidemiological and risk analysis expertise, quality assurance, data management and audit capacities

The external evaluations of the VS of South Africa indicated that it is fragmented. In order to be in the position to set and enforce appropriate effective and efficient norms and standards for South Africa with regards to veterinary responsibilities, functions and activities, reorganisation of the veterinary system will be done. An efficient and effective central veterinary authority operational structure that extends to provinces on specific functions shall be explored in order to give direction of command and responsibility.

5.1.2.1 To establish **technical independence**³, it is significant that the technical chain of command on veterinary matters be re-established, with technical decisions not influenced by commercial, financial, hierarchical and political influences.

5.1.2.2 Recruitment, retention and recognition of specialised veterinary competencies⁴

Veterinary services should be capable of performing its professional and technical tasks efficiently. The VS should assess the professional personnel by their academic qualifications and by their level of training and competence. Recruitment, retention and adequate recognition and reward of personnel in our veterinary and technical cadre will be crucial to the success of the strategy. For veterinary and para-veterinary professionals, a career pathing and remuneration model should be developed and implemented.

The level of appointment should be dependent on the scope of work and additional qualifications required in order to perform the work efficiently and effectively such as successful completion of the Senior Management Leadership Programme with either the National School of Government (NSG) or a Higher Education Institute (HEI) accredited or considered equivalent with the NSG.

5.1.2.3 Stability of structures and sustainability of policies⁵

Within the framework of national priorities and to improve contributions by DAFF to national priorities as identified in national policy documents, plans must be developed to strengthen veterinary services in disease control strategies including primary animal health care, animal production and food safety. The problem of enforcement may require that industries/stakeholders take a more active role in compliance, possibly by assisting with funding of agencies.

5.1.2.4 Coordination capability of VS: Internal coordination (Chain of command)⁶

Although constitutional imperatives are very clear, it is possible to consider ways to ensure that while abiding with the constitutional directives, improved coordination on veterinary controls are

³ The capability of the VS to carry out their duties with autonomy and free from commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the South African Veterinary Council, Codex Alimentarius, WTO SPS Agreement and the OIE.

⁴ The capability of the VS to efficiently carry out their specialized veterinary and technical functions; measured by the gualifications and experience of their personnel in veterinary and technical positions

⁵ The capability of the VS structure and/or leadership to implement and sustain policies over time

⁶ The capability of the VS to coordinate its resources and activities with a clear chain of command, from central level (CVO) to the field level of the VS in order to implement all relevant national activities

taking place. It has been suggested that the coordination should take place centrally (e.g. procurement) but that the expertise throughout the country should be utilized. There was a request that a basic resource list for provincial functions be compiled and that these products should always be available to negate repeated procurement processes and wastage of resources. During the stakeholder consultations, it became clear that some industries would like to be given an opportunity to assist in this regard.

Five models have been considered for government veterinary services namely:

- Option 1: Centrally Controlled State Veterinary Service

In this approach, all veterinary services are controlled from the office of the national Chief Veterinary Officer.

- Option 2: Federal Approach to State Veterinary Services

In this approach, regulatory veterinary services are controlled from the office of the national Chief Veterinary Officer. Provinces are given full autonomy on veterinary matters pertaining to developmental aspects.

- Option 3: The Hybrid

This will be a combination of centrally controlled and federal approach. The national veterinary officials will be placed in provinces over and above existing veterinarians and veterinary para-professionals in the provinces in critical and strategic areas. These officials will be accountable to the Chief Veterinary Officer. The advantage of this approach would be that it would satisfy concerns related to compatibility with the constitution and also the international acceptability and recognition.

- Option 4: The Agency Approach

In this approach, state veterinary services will be under a government appointed agency, with the partial funding coming from government.

- Option 5: maintaining the current structure Approach

The current structure and approach will be maintained with a modification of the current service delivery model

The ideal model for restoring the chain of command is the central model. In order to restore the chain of command, it is proposed that legislation to incorporate functions of VS under essential national standards be passed in accordance with Sections 44(2) and 146 of the Constitution of the Republic of South Africa.

The proposed model is flexible and operative at national, provincial and local levels depending on the functional areas with each level having its own distinct functions. An establishment of a disease prevention, control and eradication (biosecurity) agency may be possible with contributions from the stakeholders and government, as may be the establishment of a "Food Control Agency".
It will be necessary to expand DAFF's audit functions of all aspects of veterinary services. It will also be important to build capacity at all spheres to improve accountability for national service delivery. These should take into account feed and food safety issues and work towards the improvement of pre-harvest food safety, as well as the channels of communication with industries on veterinary matters.

5.1.2.5 Coordination capability of VS: External coordination⁷

Whole food chain food safety collaboration ("farm to fork") and communication will be strengthened. This must entail external coordination with the Department of Health (DoH) in the domain of veterinary medicine control and food safety. Control of medicines will preferably be done through a single Act of Parliament. Collaboration with customs authority and border police for border control purposes will be strengthened to address issues related to import monitoring and control, galley waste management, identify functions of the Border Management Agency (BMA).

5.1.2.6 Participation of producers and other interested parties in joint programmes⁸

Participation of producers and other interested parties in joint programmes is encouraged. All producers should be made aware of their obligation to report signs of diseases.

Education of animal owners can be improved by regular contact between veterinarians and animal owners. Joint programmes with industry may be an option to form a system of subsidised annual visits and consultations. Improved collaboration with private veterinary services should also improve access of farmers to relevant information. Veterinary services will deliver communication and awareness programmes for producers on controlled diseases, their reporting obligations and disease control activities such as vaccination and farm biosecurity.

The industry proposed creation of a disease control agency (private-public-partnership) which will cater for the development of VS with regard to disease management and promote job creation will be explored further. The stakeholders suggestion that utilisation of laboratory information should be optimised and that the overlap of audits should be limited by utilising other third party audit findings will also be explored further.

5.1.2.7 Continuing education⁹

Veterinary and para-veterinary professionals must improve on their knowledge and skills by continuing education as guided by the Human Resources Development strategy of government

⁷ The capability of the VS to coordinate its resources and activities at all levels with other relevant authorities (incl other ministries, competent authorities, national agencies and decentralised institutions)
⁸ The capability of the VS and producers and interested parties to formulate and implement joint programmes in regard

⁸ The capability of the VS and producers and interested parties to formulate and implement joint programmes in regard to animal health and food safety (incl other ministries, competent authorities, national agencies and decentralised institutions)

⁹ The capability of the VS to maintain and improve the competence of their personnel in terms of relevant information and understanding; measured in terms of the implementation of a relevant training programme

and the guidelines provided by the South African Veterinary Council. The strategy will promote a blended learning format using the Human Resources Development strategy for civil servants and accredited professional postgraduate qualifications for targeted skills and development opportunities. The effectiveness of this training has to be audited.

5.1.2.8 Management of resources and operations¹⁰

Critical to disease control is the need for an auditing system for accuracy and completeness of veterinary public health and proper management of borders, the development of new national data collection and management systems that are compatible with provincial systems for livestock census and identification, disease reporting, laboratory information, VPH activity, border inspection and others.

5.1.2.9 Communication¹¹

The veterinary services should work hand in hand with communication specialists and focus on risk communication across the veterinary domain as well as general extension to animal owners, all stakeholders, including consumers. Both the private and state veterinary services will work together and build credibility in delivering communication and extension messages. This will include improving the standard and accessibility of information on the Veterinary Services website.

5.1.2.10 Official representation¹²

The veterinary services will set up a system to enable consultations with stakeholders in order to influence international standard-setting through official representation which includes OIE, Codex, SADC, AU, SPS and to bilateral official representation.

5.1.2.11 Preparation of legislation and regulations¹³

The veterinary services will build capacity to develop and set regulatory standards using procedures that take stakeholder opinions into consideration and meet the notification requirements of both the SPS Agreement and SPS Annex. New legislative reviews and requirements in areas such as VPH, livestock identification, disease control, animal welfare, border controls, veterinary drugs and official delegation should be implemented. Where possible, there should be the establishment of specialised legal support teams on sanitary standards, in

¹⁰ The capability of the VS to document and manage their resources and operations in order to analyse, plan and improve both efficiency and effectiveness

¹¹ The capability of the VS to keep interested parties informed, in a transparent, effective and timely manner, of VS activities and programmes and of developments in animal health and food safety authorities (incl other ministries, competent authorities, national agencies and decentralised institutions) ¹² The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings

¹² The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisation including the OIE, Codex Alimentarius Commission and WTO SPS Committee ¹³ The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in

¹³ The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in domains that are under their mandate, in order to guarantee its quality with respect to principles of legal drafting and legal issues and its accessibility, acceptability and technical, social and economic applicability (incl other ministries, competent authorities, national agencies and decentralised institutions)

order to build expertise in framing legislation and regulations for sanitary measures that affect trade.

Legal advisers will be recruited at central level to insure consistency of legislation should take place, industry requested that the drafting of the legislation should be a joint effort between government and the industry. During the updating of legislation, consultations with stakeholders should take place. The updated legislation should be guided by both local and international requirements, such as Codex standards and OIE guidelines.

5.1.2.12 Implementation of legislation and regulations and compliance thereof¹⁴

The VS will improve utilisation of specialised legal advisors including those in provinces to deal with the involvedness of legislation enforcement and national inconsistencies. The use of admission of guilt (spot) fines for transgressions of legislation should be implemented to assist enforcement.

5.1.2.13 Operational funding¹⁵

The VS shall utilise available expertise to conduct economic analyses including cost benefit and efficiency analyses. Where possible, veterinary services shall capture and utilise expenditure information by developing a data management system to aid decision making and prioritisation of services on a national basis. A cost recovery may be used to recover expenses on services that are considered a private good.

5.1.2.14 Capital investment¹⁶

VS shall establish a relevant data management of capital investment. During consultations the industry indicated that they would be willing to provide funds in a public-private-partnership for the improvement of veterinary services.

5.1.2.15 Risk analysis¹⁷

VS need to strengthen skills in quantitative and qualitative risk analysis and evidence-based decision making. VS aim to integrate data generated by veterinary services with that from other sources and then analyse it to produce knowledge and intelligence that will support government in achieving its outcomes. Veterinary Services should build capacity to conduct scientific risk assessments based on OIE and Codex standards when determining appropriate levels of sanitary protection measures. The proposed risk analysis unit should be established within DAFF in order to function optimally, which would include to conducting national studies on livestock farming

¹⁴ The authority and capability of the VS to ensure compliance with legislation and regulations under the VS mandate

¹⁵ The ability of the VS to access financial resources adequate for their continued operations, independent of political

pressure ¹⁶ The capability of the VS to access funding for basic and additional investments that lead to a sustained improvement in the VS operational infrastructure

The authority and capability of the VS to base its risk management measures on risk assessment

system types, specifying breeding, management and marketing activity and associated producer numbers by type. It is thus necessary to provide specialised training on risk analysis to relevant staff at various government and industry levels and facilitate establishment of a national centre in SPS risk analysis. In doing this, it will facilitate that relevant staff at provincial level receive adequate training and information about risk analysis. During consultations industry had also indicated that outsourcing of risk analysis should be considered as well as partnerships with international bodies. It was requested that industries should be consulted on the prioritisation of projects at a dedicated risk analysis unit. Economic quantification on the impact of disease outbreaks should also be addressed by the risk analysis unit.

5.1.2.16 Emergency response¹⁸

It is critical that the chain of command be restored to improve emergency response. The emergency response arrangements will be coordinated with the relevant external disaster management authorities, industry representatives and private veterinarians. The contingency plan should be updated and include the possibility of simulation exercises. South Africa needs to develop extension programmes on emergency situations, which should include extreme climatic conditions like drought.

5.1.2.17 Emergency funding¹⁹

VS will formalise access to emergency response funding by consulting with industry on emergency response planning and funding arrangements, including for compensation. The VS will communicate with relevant producers the availability of compensation fund to maximise its positive influence on reporting and early detection. The system of obtaining funds for compensation in a private-public-partnership (perhaps as part of "Biosecurity South Africa") should be further consulted and developed.

5.1.3 Authorisation of private veterinarians and para-veterinary professionals

5.1.3.1 Accreditation/Authorisation/Delegation²⁰

Where the cost-benefit of using a private professional from a government perspective is favourable, the VS will expand levels of official delegation to private veterinarians in animal health (national disease control and identification programmes) and VPH (part time meat inspection) and develop a laboratory approval programme. VS must ensure data from officially delegated activities

¹⁸ The authority and capability of the VS to respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency)

¹⁹ The capability of the VS to access extraordinary financial resources in order to respond to emergency situations or emerging issues; measured by the ease of which contingency and compensatory funding can be made available when required

²⁰ The authority and capability of the public sector of the VS to accredit/authorise/delegate the private sector to carry out official tasks on its behalf

are recorded and fed into national databases. Delegation procedures will include a training course (with a test) before private veterinarians and para-veterinary professionals can be authorised and a standard contract with specific conditions of employment.

5.1.4 Access to markets

5.1.4.1 International certification²¹

The VS will develop and implement an internal QA system for the export certification system. It may be important to review the central VS organogram and provincial roles to analyse the internal chain of command relating to export certification. There should be a clear and direct link between the certification process and what is being certified (i.e. national animal health, animal welfare and food safety activity).

5.1.4.2 Equivalence and other types of sanitary agreements²²

The provision of risk analysis services will greatly aid VS in concluding sanitary agreements.

5.1.4.3 Quarantine and border security²³

The VS should conduct a resource allocation review of border inspection to better ensure that staff complement reflect workloads and technical requirements at the numerous ports of entry (e.g. need for veterinary inspection). Consideration will be given to rationalise the overall network and to position professionals based on the type and quantity of consignments received yearly in each border post. In addition, it is necessary to develop an audit and QA system for veterinary services. This will include review of internal SOPs for all ports of entry and quarantine stations. It is proposed that the veterinary border inspection offices should be included in the line function under the CVO.

With the understanding that the BMA is being established, VS should continue to work closely with all role-players at the borders as well as neighbouring countries' authorities to harmonise border inspection procedures. This should include training of officials at borders on animal and product import control as well as systems to ensure that border inspection data are collated nationally. The provision of holding and quarantine facilities at borders are needed especially to assist with the management of stray animals.

5.2 PILLAR 1: STRENTHENING COMPETENCIES FOR ANIMAL HEALTH

²¹ The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations and international standards

²² The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners

²³ The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.

5.2.1 Purpose

To strengthen animal disease prevention, control and eradication programmes to improve animal production, market access and contributing to the one health initiative.

5.2.2 Disease control and surveillance

5.2.2.1 Epidemiological surveillance and early detection: Passive epidemiological surveillance²⁴

With reference to surveillance, the VS will maintain and improve the current passive surveillance programmes and progressively extend the passive surveillance systems to the private veterinary network. VS will consult with private veterinarians, industry, smallholders and their representatives in the development of official delegation to private veterinarians. VS will train producers and veterinarians in their responsibilities in relation to recognition and reporting of controlled/notifiable and other diseases and develop and implement a comprehensive national disease reporting system from field to national level. The system will specify consistent reporting procedures (consider the utilisation of mobile devices and apps), data management and collation and include formal inputs from private veterinarians and abattoirs. Veterinary services should have their own courier service for the submission of samples.

5.2.2.2 Epidemiological surveillance and early detection: Active epidemiological surveillance²⁵

Specific diseases are referred to in this discussion. For Brucellosis/Tuberculosis (CA/TB), VS will undertake active surveillance and collate data nationally to get clear information on the national prevalence levels of brucellosis and TB to guide the development of national control and/or eradication programmes. The stakeholders have indicated their strong support to using CA as a model, and that all a big effort to control this disease is indicated.

For African Horse Sickness, VS will improve levels of active surveillance in the control zone.

For Avian Influenza and Newcastle Disease VS will maintain the current active surveillance activity in ostrich farms and enhance national active surveillance in the other poultry sectors.

For Bovine Spongiform Encephalopathy, VS will continue to pursue OIE freedom by increasing levels of active surveillance to demonstrate freedom.

For pig disease surveillance will also be maintained. In order to strengthen active surveillance VS will establish procedures for official delegation of private veterinarians and a national laboratory information management system to collate active surveillance data.

²⁴ The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate

²⁵ The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate

5.2.2.3 Disease prevention, control and eradication²⁶

The priority diseases for VS, as discussed above are significant in contributing to the success of the livestock sector. VS should maintain current "dip-tanks" programme within the **FMD** protection zone alongside Kruger National Park including: FMD vaccination (3 times/year, double doses, on around 200 000 cattle), identification (branding and/or ear-tagging) and fortnightly clinical surveillance. The VS should maintain FMD related movement restrictions and active surveillance including relating to the FMD protection zone, for buffalo movements nationally and for exports.

With regard to **Brucellosis** VS will establish a compulsory testing and control programme, at least for the dairy sector, including a review of previous control policies for lessons learnt. The policy should include compulsory active surveillance to get accurate prevalence levels. Mass vaccination should be undertaken to improve the national herd immunity. Options to recover costs from producers for vaccination and testing will be fully explored. While the dairy programme is being implemented options to expand this control programme to the beef sector.

For **Anthrax** VS will strengthen the compulsory vaccination programme for all cattle. VS will continue the compulsory pre-movement testing of buffalo to control FMD, corridor disease, TB and brucellosis risks.

Regarding **Rabies**, it will be compulsory for dog owners to obtain licenses for their dogs (in a municipal area), which will be subject to proof of rabies vaccination.

VS will consult with relevant industries in the development and implementation of the national disease control programmes and develop and implement legislative support required for the national compulsory disease control programmes whilst establishing a national reporting system that covers national disease control activities. These programmes will take into account international disease control and eradication initiatives. One disease (proposed bovine Brucellosis) should be the pilot project for a control/eradication programme, during which a model for disease eradication can be developed

5.3 PILLAR 2: STRENGTHENING COMPETENCIES FOR VETERINARY PUBLIC HEALTH, FEED AND FOOD SAFETY

5.3.1 Purpose

The purpose of this pillar is to strengthen control systems for enhanced public health, particularly food security and trade through strengthening the food safety, feed and zoonosis control.

²⁶ The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases

To ensure a similar level of VPH and the safety of food of animal origin to all national consumers as to international consumers, the scope of food safety in food security should be clearly defined in the existing agriculture food laws. The figure below describes the different degrees of involvement of VS in the food chain across the world. The existing South African model is reflected in bar 4, in which the food processing plants for local consumption are regulated by DoH, and those for export markets are regulated by both DoH and VS. Recent concerns about food safety in South Africa highlighted the need for an integrated system, which could be implemented by creating National Food Control Agency after a feasibility and business case study. An alternative proposed model to the proposed Food Control Agency aimed at strengthening food safety system is reflected in bar 2, in which the regulatory mandate of VS extends to processing plants both for local and exports.



5.3.2 Food and feed safety

Food safety and food security are interrelated concepts with a profound impact on the quality of human life. Foodborne illnesses are an important cause of morbidity and mortality in humans worldwide. Animals play an important role in foodborne illnesses as possible sources of pathogens in food products of animal origin or alternatively through faecal contamination of plant derived foods and water. Many of the pathogens responsible for foodborne illnesses are asymptomatic in animals. To minimise the risk of foodborne illnesses, control measures should be considered at

both the pre-harvest level (in Supplier Development Programmes) and subsequent stages of the production-to-consumption chain, i.e. 'from farm to fork'. The inclusion of dairy products and eggs in VPH legislation should be considered. Expansion of the extension and public awareness services with regard to illegal slaughter should be prioritised.

5.3.2.1 Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin²⁷ and inspection of collection, processing and distribution of products of animal origin²⁸

Risk management must be tailored to address identified and prioritised risks at the appropriate stage(s) of production, processing and distribution. Veterinary services functions will be extended to legally include apiculture, aquaculture, processed meat products, milk and eggs up to the level of processing. VS will work closely with other departments in the development of a food control agency including maintaining sanitary standards for relevant establishments. The food control agency would work on control across the various relevant Acts, which fall under different Departments. This will ensure a coordinated approach and limit the duplication of resources required.

Veterinary services will train and assign staff for the authorisation and inspection of all identified establishments in the country, and provide adequate means for this function including transport.

VS will incorporate best practice initiatives to align regulatory requirements to market requirements.

The VS will undertake close consultations with DoH on arrangements for food safety standards in processing establishments to link food safety aspects of farming, slaughter/collection, processing and distribution e.g. food safety incident trace back and trace forward.

5.3.2.2 Independent meat inspection – ante and post mortem inspection at abattoirs and associated premises²⁹

The priority over the foreseeable future is to implement a meat inspection system as follows:

- Assignment of meat inspection service providers to provide meat inspection at all high throughput and frequently slaughtering low throughput abattoirs
- Presence of government meat inspection personnel at each of the abattoirs mentioned above to monitor the implementation

²⁷ The authority and capability of the VS to establish and enforce sanitary standards for establishments that produce, process and distribute food of animal origin ²⁸ The authority and capability of the VC to involve

²⁸ The authority and capability of the VS to implement, manage and coordinate food safety measures on collection, processing and distribution of products of animals, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes
²⁹ The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at

²⁹ The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at abattoirs and associated premises, including for assuring meat hygiene and for the collection of information relevant to livestock diseases and zoonoses

- A government meat inspection service to provide meat inspection at all rural and at frequently slaughtering low throughput abattoirs

This implementation model should address stakeholder concerns of inadequate enforcement of the provisions of the Meat Safety Act.

The central and provincial VS will develop and implement periodic, random audits of meat inspection activities and continue to work with other departments to develop a strengtherned food control system model. The VS will continue to liaise with the meat industry in the development of an improved, expanded, independent meat inspection system and review legislation and regulations relating to abattoir inspection, including penalties. The VS will also establish a training programme for private veterinarians and para-veterinary professionals rendering in ante and post mortem inspection services.

VS will assess the competency of the meat inspection personnel and recommend their authorisation to render services by the regulatory authority. The service rendered by meat inspection personnel should also be audited. The VS will develop a communication plan relating to the new independent, veterinary inspection system and establish a database to nationally collate slaughter statistics, as a contribution to animal and public health surveillance.

5.3.2.3 Animal feed safety³⁰

Animal feed safety is a significant area that determines to a large extent general food safety. It is necessary to identify priorities, needs and resources for an updated national feed safety programme, based on the new legislation and provide adequate resources for this activity. The activities must address, amongst others, regulation of self-mixers in the legislation, the issue of dead stock in terms of composting and the responsibility that lies with the person feeding the animal. Traceability of feed and ingredients must be included in the legislation and the enforcement of legislation should be improved, including the verification of marketing claims of feed. The final regulations should be practical, and enabling for the emerging sector to afford compliancy. The new Animal Feed Bill will be further consulted and amended as required to create linkage and integration with all the relevant VS Acts. As the grains used for the feed can also play a role in the feed safety (e.g. mycotoxins), this will also be addressed in the requirements. The safety of abattoir by-products that can be rendered to be of use in feed manufacturing should also be addressed in the legislation.

5.3.3 Control of veterinary medicine and antimicrobial resistance

There is a need for an integrated antimicrobial resistance programme between DAFF and DoH.

³⁰ The authority and capability of the VS to regulate animal feed safety e.g. processing, handling, storage, distribution and use of both commercial and on-farm produced animal feed and feed ingredients

The existing international programmes (OIE, WHO) should be used as guidelines.

The following areas must be attended to:

- Clear definition and scope of antimicrobials
- Use and distribution of veterinary medicines and other antimicrobials
- Traceability on the use of antimicrobials
- Surveillance on antimicrobial resistance
- Use of biosecurity and management practices to limit use of antimicrobials
- Prohibition of the use of compounded medicine in food producing animals
- Restrict antimicrobial use to therapeutic use only and not prophylactic use
- Advise to end users on prudent use of antimicrobials at points of sale
- Veterinary inspection of cooperatives
- Accountability of pharmacists for the drugs they dispense
- Reconsideration of direct sale of pharmaceuticals to farmers by pharmaceutical companies
- Compulsory drug registers

Resistance to parasiticides and anthelmintics should also be addressed.

5.3.3.1 Veterinary medicines and biologicals³¹

Veterinary services must enhance coordination and communication with DoH in veterinary drug control (scheduled and over-the-counter medicines). There should be improvement in the human capacity (competency and numbers) for evaluating applications for drug registrations in certain specialist fields such as toxicology. Veterinary services should continue to explore the sharing and/or recognition of international evaluations of veterinary drugs to shorten time and effort involved in national registration. There might be a need to re-evaluate in some instances because the relevant data used and dossiers may not be available, applicable to the local environment or have all applicable information.

VS, together with relevant stakeholders should review and update veterinary drug legislation to introduce greater veterinary control of distribution and use, including reclassification of some drugs to be scheduled (e.g. tetracyclines, vaccines) and establishing protocols for prudent use of drugs. VS, with relevant stakeholders, should close loop-holes relating to large scale medicinal compounding, particularly in the intensive industries (medicated feed and autogenous vaccines) and provide adequate resources for monitoring. This will require close consultations with DoH and the veterinary pharmaceutical industry. Co-operatives should be inspected for compliance and pharmacists should be accountable for the drugs they dispense. The provision which allows pharmaceutical companies to directly supply medicines and vaccines directly to farmers should be

³¹ The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, in order to ensure their responsible and prudent use, i.e. the marketing authorisation, registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale and use of these products

re-considered.

The VS will develop communication materials about new regulations and prudent use of veterinary medications for farmers and veterinarians. Data on veterinary medicines distribution and usage, including at farm level, should be collected. Extension work on use of antimicrobials and withdrawal periods of pharmaceuticals need to prioritised.

A Single Veterinary Medicine Act will be compiled, in order not to duplicate resources and capacity needed and prevent the two regulators being played up against one another and to address the issue of antimicrobial resistance. VS will coordinate regional programmes with SADC on medicine control and data collection on medicine usage and collaborate with the BMA on control of the import of veterinary medicines, ingredients and biologicals. VS will ensure optimisation of vaccine availability for emergency situations. It was suggested that rather than limiting the availability of veterinary medicines, that withdrawal periods should be better enforced with the aid of residue monitoring. Farmer and consumer awareness on withdrawal periods should be promoted.

5.3.3.2 Residue and microbiological testing³²

As agreed with the stakeholders in the animal health industry, honey and eggs will be included in the residue monitoring programmes and this should be done in collaboration with the DoH. In addition, maximum residue levels (MRL's) of medicines in wildlife will be researched and established. Testing for MRL's will be conducted at all abattoirs and the results of this testing should be communicated to the public

The current system has been indicated to be too focused on export markets and will be amended to be integrated with local programmes. It is important in this consideration to also design programmes to include testing for vaccine components and pesticides, not just active ingredients of drugs. The VS will also develop an educational programme to educate producers on residues and withdrawal periods, which may consider owner declarations regarding these at the abattoir.

The VS will develop more accurate system of testing for residues following a survey of chemicals used and design farm accreditation systems. The development of expertise and infrastructure for residue testing is an important resource. Testing of feed, water and soil should also be considered as part of the food chain. It is a possibility for the bigger abattoirs to develop their own residue testing facilities, while a system will need to be developed for the emerging sector. There was a proposal to establish a Government residue monitoring laboratory under One Health, in collaboration with DoH. The difference between a residue monitoring and residue control programme should be explored further and should be evaluated as to which would best suit the needs of South Africa.

A funding proposal for a residue monitoring/control programme is to institute a levy on veterinary medicines sold.

³² The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals etc

5.4 PILLAR 3: STRENGTHENING COMPETENCIES FOR VETERINARY LABORATORY DIAGNOSTICS

5.4.1 Purpose

To strengthen competencies and accreditation for food safety and animal health diagnostic laboratories and research.

This strategic pillar will address challenges in terms of declining research and diagnostic capacity, registration with the veterinary statutory body, improving market access and contributing to the one health initiative.

5.4.2 Veterinary Laboratories

5.4.2.1 Access to veterinary laboratory diagnosis³³

The VS will ensure that all provincial laboratories have relevant resources to conduct all food safety and animal disease diagnostics and ensure that ARC-OVI responds adequately to the needs of VS in term of reference laboratory. The VS will ensure continuing education on testing and sensitivity, specificity and sampling in order to interpret test results as well as promote postgraduate veterinary studies to build laboratory skills capacity. The VS will develop an easy reporting system for all laboratories. When private veterinarians are authorized to perform official functions (e.g. Brucella Scheme) they will have access to the required laboratory diagnoses.

5.4.2.2 Suitability of national laboratory infrastructures³⁴

VS will maintain and improve animal disease diagnostic capacity and develop a project to develop food safety laboratory capacity to test notifiable foodborne and zoonotic diseases in South Africa. Laboratory procurement could possibly be centralised and/or collaborative arrangements between laboratories may improve the procurement system for critical items. VS, in collaboration with the SAVC, at its best will ensure sufficient resources for maintenance of equipment and remove legislative irregularities relating to the restrictive employment of laboratory staff. VS will develop a functional and efficient national laboratory information management system to collate data nationally including active surveillance data.

5.4.2.3 Laboratory Quality Assurances³⁵

³³ The authority and capability of the VS to have access to laboratory diagnosis in order to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products ³⁴ The sustainability, effectiveness and efficiency of the national (public and private) laboratory infrastructures to service the needs of the VS

VS will progressively withdraw DAFF support as more provincial and private labs are able to sustain their own official ISO accreditation. Industries may contribute funds to enable laboratories to obtain and maintain accreditation. VS will strengthen oversight on public and private laboratories responsible for food, feed and controlled diseases work and amend legislation to address the changes in mandate and organisational structure. Government VS will continue to visit laboratories to evaluate implementation of DAFF requirements in SANAS accredited laboratories. These audits will focus on bio-security, bio-safety, specified methods and reagents as well as reporting done by the laboratory. All test results will be available to the VS

5.5 PILLAR 4: DEVELOPMENT AND IMPLEMENTATION OF AN ANIMAL AND PRODUCTS IDENTIFICATION, RECORDING AND TRACEABILITY (AIRT) SYSTEM

5.5.1 Purpose

To improve animal identification and traceability, which will aid in the control of animal diseases, promote food safety and the quality of livestock data for trade purposes.

Animal identification, recording and traceability (AIRT) is both a public and private good that delivers benefits to farmers, consumers, and the nation as a whole through control of infectious diseases, disaster management, animal traceability, promotion of food safety, and improved livestock statistical data quality and use.

This strategic pillar will contribute to addressing the challenges in t management of animal health, compliance and enforcement, traceability of animals and animal products, improving market access.

5.5.2 Animal identification

5.5.2.1 Animal identification and movement control³⁶

For a progressive livestock industry, the VS need to standardise all private sector identification systems (such as those currently used for the purposes of trade, breeding etc.) through developing an accreditation process. These ID systems should be easily aligned with future longer term planning for a national ID system. The VS must ensure that data collected at all levels are collated to actualise the national livestock census and develop and implement a national livestock property identification system. The VS will undertake a thorough planning, including cost analysis, for

³⁵ The quality of laboratories (that conduct diagnosis testing or analysis for chemical residues, antimicrobial residues, toxins or tests for biological efficacy, etc) as measured by the use of formal QA systems including, but not limited to, participation in relevant profinciency testing programmes.
³⁶ The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify

³⁶ The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify animals under their mandate and trace their history, location and distribution for the purpose of animal disease control, food safety or trade or any other legal requirement under the VS/OIE mandate

national compulsory lifelong individual identification of livestock, especially considering:

- o relevant legislation and regulations, and their economic and social impact
- o the complexity and cost of ongoing database management, including recording and data entry for all movements/births/deaths etc
- o the human resources and the conditions under which animal identification should be implemented (farmers, private veterinarians, government AHTs),
- o the way the overall system might be financed (cost recovery system)

The VS will further consult and request business plans from farmer groups to ensure that the process to standardise systems also incorporates their needs and perspectives on a national compulsory life-long identification system. The VS will develop and implement legislation/regulations to standardise existing private individual identification systems and explore requirements for a legislative framework to impose a national standardised compulsory identification system for permanent individual identification of all livestock including farmed game. If initiated, there will be a need to progressively train staff, farmers or private veterinarians in tagging and data entry for livestock identification. The VS will develop a stakeholder communications plan relating to both standardised and compulsory livestock identification and explore the development of a database to record all identified animals, updating their movements, treatments, deaths etc. ensure compatibility for other This will also need to aspects such as animal production/management/breeding etc. It was further suggested that a cell phone application could be developed to load information into the database.

An independent agency/organisation may be needed to administer the animal identification system. Cattle should be used as the species to pilot the programme.

5.5.2.2 Identification and traceability of products of animal origin³⁷

The VS will consult with relevant processors and retailers on standardisation and accreditation processes for existing animal product traceability systems. The VS will develop a legislative framework for accreditation of animal product traceability to ensure accessibility and usefulness to the VS and avoid inconsistent development of multiple traceability systems and ensure product traceability systems have the capacity to be linked to the development of individual livestock identification systems.

5.6 PILLAR 5: STRENGTHENING COMPETENCIES FOR ANIMAL WELFARE

5.6.1 Purpose

³⁷ The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations and international standards

To improve animal welfare legislation and standards and ensure that animal keepers fulfil their responsibilities.

5.6.2 Animal welfare³⁸

The VS will establish an animal welfare unit with relevant expertise within the central and provincial VS. Their responsibilities and tasks will be to update the two relevant Acts, provide independent review for animal welfare legal disputes, develop a communication, compliance and enforcement programme (based on the new legislation) and develop capacity in animal welfare science. The VS will establish an animal welfare coordinator in each province responsible for training, extension and compliance within provinces to implement the legislation. Actual extension and enforcement in the field should be undertaken by field veterinarians (including private) and para-veterinary professionals in the relevant domains (e.g. slaughter welfare standards in VPH, farm welfare standards during farm visits, transport welfare standards during border inspection and movement control activity etc.) The VS will consult with relevant NGOs, industry and provincial authorities, especially in the development of updated animal welfare legislation. Welfare organisations should be linked to veterinary services and report to the national welfare unit.

Animal welfare at abattoirs should be included in independent meat inspection and the welfare aspects at stunning, for traditional and religious slaughter and during transport should be investigated / researched and guidelines developed.

Welfare guidelines should be developed for wildlife (including transport and capture), laboratory animals and exotic animals. Regulations should be developed on game slaughter (in collaboration with the DEA) and welfare during fish farming and harvesting should be investigated. A system of registering research animal ethics committees is required and competition dog fighting needs to be addressed in the revised animal welfare legislation.

The VS will cooperate with the SABS to develop welfare standards and communicate these to farmers. The VS will investigate product labelling according to welfare grading for consumer information as well as whether the animal was stunned prior to slaughter. Standards on euthanasia in various situations should also be developed (e.g. rabid animals).

There was a request from stakeholders to legalise dog racing and develop the necessary guidelines to govern this sport, similar to horse racing. It was also requested that welfare officials at NGO's receive adequate, standardised training. Clarity is required regarding the Pounds Act, its finalisation and under whose mandate it falls.

³⁸ The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Animal Health Code

CHAPTER 6: INSTITUTIONAL ARRANGEMENT

6.1 Introduction

A prerequisite for becoming a competitive veterinary service world-wide, is for government to join forces with industry, all stakeholders, education establishments (across the entire veterinary field), statutory bodies, local municipalities and in some instances, traditional leaders. From the perspective of this strategy and an enabling environment point of view, this means effective private public partnership (PPP). It is important to change the current view and consider the services as a whole. Veterinary work should be classified into private and public good.

6.2 Role players identified in the provision of veterinary services

Veterinary services are provided by a number of different service providers among them:

- **Government veterinary services**: Providing a structure to maintain inbound, outbound and internal biosecurity for state controlled diseases funded by the public through taxpayers money.
- Veterinary animal welfare organisations: Providing a welfare service for public good through private funding by the public.
- **Private veterinary services**: Individual private veterinarians in companion animal and livestock practice. Individual private veterinarians in mixed and companion animal practice and various associations such as the Animal Health Forum, representing specific interest groups.
- Animal health and production industries: Individual animal health and production entities producing animal health related products. South African Animal Health Association and distributors and retailers of animal health products.
- Veterinary regulatory body : South African Veterinary Council which regulates the standard of veterinary services and veterinary education provided through a registration and monitoring process.
- Veterinary academic institutions: Academic institutions involved in the education of veterinarians and para-veterinary professions.

Other role players in specifically providing veterinary services and extension such as, but not limited to:

- Provincial Departments of Agriculture;
- Department of Health;
- Department of Trade and Industry;
- South African Police Services;
- South African National Defence Force;
- Local Government and other government;
- Veterinary academic training institutions;
- National Agricultural Marketing Council;

- Agricultural Research Council;
- Onderstepoort Biological Products;
- South African Veterinary Association;
- Private sector veterinarians;
- Livestock Community;
- Private sector organisations;
- Laboratories

Strong links between these role players and government must be established.

6.3 Institutional and corporate governance structures

In order to fulfil the requirements of this strategy, additional personnel (specialised, skilled, semiskilled, and administrative) will be needed at both national and provincial levels. The external evaluations of the VS of South Africa indicated that it is fragmented. In order to be in the position to set and enforce appropriate effective and efficient norms and standards for South Africa with regards to veterinary responsibilities, functions and activities, reorganisation of the veterinary system is required. An efficient and effective central veterinary authority operational structure that extends to provinces on specific functions is needed in order to give direction of command and responsibility.

The next step is to produce comprehensive implementation plans, including details of the structure, control systems and governance that will enable us to deliver the vision set out in this strategy. Throughout the implementation phase we will ensure that we retain sufficient flexibility to develop and adapt our strategy in response to changing circumstances and demand.

CHAPTER 7: MONITORING AND EVALUATION

7.1 Introduction

The monitoring and evaluation exercise is essential in analysing and assessing the efficiency and effectiveness of the implementation of the aspects mentioned in the veterinary strategy. Strategic plans for implementing the identified sections of the strategy will be developed as well as a monitoring plan. The broad concepts that will be evaluated will include: relevance, effectiveness, efficiency, impact and sustainability.

7.2 Key Objectives

The monitoring function should evaluate the amount of progress toward the successful implementation of the various aspects of the agreed upon strategy. The following instructions should be given to enable monitoring to take place:

- Document the main features of the process of strategic implementation, document lessons learnt and encourage replication of good practices
- Assemble, where available, evidence of all achievements, in line with the strategic plans
- Ensure that corrective actions are undertaken during the course of strategic implementation
- Enable a process to allow auditing by trading partners whilst creating a database from which these international auditors can assess the risk of South African produced products with a positive outcome
- Enable the involvement of industry in monitoring themselves in attaining the expected outputs

7.3 Methodology

In the light of the development of transversal indicators as guided by the Department of Monitoring and Evaluation in the Presidency, transversal issues that require constant reporting on for purposes of improving service delivery and improving competitiveness must be reported on. This will to a large extent help in reporting on the identified activities and recommending remedial action of the specific strategic implementation plans.

7.3.1 Existing Intergovernmental Structures

In the context of intergovernmental framework, this output will be monitored through regular reporting to Ministerial Technical Sub-Committee: Veterinary Working Group. This sub-committee will in turn report to the higher Ministerial Committee on Agriculture which will in turn submit reports to the Minister, Member of the Executive Committee on Agriculture. Regular feedback meetings at

Ministerial Technical Sub-Committee: Veterinary Working Group will be held and each province should report on progress and implementation challenges.

7.3.2 Annual reports

The VS will report on an annual basis on all aspects of implementing the strategies that have been agreed upon. It will be expected that specific areas of output will be included in the yearly plans of each of the nine provinces, DAFF and industries of concern. Regular stakeholders meetings will take place and enable regular reporting on achievements and challenges.

7.3.3 Regular audits

Auditing by established audit committees, will be key to recommending corrective actions. This will include site visits and document verification processes

Industry is encouraged to open up for external audits and conduct their own audits, the results of which will be taken into consideration in terms of ensuring successful implementation of this strategy.

The VS will encourage regular external audits from organisations like the OIE, and other trading partners to help in opening markets.

The auditing function of the central veterinary authority will be expanded with the specific protocols taken as needed.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

Prioritisation of the objectives of this strategy can be divided into short, medium and long term as shown in the table below:

	Core Strategy	Short term (1-3 years)	Medium term (3-5 years)	Long term (5-10 years)
Found ation	Strengthening of the veterinary authority for better governance	 Establish specialised legal support team Establish national risk analysis unit Develop system of authorisation Veterinary and para-veterinary professional development 	 Develop joint programmes with stakeholders 	- Restore national chain of command for all aspects of veterinary services (changes in structuring)
Pillar 1	Strengthening competencies for animal health	 Address the challenges of implementation of the Animal Diseases Act (Act 35 of 1984) Improve animal disease surveillance system 	 Run pilot project for brucellosis control in cattle (develop model) Develop and implement control programmes for other animal diseases 	for animal disease
Pillar 2	Strengthening competencies for veterinary public health, feed and food safety	 Define veterinary services' contribution to the national antimicrobial resistance strategy framework Consult and implement VPH strategic implementation plan (incl IMI) 	 Develop a single Veterinary Medicine Act Revise Meat Safety Act (Act 40 of 2000) 	efficient administration
Pillar 3	Strengthening competencies for veterinary laboratory diagnostics	- Laboratory approval plan, including SANAS accreditation, to be further developed and consulted	 Expand laboratory capacity under veterinary services 	- Expand laboratory capacity under veterinary services
Pillar 4	Development and implementation of an Animal and Products Identification, Recording and Traceability (AIRT) System	 Policy for individual animal identification and value chain traceability to be developed and consulted Draft legislation Provide framework for animal identification Develop government controlled database 		- Comprehensive animal movement recording and relevant controls
Pillar 5	Strengthening competencies for animal welfare	 Update/revise legislation Establish national animal welfare unit Animal Welfare Strategic Implementation Plan further developed and consulted 	 Develop welfare guidelines for the keeping of various animal species and industries Develop welfare guidelines for the various types of slaughter for the various animal species. 	

The current strategic framework proposes ways forward to overcome the challenges in organisation of the VS and recommends the development of clear implementation strategies for the next ten years.

It is proposed that a direct technical chain of command on state veterinary matters be established. Operational and governance matters will be addressed through operational plans. This will take into consideration the involvement of stakeholders.

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