

Organisation
Mondiale
de la Santé
Animale

World
Organisation
for Animal
Health

Organización
Mundial
de Sanidad
Animal



Tool for the evaluation of Performance of Veterinary Services

OIE PVS Tool



**Human, Physical
and Financial
Resources**



**Technical
Authority and
Capability**



**Interaction
with
Stakeholders**



**Access
to
Markets**

August
2008

Namibia

Dr A. Thiermann
Dr S. Hutter

World Organization for Animal Health (OIE)

**Tool for the Evaluation of Performance of
Veterinary Services:
OIE PVS Tool (Second edition 2007)**

**OIE MISSION REPORT
EVALUATION OF THE VETERINARY SERVICES
OF THE REPUBLIC OF NAMIBIA
AUGUST 11 - 22, 2008**

**Evaluation Team:
Dr. Alex Thiermann
Dr. Sabine Hutter**

Index

List of abbreviations.....	4
Definition of Terms	5
Part I: Executive Summary	6
Introduction	6
Objectives, scope and context of evaluation.....	6
Summarized findings	7
Part II: Conduct of the Evaluation.....	15
Introduction on the use of the PVS tool	15
Objectives, scope and context of evaluation.....	16
Organization of the evaluation	19
Data requested and provided	20
Proposed selection of sites and visits actually conducted with contacts	20
Process for finalization of the report, including timeframes for consultation, editing and approval	25
Part III: Results of the Evaluation.....	26
CHAPTER I - HUMAN, PHYSICAL AND FINANCIAL RESOURCES.....	26
I-1 Professional and technical staffing of the Veterinary Services.....	27
I-2 Competencies of veterinarians and veterinary para-professionals	31
I-3 Continuing education	35
I-4 Technical independence.....	37
I-5 Stability of structures and sustainability of policies.....	38
I-6 Coordination capability of the sectors and institutions of the Veterinary Services (public and private).....	39
I-7 Physical resources	41
I-8 Funding	44
I-9 Contingency and compensatory funding	46
I-10 Capability to invest and develop	48
CHAPTER II - TECHNICAL AUTHORITY AND CAPABILITY	49
II-1 Veterinary laboratory diagnosis	50
II-2 Laboratory quality assurance	54
II-3 Risk analysis	55
II-4 Quarantine and border security.....	56
II-5 Epidemiological surveillance	60
II-6 Early detection and emergency response	64
II-7 Disease prevention, control and eradication	66
II-8 Veterinary public health and food safety.....	68
II-9 Veterinary medicines and veterinary biologicals	71
II-10 Residue testing.....	73
II-11 Emerging issues.....	75
II-12 Technical innovation.....	76
CHAPTER III - INTERACTION WITH STAKEHOLDERS.....	79
III-1 Communications.....	81

III-2	Consultation with stakeholders.....	82
III-3	Official representation	85
III-4	Accreditation / authorisation / delegation.....	86
III-5	Veterinary Statutory Body.....	87
III-6	Participation of producers and other stakeholders in joint programmes 89	
CHAPTER IV - ACCESS TO MARKETS.....		90
IV-1	Preparation of legislation and regulations, and implementation of regulations	91
IV-2	Stakeholder compliance with legislation and regulations	92
IV-3	International harmonisation	93
IV-4	International certification	95
IV-5	Equivalence and other types of sanitary agreements.....	97
IV-7	Transparency	101
IV-8	Zoning	102
IV-9	Compartmentalisation.....	103
Results for Aquaculture and Fisheries		105
Part IV: Conclusions		107
Appendix 1: List of personnel interviewed and locations visited or type of meeting conducted		110
Appendix 2: List of documents collected electronically or in paper		116

List of abbreviations

AGRIVET	Private consultant, Dr. Herbert Schneider
AHT	Animal Health Technician
AHW	Animal Health Worker
BNL	Botswana National Laboratory
BVI	Botswana Vaccine Institute
CBPP	Contagious Bovine Pleuropneumonia
CE	Continuing Education
CFT	Complement Fixation Test
CVL	Central Veterinary Laboratory
DVS	Directorate of Veterinary Services (of Namibia)
EU	European Union
HACCP	Hazard Analysis Critical Control Point
IAEA	International Atomic Energy Agency
IBAR	Inter-African Bureau of Animal Resources
IPO	Import Permit Office
IZSTE	Istituto Zooprofilattico Sperimentale de Teramo
MAWF	Ministry of Agriculture, Water and Forestry (of Namibia)
MBN	Meat Board of Namibia
NamLITS	Namibian Livestock Identification and Traceability System
NAU	Namibia Agricultural Union
NASSP	National Agricultural Support Service Programme
NNFU	Namibian National Farmers Union
NSP-ELISA	Non Structural Protein-Enzyme linked Immuno Sorbent Assay
OIE	World Organisation of Animal Health
OVI	Onderstepoort Veterinary Institute
PVS	Performance of Veterinary Services
RSA	Republic of South Africa
SADC	Southern Africa Development Community
SVO	State Veterinary Office
VC	Veterinary Council
VCF	Veterinary Cordon Fence
VHI	Veterinary Hygiene Inspector
VIA	Veterinary Inspectors Assistant
VLA	Veterinary Laboratories Agency
VS	Veterinary Services
WTO-SPS	World Trade Organization-Sanitary and Phytosanitary

Definition of Terms

Animal Health Technician: Veterinary para-professionals that have completed an established three to four year curriculum at a college. The Agriculture College in Windhoek is one of the institutions providing this training.

Animal Health Worker: similar to Community Animal Health Workers. These technicians, often farmers, are trained within the VS by State Veterinarians, usually in a six months course. The VS have developed training manuals. The State Veterinarian keeps a roster of all AHWs available.

Laboratory Diagnostician: professional equivalent to veterinarians working at the laboratory, but holding a masters level degree in microbiology, immunology, etc.

Stakeholder: A person, institution or organisation with a significant interest (technical, legal, financial, etc.) in the activities of the VS.

State Veterinarian: A title given to all 'official veterinarians' within the Veterinary Services of Namibia, regardless of where they are stationed.

State Veterinary Office: regional offices within the VS of Namibia, these offices are headed by a State Veterinarian and staffed by other veterinarians (not always) and veterinary para-professionals.

Veterinary Council: the official statutory body of Namibia, which was established under the Proclamation Act AG14 of 1984. It is responsible for the accreditation and licensing of all veterinarians in Namibia.

Veterinary Hygiene Inspector: para-professional holding a four year degree in environmental health, meat hygiene, an equivalent degree to bachelors in food technology. Most VHI have been trained in South Africa, but since 2008 training is also being provided at the Polytechnic Institute of Namibia.

Veterinary Inspectors Assistant: an equivalent to AHW, receiving a six months training within the VS. Their function is to conduct inspection functions within the abattoir, but under the direct supervision of a VHI.

Part I: Executive Summary

Introduction

Today, development and growth of many countries depends on the performance of their agricultural policies and economies. This directly relates to the quality of their Veterinary Services. Important roles for VS include veterinary public health – including food-borne diseases – and regional and international market access for animals and animal products. To meet these new opportunities and challenges, VS need to operate on scientifically-based principles and be technically independent and immune from political pressures from all sources. Efforts to strengthen VS and to support them to comply with OIE international standards on quality and evaluation of VS require the active participation and investment on the part of both the public and the private sectors. To assist in this effort, the World Organisation for Animal Health (OIE) and the Inter-American Institute for Cooperation on Agriculture (IICA) have joined forces to develop a tool for the Evaluation of the Performance of Veterinary Services (PVS) of a country. The PVS tool is designed to assist VS to establish their current level of performance, to identify gaps and weaknesses regarding their ability to comply with OIE international standards, to form a shared vision with stakeholders (including the private sector), and to establish priorities and carry out strategic initiatives.

WTO Members such as Namibia are also bound by the provisions of the SPS Agreement. The SPS Agreement reaffirms the right of each member country to protect plant, animal and human life or health, but the Agreement requires countries to base these actions on scientific principles. For animal health and zoonoses, the OIE is cited as the reference organization for standards, guidelines and recommendations covering international trade in animals and animal products. This approach of implementing international standards, guidelines and recommendations developed through the OIE, including standards on quality and evaluation of VS, aims to ensure that international trade is free of discrimination and scientifically unjustified restrictions.

Objectives, scope and context of evaluation

The evaluation of Veterinary Services of the Republic of Namibia had the objective of identifying both strengths and gaps in capability against the criteria set out in the OIE Terrestrial Animal Health Code, using the OIE PVS tool.

The original idea of asking the OIE for this evaluation came from Namibia's Agricultural Union. Its congress passed a resolution requesting a PVS evaluation.

The scope of the mission was the overall performance of the VS and other institutions and sectors that comprise the VS of Namibia, including the Central Veterinary Laboratory as well as the interaction of the VS with its stakeholders.

The Republic of Namibia is a large and sparsely populated country located on Africa's south-west coast. It shares 4,000 kilometres of borders with South Africa to the south, Botswana to the east, Zambia and Zimbabwe to the north-east and Angola to the north. Its western boundary is the South Atlantic Ocean. Namibia has a population of two million inhabitants, on a total land area of 835,000 square kilometres.

After German control, the country was occupied and annexed by South Africa, and won independence only in 1990, after a war of independence, which had lasted for a quarter of a century.

Namibia's economy is heavily dependent on mineral exports. Although half of the population depend on subsistence agriculture for their livelihood, about 50% of the cereal requirements must be imported. Agriculture is responsible for around 11% of the Gross Domestic Product. A relatively high per capita GDP for the region hides the very unequal income distributions.

During the mission, a significant difference between rich commercial (mainly of European origin) farmers and poor communal (mainly of African origin) farmers was noted. In general it could be said that these two farming types were separated by the Veterinary Cordon Fence, which splits the country into a FMD and CBPP free southern and an FMD and northern zone which is CBPP infected and contains an FMD buffer and infected zone.

Namibia consists of 13 regions, and has Windhoek as its capital, which is also the seat of the Directorate of Veterinary Services (DVS) and the Central Laboratory (CVL), as well as some of the most important stakeholder associations for the VS.

A census from the end of 2006 showed a total of 2.4 million cattle, 2.6 million sheep and 2 million goats as the most numerous domestic species. The poultry and swine populations in Namibia are small. Namibia also has a huge wildlife population from antelopes and elephants to lions and zebras, which live free but in usually large extensive fenced-in commercial farms and national parks.

Summarized findings

Veterinary Services: Namibia has very competent Veterinary Services characterized by extremely well trained professionals. Most veterinarians have advanced degrees from various institutions abroad. Unfortunately, the Veterinary Services have too many vacant positions, mostly due to an insufficient number of professionals in the country and the fact that Namibia does not have its own veterinary school.

A potential problem in terms of sustainable professional staffing of the VS could be the eventual departure of several of their veterinarians with advanced degrees, as

they are not Namibians; most of them are Zimbabweans, who might return to their own country once their political and economical situation has improved.

The VS have overcome in part the shortness of professionals by operating with a well trained cadre of para-veterinarians in the form of Animal Health Technicians (AHT). They also have a strong in-house training program for Animal Health Workers (AHW).

While the resources available are not ample, the competency and creativity of the professionals is demonstrated through their innovation and constant search for application of state of the art technology in their work. An example of this creativity was observed in the application of electronic pens, connected to mobile phones, for the entry of animal disease data directly from the field into the central animal health database.

Animal Identification and Traceability system: Namibia has established a robust animal identification and traceability system, which is mandatory in the FMD surveillance and FMD free zone (south of the Veterinary Cordon Fence (VCF)). The system (NamLITS) has been established in close partnership with the private sector (Meat Board of Namibia (MBN)). All cattle over 6 months of age need to be identified with individual ear tags and the recording of all animal movements is mandatory and monitored through a well enforced permit system. The traceability system also covers small ruminants, but these are identified as lots and not individuals.

The traceability system has allowed the VS to conduct important surveys and to be able to do trace backs in case emergency issues should arise. If the existing professional vacancies are eventually filled within the VS, the headquarters staff would be able to conduct better surveys, as well as risk analyses using NamLITS data. Unfortunately, this traceability system is still not operational in the region north of the Veterinary Cordon Fence, although there are plans to begin its implementation this coming year.

Private sector partnership: There is a strong partnership between the VS and the private sector, particularly the export sector (Meat Board of Namibia and the Namibia Agriculture Union). These organizations have strongly supported the work of the VS in terms of supporting the need for resources required for the safety guarantees for the export of meat to high demanding markets, such as the European Union and South Africa. However, these organizations have not greatly contributed to solving the dissimilar governance system between the north and the south of the country. The initiatives promoted by the MBN and the NAU are primarily those aimed at facilitating and improving the export conditions from the FMD free zone, and to a lesser degree, at improving the overall governance of the VS throughout the country.

The enforcement of the traceability system is weaker north of the Veterinary Cordon Fence, and so is the professional staffing level and laboratory support.

Driven by pressures from importing private standards (e.g. TESCO), and not necessarily importing country regulations, the MBN has persuaded the VS to conduct expensive and unnecessary testing of brains at slaughter for BSE. With the current level of testing, Namibia will not be able to meet the requirements for having its BSE risk status categorized by the OIE. Even if this BSE status were to be re-categorized by the OIE, Namibia would still not be able to reduce the requirements for export of meat due to the lack of FMD free recognition by some importing countries.

It is recommended that the VS consider a stronger partnership with private veterinarians as they are a valuable source of information on animal diseases of importance, as well as the potential first point for detection of emerging diseases. In a country where the number of veterinarians is so limited, every effort should be made to maximize the contribution from the few. An accreditation program, accompanied by appropriate training of private veterinarians should be considered by the VS.

Links between the Ministry of Agriculture and Ministry of Health: Emerging infectious diseases and the threat of a potential pandemic form of avian influenza have reminded the international community of the importance of a close collaboration between Ministries of Health and Agriculture. However, there was no apparent evidence of such a link between these two ministries in Namibia. During the PVS evaluation, attempts were made to meet with authorities from these two Ministries. A meeting was held with the Permanent Secretary from the Ministry of Health, Mr. Kahijoro Kahure. He expressed interest on the subject and offered to assist in arranging for a meeting with professionals from his Ministry. He agreed on the importance in discussing the difference in existing policies on abattoir inspections between those for domestic consumption and those for export. Unfortunately, these meetings did never materialize. Although requested, a meeting with the Permanent Secretary or the Minister from the Ministry of Agriculture was not possible, due to their busy schedules.

The differences in the existing procedures for meat inspection between export abattoirs and those destined for local markets were of concern. The export abattoirs have a full staff from VS conducting ante and post-mortem inspections addressing animal health as well as public health matters, in accordance with high demands from the importing markets. However, there is no presence from VS personnel in the local abattoirs. The inspections at these establishments are conducted by health inspectors from either the Municipality or Ministry of Health and are limited to meat hygiene issues only.

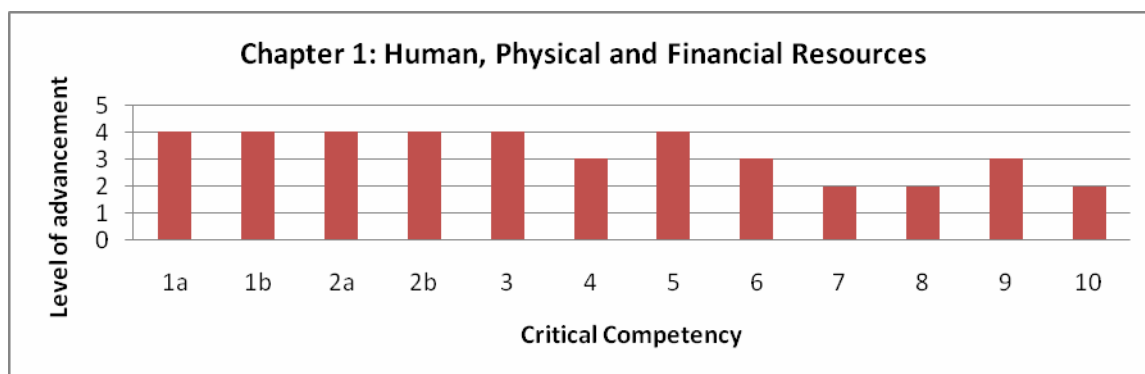
Funding: The annual budget for VS operations appeared adequate. However, upon more detailed examination it demonstrated that shortfalls in vehicles and transportation expenses were being covered by salary lapse from the many unfilled vacant positions. The overall monthly distance allowances for vehicle use and the reimbursement amount for official use of private vehicles will need revision.

The overall budget for the Central Veterinary Laboratory should also be examined. There is an adequate budget for salaries, although not fully staffed. However, there is a shortfall for maintenance and service contracts. The fact that revenues from services rendered must be returned to Treasury creates a shortfall in reagents and supplies. The more and better services are rendered by the laboratory, the greater the expense in reagents and supplies.

While the current zoning applied for freedom from FMD and CBPP is adequate to meet international market requirements, the VS of Namibia should re-examine their current policies to minimize the differences in governance between the two sides of the Veterinary Cordon Fence. The Fence does serve its purpose and has demonstrated through time to provide the guarantees for maintenance of FMD freedom and safe trading. However, resources should be identified to improve the governance of VS north of the Cordon Fence.

Summary Tables of Results:

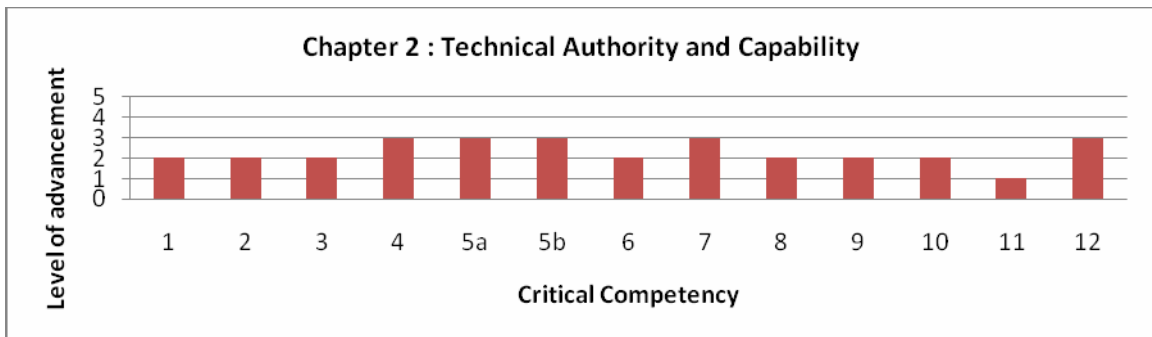
CHAPTER I - HUMAN AND FINANCIAL RESOURCES	
Institutional and financial sustainability as evidenced by the level of professional/technical and financial resources available.	
Critical Competency	Level of Advancement
Section I-1 Professional and technical staffing of the Veterinary Services	
A. Veterinary and other professionals (university qualification)	4
Section I-1 Professional and technical staffing of the Veterinary Services	
B. Veterinary para-professionals and other technical personnel	4
Section I-2 Competencies of veterinarians and veterinary para-professionals	
A. Professional competencies of veterinarians	4
Section I-2 Competencies of veterinarians and veterinary para-professionals	
B. Competencies of veterinary para-professionals	4
Section I-3 Continuing education (CE)	3
Section I-4 Technical independence	3
Section I-5 Stability of structures and sustainability of policies	4
Section I-6 Coordination capability of the sectors and institutions of the Veterinary Services (public and private)	3
Section I-7 Physical resources	2
Section I-8 Funding	2
Section I-9 Contingency and compensatory funding	3
Section I-10 Capability to invest and develop	2



CHAPTER II - TECHNICAL AUTHORITY AND CAPABILITY

The authority and capability of the VS to develop and apply sanitary measures and science-based procedures supporting those measures.

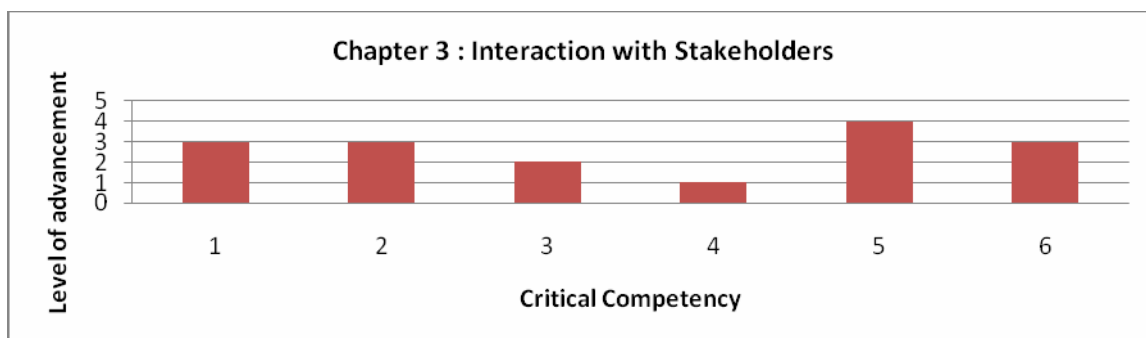
Critical Competency	Level of Advancement
Section II-1 Veterinary laboratory diagnosis	2
Section II-2 Laboratory Quality Assurance	2
Section II-3 Risk Analysis	2
Section II-4 Quarantine and border security	3
Section II-5 Epidemiological surveillance:	
A. Passive epidemiological surveillance	3
Section II-5 Epidemiological surveillance:	
B. Active epidemiological surveillance	3
Section II-6 Early detection and emergency response	2
Section II-7 Disease prevention, control and eradication	3
Section II-8 Veterinary public health and food safety	2
Section II-9 Veterinary medicines and veterinary biologicals	2
Section II-10 Residue testing	2
Section II-11 Emerging issues	1
Section II-12 Technical innovation	3



CHAPTER III - INTERACTION WITH STAKEHOLDERS

The capability of the VS to collaborate with and involve stakeholders in the implementation of programmes and activities.

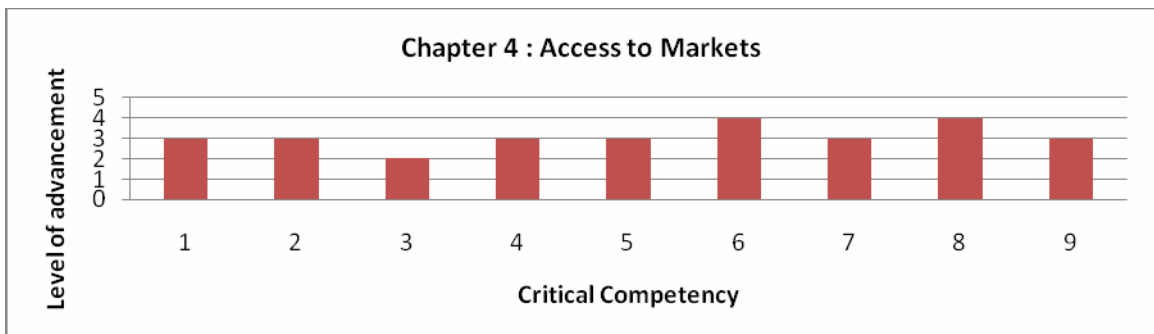
Critical Competency	Level of Advancement
Section III-1 Communication	3
Section III-2 Consultation with stakeholders	3
Section III-3 Official Representation	2
Section III-4 Accreditation/Authorisation/Delegation	1
Section III-5 Veterinary Statutory Body	4
Section III-6 Participation of producers and other stakeholders in joint programmes	3



CHAPTER IV - ACCESS TO MARKETS

The authority and capability of the VS to provide support in order to access, expand and retain regional and international markets for animals and animal products.

Critical Competency	Level of Advancement
Section IV-1 Preparation of legislation and regulations, and implementation of regulations	3
Section IV-2 Stakeholder compliance with legislation and regulations	3
Section IV-3 International harmonization	2
Section IV-4 International certification	3
Section IV-5 Equivalence and other types of sanitary agreements	3
Section IV-6 Traceability	4
Section IV-7 Transparency	3
Section IV-8 Zoning	4
Section IV-9 Compartmentalization	3



Part II: Conduct of the Evaluation

Introduction on the use of the PVS tool

Experience has shown that countries are more credible in the eyes of their stakeholders, trading partners and other countries, when the focus of their VS have developed around four fundamental components:

- 1) **Human and financial resources** to attract resources and retain professionals with technical and leadership skills;
- 2) **Technical capability** to address current and new issues based on scientific principles;
- 3) Sustained **interaction with stakeholders** in order to stay on course and carry out relevant joint programmes and services; and
- 4) The ability to **access markets** through compliance with existing standards and the implementation of new disciplines such as the harmonisation of standards, equivalence and zoning.

The evaluation of the VS of a Member country is performed in accordance with the provisions of Chapters 3.1. and 3.2. of the OIE Terrestrial Animal Health Code, using the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool) as a guide.

The four mentioned fundamental components comprise the basic structure of the OIE PVS tool.

The PVS tool helps establish the current level of performance of the Veterinary Services of a country, form a shared vision, establish priorities and develop strategic initiatives.

Six to twelve critical competencies have been elaborated for each of the four fundamental components. For each critical competency, qualitative levels of advancement are described. A higher level of advancement assumes that the VS are complying with the preceding levels (i.e. level 3 assumes compliance with level 2 criteria; level 5 assumes compliance with level 4 and preceding criteria; etc.). In addition to the qualitative levels, provision has been made in each critical competency to expand upon or clarify responses, if so desired.

For each critical competency, the evaluation team (which has been trained and certified by the OIE) will use a list of suggested indicators.

More than an assessment mechanism, the PVS tool promotes a culture of raising awareness and continual improvement, which can be used either passively or actively depending on the level of interest, priorities and commitment of the VS and its stakeholders.

In the passive mode, the PVS tool helps to raise awareness and improve the understanding of all sectors including other administrations regarding the fundamental components and critical competencies VS must have in order to

function effectively. The tool helps establish a shared vision, foster dialogue and provide a common language for exploring different viewpoints.

The active mode is where the maximum outcomes are realised but this mode requires a sustained commitment on the part of both the public and private sectors, that is, all relevant stakeholders. In this mode, performance is assessed, differences are explored and priorities are established. This mode is where strategic actions are outlined, investments are evaluated and agreed to, and commitments made and implemented. Continuity of this process requires a true partnership between the public and the private sectors. Leadership on the part of the public sector is a fundamental and critical determinant of success.

The benefits and outcomes of using the PVS tool include:

- An indication of overall performance for each of the four components
- A relative performance rating within each of the critical competencies
- A basis for comparing the performance of the VS with that of other veterinary services in the region or globally, in order to explore areas for cooperation or negotiation
- Identifying differences in the responses of stakeholders in order to arrive at shared points of view
- Fostering a common understanding in order to achieve greater levels of advancement
- Helping to determine the benefits and costs of investing in VS and, when necessary, obtaining assistance from government and financial and technical cooperation agencies
- Providing a basis for establishing a routine monitoring and follow up mechanism on the overall level of performance of the VS over time
- Helping to identify and present justifications and specific needs when applying for national and/or international financial support (loans and/or grants)
- Providing the basis for carrying out a process of verifying compliance with the OIE standards and assessments of VS by external or independent bodies under the guidelines and auspices of the OIE.

Objectives, scope and context of evaluation

The evaluation of Veterinary Services of the Republic of Namibia had the objective of identifying both strengths and gaps in capability against the criteria set out in the OIE Terrestrial Animal Health Code, using the OIE Performance, Vision and Strategy (PVS) tool.

The original idea of asking the OIE for this evaluation came from Namibia's Agricultural Union (NAU). Its congress passed a resolution requesting a PVS evaluation.

The scope of the mission was the overall performance of the VS and other institutions and sectors that comprise the Veterinary Service of Namibia, including

the Central Veterinary Laboratory and well as the interaction of the VS with its stakeholders.

The report shall establish the current level of performance, identify gaps and weaknesses in relation to the VS's application of OIE standards and through discussions with stakeholders provide a common vision in establishing priorities and in setting up strategic planning.

The evaluation has been paid through an OIE Trust Fund.

Country information:

The Republic of Namibia is a large and sparsely populated country located on Africa's south-west coast. It shares 4,000 kilometres of borders with South Africa to the south, Botswana to the east, Zambia and Zimbabwe to the north-east and Angola to the north. Its western boundary is the South Atlantic Ocean, with a coastline of 1,600 km.

The climate is dry and hot, with sparse rainfalls and prolonged periods of drought. Permanent crops exist only in 0.01% of the country.

Namibia has a population of two million inhabitants, on a total land area of 835,000 square kilometres. There are several different ethnic groups. 87.5% of the population are black, 6.5% mixed, 6% white.

There is a high risk for major infectious diseases, and the HIV/AIDS prevalence rate in adults was estimated at 21% in 2003.

After German control, the country was occupied and annexed by South Africa, and won independence only in 1990, after a war of independence, which had lasted for a quarter of a century.

Namibia's economy is heavily dependent on mineral exports.

Although half of the population depend on subsistence agriculture for their livelihood, about 50% of the cereal requirements must be imported. Agriculture is responsible for around 11% of the Gross Domestic Product. A high per capita GDP for the region hides the very unequal income distributions.

For more information on Namibia, see the CIA World Factbook.

Veterinary Services and other institutions:

Namibia contains 13 regions, and has Windhoek as its capital, which is also the seat of the Directorate of Veterinary Services and the Central Laboratory, as well as some of the most important stakeholder associations for the VS.

The Directorate of Veterinary Services is within the Department of Agriculture in the Ministry of Agriculture, Water and Forestry. It contains 4 divisions: Animal Disease Control; Veterinary Public Health; Epidemiology, Training, Import and Export Control and Diagnostic Services (see Figure 1).

The wildlife aspects, including the national parks are managed by the Ministry of the Environment and Tourism, in close collaboration with the VS.

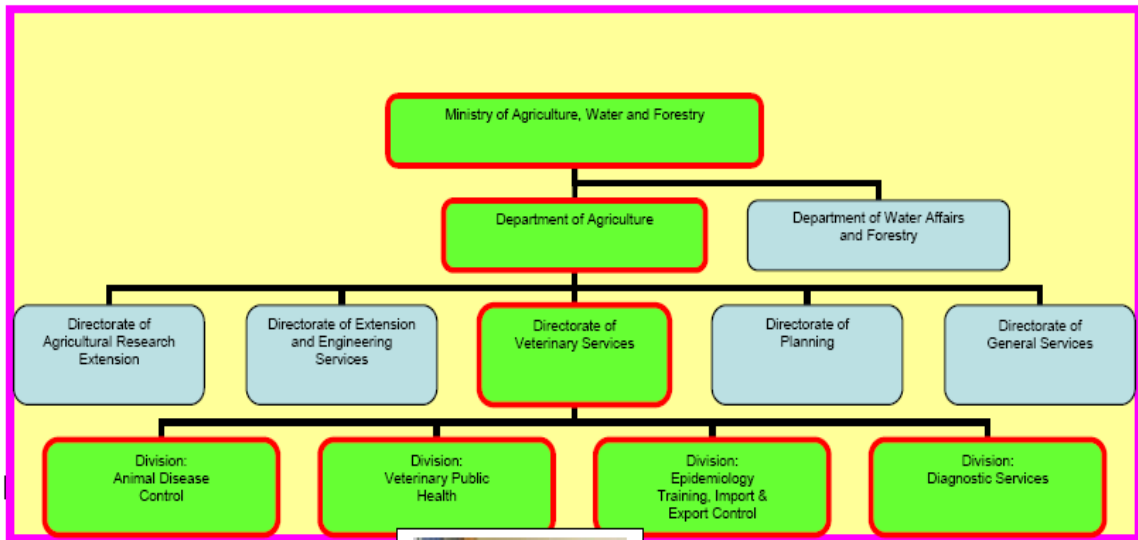


Figure 1: Structure of the VS within the Ministry of Agriculture

Apart from the central veterinary office in Windhoek, there are 18 state veterinary offices distributed throughout the country, and around 50 animal health technician offices.

Five border posts are controlled with permanent veterinary staff, two of which are the airport in Windhoek and Walvis Bay Harbour.

The VS are responsible for the ante- and post-mortem inspection at export abattoirs, while the meat inspection for local consumption is done by the Ministry of Health or municipalities.

Aquaculture and fisheries is not part of the Veterinary Services, but is part of the Ministry of Fisheries and Marine Resources.

The country is basically divided into two parts by the Veterinary Cordon Fence. This is a stockproof and gameproof fence located in the northern part of Namibia, traversing the country from near the Atlantic coast to the border with Botswana (see Figure 2). It separates the FMD disease free and surveillance zone in the South from a buffer and FMD infected northern zone. The VCF can be passed on 9 permanent check-points.

Farming:

There are two distinctly different farming systems in Namibia: Commercial farming, with often large territories and owned and managed by farmers, mostly of European origin, and Communal farming, with smaller territories, which are mainly run by African families under a communal system.

While almost all commercial farming, which allows for higher profits due to the possibility of exporting the meat to the RSA and the EU happens south of the VCF, communal farming is done north of the VCF.

A census from the end of 2006 showed a total of 2.4 million cattle, 2.6 million sheep and 2 million goats as the most numerous domestic species. There were around

50,000 pigs and about the same amount of horses, 160,000 donkeys, and commercial poultry operations were held on around 10, mainly layer farms. Namibia also has a large wildlife population from antelopes to elephants and from lions to zebras, which live freely within large fenced-in in farms and in national parks.

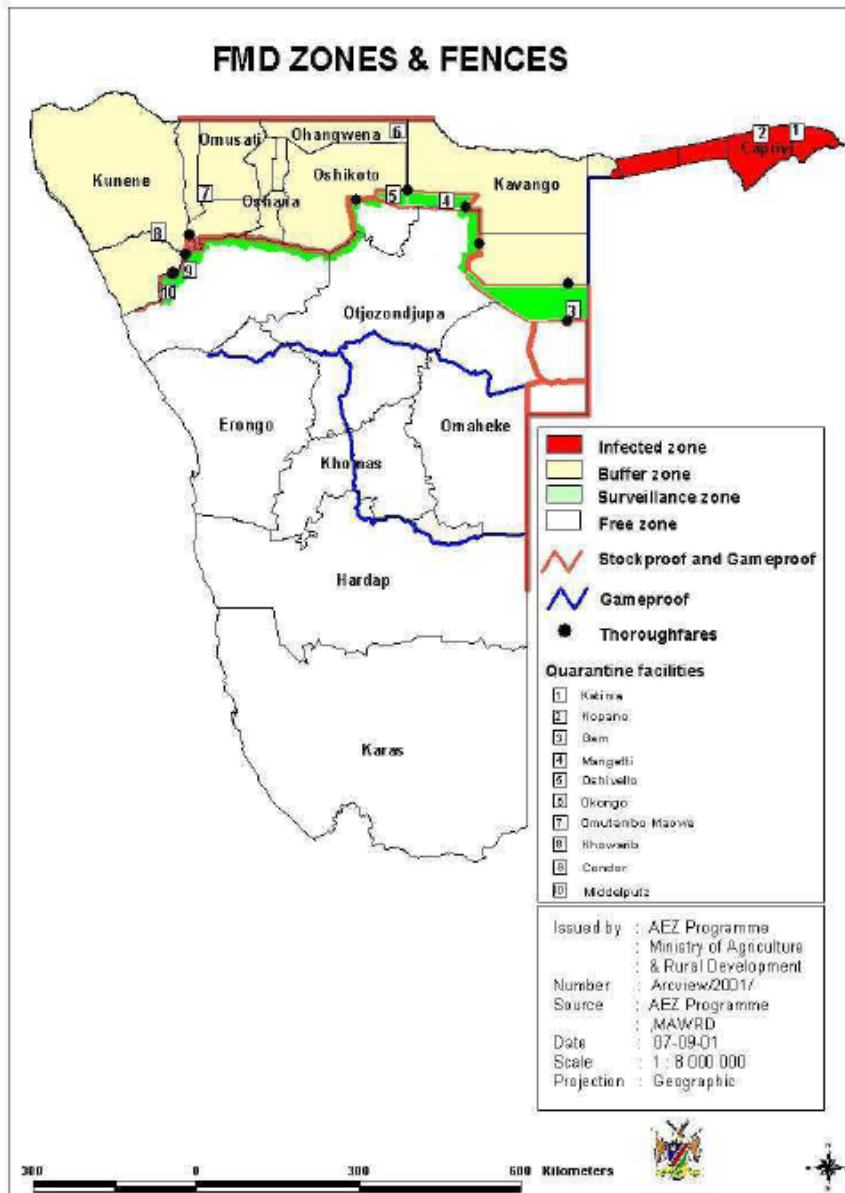


Figure 2: Veterinary Cordon Fence (pink line) and the different FMD zones

Organization of the evaluation

The mission Namibia was carried out from August 11th to August 22nd 2008. The evaluation team consisted of two certified OIE experts: Dr. Alex Thiermann as evaluation team leader and Dr. Sabine Hutter as technical expert.

The team was accompanied by the acting CVO, Dr. Francois Joubert to most of the meetings and visits. If he was unavailable, another staff member joined the team.

Two major constraints of this mission were the passing away of the late Chief Veterinary Officer of Namibia, Dr. Otto Hübschle shortly before the mission, as well as an on-going FMD outbreak during the mission in the FMD infected zone of Namibia, located in the Caprivi Region in Northern Namibia.

The evaluation team collected information through documents provided before, during and after the mission, interviews, and meetings held with the personnel of the Veterinary Service and stakeholders, as well as through observations made during the field visits.

Data requested and provided

Prior to the visit a detailed list of baseline documents was requested from the acting CVO of Namibia. It included questions as to the structure of the VS of the country, other veterinary institutions, the number of animals, imports and exports of animal origin, lists of consumer organisations and many more. This information is meant to help the assessors get a first impression of the veterinary situation in the country and especially to plan the programme of the evaluation.

Comprehensive data was sent to the team leader a few days before the beginning of the mission. This was rather late, but understandable due to the constraints mentioned above. The mission was carried out without delays and with complete collaboration by Dr. Joubert and his staff. All requested information during the mission was willingly given either in paper or electronic format.

A table - List of documents collected electronically or in paper - is shown in the Appendix.

Proposed selection of sites and visits actually conducted with contacts

The evaluation team tried to visit as many different places and meet as many players as possible during the short time of the mission. A complete program was drafted jointly between the evaluation team and the DVS. Most of the team's wishes were fulfilled, except for the visit to a second state veterinary office, which was not possible due to lack of time. Only a short meeting with the Permanent Secretary of the Ministry of Health was possible. A follow-up meeting with other Health officials and meetings with the Minister or the Permanent Secretary of Agriculture were not possible due to their busy schedules.

The meetings with private sector stakeholders were limited to the two major commercial organizations, MBN and NAU. It was explained that it was very difficult to schedule meetings with other relevant organizations e.g. of the Communal Farmers Union, as they were not organized in the same way, meaning that they do not have central office facilities.

Although there are two regional laboratories currently functional, only the CVL was visited. This was due to the time constraint, but also because these laboratories only undertake a smaller number of the sample analyses.

Of big interest was a site visit to the VCF, which has played an important role in maintaining FMD and CBPP free zones in the south. This visit was accomplished as part of a three day trip to the northern region.

During the northern region visit, the team had the opportunity to visit a private veterinary practice; the VCF and its crossing gate; a visit to a communal farm and one of their families; a trip to one of the quarantine farms, and a private farm immediately south of the VCF. The team also had the opportunity to travel through the Etosha National Park when accessing the northern region.

The visit to the VCF crossing at Oshivelo allowed the team to witness how the heavy vehicle traffic is checked by a team of AHW. Transit permits and content of shipments are checked. While the inspections appeared adequate, the day of the visit, a local newspaper reported on how a high level police officer had used his status to illegally transport elephant and hippo meat across one of the crossing point and was later detained.

A local communal farm was visited north of the fence. This gave the team the opportunity to see the different livestock management and to meet and discuss animal health and animal identification issues with one of the communal families. The family kept over 200 head of cattle and some 100 goats, which were grazed with the animals of other neighbours in common pastoral land.

Travelling to the quarantine fence allowed the team to drive 50 km along the VCF and witness the fence in detail. It is an impressive 900 km long double game and stock fence, with a 10 mt. separation between the two fences. The team travelled between the two fences to reach Oshivelo Quarantine Farm. This farm (one of three) has been operational since the 80s and is devoted to house animals from the surveillance zone (north of the VCF) for a minimum of 21 days prior to going to slaughter. The farm visited had an impressive total surface of 27,000 hectares and contained ten pens of over 2,000 hectares each, all separated by double fences from each other. The farm was managed by 6 AHT and was in direct electronic contact with the SVO for the submission of animal identification and animal health matters. Animals are brought in by their owners and kept for the quarantine period while managed by their own herdsmen and supervised by DVS personnel. It was an

impressive system and which has not had an FMD infection since being established in the 80s.

Two export and three local abattoirs were visited. Although the diversity of local abattoirs must be big, seeing three of them gave at least an impression on the quality of facilities and management. Smaller slaughter points, which might be more critical in regard to hygiene and inspection, were not visited. The export abattoirs visited were both under the same management, MeatCo, which is the largest private abattoir company exporting from Namibia. The export abattoirs (seven in Namibia) met the highest standards, comparable to abattoirs in Europe and meeting all requirements for export to the EU and the RSA markets, and were supervised and inspected by a team of DVS veterinarians and VHI. On the other hand the local abattoirs were simple, slaughtered small numbers of animals and were inspected by either municipal or Ministry of Health inspectors. No animal health data was therefore collected from these local abattoirs.

The only border post visited was the border post between Namibia and Botswana, at Buitepos. The post was managed by a team of three AHW working 12 hour shifts. They worked in close collaboration with Customs and Immigrations officers and under the direct supervision of the State Veterinarian. All vehicles containing animal or animal products were inspected. The movement permits were checked and in case of animal shipments, the animal identification was verified and checked against the electronic NamLITS database. In accordance with a Namibia-Botswana-South Africa agreement, passenger vehicles can transport a maximum of 25 kg of meat and meat products from these countries for personal consumption. There are seven different border posts in Namibia. It was explained that while the border crossing between Zambia and Namibia is enforceable as far as the movement of people and goods. However, there have been cases of animal crossing at the Zambezi river at shallow points. There are basically no enforceable borders between Namibia and Angola.

A visit to the Otjivarongo Veterinary Clinic was conducted. The private veterinary hospital is owned by Dr. Axel Hartmann and managed with two other veterinarians. An excellent establishment dedicated to 50% livestock, 40% small animals and 10% wildlife. At the time of the visit Dr. Hauptmann was conducting an endoscopy on a cheetah. The facility was well equipped and Dr. Hauptmann was very enthusiastic about innovations. He is also an active member of the local society and the profession in Namibia.

In order to visit a cattle auction, the largest cattle auction in Windhoek was chosen due to its importance and convenience. Auctions at this Windhoek facility take place only once a month. The team had the opportunity to witness how animal movement permits are inspected and how the animal identification system is controlled. Any shipment containing animals not properly identified or invalid

transport permits is returned to the farm of origin. Most of the animals auctioned that day were 6 month-old weaned cattle in excellent condition.

It was intended to visit a second private veterinarian, but due to other commitments the team decided to skip that appointment.

The evaluation team tried to diversify the meetings and visits as much as possible. Due to time constraints and the very large distances to be covered between locations, possibilities to choose sites according to classical sampling methods were not possible. The sites visited were therefore selected more by convenience than as a random sample.

The detailed programme of the mission is listed in the table below.

Programme of the mission

Date	Performed activities	Location
Day 0: Sunday, August 10 th	Arrival Dr. Thiermann	Windhoek
Day 1: Monday, August 11 th	Arrival Dr. Hutter, Opening Meeting	DVS, Windhoek
Day 2: Tuesday, August 12 th	Finalization of the programme Meeting with the Finance Department Visit to the Central Veterinary Laboratory	DVS, Windhoek DVS, Windhoek CVL, Windhoek
Day 3: Wednesday, August 13 th	Visit to the Import/ Export Office, the State Veterinary Office and Veterinary Council Meeting with the Meat Board of Namibia Visit to NamLITS, animal identification system	State Veterinary Office, Windhoek Offices of the Meat Board, Windhoek
Day 4: Thursday, August 14 th	Visit of the Trans Kalahari Border Post at the Botswana border Visit to a municipal non-export abattoir	Buitepos Gobabis
Day 5: Friday, August 15 th	Visit to Meatco export abattoir at Okahandja Visit to the Epidemiology Division	Okahandja DVS, Windhoek

Day 6: Saturday, August 16th	Free day, writing up report and verifying information	Windhoek
Day 7: Sunday, August 17th	Departure for the Veterinary Cordon Fence Visit of the private Veterinary Clinic of Dr. Hartmann Arrival at Etoscha National Park	Otjiwarongo Namutoni
Day 8: Monday, August 18th	Visit to a communal farm Visit to a quarantine farm Visit to the Oshivelo gate (check-point of the VCF) Visit to a commercial farmer	Oshivelo (north of the VCF) 45 km east of Oshivelo (bordering VCF) Oshivelo Sachsenheim, on road between Oshivelo and Namutoni (south of the VCF)
Day 9: Tuesday, August 19th	Return to Windhoek (too late to visit the State Veterinary Office in Outjo)	Windhoek
Day 10: Wednesday, August 20th	Visit to MeatCo export abattoir at Windhoek Visit to the Ministry of Health Visit to Namibia's Agricultural Union (NAU) Meeting with the Ministry of Fisheries	Windhoek Ministry of Health, Windhoek Offices of NAU, Windhoek DVS, Windhoek

Day 11: Thursday, August 21st	Visit to a municipal abattoir, Jacob's Abattoir	3 km from road between Okahandja and Windhoek
	Visit to a municipal abattoir, Indrai Abattoir	A few hundred meters from road between Okahandja and Windhoek
	Visit to the Windhoek cattle auction	Agra, Windhoek
	Debriefing meeting with DVS staff	DVS, Windhoek
Day 12: Friday, August 22nd	Writing of report	Windhoek
Day 13: Saturday, August 23rd	Departure Dr. Thiermann	Windhoek
Day 14: Sunday, August 24th	Departure Dr. Hutter	Windhoek

Process for finalization of the report, including timeframes for consultation, editing and approval

A final report draft on the evaluation of the Veterinary Services of the Republic of Namibia will be provided by the OIE after receiving all necessary information. It is expected that DVS will provide its final comments within one month. Once the OIE has received comments from DVS, the report on the evaluation will be finalized, normally within one month after receiving comments. The approved final report will be released according to the agreement between DVS and the OIE. The report and all appendices are confidential and can only be published if the authorities of DVS and the Director General of the OIE agree.

Part III: Results of the Evaluation

CHAPTER I - HUMAN, PHYSICAL AND FINANCIAL RESOURCES

Institutional and financial sustainability as evidenced by the level of professional/technical physical and financial resources available.

Critical competencies:

- Section I-1 Professional and technical staffing of the Veterinary Services
- Section I-2 Competencies of veterinarians and veterinary para-professionals
- Section I-3 Continuing education
- Section I-4 Technical independence
- Section I-5 Stability of structures and sustainability of policies
- Section I-6 Coordination capability of the sectors and institutions of the Veterinary Services
- Section I-7 Physical resources
- Section I-8 Funding
- Section I-9 Contingency and compensatory funding
- Section I-10 Capability to invest and develop

<p>I-1 Professional and technical staffing of the Veterinary Services</p> <p>The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.</p> <p>A. Veterinary and other professionals (university qualification)</p>	Levels of advancement
	1. The majority of veterinary and other professional positions are not occupied by appropriately qualified personnel.
	2. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at central and state / provincial levels.
	3. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at local (field) level.
	4. There is a systematic approach to defining jobs descriptions and formal appointment procedures for veterinarians and other professionals
5. There are effective management procedures for performance assessment of veterinarians and other professionals.	

Results
<p>Strengths :</p> <p>Organizational structure and hierarchical levels appear to be well defined. Completion of on-going review will demonstrate the degree of improvements made</p> <p>The DVS has well defined activities aimed at training and recruiting. At the completion of the evaluation, a complete set of documents was provided on the restructuring of the Veterinary Service.</p>
<p>Weaknesses :</p> <p>Understaffed due to vacancies, one reason being that there is not sufficient qualified professional technical personnel present in the country, often higher professionals leave for better paying jobs in the private sector once skills and experience have been obtained within VS (e.g. laboratory)</p> <p>No VS involvement (no veterinarians present, nor VS personnel) in municipal and local non-export abattoirs. Although very low throughput abattoirs, these can be most likely points of occurrence of emerging diseases</p> <p>Insufficient numbers of professionals and technical personnel north of the VCF</p> <p>Many of the well-trained professionals (with post-graduate degrees) are not Namibian citizens and remain in Namibia as temporary residents.</p>
<p>Supporting documentation (documents or photos):</p> <p>Directorate of Veterinary Services - Annual Report 2005 (p. 12)</p> <p>Directorate of Veterinary Services - Annual Report 2006 (p. 14)</p> <p>DVS: various updated Post Profiles</p> <p>PVS CVL updated 25 Jul 2008 version (Table 1)</p> <p>Restructuring DVS 2008-12-04</p>

Post Profiles of professionals
<p>Detailed findings during visit: While the majority of the filled positions are staffed with well qualified professionals, the excessive number of vacancies will continue to hinder the ability of the DVS to function at an optimal level and be able to consider advancements.</p> <p>All staff of DVS: The 2006 Annual Report describes that DVS had 737 approved posts, but that only 457 (62%) of these were filled. Twenty-two of the vacancies were in the professional veterinarian and diagnostician grades, 81 in technical support staff and 150 in the administrative and auxiliary grades. All except two posts were budgeted for.</p> <p>Laboratory Staff: The CVL is headed by a Deputy Chief Veterinary Officer; it has a recently recruited Quality Manager, administrative and technical staff, veterinarians and veterinary diagnosticians. Veterinary diagnosticians have a master’s degree in microbiology. Of the 48 total positions, only 35 are currently filled. Five of these vacant positions are leading positions of university trained staff (e.g. the position of the head of laboratory has been vacant for the past two years). Further, three positions for technicians and five for labourers or work hands are also not filled. Reasons for the vacant positions are that there are not enough qualified personnel in the country (especially for the veterinary positions), and that the wages cannot compete with industry wages (especially in the case of quality manager and technicians). The current staff tries to cover most of the missing positions. In the regional laboratories, eight of the 22 posts are not filled.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :
Must make bigger efforts to train and recruit additional veterinarians. Current efforts, while commendable are clearly not sufficient.

B. Veterinary para-professionals and other technical personnel	Levels of advancement
	1. The majority of technical positions are not occupied by personnel holding technical qualifications.
	2. The majority of technical positions at central and state / provincial levels are occupied by personnel holding technical qualifications.
	3. The majority of technical positions at local (field) levels are occupied by personnel holding technical qualifications.
	4. The majority of technical positions are effectively supervised on a regular basis.
5. There are effective management procedures for formal appointment and performance assessment of <i>veterinary para-professionals</i> .	

Results
<p>Strengths : Animal health inspectors, animal health workers and lab technicians are an integral part of the VS The VS have identified programmes for the training of animal health workers and animal health technicians VS have managed to cover the lack of veterinarians with well-trained animal health technicians. There is a good level of supervision of these para-professionals by the VS veterinarians.</p>
<p>Weaknesses : While the para-professional skills and level of training are adequate in most cases, the high number of vacant positions in many places, constitutes a weakness. Para-professionals (AHT) are not formally organized, and not yet included in the accreditation programme of the Veterinary Statutory Body (VC)</p>
<p>Supporting documentation (documents or photos): University of Namibia, Faculty of Agric and Nat Resources, Yearbook 2007 and 2008 Handbook for Meat Examiners, Course in Meat Hygiene and Meat Inspection Letter to Abattoir State Veterinarians on Training Program for Public Veterinary Hygiene Inspector Assistants at Tsumis Park, Namibia, from 04 February 2008 to 29 February 2008 PVS CVL updated 25 Jul 2008 version (Table 1)</p>
<p>Detailed findings during visit: See "Detailed findings during visit" of point I.1.A. on Laboratory Staff</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :
<p>Must make greater efforts to fill vacant para-professional positions Establish an accreditation programme and minimal criteria for formal recognition of Animal</p>

Health Technicians within the Veterinary Council.

<p>I-2 Competencies of veterinarians and veterinary para-professionals</p> <p>The capability of the VS to efficiently carry out their veterinary and technical functions; measured by the academic qualifications of their personnel in veterinary, other professional and technical positions¹.</p> <p>A. Professional competencies of veterinarians</p>	Levels of advancement
	The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.
	The veterinarians' practices, knowledge and attitudes are of a uniform standard that usually allow for accurate and appropriate clinical and administrative activities of the VS.
	The veterinarians' practices, knowledge and attitudes usually allow undertaking all professional/technical activities of the VS (e.g. epidemiological surveillance, early warning, public health, etc.).
	The veterinarians' practices, knowledge and attitudes usually allow undertaking specialized activities as may be needed by the VS.
	The veterinarians' practices, knowledge and attitudes are subject to regular updating, or international harmonisation, or evaluation.

Results
<p>Strengths :</p> <p>Many professionals with post-graduate degrees, currently eight professionals with post-graduate degrees and eight working on a Masters or PhD.</p> <p>Accreditation program of veterinarians through the Statutory Body</p> <p>Continuing education program through Statutory body</p> <p>Internal promotions through competitive interview process</p> <p>On-going programme to fund employees obtaining post-graduate degrees abroad</p>
<p>Weaknesses : Due to the lack of sufficient veterinary professionals there are too many duties that should be carried out by veterinarians, being delegated to AHTs and AHWs.</p>
<p>Supporting documentation (documents or photos):</p> <p>Veterinary Council of Namibia 2008 - Information Brochure</p>

¹ Not all professional positions require an academic degree. Nonetheless, the proportion of academic degrees serves as an indicator of professional excellence within the VS.

Detailed findings during visit:

Interview process:

During our visit, an internal promotion process was going on, which involved the participation of some senior staff, like acting CVO and head of the epidemiology division, as panel members.

Support for continuing education:

It was explained that employees, who are interested in obtaining a post-graduate degree relevant to their area of work, can opt for a continuation of full salary during their absence for training. The only prerequisite is that they must complete their degree program and commit to coming back after the degree to work for the VS for two more years.

Priorities/Recommendations

Short Term :

Medium / Long Term :

B. Competencies of veterinary para-professionals	Levels of advancement
	The majority of <i>veterinary para-professionals</i> have no formal entry-level training.
	The training of <i>veterinary para-professionals</i> is of a very variable standard and allows the development of only limited animal health competencies.
	The training of <i>veterinary para-professionals</i> is of a uniform standard that allows the development of only basic animal health competencies.
	The training of <i>veterinary para-professionals</i> is of a uniform standard that allows the development of some specialist animal health competencies (e.g. meat inspection).
	The training of <i>veterinary para-professionals</i> is of a uniform standard and is subject to regular evaluation and/or updating.

Results
<p>Strengths : Well defined criteria for the various para-professional levels, 3-4 year university training required for many of the para-professional levels (AHT and VHI) Established in-house training for community animal health workers (AHW)</p>
<p>Weaknesses : Para-professionals (AHT) are not formally associated and not included in Statutory Body Accreditation Programme</p>
<p>Supporting documentation (documents or photos): University of Namibia, Faculty of Agric and Nat Resources, Yearbooks 2007 and 2008 Definition of Terms for AHT, VHI, VIA, AHW Handbook for Meat Examiners NASSP - Training Manual of Community Animal Health Agents - September 2006</p>
<p>Detailed findings during visit: The competencies of para-professionals and community animal health workers within DVS were well outlined and applied. There is a good utilization of these categories of personnel, particularly in overcoming the shortage of veterinarians in the service. There was evidence of a close communication and direct involvement by State Veterinarians in the routine work of AHT. There is a direct involvement by DVS veterinarians in the training of AHT at the University of Namibia, as well as an involvement by State Veterinarians in the in-house training of AHW.</p>

Priorities/Recommendations
Short Term :
Hire a consultant to advise on how to incorporate para-professionals under the Veterinary

Council
Medium / Long Term :
Establish accreditation programme and minimal criteria for formal recognition of Animal Health Technicians within the Veterinary Council

I-3 Continuing education² 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 an annually reviewed training programme.	Levels of advancement
	1. The VS have no access to continuing veterinary, professional or technical education.
	2. The VS have access to CE (internal and/or external programmes) on an irregular basis but it does not take into account needs, or new information or understanding.
	3. The VS have access to CE that is reviewed annually and updated as necessary, but it is implemented for less than 50% of the relevant personnel.
	4. The VS have access to CE that is reviewed annually and updated as necessary, and it is implemented for more than 50% of the relevant personnel.
5. The VS have up-to-date CE that is implemented for all relevant personnel.	

Results
Strengths : The continuing education programme is managed through a training unit of the VS The Statutory Body is in the process of establishing a formal CE programme for veterinarians as part of the veterinary accreditation
Weaknesses : No established comparable CE programme for the laboratory personnel, only through sporadic training opportunities
Supporting documentation (documents or photos): Clinical examination Collection of samples for specialized techniques NASSP - Training Manual of Community Animal Health Agents - September 2006 Necropsy: post-mortem examination Surveillance of sheep scab Surveillance protocol for anthrax Training Budget for DVS 2008/2009 University of Pretoria - Continuing Education - Advanced Level University of Pretoria - Continuing Education - Technical Level

² Continuing education includes Continuous Professional Development (CPD) for veterinary, professional and technical personnel.

Detailed findings during visit:

Training unit at the Directorate of Veterinary Services:

The training unit is part of the Epidemiology Division. It is headed by a veterinarian, Dr. Amuthenu, who was trained in Cuba, and did a distance learning M.Sc. at the University of Pretoria. This unit has been in place for 4 ½ years, and has been supported by a training technician for 1 ½ years, Mrs. Tjimune, who has a diploma in Agriculture.

The aim of the unit is capacity building for sustainability and continuity for veterinary, technical and administrative staff of the VS and for farmers.

The unit, which appeared quite active, was recently conducting their own training on HPAI prevention, as well as the use of new technology, such as the recently incorporated digital pens. This training is provided to the AHW, who then go to the field to train the farmers.

They develop training material for internal training, and also Manuals for farmer awareness, re-settlement and overall stakeholder participation. A manual for community animal health agents has been developed by this section and translated into 6 languages (English, Oshihherero, Oshindonga, Ukawango, Silosi and Namadamara).

They are currently preparing flyers for various important diseases in the country, and issue the "Vet News", a quarterly newsletter of the DVS, which is issued to all staff, organisations, and local offices, available as paper version and in the internet.

Orientation manuals for new staff members, containing all relevant forms and job descriptions have been developed, as well as a manual to assist new veterinarians prepare for the accreditation exam given by the Veterinary Council. An interim position has also been created within the VS to provide new veterinary graduates with expertise needed to pass the accreditation.

They also manage a booth with education material at the Annual Farmers trade fairs.

On continuing education, they have received support from the EU for courses in conjunction with the University of Pretoria for veterinarians and Animal Health Technicians. They also manage a program for funding the training of veterinarians, who are committed to then work for the VS for a period of two years after graduation. Currently they are funding a total of 17 students, who receive the financial support only if they pass their courses. The students who were studying in Zimbabwe have now been moved to Zambia.

Priorities/Recommendations

Short Term :

Complete continuing education programme by Statutory Body

Formalize continuing education programme for personnel in the laboratory

Medium / Long Term :

Conduct a needs assessment, particularly for laboratory personnel.

<p>I-4 Technical independence</p> <p>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 OIE (and of the WTO SPS Agreement where applicable).</p>	Levels of advancement
	1. The technical decisions made by the VS are generally not based on scientific considerations.
	2. The technical decisions take into account the scientific evidence, but are routinely modified to conform to non-scientific considerations.
	3. The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
	4. The technical decisions are based only on scientific evidence and are not changed to meet non-scientific considerations.
5. The technical decisions are made and implemented in full accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations where applicable).	

Results
<p>Strengths :</p> <p>Internal decision making through well-trained and competent professionals</p>
<p>Weaknesses :</p> <p>Heavy influence by the export related private sector on the prioritization of VS activities</p>
<p>Supporting documentation (documents or photos):</p> <p>A guide to Livestock Traceability in Namibia Version 1.01 - March 2007</p> <p>Role and Functions of the Meat Board of Namibia</p> <p>Tracking Down - From Assured Namibian Meat - Introducing Namibia's red meat industry</p>
<p>Detailed findings during visit:</p> <p>Laboratory equipment and analyses:</p> <p>Most testing and sample analyses in the CVL are focused almost strictly on exports e.g. BSE, residues, salmonella etc. The most modern equipment in the CVL is export-related.</p> <p>Meat Hygiene:</p> <p>The Veterinary Services are only involved in the inspection of export abattoirs, not on local and municipal abattoirs for local consumption.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :
<p>Encourage and facilitate participation by other production sectors (communal system)</p> <p>Need to establish dialogue with Ministry of Health in order to harmonize meat inspection on all Namibian abattoirs.</p>

<p>I-5 Stability of structures and sustainability of policies</p> <p>The capability of the VS to implement and sustain policies over time.</p>	Levels of advancement
	1. Substantial changes to the organisational structure and/or leadership of the public sector of the VS frequently occur (e.g. annually) resulting in lack of sustainability of policies.
	2. Substantial changes to the organisational structure and/or leadership of the public sector of the VS occur less frequently (e.g. biannually) resulting in lack of sustainability of policies.
	3. The organisational structure of the public sector of the VS is substantially changed each time there is a change in the political leadership and this has negative effects on sustainability of policies.
	4. There are generally only minor changes in the organisational structure of the public sector of the VS following a change in the political leadership and these have little or no effect on sustainability of policies.
5. The organisational structure of the public sector of the VS generally remains stable for longer periods (e.g. 5 years) and is only modified based on an evaluation process, with little or no effect on the sustainability of policies.	

Results
<p>Strengths :</p> <p>Ongoing review of organizational structure and position descriptions, as part of a well planned process</p> <p>Structure has not appear to be affected by changes of elected officials</p>
<p>Weaknesses :</p> <p>Inability to fill vacancies of professional and technical personnel</p>
<p>Supporting documentation (documents or photos):</p> <p>Documentation on ongoing restructuring and redefinition of positions (to be obtained from DVS)</p>
<p>Detailed findings during visit:</p> <p>The on-going review of position descriptions and overall structure of DVS was discussed during the visit. Apparently the new proposed structure has been agreed and is due to be implemented soon. Most position descriptions have already been drafted.</p>

Priorities/Recommendations
Short Term :
<p>Submit documentation on new structure and reviewed position descriptions</p> <p>Complete and implement new structure and positions</p>
Medium / Long Term :

<p>I-6 Coordination capability of the sectors and institutions of the Veterinary Services (public and private)</p> <p>The capability of the VS to coordinate national activities, including disease control and eradication programmes, food safety programmes and responses to emergency situations.</p>	Levels of advancement
	1. There is no coordination.
	2. There are informal or irregular coordination mechanisms for some activities, with an unclear chain of command.
	3. There are coordination mechanisms with a clear chain of command for some activities, but these are not coordinated / implemented throughout the country.
	4. There are coordination mechanisms with a clear chain of command at the national level for most activities, and these are uniformly implemented throughout the country.
5. There are agreed coordination mechanisms that can be implemented as necessary to address all activities.	

Results
<p>Strengths :</p> <p>Developed NamLITS traceability system in close collaboration with the MBN</p> <p>Active participation by VS personnel in meetings/ conferences of NAU, MBN</p> <p>VS information often included in published and electronic newsletters from NAU and MBN</p>
<p>Weaknesses :</p> <p>Too much emphasis by VS on export related matters, as a result of influence by private sector</p> <p>No demonstrable coordination/ collaboration with stakeholders north of the VCF</p> <p>No coordination with the Ministry of Health or Local Municipalities on non-export slaughter and other veterinary public health matters</p>
<p>Supporting documentation (documents or photos):</p> <p>A guide to Livestock Traceability in Namibia Version 1.01 - March 2007</p> <p>Vet News Namibia Vol.5 Issue 2: April-June 2008</p>
<p>Detailed findings during visit:</p> <p>There are clearly well established links and mechanisms of collaboration and coordination with the organized private sector. NamLITS has been established thanks to strong input and support from the private sector. However, the private sector also demands high investments such as for BSE testing, which need to be made to be able to export to certain EU companies, where private standards must be met.</p> <p>The private sector is well organized and can continue to contribute to VS with improved governance nationwide. The animal identification, traceability and surveillance activities north of the VCF should be improved, as well as the involvement of their producers.</p> <p>Private sector may also be able to influence the needed collaboration between Ministries of Health and Agriculture.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :
Fully implement programs north of the VCF. Organize communal farmers and assist in awareness raising and more active participation.

<p>I-7 Physical resources</p> <p>The access of the VS to relevant physical resources including buildings, transport telecommunications, cold chain, and other relevant equipment (e.g. computers).</p>	Levels of advancement
	The VS have no or unsuitable physical resources at almost all levels and maintenance of existing infrastructure is poor or non-existent.
	The VS have suitable physical resources at national (central) level and at some regional levels, and maintenance and replacement of obsolete items occurs only occasionally.
	The VS have suitable physical resources at national, regional and some local levels and maintenance and replacement of obsolete items occurs only occasionally.
	The VS have suitable physical resources at all levels and these are regularly maintained.
	The VS have suitable physical resources at all levels (national, sub-national and local levels) and these are regularly maintained and updated as more advanced and sophisticated items become available.

<p>Results</p>
<p>Strengths :</p> <p>Headquarters with adequate facilities; conditions and space are adequate and DVS are centrally located</p> <p>CVL with adequate space and in proximity to headquarters</p> <p>Most field offices have access to phone and fax</p> <p>Have obtained equipment and implemented a system for remote hand held data entry</p> <p>Headquarters and State Veterinary Offices also have computers, links to central database and internet</p> <p>Transportation is adequate provided by a) government vehicles b) monthly allowance for personal vehicles (only for professionals) c) reimbursement by kilometres driven using private vehicles</p> <p>Transportation of goods (cold chain) through a reliable private courier service</p> <p>The VS benefits from a regular mechanism for yearly budgetary allocations through the Ministry of Agriculture</p>
<p>Weaknesses :</p> <p>Internet connections for clinics and other field offices are not yet available in most cases</p> <p>Laboratory equipment confined to scarce and outdated equipment and inadequate resources for maintenance and reagents</p> <p>Reimbursement rates for vehicle use are inadequate to cover cost of fuel, maintenance and vehicle replacement</p>

Existing monthly kilometre limits are inadequate to cover the needs in most field offices, due to extensive territory.

Supporting documentation (documents or photos):

Recommendations 2006 Report to DVS by AGRIVET

Vehicle Needs Assessment for the Directorate of Veterinary Services - June 2008

Detailed findings during visit:

Buildings:

Headquarters and State Offices are adequate. Most employees have individual offices in the centrally located main building of the Ministry of Agriculture and Water Resources.

In terms of communication, all offices (headquarters and State Offices) have telephone, fax and internet access. The field offices and clinics have telephone and fax, but only few have internet at this time. Expansion of internet access and updating of equipment has been budgeted for. VS are planning to build 5 additional Animal Centres north of the surveillance zone with post mortem facilities.

Vehicles:

Use of vehicles is provided by either making use of a fleet of government vehicles, or by employees being reimbursed for the use of a personal car on a kilometre driven basis, or in the case of veterinarians and other professionals by participating in a car scheme, where the government provides a monthly allowance for purchase of a car, not older than 5 years.

Cold chain:

The cold chain is excellent, they have cold rooms in the larger offices (north) where vaccination against FMD and CBPP is practiced, and smaller offices all have adequate size refrigerators. The offices also have reliable power supply/generators. When in the field, coolers with ice (made at the field offices) are used. For transportation of samples to the laboratory, there is access to a very reliable national courier service.

State Veterinary Office:

The SVO is equivalent to a district office of the VS. The Office visited was the one covering the region of Windhoek. A tour of the SVO allowed us to examine the different offices and functions conducted. There was ample space provided by what once must have been a private residence and which is located very centrally in town and only walking distance from the VS and the Central Veterinary Laboratory.

The clinic was equipped with basic instrumentation, had a simple cabinet for medicines, and a post mortem room and a large walk-in cold room. It also had several metal containers for carrying instrumentation and medicines to the field visits. This office also provides clinical service to a military base, police and prison dogs, and the Agricultural College. It also certifies pet animals being exported; they also provide free rabies vaccination to dogs and cats.

The SVO also issue movement permits, a service that was very well attended responding to a high demand from local farmers. Three full time AHWs were managing this service with a direct link to the central database. This SVO also housed the Import permit office, as well as provided

space for the office of the Veterinary Council (statutory body).

Priorities/Recommendations

Short Term :

Need to reassess the needs for vehicle use, in terms of capacity to adequately cover the territory as well as the appropriateness of the reimbursement scheme.

Medium / Long Term :

Provide connectivity of field offices in the north to internet and the central databases.

I-8 Funding The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure.	Levels of advancement
	1. Funding for the VS is neither stable nor clearly defined but depends on resources allocated irregularly.
	2. Funding for the VS is clearly defined and regular, but is inadequate for their required base operations.
	3. Funding for the VS is clearly defined and regular, and is adequate for their base operations, but there is no provision for new or expanded operations.
	4. Funding for new or expanded operations is on a case-by-case basis.
5. Funding for all aspects of VS activities is adequate; all funding is provided under full transparency and allows for full technical independence.	

Results
<p>Strengths : Base operations and salaries are all covered, at least at the current staffing level During the last 5 years, the VS have received adequate funding with slight annual increases. There is a mechanism for submitting justifications for budget increases on a yearly basis Legislation and regulations under the Financial Act assures continuous VS funding Private services, when provided by the CVL and state veterinarians are charged according to pre-established professional tariffs</p>
<p>Weaknesses : Insufficient funding in case of unexpected events (e.g. vehicle and travel allowance, vaccine supplies) Diminishing resources as payments for services provided must be returned to Treasury. There is currently no mechanism for adjusting laboratory and SVO budgets in accordance with services rendered, although revenues are collected and sent to Treasury. Due to multiple vacancies significant amount of budget allocated to salaries is being redirected to cover shortfalls in operations and other services.</p>
<p>Supporting documentation (documents or photos): Financial Act Directorate of Veterinary Services - Annual Report 2005 Directorate of Veterinary Services - Annual Report 2006</p>

Detailed findings during visit:

Budget of the VS:

The VS have had an adequate budget, with slight increases on a yearly basis. In fiscal year 2006-2007 they had a budget of N\$ 69 Million (Euros 5.3 Million), and in 2008-2009 of N\$ 82 Million. Salaries are covered appropriately, while there are still several vacancies due to difficulties in recruiting. The difficulties in recruiting and retaining trained personnel are more related to the overall shortness in the country, than to the salary levels. Often there are shortfalls for the purchase of vaccines and other reagents. When unexpected events occur, like the recent FMD outbreak in the infected zone, there are difficulties in covering increased costs due to transportation and travel allowance. Under these situations, the funding has been resolved by moving funds from other categories within the VS budget.

There is an adequate mechanism for budget preparation, including requests and justification for annual increases. This process is done a year in advance. The Namibian budget distribution is regulated by proper legislation and regulations under the Ministry of Finance.

There are clear rules prohibiting the VS or their employees from accepting funds from private sources, with the exception of special services provided by the Laboratory and certain State Offices. In this case the services are charged according to an official table of tariffs and the collected funds must be deposited in Treasury. Animal Health Technicians working for the VS cannot charge for services rendered to farmers.

Regular audits are conducted in all areas of the VS by internal government auditors. Audit reports are publicly available.

Budget for the CVL:

One of the major constraints for the laboratory is the limited budget. The Central Diagnostic Laboratory claimed shortfalls in budget, especially as more services are rendered there is an ever increasing deficit for supplies and reagents. Their equipment is outdated, except for that required to do the tests demanded by EU regulations for meat exports. There is insufficient budget for equipment maintenance and servicing. To accredit the lab, another 8 million Namibian Dollars would be needed; the budget is only 1/10 of this.

Priorities/Recommendations

Short Term :

Should conduct a needs assessment in the laboratory and identify the necessary resources to properly address the laboratory's needs.

Medium / Long Term :

Should investigate the establishment of a revolving fund mechanism. While there is a cost recovery system for the laboratory and SVO, the funds go directly to Treasury. There is a demand for services, the laboratory and the SVO are well placed to deliver these valuable services to the community, but without the ability of these funds for services rendered coming back to enhance the services, the process is self defeating.

<p>I-9 Contingency and compensatory funding</p> <p>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 (i.e. arrangements for compensation of producers in emergency situations) can be made available when required.</p>	Levels of advancement
	1. No contingency and compensatory funding arrangements exist and there is no provision for emergency financial resources.
	2. Contingency and compensatory funding arrangements with limited resources have been established, but these are inadequate for expected emergency situations (including emerging issues).
	3. Contingency and compensatory funding arrangements with limited resources have been established; additional resources for emergencies may be approved but approval is through a political process.
	4. Contingency and compensatory funding arrangements with adequate resources have been established, but in an emergency situation, their operation must be agreed through a non-political process on a case-by-case basis.
5. Contingency and compensatory funding arrangements with adequate resources have been established and their rules of operation documented and agreed with stakeholders.	

Results
<p>Strengths :</p> <p>Funds would be available in cases of major emergencies under the Ministry of Finance, however, so far this mechanism has never been utilized by the VS</p> <p>Animal Health Compensatory Fund under MBN, currently aiding in VCF repair, also used for increased farmer awareness and surveillance programs</p>
<p>Weaknesses :</p> <p>Prioritization of the use of the Animal Health Fund is under custody of the MBN, and not the VS. Therefore, the fund is not always addressing national needs, but more often MBN immediate needs. There is no evidence of such funds being used for compensation mechanisms.</p>
Supporting documentation (documents or photos):
<p>Detailed findings during visit:</p> <p>Contingencies:</p> <p>In case of a major crisis, there is an adequate mechanism for addressing contingencies through requests made by the Minister of Agriculture through the Directorate of Emergency Management in the Ministry of Finance. The VS have so far not made use of such funds. However, it has been effectively used in cases of several floods and droughts.</p>

Priorities/Recommendations
Short Term :

Medium / Long Term :

VS in conjunction with the stakeholders should lobby through the Ministry of Agriculture for establishing a contingency and compensatory fund.

There should be a stronger influence by the VS in how to prioritize the use of Animal Health Compensatory Fund nationwide.

I-10 Capability to invest and develop The capability of the VS to access additional investments, over time, that lead to a sustained improvement in the VS.	Levels of advancement
	1. There is no capability to improve the operational infrastructure of the VS.
	2. The VS occasionally develops proposals and secures funding for improvements in operational infrastructure through extraordinary allocations.
	3. The VS regularly secures funding for improvements in operational infrastructure, through extraordinary allocations from the national budget or from other sources, but these are allocated with constraints on their use.
	4. The VS secures adequate funding for the necessary improvements in operational infrastructure through extraordinary allocations, including from stakeholders.
5. The VS routinely secures adequate funding for the necessary improvements in operational infrastructure.	

Results
Strengths : The VS have developed a proposal for establishing additional field offices, improved connectivity and traceability particularly north of the VCF to be funded by the Millennium Challenge Project
Weaknesses : No existing capability to invest and develop within the regular budget mechanism.
Supporting documentation (documents or photos):
Detailed findings during visit: External funds: The VS have had access to external sources of funding. At times they have had special projects funded by the EU, France and more recently the US. Currently, there is a Millennium Challenge Project, funded by the US which will allow for the construction of several field offices in the area north of the fence, and the expansion of the CVL.

Priorities/Recommendations
Short Term :
Medium / Long Term :
The VS should work with their private sector partners in considering plans for sustained improvements for mutual benefit.

CHAPTER II - TECHNICAL AUTHORITY AND CAPABILITY

The authority and capability of the VS to develop and apply sanitary measures and science-based procedures supporting those measures.

Critical competencies:

- Section II-1 Veterinary laboratory diagnosis
- Section II-2 Laboratory quality assurance
- Section II-3 Risk analysis
- Section II-4 Quarantine and border security
- Section II-5 Epidemiological surveillance
- Section II-6 Early detection and emergency response
- Section II-7 Disease prevention, control and eradication
- Section II-8 Veterinary public health and food safety
- Section II-9 Veterinary medicines and veterinary biologicals
- Section II-10 Residue testing
- Section II-11 Emerging issues
- Section II-12 Technical innovation

<p>II-1 Veterinary laboratory diagnosis</p> <p>The authority and capability of the VS to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products.</p>	Levels of advancement
	1. Disease diagnosis is almost always conducted by clinical means only, with laboratory diagnostic capability being generally unavailable.
	2. For major zoonoses and diseases of national economic importance, the VS have access to and use a <i>laboratory</i> to obtain a correct diagnosis.
	3. For other zoonoses and diseases present in the country, the VS have access to and use a <i>laboratory</i> to obtain a correct diagnosis.
	4. For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/or that could enter the country, the VS have access to and use a <i>laboratory</i> to obtain a correct diagnosis.
5. In the case of new and <i>emerging diseases</i> in the region or world, the VS have access to and use a network of national or international reference laboratories (e.g. an OIE Reference Laboratory) to obtain a correct diagnosis.	

Results
<p>Strengths :</p> <p>Highly qualified technical personnel</p> <p>CVL makes good use of laboratories abroad for reference, confirmation and support</p> <p>Good laboratory support for rabies investigation</p> <p>Good laboratory support to meet the strict export requirements on pathogen and residue testing</p> <p>Good courier system for sample transport</p>
<p>Weaknesses :</p> <p>Too many vacancies in critical positions including directors of services</p> <p>Budgetary deficiencies accentuated by non-recovery of services rendered (payment for services rendered goes directly to Treasury rather than to reimburse for reagents and supplies utilized)</p> <p>Heavy emphasis on laboratory services related to export</p> <p>No direct integration between databases (laboratory database with TADInfo)</p>
<p>Supporting documentation (documents or photos):</p> <p>PVS CVL updated 25 Jul 2008 version</p> <p>PVS presentation CVL 12 Aug 2008</p>
<p>Detailed findings during visit:</p> <p>Laboratory Staff:</p> <p>The positions all filled by highly qualified personnel with high motivation and good international relations. However, due to budgetary restrictions there is no continuing education. Staff are trained whenever a possibility arises e.g. through courses given by IAEA etc.</p> <p>A library exists, but the staff would like to have access to more scientific literature.</p> <p>Position and mission:</p> <p>The Central Veterinary Laboratory is under the Directorate of Veterinary Services within the Ministry of Agriculture, Water and Forestry. It is the central public institution responsible for veterinary</p>

diagnostic services for the agricultural industry. Its mission is to provide quality analytical and diagnostic services to the agricultural industry and to ensure the production and/or export of safe agricultural products as well as assisting veterinarians, their clients, and others responsible for animal and public health in the detection, prevention and understanding of the diseases.

A comprehensive text on components, functions, mission and vision of the CVL can be found in the electronic document: PVS CVL updated 28 Jul 2008.

Structure:

The Central Veterinary Laboratory consists of three sub-divisions: Food Science, Diagnostic Services and Biotechnology/research.

The Food Science Subdivision consists of food hygiene and toxicology and residue analysis.

The Diagnostics Subdivision comprises clinical microbiology and animal reproduction, pathology, parasitology and rabies, serology and BSE (bovine spongiform encephalopathy).

The Biotechnology Subdivision is made up of molecular diagnostics for viral and bacterial pathogens, including the use of PCR equipment. They are strictly diagnostic and do not produce vaccines.

There are also 3 regional laboratories in Ondangwa, Grootfontein and Gobabis as well as a research/experimental farm at Bergvlug. However, only the former two regional laboratories are currently functional. Their duty is assist the CVL by providing diagnostic services, and fulfil basic parasitological and serological tests. The Grootfontein laboratory is also performing all histopathological analyses. The research farm supplies biological reagents for laboratory use.

Diagnostics and therapeutic activities:

Contagious Bovine Pleuropneumonia (CBPP) - ELISA and CFT

Food and Mouth Diseases (FMD) using NSP- ELISA

Avian Influenza (AI) using Haemagglutination Inhibition (HI)

Newcastle Diseases (NCD) - HI

Bovine Spongiform Encephalopathy (BSE) - ELISA

Brucella abortus, ovis and mellitensis in cattle, sheep and goats using Rose Bengal Test (RBT),

Complement Fixation test (CFT) - ELISA

Dourine in Horses and Donkeys - CFT

Infectious Bovine Rhinotracheitis (IBR)- ELISA

Bovine Viral Diarrhoea Virus (BVDV)-ELISA

Chlamydia- ELISA

Bovine Leukaemia Virus (BLV) – ELISA

Blue Tongue – Gel Immunodiffusion Test (GID)

Sheathwashing (Campylobacter spp. and Tri- trichomonas fetus).

Bacterial isolations and enumerations e. g. Bacillus anthracis, Pasteurella, E.coli , Clostridium spp. , Salmonella spp. Brucella ect.

Chlamydia FAT

Wildebeest and sheep associated Malignant Catarrhal Fever Virus

Campylobacter fetus fetus, C. fetus venereal

Ruminant DNA in feed

African Horse Sickness (AHS)

Rift valley fever (RvF)

Total Plate Count

Post-Mortem

Histopathology

External/Internal parasites identification and faecal egg count

Rabies diagnosis

Production of Orf and Papilloma vaccines

Stilbenes

Estrogenic compounds

Androgenic Compounds

Natural hormones

Clenbuterol

Chloraphenicol

Organophosphates

Antimicrobials

Organochlorides

Anticoccidial

Pyrethroids

Carbamites

Mycotoxins

Strychnine -Thin Layer Chromatography (TLC)

Arsenic in animal organs- TLC

Aflatoxin in feed –TLC

Nitrite/nitrite in water

Prussic acid

Samples for which CVL lacks analytical capacity are sent to subcontracted accredited laboratories in South Africa such as The South Africa Bureau of Standard (SABS), The National Horseracing Authority as well as The University of Free State. Following are the residue tests that are subcontracted:

Anticoccidials

Pyrethroids

Closantel

Stilbenes

Avermectin

Thyrostats

Non steroid anti-inflammatory drugs (NSAIDs)

Sedatives

Imidazoles

Equipment:

The main emphasis of diagnosis as well as the most modern equipment was seen on analyses for the export of meat products, e.g. all export abattoirs are routinely sampled for residues, using an EU template, BSE analysis is done with a rapid test since 2005.

Generally it was complained that there is a shortage of equipment, and that the equipment is rather old. There are three BSL II and two BSL I Biosafety cabinets available.

Transport of samples:

The transport of samples is done by local courier service, and samples usually reach the lab over night. There seem to be no problems with the cold chain.

Collaborating partners:

CVL counts on four collaborating laboratories in the country: The Agricultural Laboratory, Analytical Laboratory Services, Gammams Laboratory City of Windhoek, and Namwater Laboratory.

Collaborating laboratories outside the country are the Botswana Vaccine Institute (BVI), Onderstepoort Veterinary Institute (OVI) in South Africa, the South African Bureau of Standards, the IAEA- Seiberdorf laboratory in Vienna, Austria, VLA in the United Kingdom, Istituto Zooprofilattico Sperimentale della Italia in Teramo (IZSTE), Italy and several others.

Samples for which the CVL does not have the analytical capacity are sent to subcontracted accredited laboratories.

Priorities/Recommendations

Short Term :

CVL should undergo a systematic analysis (OIE-Gap Analysis) in order to address the weaknesses identified in the PVS. Personnel, budget, equipment and services rendered, all need to be examined and a determination must be made as to how to prioritise the resource needs and how to focus services on the most important for the overall support of the DVS.

Medium / Long Term :

As part of the implementation from a Gap Analysis, consideration should be given to strengthen the services in the region north of the VCF.

II-2 Laboratory quality assurance The quality of laboratories (that conduct diagnostic testing or analysis for chemical residues, antimicrobial residues, toxins, or tests for, biological efficacy, etc.) as measured by the use of formal QA systems and participation in relevant proficiency testing programmes.	Levels of advancement
	1. No laboratories used by the public sector VS are using formal QA systems.
	2. Some laboratories used by the public sector VS are using formal QA systems.
	3. All laboratories used by the public sector VS are using formal QA systems.
	4. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA systems.
5. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA programmes that meet OIE, ISO 17025, or equivalent QA standard guidelines.	

Results
Strengths : A Quality Manager has been recently recruited, filling a long-standing vacancy Good collaboration with several reference labs abroad (e.g. VLA, IZSTE, OVI, BVI, BNL, IAEA Seibersdorf) Has met Quality assurance requirements, as part of the EU compliance audits National Pathology and Medical Laboratory are already accredited
Weaknesses : Budgetary deficiencies especially for equipment, maintenance and personnel training While the CVL intends to seek accreditation by 2010, it is unlikely this can be attained without a significant improvement in filling vacancies, readjusting budget, and updating equipment
Supporting documentation (documents or photos): PVS CVL updated 25 Jul 2008 version PVS presentation CVL 12 Aug 2008
Detailed finding during visit: Quality insurance: A quality manager was recruited 3-4 months ago. A Laboratory Quality Manual (documented SOPs) is being used, and the goal is to obtain ISO 17025 accreditation by 2010 .

Priorities/Recommendations
Short Term :
Complete activities to seek laboratory accreditation in 2010
Medium / Long Term :
Same as for II-1

II-3 Risk analysis The authority and capability of the VS to base its risk management decisions on a scientific assessment of the risks.	Levels of advancement
	1. Risk management decisions are not usually supported by scientific risk assessment.
	2. The VS compile and maintain data but do not have the capability to systematically assess risks. Some risk management decisions are based on scientific risk assessment.
	3. The VS can systematically compile and maintain relevant data and carry out risk assessment. Scientific principles and evidence, including risk assessment, generally provide the basis for risk management decisions.
	4. The VS systematically conduct risk assessments in compliance with relevant OIE standards, and base their risk management decisions on the outcomes of these risk assessments.
5. The VS are consistent in basing sanitary decisions on <i>risk analysis</i> , and in communicating their procedures and outcomes internationally, meeting all their OIE obligations (including WTO SPS Agreement obligations where applicable).	

Results
Strengths : Well trained personnel (3 trained risk assessors in the Epidemiology Division) Good data collection and data bases Competency demonstrated by one risk assessment on FMD in the Caprivi Region
Weaknesses : Risk Assessment trained personnel devote their time to other essential functions. Not enough personnel to devote time to risk analysis
Supporting documentation (documents or photos): An Example of an Abattoir's Validation in Namibia - June 2008 An Example of Validation in the North Region of Namibia - June 2008 - Vet Services Office: Directorate of Veterinary Services - Annual Report 2005 Directorate of Veterinary Services - Annual Report 2006 DVS - National Summary Report June 2008 Risk Analysis Caprivi region of Namibia Final2 SVS - Quarterly Report Jan-Mar 2008
Detailed findings during visit: The Epidemiology section has competent staff, capable of compiling and maintaining data as well as conducting risk assessments. However, due to limited number of staff these risk analyses are not conducted regularly, but the sample provided, demonstrated the capabilities of the section.

Priorities/Recommendations
Short Term :
Medium / Long Term :
Increase staffing and resources, as a result of the on-going review of the DVS.

<p>II-4 Quarantine and border security</p> <p>The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.</p>	Levels of advancement
	1. The VS cannot apply any type of quarantine or border security procedures for animals or animal products with their neighbouring countries or trading partners.
	2. The VS can establish and apply quarantine and border security procedures; however, these are generally based neither on international standards nor on a <i>risk analysis</i> .
	3. The VS can establish and apply quarantine and border security procedures based on international standards, but the procedures do not systematically address illegal activities ³ relating to the import of animals and animal products.
	4. The VS can establish and apply quarantine and border security procedures which systematically address legal pathways and illegal activities.
5. The VS work with their neighbouring countries and trading partners to establish, apply and audit quarantine and border security procedures which systematically address all risks identified.	

Results
<p>Strengths :</p> <p>Good collaboration on border enforcement with Botswana and South Africa</p>
<p>Weaknesses :</p> <p>There is no enforceable border between Namibia and Angola, thereby relying heavily on the enforcement of border security at the VCF. The border issues with Zambia and Zimbabwe are well managed within the strictly managed FMD infected zone in the Caprivi.</p> <p>Checkpoints along the VCF are not always fully efficient and may be circumvented by political pressure. VCF is not a true international border and therefore not as strictly enforced by customs and immigration</p> <p>Border controls are enforced by animal health workers (6-months training) without the presence of a veterinarian on-site</p>
<p>Supporting documentation (documents or photos):</p> <p>Movement of Animals and Products through the VCF</p> <p>Oshivelo Quarantine Farm - map</p>
<p>Detailed findings during visit:</p> <p>State Veterinary Office: The SVO in Windhoek has a good communication with the Extension Service and jointly they prepare material for raising awareness among farmers and other stakeholders. Their veterinarians or AHT also attend 'farmers day' and provide lectures at the Agricultural College, which is the one training Animal Health Technicians (3 year diploma).</p> <p>The SVO has also prepared excellent hand-out material to educate farmers as well as a manual on how to complete the animal health questionnaire filled by farmers as part of the national health monitoring program (provided).</p>

³ Illegal activities include attempts to gain entry for animals or animal products other than through legal entry points and/or using certification and/or other procedures not meeting the country's requirements.

In terms of continuing education for personnel, each SVO (veterinarian) is responsible for the continuing on the job education of their AHT personnel. The continuing education programs for veterinarians, as well as for AHT are organized also by the Veterinary Association.

Central Import/ Export Office:

The Import Permit Office (IPO) is an integral part of the VS and it is located in the same building with the SVO of Windhoek. The unit is headed by Dr. Albertina Shilongo, a veterinarian trained at the University of Camaguey in Cuba. (There are several veterinarians and AHT who received their training in Cuba).

The import procedures and protocols are established by the VS and are covered under the General Act 13 of 1956. There are no other regulatory or legal procedures involved in the establishment or modification of established import regulations. While there is a national enquiry point for WTO matters, there is no contact by this national enquiry point office with the VS. Therefore, import requirements and changes in these are not notified as part of WTO obligations. The information on import requirements into Namibia are not included in the DVS website, it must be obtained by directly contacting the Import Permit Office.

The IPO is the sole responsible for issuing import permits for animals and animal products into Namibia. The main imports are chicken, eggs, pork and dairy products from registered establishments in the RSA, New Zealand, France, Brazil, Canada and Australia. The import permit is based on a paper document which is first issued and signed by the Import officer and then handled with the importation. When the imported product enters the country it must be accompanied by a section that was completed by the exporting authority, or an export permit from that authority. The entire process is tracked electronically within the NamLITS system.

The imported animals must come in with a special fire brand mark on the neck identifying them as imported animals, whose products are not fit for export. These animals receive a different color eartag (green, as opposed to the yellow eartag for Namibian animals).

There are four border posts, in addition to the international airport at Windhoek and the seaport at Swakopmund. The only animals that are quarantined at the Windhoek facility are imported dogs, cats and horses.

Trans Kalahari Border Post to Botswana:

We visited the border post at Buitepos, the only official eastern border post between Botswana and Namibia which was at the time managed by Mr. Naftali Kambungu. The post is manned by VS Animal Health Workers receiving a 6 months training at the Agricultural College. They each work 8 hour shifts, 16 hours a day, and work side by side with immigration and customs counterparts. They are trained on how to enforce the import/export regulations, including the inspection of all vehicles transporting animals and animal products. On-the-job training is done by the State Veterinarians, who come and inspect the post 2 to 3 times per year. When irregularities or animal health issues are detected by the border inspector, they immediately contact the State Veterinarian to determine the course of action to be taken.

All import permits are controlled at the border and proper notification goes to VS through the NamLITS and faxes if necessary.

All vehicles and persons must visit the border post when crossing the border. Individuals are allowed to transport up to 25 kg of meat and meat products for personal consumption, as part of a Namibia-Botswana, South Africa agreement. This condition can be revoked immediately after the notification of an outbreak in one of the three countries.

The most common imports are dairy products, chicken meat, eggs and pork coming from the RSA. Live animal imports are limited to breeding stock from the RSA. Namibia exports mostly live wildlife to Botswana and RSA.

Veterinary Cordon Fence and Oshivelo Gate, an official control point for the VCF:

This is the 900 km long fence separating the buffer from the surveillance zone in the northern region. It is an excellent double fence (a game fence separated by 5 meters from the stock fence), which is maintained by repair teams. One problem for the destruction of the fence is trespassing elephants.

The fence is crossed by a major highway at Oshivelo. The gate is controlled by police and veterinary services. Every passing vehicle has to show a licence, and trailers and luggage compartments are inspected. No cloven hoofed animals (except small ruminants with a permit after quarantine) are allowed to pass the fence to the south of Namibia, nor are meat products from cloven hoofed animals (except in sealed containers from approved abattoirs) or raw and fresh milk of these species. We note that it is unlikely that a live animal could pass this gate; however it cannot be excluded that meat products might be brought into the southern part of Namibia. Although all vehicles are checked for cool boxes etc., we did not see the inspection of the inside of e.g. suitcases.

However, public awareness as to this prohibition seems to be quite high, and there have not been FMD outbreaks in the South for at least the past twenty years. There are no or only limited game farms in the north, and only processed trophies may be brought south.

Flyers with the rules are available at the gate.

Visit to the Oshivelo Quarantine Farm:

This is one of seven farms, controlled and run by the VS, which lies immediately north of the VCF, around 45 kilometers east from Oshivelo. The quarantine facilities are used to isolate cattle coming from the buffer zone for a minimum of 21 days prior to sending the cattle consignment to slaughter at the export slaughterhouse in the Caprivi.

This quarantine farm has a total surface of 29,000 hectares, and is made up of 16 different pens with separate water supply and with an average surface of 2,500 hectares each. The external perimeter of the farm is made up of a double fence (a game fence and livestock fence, separated by 10 meters). All internal fences between pens are made up of double livestock fences, with a 10 meter separation as well. These excellent facilities are managed by one Animal Health Technician, assisted by 6 Animal Health Technical Assistants.

The cattle are brought by the farmers, mainly from the communal areas, and housed in one of the pens for 21 to 30 days. The animals have to be managed by their own herdsman and supervised at all times by VS personnel. Facilities are provided for the herdsman to stay for the duration of the quarantine. The cattle are brought to the quarantine under a movement permit and are inspected for general health condition before entering the farm. Immediately after off loading and before entering one of the pens, the animals are checked for tongue and hoof lesions. Each consignment is housed in a separate pen.

After the completion of the quarantine period, the animals are again individually checked for general health, as well as tongue and hoof lesions before being directly transported to the slaughterhouse. The farmer only has to pay for transport from the quarantine farm to the slaughterhouse. These farms have been under operation since the early 1980s, and have never had a positive FMD case.

This is an excellent concept and very well managed by the VS. It can be considered a practical exercise of compartmentalization.

Priorities/Recommendations

Short Term :

Strengthen veterinary border control along the Angola border, as well as in the Caprivi region.

Medium / Long Term :

The situation north of the VCF has to be examined in an effort to improve surveillance, border enforcement and participation in all national activities of the DVS.

<p>II-5 Epidemiological surveillance</p> <p>The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations under their mandate.</p> <p>A. Passive epidemiological surveillance</p>	Levels of advancement
	1. The VS have no passive surveillance programme.
	2. The VS conduct passive surveillance for some relevant diseases and have the capacity to produce national reports on some diseases.
	3. The VS conduct passive surveillance for some relevant diseases at the national level through appropriate networks in the field, whereby samples from suspect cases are collected and sent for laboratory diagnosis with evidence of correct results obtained. The VS have a basic national disease reporting system.
	4. The VS conduct passive surveillance and report at the national level on most relevant diseases. Appropriate field networks are established for the collection of samples and submission for laboratory diagnosis of suspect cases with evidence of correct results obtained. Stakeholders are aware of and comply with their obligation to report the suspicion and occurrence of notifiable diseases to the VS.
	5. The VS regularly report to stakeholders and the international community (where applicable) on the findings of passive surveillance programmes.

Results
<p>Strengths :</p> <p>Surveillance well supported by NamLITS identification and traceability system south of the VCF. VS has highly competent professionals in the epidemiology division, capable of developing surveillance programs and advanced data analysis. Farmers and private veterinarians contribute to the passive surveillance by completing animal health questionnaire, and submitting samples when reportable animal health events are observed. Thanks NamLITS identification system, VS is able to conduct more accurate surveys and validations.</p>
<p>Weaknesses :</p> <p>NamLITS identification and traceability system are not applied equally north of the VCF Insufficient number of professionals and para-professionals in the field particularly north of the VCF Personnel vacancies and budgetary deficiencies in the laboratory negatively impact the capability to increase the number of diseases investigated and samples tested</p>
<p>Supporting documentation (documents or photos):</p> <p>Animal Health Technicians' Protocol for Routine Farm Inspections Directorate of Veterinary Services - Available Databases Disease Report Form - TC.3937.FAO.TAD.002 V 2.00 An Example of an Abattoir's Validation in Namibia - June 2008 DVS - Animal Health Declaration - Guidance Notes Version 1.0 February 2008 DVS - Animal Health Declaration - Official animal health declaration for all livestock famers DVS - Disease Report Forms - capital press 00-2442 Surveillance Model Draft Sep_08 Surveillance Narrative</p>

Surveillance protocol for CBPP
The Namibian Epidemiology and Animal Health Information System

Detailed findings during visit:

Division of Epidemiology, Import/Export, Traceability and Training:

This section is headed by Dr. Cleopas Bamhare, and contains a small cadre of well trained professionals.

Among other key functions, Dr. Bamhare and his staff are responsible for the animal disease notifications to the OIE. These notifications are submitted regularly and in accordance with the new WAHIS system.

Data collection and management section: Data are collected and various data bases are being managed by this section. Since 1986 animal health data has been collected and stored using software produced internally by Dr. Harry Biggs. Since 2007 all data are transferred to TAD-Info, which means that for the time being they are entering the data in both systems. Data is collected in the field by field veterinarians, animal health inspectors and abattoirs using two different forms, the Herd Health Form and the Disease Report Form. At the end of each month the data is validated, collated with the data coming from the diagnostic laboratory for the creation of a monthly report. The disease listing is then entered into various forms in order to be submitted to OIE, SADC, and IBAR. There is also a quarterly report containing the data from all State Veterinary offices.

The laboratory data is entered electronically into specific Interlab forms at the Central Laboratory and then transferred manually into the VS data base. This office also compiles stock census, which has been collected since 1986 and in 2007 was changed to the farmer's questionnaire.

In their efforts to incorporate new technology in data collection, the epidemiology section started to use digital pens to enter data directly at the farm in electronic form into the central TAD-Info data base.

Passive surveillance:

Passive surveillance is based primarily on follow-up investigations by state veterinarians as a result of farmer reports of disease problems in their herds and farmer's questionnaire reports.

See also "Detailed findings during visit" of next point (Active Epidemiological Surveillance).

Priorities/Recommendations

Short Term :

Verify and consider changes to the manual data transcription from one database to another to minimise errors and improve data interpretation.

Medium / Long Term :

Strengthen surveillance through the application of NamLITS north of the VCF

B. Active epidemiological surveillance	Levels of advancement
	1. The VS have no active surveillance programme.
	2. The VS conduct active surveillance for some relevant diseases (of economic and zoonotic importance) but apply it only in a part of susceptible populations and/or do not update it regularly.
	3. The VS conduct active surveillance for some relevant diseases and apply it to all susceptible populations but do not update it regularly.
	4. The VS conduct active surveillance for some relevant diseases, apply it to all susceptible populations, update it regularly and report the results systematically.
5. The VS conduct active surveillance for most or all relevant diseases and apply it to all susceptible populations. The surveillance programmes are evaluated and meet the country's OIE obligations.	

Results
Strengths : See point II.5.A
Weaknesses : Most of the field work is done by trained Animal Health Technicians and not by veterinarians Personnel vacancies and budgetary deficiencies in the laboratory negatively impact the capability to conduct extensive surveillance programs
Supporting documentation (documents or photos): See point II.5.A
Detailed findings during visit: Animal health inspections: The animal health inspections of the farms within the territory of a SVO are done by the SVOs and a certain percentage by AHTs, while the information from all other farms is provided directly by the farmers in the form of a questionnaire. The farm visits are selected at random or when information in the questionnaire determines it. Farms are suspended from being able to move animals (farm is closed) when the farmer is negligent in providing the questionnaire or fails to return the animal movement permits within the established time period. Active surveillance is conducted by the VS, not only on diseases of importance for exports. They have extensive programs on surveillance for FMD (in the buffer, surveillance and free zones), CBPP, rabies, anthrax, lumpy skin disease, MCF, pasteurellosis, tuberculosis and brucellosis, as well as residue testing and feed sampling for bovine proteins. The surveillance in poultry is limited due to the small number of poultry in the country. Low and highly pathogenic Avian influenza has not been reported, although there is an occasional report of Newcastle disease.

Priorities/Recommendations
Short Term :
Medium / Long Term :
Strengthen the application of NamLITS north of the VCF

<p>II-6 Early detection and emergency response</p> <p>The authority and capability of the VS to detect and respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).</p>	Levels of advancement
	1. The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately.
	2. The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately.
	3. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command.
	4. The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases.
5. The VS have national contingency plans for all diseases of concern through coordinated actions with all stakeholders through a chain of command.	

Results
<p>Strengths :</p> <p>Rapid response demonstrated through high surveillance, particularly in the FMD infected and buffer zones</p> <p>Epidemiology division has developed contingency plans for several important animal diseases</p>
<p>Weaknesses :</p> <p>Unlikely to early detect and rapidly respond in areas of weak VS coverage, particularly north of the VCF, along the Angola border</p> <p>No ante-mortem and post-mortem inspection by veterinarians in local and municipal abattoirs</p> <p>The inspection in these abattoirs is only a meat hygiene inspection, with no animal health controls</p>
<p>Supporting documentation (documents or photos):</p> <p>Contingency Plan AI and Pandemic Flu Sept 07</p> <p>DVS - Contingency Plan for Bovine Spongiform Encephalopathy - February 2006</p> <p>DVS - Contingency Plan for Foot and Mouth Disease - February 2008</p> <p>National Contingency Plan for Avian & Pandemic Influenza - September 2007</p>
<p>Detailed findings during visit:</p> <p>Contingency plans:</p> <p>When discussing the ability of VS for early detection and response, we learned of the existence of contingency plans for FMD, CBPP, BSE and HPAI, and standard operating procedures for veterinarians and field personnel in cases of FMD and CBPP. While they have not conducted simulation exercises, they have revised their contingency plans and SOPs. They are also facing outbreaks of other important diseases, which allow the VS to test their response capability particularly south of VCF. When there are significant changes in the prevalence or distribution of</p>

diseases, these are often reflected by changes in policy. Recently an increase in cases of anthrax in cattle was experienced, which resulted in an increase in their anthrax specific surveillance and reporting efforts.

Priorities/Recommendations

Short Term :

Establish communication links between Ministry of Health and VS

Medium / Long Term :

Consider to incorporate the inspection of local and municipal abattoirs a responsibility of the DVS.
Consider running disease outbreak simulation exercises throughout the country.

II-7 Disease prevention, control and eradication 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.	Levels of advancement
	1. The VS have no authority or capability to prevent, control or eradicate animal diseases.
	2. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with little or no scientific evaluation of their efficacy and efficiency.
	3. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with scientific evaluation of their efficacy and efficiency.
	4. The VS implement prevention, control and eradication programmes for all relevant diseases but with scientific evaluation of their efficacy and efficiency of only some programmes.
5. The VS implement prevention, control and eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency consistent with relevant OIE international standards.	

Results
Strengths : Well implemented control program for FMD, CBPP with establishment and maintenance of free, surveillance and buffer zones A national rabies control program with vaccination campaigns is well managed There is also a good Trypanosomiasis eradication between Angola, Botswana, Namibia and Zambia with DVS involvement
Weaknesses : There are several other diseases of importance which are not controlled, particularly north of the VCF, such as lumpy skin disease, anthrax, rabies and CBPP
Supporting documentation (documents or photos): Directorate of Veterinary Services - Annual Report 2005 Directorate of Veterinary Services - Annual Report 2006 Disease free status recognition by OIE
Detailed findings during visit: Disease control: We learned that the diseases of highest economic importance in Namibia are: FMD, CBPP, Anthrax, blackleg, botulism, rabies, lumpy skin disease, malignant catarrhal fever, pasteurellosis, occasionally blue tongue, Newcastle disease, and salmonella for trade purposes. Active or passive surveillance programs exist for all of these diseases, but not all of them have effective control programs implemented.

Priorities/Recommendations
Short Term :

Medium / Long Term :

Strengthen the field workforce for a more effective disease control and eradication, especially in the region north of the VCF.

<p>II-8 Veterinary public health and food safety</p> <p>The authority and capability of the VS to implement manage and coordinate veterinary public health measures, including programmes for the prevention of specific foodborne zoonoses and general food safety programmes.</p>	Levels of advancement
	1. Management, implementation and coordination are generally not undertaken in conformity with international standards.
	2. Management, implementation and coordination are generally undertaken in conformity with international standards only for export purpose.
	3. Management, implementation and coordination are generally undertaken in conformity with international standards only for export purpose and for products that are distributed throughout the national market.
	4. Management, implementation and coordination are generally undertaken in conformity with international standards for export purpose and for products that are distributed throughout the national and local markets.
5. Management, implementation and coordination are undertaken in full conformity with international standards for products at all levels of distribution (throughout the national and local markets, and direct sales).	

[Note: This critical competency primarily refers to inspection of unprocessed animal products (e.g. meat, milk and honey). It may in some countries be undertaken by an agency other than the VS.]

Results
<p>Strengths :</p> <p>Due to demanding EU requirements, well established in export abattoirs</p>
<p>Weaknesses :</p> <p>VS not present in local and municipal abattoirs</p> <p>No link between Ministry of Health and VS</p>
<p>Supporting documentation (documents or photos):</p> <p>Directorate of Veterinary Services - Annual Report 2006 (p. 58)</p> <p>Handbook for Meat Examiners, Course in Meat Hygiene and Meat Inspection</p>
<p>Detailed findings during visit:</p> <p>Control programmes on zoonotic diseases:</p> <ul style="list-style-type: none"> • There are formal control programmes for anthrax and BSE • Rabies is controlled through vaccination campaigns for dogs and cats every third year in each town (Vaccine manufacturer recommend vaccinations every 3 years). However pet owners are informed through posters and talks at farmer gatherings that young pets must be vaccinated twice after reaching the age of three months, and thereafter annually or at least once every 3 years. • Female bovines are vaccinated for B. abortus between the age of 3-10 months (described in Regulations of Animal diseases and Parasites Act). • Farms who supply export abattoirs with sheep have to be tested annually for B. melitensis • Tuberculosis in animals is not found in Namibia – all imported bovine receive intradermal test • All imported animals must be certified free of diseases, including zoonotic diseases. <p>Meat Inspection for export purposes:</p>

Visit of the export abattoirs, owned by MEATCO in Okahandja. The plant was built in the 50's and then reconditioned for export to the EU in 1972. They only slaughter cattle for deboning, and export deboned primal cuts to the EU and RSA. They are currently slaughtering 400 to 430 head a day, five days a week. The plant employs 334 employees. Total yearly slaughter was 50,000 for 2007 and it had been as high as 80,000. The reduction is mainly due to the lower production of cattle in the FMD free zone.

Exports to the EU include 60% of their hind quarter cuts. Exports to RSA include deboned meat and offal, and meat-and-bone meal to RSA, Zambia and Zimbabwe, as long as it goes to registered pet food industries.

Namibia has its own rendering industry. Meat and bone meal is all exported, and only to certified pet food and feed producers.

Aside from the daily inspections by the VS, the plant has internal audits on Quality Control from plant personnel, as well as a regular audit program by a private consultant, a so called HAS system. They also have an Eco-science inspection on the pest control program.

The plant charges a standard fee to farmers per head slaughtered to cover the cost of veterinary inspections, which is then transferred to the Ministry of Finance. Laboratory and overtime fees are also reimbursed directly to the Ministry of Finance. An additional fee for grading of carcasses of N\$ 5 is also charged to the farmers.

The food safety obligations are the direct responsibility of the plant, the VS inspection at the plant is supervised by one official veterinarian (State veterinarian), who is assisted by veterinary hygiene inspectors (3 year diploma, plus one year bachelors in food technology), and veterinary hygiene inspectors assistants (6 months internal training form VS).

The ante-mortem inspection and registration of ear tags is a function conducted strictly by the official veterinarian. The veterinary office is adequately equipped with phone, fax and internet. It has a direct access to the NamLITS system and enters all relevant record directly into the database.

The most common zoonosis observed at slaughter is bovine cysticercosis ("measles"), each carcass has to be individually examined as part of a national surveillance program. Occasionally, they observe lumpy skin disease, and damage due to trauma. Non ambulatory animals are set aside for clinical inspection and if no diagnosis can be made, they are killed, posted as dead-on-arrival animals, and then destroyed (and not rendered).

An EU funded consultancy through the MBN developed guidelines on animal welfare at the abattoir, as well as during transport. Vehicles and drivers must be registered for animal transport. The guidelines are monitored and enforced by a plant animal welfare officer.

Vehicles are cleaned and disinfected before transporting animals to the slaughterhouse, and then immediately washed and disinfected before leaving the abattoir grounds.

The plant does its own audit reports, which then, when accompanied by their action plans, are shared with the VS on a monthly basis. The EU also requires the external audits, which are conducted by the VS, twice a year.

Specific monthly so called 'deficiency reports' are required by the VS, these include the number of animals slaughtered, revenues and records on animal identification. There is an adequate dialogue between VS and plant personnel and management.

Visit of the export abattoir owned by MEATCO in Windhoek: This plant, as the one in Okahandja, is ISO 9002 and HACCP accredited. Their relationship with VS, dependence on laboratory support, and VS inspection system is identical to the Okahandja plant. The VS staff is bigger as the capacity of this plant is greater. The VS team is headed by a veterinarian, assisted by 4 veterinary hygiene inspectors, and 10 veterinary hygiene assistants. Their assignments are divided between the cattle and the sheep slaughter lines. This plant slaughters around 450 cattle for export and 100 cattle for

the local market, as well as 1800 sheep for export and local market per day. They also slaughter a maximum of 180 pigs daily, 2 to 3 days per week.

Meat inspection at municipal and local abattoirs:

We met with a Municipal Health Inspector, Mr. Louw and visited two municipal abattoirs. These plants are within the Windhoek city limits and slaughter cattle and sheep for local consumption. There is no VS presence in these non-export abattoirs.

Although many of these non-export abattoirs are to be inspected by the Ministry of Health, for lack of sufficient personnel, they delegate this function to the Municipal inspectors (of equal training as in the Ministry of Health). The inspector was a Municipal Health Inspector, with a four year college training on meat hygiene, occupational health and safety and environmental health.

One abattoir (Jakobs plant) is a small private establishment located within a farm on a dirt road some three km off the main highway. It was a clean and simply equipped establishment, which had already slaughtered 4 cattle. The inspector entered and after putting on rubber boots and a rubber apron, proceeded to inspect the carcasses and their offal and heads. The inspection was a simple meat inspection, where he looked for major lesions, presence of CBPP, Anaplasmosis and others.

The other abattoir visited was also within the outskirts of Windhoek (Indraais plant), with a cattle and a small ruminant slaughter establishment. Some 15 cattle had been slaughtered, and at the time of our visit they were lifting the carcasses from the floor and hoisting them on a rail. The inspector made some recommendations on better handling of the carcasses. The small ruminant establishment had already slaughtered 40 sheep which were ready for inspection. There was also a facility for meat cutting and boxing of specific cuts.

Between the three local plants they slaughter about 600 cattle and 12,000 sheep per months. The slaughter establishment has to pay N\$ 4.90 per sheep and N\$ 8.90 per cattle inspected (.40 and .70 Euros respectively).

We visited another municipal abattoir located in the municipality of Gobabis. We were taken by a municipal inspector, who used to work in an export abattoir, but the inspection on that day was actually done by a Ministry of Health Inspector. The municipal inspector explained to us that some of the main requirements for a non-export abattoir are that it must be clean, and that it must have hot water. The facilities visited looked clean, however we noticed that the inspector, who we had picked up from a health centre earlier, did not wear any protective clothing nor gloves (like apron or boots) for the inspection, but rather her normal clothes. There was no ante-mortem inspection.

There are no links between these establishments and inspection services with the VS and therefore no reporting of animal health related findings to the VS. The approved carcasses were entered into paper forms which are to accompany the carcasses or the meat to the butchers purchasing them, and which would allow trace backs to the abattoir facility.

Priorities/Recommendations

Short Term :

Establish communication links between Ministry of Health and VS

Medium / Long Term :

Incorporate inspection at municipal and local abattoirs as part of VS functions.

II-9 Veterinary medicines and veterinary biologicals The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals.	Levels of advancement
	1. The VS cannot regulate the usage of veterinary medicines and veterinary biologicals.
	2. The VS has only limited capability to exercise administrative control (including registration) over the usage, including import and production, of veterinary medicines and veterinary biologicals.
	3. The VS exercise quality control (technical standards) over the import, production and distribution of veterinary medicines and veterinary biologicals.
	4. The VS exercise complete control over registration, sale and usage of veterinary medicines and veterinary biologicals.
5. The VS implement systems to monitor the use of veterinary medicines, veterinary biologicals and their side effects (pharmacovigilance).	

Results
Strengths : The Act 101 from 1965 has been replaced by Act 13 of 2003 on prescription medicines and controlled substances together with the Ministry of Health. A Veterinary Oversight Committee has been established to develop the regulations in collaboration with the Ministry of Health
Weaknesses : Act 13 of 2003 can still not be enforced as operational regulations are still not in place. There are still antibiotics (oxytetracyclines) which remain over the counter medicines. Due to the long distances and a lack of veterinarians even prescription drugs have to be administered by farmers
Supporting documentation (documents or photos): Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, No 36 of 1947
Detailed findings during visit: Control of veterinary medicines and biologicals: The control of medicines and biologicals is administered under The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act from 1947; Medicines and Related Substances Act, 1965; The Medicines And Related Substances Control Act from 2003; and The Prevention Of Undesirable Residues in Meat Act, 1991. The Medicines and Related Substances Control Act, 2003 is technically not yet in force, as subsidiary regulations required for its operations are still under development. The registration of stock remedies is administered by the Registrar of Act 36 who is appointed by the Minister responsible for Agriculture. The official is the head of the Law Enforcement Division of the Directorate of Extension and Engineering Services in the Ministry of Agriculture Water and Forestry. The Act also provides for the designation of technical advisors and analysts to the Registrar. The Technical Advisor is currently a state veterinarian in the Epidemiology Section. The state

veterinarian's role is to ensure that products that are registered comply with the current legal requirements and standards and that the use of the medicine does not compromise export market requirements. The Act also provides for the regulation or prohibition of the importation, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies and stock remedies in Namibia. Namibia at present does not have a Veterinary Medicines body with technical expertise and laboratory facilities for processing registration of veterinary medicines in the country and for this the country relies on the Medicines Control Council of South Africa (MCCSA). A medicine must therefore be registered first with the MCCSA before it can be considered for registration in Namibia. Not all medicines registered by the MCCSA are automatically registered in Namibia. They have to comply with local requirements as well. Human medicinal products that are used in animal medicine are registered under the Medicines and Related Substances Act, 1965 which is administered by the Ministry of Health. The Act is administered by a Registrar who is appointed in accordance with the Act. Giving direction to the Registrar of the Medicines and Related Substances Act, 1965 is the Medicines Control Council of Namibia. Two veterinarians are members of the Council.

In terms of Section 7 of Act 36 of 1947 all stock remedies sold in Namibia must be registered. An applicant sends the completed application form with efficacy, toxicological, residue, physical data with approved labelling in country of origin, package insert, prescribed fees and a certificate of registration of South Africa. The registration documentation is forwarded to the technical advisor for approval. He/she makes a recommendation to the Registrar for approval. A registration number is then allocated to a product and certificate of registration will be issued. The registration number allocated must be displayed on every container of the medicine offered for sale in Namibia. Oversight to ensure compliance is carried out by officials of the Directorate of Veterinary Services and Ministry of Health and Social Services. Routine and unscheduled oversight visits are conducted to wholesalers and retailers, pharmacies, veterinary practices and farms. Feed, urine and organ samples are routinely collected for screening tests to ensure compliance in fulfilment of The Prevention Of Undesirable Residues in Meat Act from 1991.

Priorities/Recommendations
Short Term :
Complete development of regulations as soon as possible in order to benefit from the implementation of the new act
Medium / Long Term :

II-10 Residue testing The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals, etc.	Levels of advancement
	No residue testing programme for animal products exists in the country.
	Some residue testing programme is performed but only for selected animal products for export.
	A comprehensive residue testing programme is performed for all animal products for export and some for domestic use.
	A comprehensive residue testing programme is performed for all animal products for export and/or internal consumption.
	The residue testing programme is subject to routine quality assurance and regular evaluation.

[Note: This critical competency may in some countries be undertaken by an agency or agencies other than the VS.]

Results
Strengths : The competencies to conduct residue testing exist within CVL, as it has the experience and trained personnel.
Weaknesses : Residue testing is limited to those residues tested strictly on export abattoirs and in accordance with importing country requirements. Nevertheless, the majority of the animals consumed in Namibia are slaughtered at these export establishments.
Supporting documentation (documents or photos): PVS CVL updated 25 Jul 2008 version
Detailed findings during visit: Laboratory Equipment used to carry out residue testing at CVL: <ul style="list-style-type: none"> - 1 X HPLC with UV and fluorescence detectors - 1 X HPLC with Diode Array detector - 1 X GC with Electron capture Detector (ECD) and Nitrogen Phosphate Detector - (NPD) for pesticides (Organophosphates and Organochlorides) - 1 X ELISA Reader for Clenbuterol, Chloramphenicol, Gestagens, Zeranol and - Trenborone screening - Four Plate Inhibition Test (FPT) for antimicrobials testing

Priorities/Recommendations
Short Term :
Medium / Long Term :
CVL should undergo a systematic review (OIE gap analysis) in order to address the weaknesses

identified in the PVS. Personnel, budget, equipment and services rendered, all need to be examined and a determination must be made as to how to prioritise the resource needs and how to focus services on the most important for the overall support of the DVS, in this case with special emphasis on residue testing.

<p>II-11 Emerging issues</p> <p>The authority and capability of the VS to identify in advance, and take appropriate action in response to likely emerging issues under their mandate relating to the sanitary status of the country, public health, the environment, or trade in animals and animal products.</p>	Levels of advancement
	1. The VS do not have procedures to identify in advance likely emerging issues.
	2. The VS monitor and review developments at national and international levels relating to emerging issues.
	3. The VS assess the risks, costs and/or opportunities of the identified emerging issues, including preparation of appropriate national preparedness plans. The VS have some collaboration with stakeholders and other agencies (e.g. human health, wildlife, animal welfare and environment) on emerging issues.
	4. The VS implement, in coordination with stakeholders, prevention or control actions due to an adverse emerging issue, or beneficial actions from a positive emerging issue. The VS have well-developed formal collaboration with stakeholders and other agencies (e.g. human health, wildlife, animal welfare and environment) on emerging issues.
5. The VS coordinate actions with neighbouring countries and trading partners to respond to emerging issues, including audits of each other's ability to detect and address emerging issues in their early stages.	

Results
<p>Strengths :</p> <p>The VS developed and updates several contingency plans for diseases like HPAI, BSE and FMD. The network for addressing emerging issues is there through internet access at central and state veterinary offices, well trained personnel, good links among SADC countries and good English</p>
<p>Weaknesses :</p> <p>We did not see any evidence of preventive strategies being implemented. The high number of vacant positions and budget limitations prevent at times the consideration to indentify emergencies in advance</p>
Supporting documentation (documents or photos):
Detailed findings during visit:

Priorities/Recommendations
Short Term :
Consider assigning the responsibility of monitoring emerging issues in the region
Medium / Long Term :

II-12 Technical innovation⁴ The capability of the VS to keep up-to-date with the latest scientific advances and to comply with the standards of the OIE (and Codex Alimentarius Commission where applicable).	Levels of advancement
	1. The VS have only informal access to technical innovations, through personal contacts and external sources.
	2. The VS maintain a database of technical innovations and international standards, through subscriptions to scientific journals and electronic media.
	3. The VS have a specific programme to actively identify relevant technical innovations and international standards.
	4. The VS incorporate technical innovations and international standards into selected policies and procedures, in collaboration with stakeholders.
	5. The VS systematically implement relevant technical innovations and international standards.

Results
Strengths: The DVS staff appears interested and committed to technical innovations. The VS are actively submitting data into WAHIS and are providing recommendations to improve the system (entering data offline and then submitting) Application of electronic pens and mobile phones to enter data on the animal disease forms from the field directly into the data base Subscription to scientific journals in DVS and CVL
Weaknesses: The high number of vacant positions and budget limitations prevent at times the consideration of new and more innovative approaches.
Supporting documentation (documents or photos): Disease Report Form - TC.3937.FAO.TAD.002 V 2.00 DVS - Disease Report Forms - capital press 00-2442 OIE WAHIS results for Namibia at www.oie.int The Namibian Epidemiology and Animal Health Information System Vet News Namibia Vol.5 Issue 2: April-June 2008
Detailed findings during visit: Digital pens: In their efforts to incorporate new technology in data collection, the epidemiology section started to use digital pens to enter data directly at the farm in electronic form into the central TAD-Info data base. Currently they are using 20 digital pens and they plan to expand the number significantly by renting the equipment. They intend to soon enter all animal health data from the Northern territory along the Angola border via this electronic system.

Priorities/Recommendations

⁴ Technical innovation includes new disease control methods, new types of vaccines and diagnostic tests, food safety technologies, and connections to electronic networks on disease information and food emergencies.

Short Term :

Medium / Long Term :

CHAPTER III - INTERACTION WITH STAKEHOLDERS

The capability of the VS to collaborate with and involve stakeholders in the implementation of programmes and activities.

Critical competencies:

Section III-1 Communications

Section III-2 Consultation with stakeholders

Section III-3 Official representation

Section III-4 Accreditation / Authorisation / Delegation

Section III-5 Veterinary Statutory Body

Section III-6 Participation of producers and other stakeholders in joint programmes

III-1 Communications The capability of the VS to keep stakeholders informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety.	Levels of advancement
	1. The VS have no mechanism in place to inform stakeholders of VS activities and programmes.
	2. The VS have informal communication mechanisms.
	3. The VS maintain an official contact point for communications but it is not always up-to-date in providing information.
	4. The VS contact point for communications provides up-to-date information, accessible via the Internet and other appropriate channels, on activities and programmes.
5. The VS have a well developed communication plan, and actively and regularly circulate information to stakeholders.	

Results
Strengths : The VS have a training unit with strength in communication and extension The VS actively work with a communication officer from the Ministry of Agriculture in developing press releases There is good evidence of collaboration with NAU and MBN when communicating with stakeholders
Weaknesses : Not using their own website as a communication platform
Supporting documentation (documents or photos): Ministry of Agriculture, Water and Forestry - Press Release 31 July 2008: Suspected Foot and Mouth Disease Outbreak at Kamutjonga village in Mukwe Constituency Kavango Region Press Release Press Release2
Detailed findings during visit: Communication/Information: The VS works closely with the media liaison officer of the Ministry of Agriculture in drafting and circulating press releases in case of disease outbreaks in their territory, and also in neighbouring countries. The VS maintains a good relationship with the local press. The VS is actively engaged in providing relevant technical information to the NAU and MBN newsletters in order to raise awareness among farmers.

Priorities/Recommendations
Short Term :
Establish an active and updated website as a platform for all aspects of VS
Medium / Long Term :
Consider improvements to the communication network for communal farmers and other stakeholders north of the VCF.

<p>III-2 Consultation with stakeholders</p> <p>The capability of the VS to consult effectively with stakeholders on VS activities and programmes, and on developments in animal health and food safety.</p>	Levels of advancement
	1. The VS have no mechanisms for consultation with stakeholders.
	2. The VS maintain informal channels of consultation with stakeholders.
	3. The VS maintain a formal consultation mechanism with stakeholders.
	4. The VS regularly hold workshops and meetings with stakeholders.
5. The VS actively consult with and solicit feedback from stakeholders regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities.	

Results
<p>Strengths : There are established formal meetings with MBN and NAU for active consultation with stakeholders</p>
<p>Weaknesses : There are no apparent mechanisms for active consultation with stakeholders from the communal system Most consultations are with the farmer organizations south of the VCF and related to export interests.</p>
<p>Supporting documentation (documents or photos): MEATCO News, Volume 29, Number 14, July 2008 Namibian Meat - Sense the taste Namibia Agricultural Union - The mouthpiece of organised agriculture in Namibia Role and Functions of the Meat Board of Namibia Tracking Down - From Assured Namibian Meat - Introducing Namibia's red meat industry</p>
<p>Detailed findings during visit: Meat Board of Namibia (MBN): The MBN is a semi-private organization made up of 13 executive members, including representatives from government, abattoirs and producers (9 from the private sector and 4 from government). Their mission is to effectively and efficiently manage, promote and represent the interests of the meat industry in Namibia. They represent a dynamic partnership between the Namibian meat industry and their customers. The MBN manages the Farm Assured Namibian Meat Scheme and keeps the database of animal movements, exports and slaughtering. It also provides export inspection and classification services. They meet regularly and have various committees dealing with farmers and Veterinary Services. There is a close dialogue between the MBN and the VS. The VS office managing the traceability system is co-housed with the MBN.</p> <p>Namibia Agriculture Union (NAU):</p>

A visit was held with the staff and the president of the NAU. President Mr. Raimar von Hase and Commodities Manager Mr. Harald Marggraff met with us and explained the function of the NAU, as an important stakeholder of the Ministry of Agriculture.

The NAU is the mouthpiece of the organized agriculture in Namibia. Their membership is made up of over 2000 members. Their board is made up of 20 members, 10 representing the different District Agriculture Union leaders, and 10 representing the leadership of the various commodity groups (dairy, poultry, swine, meat, charcoal, caracul sheep etc). The president is elected by the Congress on a yearly basis.

The budget of the NAU is made up of member contributions and complemented by levies imposed on certain controlled products. This budget is not used for contingency funding.

The NAU plays an important role within the Meat Board of Namibia (MBN), by nominating 4 representatives to the MBN board. While there are nominated by the NAU, they are appointed by the Minister of Agriculture. They also participate actively in three marketing boards, established by statutes (the meat, the caraculs and the agronomic marketing boards). The poultry and dairy industry are very small in Namibia, some 16 dairies, with four in the Windhoek area, and 10 poultry producers, mainly layers.

There is a close relationship between the NAU and the VS. During their quarterly meetings, the Livestock production board invited representatives from VS to an open discussion on animal health issues. NAU also assists the VS in reaching farmers and in distributing relevant information through their newsletter and their weekly electronic newsletter.

The benefits of the MBN were reflected in a recent quarterly report indicating that thanks to exports to the EU market, meat producers received N\$ 83 Million more than if these products had been exported only to the RSA.

The NAU also participated actively in the development of the Animal Disease Questionnaire and in the distribution and training of farmers in the completion of these. Another achievement of the NAU was the adoption of a resolution farmers south of the cordon fence to levy each animal slaughtered for export, in order to have an Animal Health Fund of about N\$ 10 Million per annum to raise the animal health status of the territory north of the cordon fence. The MBN serves as the custodian of this fund. The priorities to be funded by this fund are determined by the farmers of the south and the MBN. Currently, these funds are allocated to education, raising awareness and establishing quarantine facilities; 40% of the funds are allocated to surveillance activities.

Namibian National Farmers Union (NNFU):

The NAU represents most of the Namibian commercial farmers (title deed holders) currently over 2000 members. The Namibian National Farmers Union (NNFU) is the organization representing most of the farmers of the Communal system (those living in communal land). Today the communal system is more than just subsistence farming. The NNFU is not so well organized and does not have an electronic mechanism to reach their members with relevant information, they hold local meetings, but are much less organized. Therefore, they have a lesser impact on influencing VS priorities.

Visit to a communal farm in Oshivello, North of the Cordon Fence

The farm belongs to a family, the head of which is a Mrs. Shahali. The family typically consists of three generations living together.

The owner has around 300 animals in total, around 200 of these are cattle, the rest mainly sheep. It is common that a communal farmer also looks after the animals of relatives, who e.g. live in town.

There are also a few pigs and backyard chicken on the farm. The sheep are held in a corral, the calves

are brought from a pasture to drink water close to the farm houses.

Mrs. Shahali explains that it is very difficult to receive support from a veterinarian, as the state veterinarian is very far away (as well as the private vet). However, the VS come to visit the farm once a year in order to vaccinate the animals against CBPP and FMD. There was no vaccination last year, though, and when asked to show us the farm register she says that she would not be able to find it that quickly.

The farm seems to be typical, although the family might be rather richer than average for a communal farmer.

Visit to a private farm:

We also visited a private farm, Sachsenheim, located immediately south of the Veterinary Cordon Fence and within the surveillance zone. The farm was owned by Mr. Sachse. The total surface area is of 9,700 hectares and is subdivided into a 5,000 hectares game farm and a 4,700 hectares cattle farm. The farm also serves as a lodge providing bed and breakfast for tourists visiting the Etosha National Park.

The farmer claims he has to diversify into game farming and tourism, as it is very difficult to succeed strictly raising cattle. This is a common phenomenon in several regions of Namibia today. One of the problems in his area is the ample availability of water, with his cattle suffering from ecto- and endo-parasites.

His cattle have to be shipped at a high cost on average 500 kilometres to the export slaughterhouses in central Namibia. He ships an average of 100 cattle to slaughter each year. The game farm exports the overproduction of game (kudu, impala, gemsbok, and eland) live to South Africa.

He appeared more interested in developing the tourism side of his business. He does not appear to represent the opinions of the majority of farmers in his situation.

The movement permits and the technical extension is provided by the regional office of the VS (State Veterinary Office).

Priorities/Recommendations

Short Term :

Identify mechanisms for closer consultation and awareness raising with communal farmers

Medium / Long Term :

III-3 Official representation The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisations including the OIE (and Codex Alimentarius Commission and WTO SPS Committee where applicable).	Levels of advancement
	1. The VS do not participate in or follow up on relevant meetings of regional or international organisations.
	2. The VS sporadically participate in relevant meetings and/or make a limited contribution.
	3. The VS actively participate ⁵ in the majority of relevant meetings.
	4. The VS consult with stakeholders and take into consideration their opinions in providing papers and making interventions in relevant meetings.
5. The VS consult with stakeholders to ensure that strategic issues are identified, to provide leadership and to ensure coordination among national delegations as part of their participation in relevant meetings.	

Results
Strengths : Active participation in technical committees on a regional level (SADC committees)
Weaknesses : Although VS meets the terrestrial animal diseases notification obligations of OIE, it does not actively participate in the standard setting process of OIE and Codex Alimentarius While Namibia does participate in the WTO-SPS process, there is no direct link between these representatives and the VS personnel.
Supporting documentation (documents or photos):
Detailed findings during visit:

Priorities/Recommendations
Short Term :
Establish a sub-committee within the SADC network to participate in the standard setting process Establish a closer link with Namibian representatives to the WTO-SPS Committee.
Medium / Long Term :

⁵ *Active participation* refers to preparation in advance of, and contributing during the meetings in question, including exploring common solutions and generating proposals and compromises for possible adoption.

III-4 Accreditation / authorisation / delegation The authority and capability of the public sector of the VS to accredit / authorise / delegate the private sector (e.g. private veterinarians and laboratories), to carry out official tasks on its behalf.	Levels of advancement
	1. The public sector of the VS has neither the authority nor the capability to accredit / authorise / delegate the private sector to carry out official tasks.
	2. The public sector of the VS has the authority and capability to accredit / authorise / delegate to the private sector, but there are no current accreditation / authorisation / delegation activities.
	3. The public sector of the VS develops accreditation / authorisation / delegation programmes for certain tasks, but these are not routinely reviewed.
	4. The public sector of the VS develops and implements accreditation / authorisation / delegation programmes, and these are routinely reviewed.
5. The public sector of the VS carries out audits of its accreditation / authorisation / delegation programmes, in order to maintain the trust of their trading partners and stakeholders.	

Results
Strengths : While not an official accreditation process, farmers are being trained and authorized to complete the animal health forms by AHWs.
Weaknesses : At the moment there are no VS functions being delegated to private veterinarians and laboratory.
Supporting documentation (documents or photos): Disease Report Form - TC.3937.FAO.TAD.002 V 2.00 DVS - Disease Report Forms - capital press 00-2442
Detailed findings during visit: The competencies of private veterinarians were identified as very good. Therefore consideration should be given by the VS to develop an accreditation plan for a the more active participation by these professionals, especially in view of the shortness of such professionals.

Priorities/Recommendations
Short Term :
Medium / Long Term :
VS should consider a closer link with private veterinarians in an attempt to establish specific accreditation programs to benefit from the professional talent and presence in the field.

III-5 Veterinary Statutory Body The <i>Veterinary Statutory Body (VSB)</i> is an autonomous authority responsible for the regulation of the <i>veterinarians</i> and <i>veterinary para-professionals</i> . Its role is defined in the <i>Terrestrial Code</i> .	Levels of advancement
	1. There is no legislation establishing a <i>VSB</i> .
	2. There is a <i>VSB</i> , but it does not have legislated authority to make decisions nor to apply disciplinary measures.
	3. The <i>VSB</i> regulates <i>veterinarians</i> and <i>veterinary para-professionals</i> only within certain sectors of the VS (e.g. public sector but not private sector veterinarians).
	4. The <i>VSB</i> regulates veterinarians and veterinary para-professionals throughout the VS.
5. The <i>VSB</i> is subject to evaluation procedures in respect of autonomy, functional capacity and membership representation.	

Results
Strengths : A well established VSB (in Namibia, the VSB is called Veterinary Council) empowered by legislation is responsible for accrediting all veterinarians in the country The VSB is formalizing criteria for a formalized continuing education program
Weaknesses : Although intended, the veterinary para-professionals are not yet included in the VSB
Supporting documentation (documents or photos): Veterinary Council of Namibia 2008 - Information Brochure
Detailed findings during visit: Veterinary Council: The Veterinary Council (VC) was established as the statutory body and juristic person under the Veterinary and Para-Veterinary Professions proclamation in August 1, 1984 (Proclamation AG14 of 1984). It is made up of six officers: three officers designated by the Minister of Agriculture, Water and Forestry (MAWF), of whom one is the Chief Veterinary Officer (CVO), another one another official veterinarian, and one should have the knowledge of law; one veterinarian representing the Veterinary Association; and two veterinarians elected by veterinarians registered under the proclamation and who are permanent residents of Namibia. They serve for a term of three years, the most recent election occurred in May 2008 and Dr. Reiner Hassel was elected president, Dr. Anna Marais serves as registrar of the VC. The main objectives of the VC are: to regulate the practicing of the veterinary and para-veterinary professions and the registration of persons practising; to determine the minimum standards of tuition and training required for degrees, diplomas and certificates entitling the holders to register and practice; to exercise effective control over the professional conduct; to determine the standards of professional conduct; to encourage and promote highest ethics in regards to the practice of the professions; to protect the interests of the professions; to maintain and enhance the prestige, status and dignity of the professions; and to advice the Minister of Agriculture in relation to any matter affecting the veterinary and the para-veterinary profession. The para-veterinary professions (veterinary nurses and veterinary technicians) presently have not yet

been registered with the VC, thus the VC at the moment only deals with the veterinary profession. The VC is considering incorporating the para-veterinarians and the Animal Health Technicians into a single Act. The biggest impediment at the moment is that these professionals are not registered as members of an association. The veterinary nurses at the moment are trained and registered in South Africa.

The VC considers three types of registration: the Unconditional registration for members meeting all requirements of the VC; the Limited Temporary registration under the supervision of a registered veterinarian for incoming veterinarians and until the date of the next registration exam; and a Restricted registration for veterinarians interested in practicing only in the laboratory or meat inspection at certified abattoirs.

The VC meets regularly every three months, or when there is a more urgent need. Their services are provided ad honorem, but their expenses are reimbursed in cases of required travel.

The VC accredits all veterinarians coming into Namibia; they also recognize the qualifications of several Veterinary Colleges, graduates of which do not need to take a qualification exam. Among those Colleges recognized by the VC are the schools from South Africa, Germany, Australia, New Zealand, and the Royal Veterinary College. This list cannot be modified as it is part of the Act. The VC is currently considering a revision of the Act.

For the accreditation, the VC develops the examination material and delivers the exam to applicants, once a year. The examiners include a member of the VS, a private practitioner, a member of the RSA faculty as well as a faculty from an overseas college.

The examination consists of a practical and a theoretical examination, a two week practicum at one of the export abattoirs, and a practicum at one of the private veterinary practices.

The VC is considering making continuing education a mandatory requirement for maintaining the registration. It will consider attendance to veterinary conferences, as well as on-line courses to meet this requirement.

In all of their activities there is a close collaboration between the VC and the Veterinary Association.

Priorities/Recommendations

Short Term :

Complete the formal continuing education program for veterinarians

Medium / Long Term :

Establish comparable programs for veterinary para-professional to those already in existence for veterinarians in the VSB.

<p>III-6 Participation of producers and other stakeholders in joint programmes</p> <p>The capability of the VS and stakeholders to formulate and implement joint programmes in regard to animal health and food safety.</p>	Levels of advancement
	1. Producers and other stakeholders only comply and do not actively participate in programmes.
	2. Producers and other stakeholders are informed of programmes and assist the VS to deliver the programme in the field.
	3. Producers and other stakeholders are trained to participate in programmes and advise of needed improvements, and participate in early detection of diseases.
	4. Representatives of producers and other stakeholders negotiate with the VS on the organisation and delivery of programmes.
5. Producers and other stakeholders are formally organised to participate in developing programmes in close collaboration with the VS.	

Results
<p>Strengths : VS have trained and authorized farmers south of the VCF to complete animal health questionnaires VS have developed several excellent manuals for training farmers, community animal health agents and animal health workers</p>
<p>Weaknesses : Most of these activities are limited to farmers and other stakeholders south of the VCF</p>
<p>Supporting documentation (documents or photos): Ministry of Agriculture, Water and Rural Development - Basic Veterinary Manual for Communal Livestock Farmers of Namibia NASSP - Training Manual of Community Animal Health Agents - September 2006 Namibia Agricultural Union - The mouthpiece of organised agriculture in Namibia Role and Functions of the Meat Board of Namibia Tracking Down - From Assured Namibian Meat - Introducing Namibia's red meat industry</p>
<p>Detailed findings during visits: Farmers and producers south of VCF are actively engaged in joint programs, primarily through their organization (NAU) and the NamLITS program.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :
Harmonize activities and participation with stakeholders from both sides of the VCF

CHAPTER IV - ACCESS TO MARKETS

The authority and capability of the VS to provide support in order to access, expand and retain regional and international markets for animals and animal products.

Critical competencies:

- Section IV-1 Preparation of legislation and regulations, and implementation of regulations
- Section IV-2 Stakeholder compliance with legislation and regulations
- Section IV-3 International harmonisation
- Section IV-4 International certification
- Section IV-5 Equivalence and other types of sanitary agreements
- Section IV-6 Traceability
- Section IV-7 Transparency
- Section IV-8 Zoning
- Section IV-9 Compartmentalisation

<p>IV-1 Preparation of legislation and regulations, and implementation of regulations</p> <p>The authority and capability of the VS to actively participate in the preparation of national legislation and regulations, and to implement animal health and food safety regulations for animals, animal products and processes under their mandate.</p>	Levels of advancement
	1. The VS have neither the authority nor the capability to participate in the preparation of national legislation and regulations, and implement resultant regulations.
	2. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, but cannot implement resultant regulations nationally.
	3. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, and to implement resultant regulations nationally.
	4. The VS consult their stakeholders in participating in the preparation of national legislation and regulations, and in implementing regulations to meet national needs.
	5. The VS consult their stakeholders in implementing regulations to meet international trade needs.

Results
<p>Strengths : VS had the opportunity to participate in the drafting of Act 13 of 2003 and will be involved in the preparation of regulations implementing this act The regulations required for implementing a certain act can be prepared by VS with the consultation of stakeholders and the approval of the Minister of Agriculture</p>
<p>Weaknesses : Political process for drafting and implementing regulations is slow and therefore new Act will not be quickly enforceable.</p>
<p>Supporting documentation (documents or photos):</p>
<p>Detailed findings during visit: Regulations are drafted by the VS, then sent for legal consultation, circulated for stakeholder comments, then “gazetted” (published), requiring only Minister of Agriculture. For a law, the same mechanism as for regulations is in place, however, a law must also meet the approval of parliament, and therefore the process is much longer. The latest example is an Animal Health Bill, which will be a law in the near future and which used Namibian technical experts to ensure compliance with SPS/OIE guidelines. Currently it is still missing regulations to support the implementation of the act.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :

IV-2 Stakeholder compliance with legislation and regulations⁶ The authority and capability of the VS to ensure that stakeholders are in compliance with animal health and food safety regulations under the VS mandate.	Levels of advancement
	1. The VS have no programme to ensure stakeholder compliance with relevant regulations.
	2. The VS implement a programme consisting of inspection and verification of compliance with regulations relating to animals and animal products, report instances of non-compliance, but generally do not take further action.
	3. If necessary, the VS impose appropriate penalties in instances of non-compliance.
	4. The VS work with stakeholders to minimise instances of non-compliance.
5. The VS carry out audits of their compliance programme.	

Results
Strengths : Active compliance with movement permits and questionnaire submission by farmers south of the VCF. Compliance with import/ export regulations and certificates is also enforced. Farmers not complying are removed from the list of certified establishments, and can no longer trade or move animals in or out of their premises. Farmer registration system is well managed by State Veterinary Offices and database is accessible at all points with a terminal.
Weaknesses : Not enough personnel to monitor and sanction violators
Supporting documentation (documents or photos):
Detailed findings during visit: During our visit there was an instance where a police officer abused his authority to traffic with game meat across a border post at the VCF, however, he was later apprehended and penalized. The event also appeared in the local newspaper.

Priorities/Recommendations
Short Term :
Medium / Long Term :
Increase the number of field personnel in order to better monitor compliance with regulations.

⁶ Legislation is the basis for sanitary measures, and includes all relevant laws, regulations and decrees, and associated technical processes and procedures.

<p>IV-3 International harmonisation</p> <p>The authority and capability of the VS to be active in the international harmonisation of regulations and <i>sanitary measures</i> and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate.</p>	Levels of advancement
	1. National legislation, regulations and <i>sanitary measures</i> under the mandate of the VS do not take account of international standards.
	2. The VS are aware of gaps, inconsistencies or non-conformities in national legislation, regulations and <i>sanitary measures</i> as compared to international standards, but do not have the capability or authority to rectify the problems.
	3. The VS monitor the establishment of new and revised international standards, and periodically review national legislation, regulations and <i>sanitary measures</i> with the aim of harmonising them, as appropriate, with international standards, but do not actively comment on the draft standards of relevant intergovernmental organisations.
	4. The VS are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations.
	5. The VS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards ⁷ , and use the standards to harmonise national legislation, regulations and <i>sanitary measures</i> .

Results
<p>Strengths :</p> <p>While not always adjusting national regulations to international standards, veterinary staff is well aware of current international standards</p>
<p>Weaknesses :</p> <p>Most regulations are driven by national needs and importer demands rather than by the commitment to comply with international standards</p>
<p>Supporting documentation (documents or photos):</p> <p>Directorate of Veterinary Services - Annual Report 2006 (p. 22)</p>
<p>Detailed findings during visit:</p> <p>There is a clear understanding of the international sanitary standards for trade, and there is a recognised concern about the inability to export to big markets in accordance with the OIE standards. However, there are no efforts regarding the harmonisation of Namibian regulations with the same international standards. Liberalization of import regulations would further overburden limited VS staff responsible for regulatory enforcements.</p>

⁷ A country could be active in international standard setting without actively pursuing national changes. The importance of this element is to promote national change.

Priorities/Recommendations
Short Term :
Medium / Long Term :
Encourage notification of any regulatory changes through the WTO-SPS contact point Encourage periodic review of national regulations and harmonization with international standards whenever possible

<p>IV-4 International certification⁸</p> <p>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.</p>	Levels of advancement
	1. The VS have neither the authority nor the capability to certify animals, animal products, services or processes.
	2. The VS have the authority to certify certain animals, animal products, services and processes, but are not always in compliance with the national legislation and regulations and international standards.
	3. The VS develop and carry out certification programmes for certain animals, animal products, services and processes under their mandate in compliance with international standards.
	4. The VS develop and carry out all relevant certification programmes for any animals, animal products, services and processes under their mandate in compliance with international standards.
5. The VS carry out audits of their certification programmes, in order to maintain national and international confidence in their system.	

Results
<p>Strengths : Certification for animal movement south of the VCF and the export certifications are well carried out</p>
<p>Weaknesses : No control or certification by VS of inspections at local and municipal abattoirs Animal movement in the zone north of the VCF are not as strictly enforced</p>
<p>Supporting documentation (documents or photos): Application for Veterinary Import Permit for Animals/ Animal Products into Namibia (Act 13, 1956) Application for Veterinary Import Permit for Importation of Cattle, Sheep and Goats into Namibia (Act 13, 1956) Movement of Animals/ Products and infectious things through veterinary cordon gates - To all Veterinary Staff Members and the General Public</p>
<p>Detailed findings during visit: Visits to State Veterinary Office and auction yard allowed for a detailed observation of the application, completion and enforcement of veterinary certification. Examination and enforcement of international certificates was also observed when visiting border post.</p>

Priorities/Recommendations

⁸ Certification procedures should be based on relevant OIE and Codex Alimentarius standards.

Short Term :

Medium / Long Term :

<p>IV-5 Equivalence and other types of sanitary agreements</p> <p>The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.</p>	Levels of advancement
	1. The VS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries.
	2. The VS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented.
	3. The VS have implemented equivalence and other types of sanitary agreements with trading partners on selected animals, animal products and processes.
	4. The VS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to animals, animal products and processes under their mandate.
5. The VS actively work with stakeholders and take account of developments in international standards, in pursuing equivalence and other types of sanitary agreements with trading partners.	

Results
<p>Strengths :</p> <p>Existing equivalence on movement of live animals (including game) and certain products between Botswana, South Africa and Namibia</p>
<p>Weaknesses :</p>
<p>Supporting documentation (documents or photos): The equivalence agreement between Namibia, Botswana and South Africa is published by the VS and distributed to border posts and stakeholders. It is immediately modified and distributed upon changes in the health status of one of the countries.</p>
<p>Detailed findings during visit:</p> <p>During the visit we witnessed the enforcement of the Namibia-Botswana-South Africa agreement which allows for a liberated flow of animal and animal products as long as the sanitary status for the three countries remains stable.</p>

Priorities/Recommendations
Short Term :
Medium / Long Term :

IV-6 Traceability The authority and capability of the VS to identify animals and animal products under their mandate and trace their history, location and distribution.	Levels of advancement
	1. The VS do not have the capability to identify animals or animal products.
	2. The VS can document the history of some animals and animal products.
	3. The VS have procedures in place to identify and trace selected animals and animal products as required for disease control and food safety purposes, in accordance with relevant international standards.
	4. The VS and their stakeholders have coordinated national procedures in place that can identify and trace animals and animal products as required for disease control and food safety purposes.
5. The VS, in cooperation with their stakeholders, carry out audits of their traceability procedures.	

Results
<p>Strengths : An effective traceability system in individual cattle and small ruminant lots south of the VCF through ear tags in cattle and movement permits (NamLITS) As a result of the Millennium Challenge Program the implementation and enforcement of such measures north of the VCF is soon to be initiated</p>
<p>Weaknesses : Traceability system is not fully implemented north of the VCF, yet No efforts on traceability of less important species (poultry and swine).</p>
<p>Supporting documentation (documents or photos): A guide to Livestock Traceability in Namibia Version 1.01 - March 2007 www.namlits.com</p>
<p>Detailed findings during visit: NamLITS: The Namibian livestock identification and traceability system (NamLITS) grew from a need to meet international market requirements and assure clients of the integrity of the national livestock and meat production system. Before the implementation of the current NamLITS system, Namibia had a movement permit system which allowed the movement of cloven hooved domestic livestock to be traced back to the herd of origin on a group basis. The current NamLITS system is computer based and allows for the individual identification of cattle and for the identification on a group basis for small ruminants. The system has been incorporated into the Farm Assured Namibian Meat (FAN Meat) scheme. The Meat Board of Namibia (MBN) is the coordinator of the FAN Meat Scheme; it assists in the management and coordination of the traceability system, which is enforced by the VS. The traceability system is based on three pillars: a) the Stock Brand system, which is used to allocate brand symbols to each livestock owner (owner identification code); b) the Ear Tag</p>

ordering system which allocates ear tag numbers to each bovine animal, it has two codes, the stock brand code of the owner and the serial number of the animal; and c) the traceability system per se, which is the NamLITS itself.

The ear tags can be visually read, but can also be scanned at establishments having the proper bar code readers. Owners must immediately report lost ear tags and request replacement. Animals cannot be moved if they have lost their ear tag.

The key drivers of the system are compliance with export markets, retaining the major export markets (EU, RSA), animal disease surveillance, protection of the national herd, and support for animal disease emergency preparedness. Additional uses of the system are the management of loans to farmers, linked to the identification system, and the collection of levies by the Meat Board.

The NamLITS system issues movement permits electronically through 33 VS offices around the country. Producers apply for paper permits, which are also recorded electronically on the NamLITS database by authorized VS staff. There are currently plans to allow farmers and auction houses to enter their own data into the system, as the export slaughterhouses do today. At the slaughterhouse the traceability goes from the animal to the carcass and from there to the individual package.

The funding for the implementation of this system comes from levies paid by farmers to the Meat Board. The cost of the private service contract agreement is of N\$ 80,000 per month, which only covers the cost of network support and internet connectivity. All other implementation costs are born by the VS budget.

Currently this system is only enforced within the FMD free zone. However, there are considerations for expanding this system throughout the northern part of the country, thanks to a Millennium Challenge program funded by the US. The legal basis for its enforcement is through the Animal Disease and Parasite Act. The distribution of ear tags is centrally controlled and each farmer has to order the tags through the Meat Board, which in turn orders each submission directly from the French manufacturer. This is something which appears to be complicated and not very cost effective. The cost of a double ear tag today is of N\$ 14, which is high, especially for farmers not directly benefiting from the export market.

All farms are registered and allowed to apply for movement permits and move animals from the farm as long as they are in compliance with the system. This means that farmers who have not returned their movement permits within the established period, or who have failed to submit the farm questionnaire will be delisted. These 'closed farms' will not be able to move animals until they recover their status with the VS. All cattle must wear an ear tag at 6 months of age, or when moved from the farm of origin, whichever occurs first.

The challenges of the system are its high operating cost, the timeliness in reporting, the chance for transcription errors, the need for technical field support, as well as legal framework, as well as inadequate extension and the necessary monitoring and evaluation.

Visit to a cattle auction at the Windhoek municipal grounds:

This was a very well managed facility within the city, used for livestock auctions and livestock shows. The auction was managed by AGRA, a Namibian cooperative.

The Auction was inspected by two AHT from the VS to make sure all animals complied with the proper movement permits and showed no signs of illness. A total of 690 cattle (mostly young steers) were auctioned in lots. The operation looked very well managed and the animals were

well identified and handled.

Priorities/Recommendations

Short Term :

Medium / Long Term :

MBN should consider more effective and less expensive mechanisms for individual farmers ordering the imported ear tags.

IV-7 Transparency The authority and capability of the VS to notify the OIE of their sanitary status and other relevant matters (and to notify the WTO SPS Committee where applicable), in accordance with established procedures.	Levels of advancement
	1. The VS do not notify.
	2. The VS occasionally notify.
	3. The VS notify in compliance with the procedures established by these organisations.
	4. The VS regularly inform stakeholders of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, and of changes in the regulations and sanitary status of other countries.
5. The VS, in cooperation with their stakeholders, carry out audits of their transparency procedures.	

Results
Strengths : Namibia has an excellent record of notification of terrestrial animal diseases to the OIE
Weaknesses : There is no evidence of regulatory notifications to WTO-SPS While a contact point has been identified, Namibia is not yet reporting aquatic animal diseases to the OIE
Supporting documentation (documents or photos): OIE WAHIS and Handystatus pages for Namibia at www.oie.int
Detailed findings during visit:

Priorities/Recommendations
Short Term : Establish a mechanism of collaboration with the Ministry of Fisheries in order to strengthen the link with the OIE on aquatic animal health
Medium / Long Term :

IV-8 Zoning The authority and capability of the VS to establish and maintain disease free zones, as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).	Levels of advancement
	1. The VS cannot establish disease free zones.
	2. As necessary, the VS can identify animal sub-populations with distinct health status suitable for zoning.
	3. The VS have implemented biosecurity measures that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	4. The VS collaborate with their stakeholders to define responsibilities and execute actions that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free zones and can gain recognition by trading partners that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Results
Strengths : In relation to FMD and CBPP well established and implemented zones, which have been recognized by the OIE
Weaknesses :
Supporting documentation (documents or photos): OIE recognition of FMD and CBPP status updated yearly
Detailed findings during visit: Visit of the impressive game and stock proof Veterinary Cordon Fence, which extends for 900 km, from nearly the Atlantic coast in the west to the Botswana border in the east, dividing the FMD buffer zone from surveillance and free zone. During the visit we also had an opportunity to examine a 27,000 hectares quarantine farm north of the VCF.

Priorities/Recommendations
Short Term :
Medium / Long Term :
Improve the animal health conditions in the FMD buffer and surveillance zones

<p>IV-9</p> <p>Compartmentalisation</p> <p>The authority and capability of the VS to establish and maintain disease free compartments as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).</p>	Levels of advancement
	1. The VS cannot establish disease free <i>compartments</i> .
	2. As necessary, the VS can identify animal sub-populations with a distinct health status suitable for compartmentalisation.
	3. The VS have implemented biosecurity measures that enable it to establish and maintain disease free <i>compartments</i> for selected animals and animal products, as necessary.
	4. The VS collaborate with their stakeholders to define responsibilities and execute actions that enable it to establish and maintain disease free <i>compartments</i> for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free <i>compartments</i> and can gain recognition by other countries that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Results
<p>Strengths :</p> <p>VS have taken a broad interpretation of the compartmentalisation concept when establishing and enforcing biosecurity measures in the quarantine farms</p> <p>Game farmers, having wildebeest, and neighbouring cattle farms are required by VS to build double game fences to prevent the transmission of Malignant Catarrhal Fever</p> <p>Pig farmers have implemented biosecurity measures (creating compartments) to protect their pigs from ticks and African Swine Fever</p>
Weaknesses :
Supporting documentation (documents or photos): Oshivelo Quarantine Farm - map
Detailed findings during visit: See point II.4 on “Detailed findings during visit”

Priorities/Recommendations
Short Term :
Medium / Long Term :
Continue to consider compartmentalisation as a complement to zoning, particularly for cases like protecting swine from ASF.

Results for Aquaculture and Fisheries

Due to the non-involvement of the Directorate of Veterinary Services in aquaculture and fisheries, this topic was not included in the Results of Chapter I to IV above, but is handled separately:

A meeting was held with the aquatic animal health contact point, Dr. Bronwen Currie, who came from Swakopmund to Windhoek to meet with us and the DVS. She had recently attended the OIE General Session, in May 2008, as well as a workshop on disease notification held by the OIE in Maputo. She was very enthusiastic about the OIE activities and was rapidly becoming familiar with OIE obligations. She indicated that she is soon to submit her first aquatic animal health report via the VS office to the OIE.

The aquaculture industry in Namibia is very recent, it started in 2003. In 2002 they received a consultancy from FAO identifying their needs and opportunities. Namibia is also in the process of developing an Aquaculture Act, currently being drafted. They are also drafting the proper regulations for trade in aquatic animals and products.

Currently Namibia does not have diagnostic capabilities for aquatic animal diseases, and Dr. Currie expressed an interest in submitting a proposal for a twinning exercise aimed at establishing basic diagnostic capabilities. Currently, the industry is using professional laboratories in RSA for support.

There are two distinctly different aquaculture industries in Namibia at the moment: The saltwater industry, which is strictly run by the private sector; and the freshwater industry which is heavily subsidized by the government.

The saltwater industry represents mainly oyster, abalone and mussel farmers. They are located in Luderitz, Walvis Bay and Sandwich Bay, the three major coastal urban areas in Namibia. They have an Aquaculture Association, aiming mainly at meeting export requirements through regulations.

The freshwater sector is concentrated in the north of the country; it has a big government support and it is aimed at providing diversity of agriculture production to the communal system farmers in the northern territories. The emphasis is on capacity building for tilapia and catfish farming intended for personal consumption and local marketing. A 75% of the total Ministry of Fisheries budget is being devoted to this initiative. This freshwater system is currently being threatened by Epizootic Ulcerative Syndrome (EUS), already detected in the Zambezi and the Okavango river system.

Supporting documentation (documents or photos):
Aquaculture Act GOVERNMENT GAZETTE
Aquaculture import export regulations1TC Bronwen
Aquaculture Policy, March 2001
Arthur namibia2002report
Gazetted Marine Resources Act, 2000
Licensing regulations Aq Act
Namibia Abstract
Namibia OIE June 08
REPORT ON EUS 2007-2008

Part IV: Conclusions

Namibia has very competent Veterinary Services characterized by extremely well trained professionals. Most veterinarians have advanced degrees and many from various institutions abroad. Unfortunately, the VS has too many vacant positions, mostly due to an insufficient number of professionals in the country and the fact that Namibia does not have its own veterinary school.

A potential problem in terms of sustainable professional staffing of the VS could be the eventual departure of several of their veterinarians with advanced degrees, as they are not Namibians; most of them are Zimbabweans, who might return to their own country once the political and economical situation has improved.

The VS have overcome in part the shortness of professionals by operating with a well trained cadre of para-veterinarians in the form of Animal Health Technicians. They also have a strong in-house training program for Animal Health Workers.

While the resources available are not ample, the competency and creativity of the professionals is demonstrated through their innovation and constant search for application of state of the art technology in their work. An example of this creativity was observed in the application of electronic pens, connected to mobile phones, for the entry of animal disease data directly from the field into the central animal health database.

Namibia has established a robust animal identification and traceability system, which is mandatory in the FMD surveillance and FMD free zone (south of the Veterinary Cordon Fence. The system has been established in close partnership with the private sector (Meat Board of Namibia). All cattle over 6 months of age need to be identified with individual ear tags and the recording of all animal movements is mandatory and monitored through a well enforced permit system. The traceability system also covers small ruminants, but these are identified as lots and not individuals.

The traceability system has allowed the VS to conduct important surveys and to be able to do trace backs in case emergency issues should arise. If the existing professional vacancies are eventually filled within the VS, the headquarters staff would be able to conduct better surveys, as well as risk analyses using NamLITS data. Unfortunately, this traceability system is still not operational in the region north of the Veterinary Cordon Fence, although there are plans to begin its implementation this coming year.

There is a strong partnership between the VS and the private sector, particularly the export sector (Meat Board of Namibia and the Namibia Agriculture Union). These organizations have strongly supported the work of the VS in terms of supporting the need for resources required for the safety guarantees for the export of meat to high demanding markets, such as the European Union and South Africa. However, these organizations have not greatly contributed to solving the much dissimilar governance system between the north and the south of the country. The initiatives promoted by the MBN and the NAU are primarily those aimed at facilitating and improving the export conditions from the FMD free zone, and to a lesser degree, at improving the overall governance of the VS throughout the country.

The enforcement of the traceability system is weaker north of the Veterinary Cordon Fence, and so is the professional staffing level and laboratory support.

Driven by pressures from importing private standards, and not necessarily importing country import regulations, the MBN has persuaded the VS to conduct expensive testing of brains at slaughter for BSE. With the current level of testing, Namibia will not be able to meet the requirements for having its BSE risk status categorized by the OIE. Even if this BSE status were to be re-categorized by the OIE, Namibia would still not be able to reduce the requirements for export of meat due to the lack of FMD free recognition by importing countries.

It is recommended that the VS consider a stronger partnership with private veterinarians as they are a valuable source of information on animal diseases of importance, as well as the potential first point for detection of emerging diseases. In a country where the number of veterinarians is so limited, every effort should be made to maximize the contribution for the very few. An accreditation program, accompanied by appropriate training of private veterinarians should be considered by the VS.

infectious diseases and the threat of a potential pandemic form of avian influenza have reminded the international community of the importance of a close collaboration between Ministries of Health and Agriculture. However, there was no apparent evidence of such a link between these two ministries in Namibia.

The differences in the existing procedures for meat inspection between export abattoirs and those destined for local markets were of concern. The export abattoirs have a full staff from VS conducting ante and post-mortem inspections addressing animal health as well as public health matters, in accordance with high demands from the importing markets. However, there is no presence from VS personnel in the local abattoirs. The inspections at these establishments are conducted by health inspectors from either the Municipality or Ministry of Health and are limited to meat hygiene issues only.

The annual budget for VS operations appeared adequate. However, upon more detailed examination it demonstrated that shortfalls in vehicles and transportation expenses were being covered by salary lapse from the many unfilled vacant positions. The overall monthly distance allowances for vehicle use and the reimbursement amount for official use of private vehicles will need further examination.

The overall budget for the Central Veterinary Laboratory should also be examined. There is an adequate budget for salaries, although not fully staffed. However, there is a shortfall for maintenance and service contracts. The fact that revenues from services rendered must be returned to Treasury creates a shortfall in reagents and supplies. The more and better services are rendered by the laboratory, the greater the expense in reagents and supplies.

While the current zoning applied for freedom from FMD and CBPP is adequate to meet international market requirements, the VS of Namibia should re-examine their current policies to minimize the differences in governance between the two sides of the Veterinary Cordon Fence. The Fence does serve its purpose and has demonstrated through time to provide the guarantees for maintenance of FMD freedom and safe trading. However, resources should be identified to improve the governance of VS north of the Cordon Fence.

Appendix 1: List of personnel interviewed and locations visited or type of meeting conducted

Forename and Name	Position	Institution	Meeting(s)/ visits	Date
Alexander Toto	State Veterinarian, NAMLITS	DVS	Opening meeting	11/08/ 2008
Anne-Laure Hager	Veterinarian Diagnostician	CVL	Opening meeting	11/08/ 2008
Annatjie du Preez	Commodities Assistant	NAU	Opening meeting	11/08/ 2008
Anna Marais	Chief Veterinarian, Registrar of Veterinary Council	DVS	Opening meeting	11/08/ 2008
Rosa-Stella Mbulu	Veterinary Diagnostician	CVL	Opening meeting	11/08/ 2008
Julia Ipawa Shimwino	Veterinary Diagnostician	CVL	Opening meeting	11/08/ 2008
Georgina Tjipura-Zaire	Veterinary Diagnostician	CVL	Opening meeting	11/08/ 2008
Renatus P. Shilangale	Veterinary Diagnostician	CVL	Opening meeting	11/08/ 2008
Frans Joubert	Acting CVO	DVS	Opening meeting	11/08/ 2008
Paul Strydom	General Manager	Meat Board	Opening meeting	11/08/ 2008
Susanne Thalwitzer	Consultant FAN-Meat	Meat Board	Opening meeting	11/08/ 2008
Udo Riedel	Representative Manager IT	Abattoir Association of Namibia, MEATCO	Opening meeting	11/08/ 2008
Tina Musilika-Shilongo	State Veterinarian	DVS	Opening meeting	11/08/ 2008
Ermelinda Tijmune	Veterinary Training Technician	DVS	Opening meeting	11/08/ 2008
Jessey A. Kamwi	Chef Veterinarian, Veterinary Public Health	DVS	Opening meeting	11/08/ 2008
Ketchophilwe C. Dihawa	Specialist Veterinary Public Health	DVS	Opening meeting	11/08/ 2008

Forename and Name	Position	Institution	Meeting(s)/ visits	Date
Cleopas Bamhare	Deputy CVO	DVS	Opening meeting	11/08/2008
Gilbert Mutenda	Chief Control Officer	DVS	Meeting about finances	12/08/2008
Julia Ipawa Shimwineo	Veterinary Diagnostician	CVL	CVL meeting	12/08/2008
Rosa-Stella Mbulu	Veterinary Diagnostician	CVL	CVL meeting	12/08/2008
Renatus P. Shilangale	Veterinary Diagnostician	CVL	CVL meeting	12/08/2008
Roderick M. Haraseb	Quality Manager	CVL	CVL meeting	12/08/2008
Gisela Eberle	Veterinary Diagnostician	CVL	CVL meeting	12/08/2008
Anne-Laure Hager	Veterinary Diagnostician	CVL	CVL meeting	12/08/2008
Frans Joubert	Acting CVO	DVS	CVL meeting	12/08/2008
Albertina Shilongo	Import Control Veterinary Officer	DVS	Visit to Import Control Office	13/08/2008
Cleopas Bamhare	Deputy CVO	DVS	Visit to Import Control Office	13/08/2008
Anna Marais	Chief Veterinarian	State Veterinary Services Windhoek	Visit to State Veterinary Office Windhoek	13/08/2008
Bernd Neumann	Chief Animal Health Technician	State Veterinary Services Windhoek	Visit to State Veterinary Office Windhoek	13/08/2008
Jonas Shihungileni	Animal Health Technician	State Veterinary Services Windhoek	Visit to State Veterinary Office Windhoek	13/08/2008
Laurens Tenda	Clerical Assistant	State Veterinary Services Windhoek	Visit to State Veterinary Office Windhoek	13/08/2008
Alexander Toto	State Veterinarian, NAMLITS	DVS	Meeting on traceability	13/08/2008
Angelo Glaeser	Data Base Technician	Meat Board	Meeting on traceability	13/08/2008

Forename and Name	Position	Institution	Meeting(s)/ visits	Date
Cleopas Bamhare	Deputy CVO	DVS	Meeting with MBN	11/08/2008
Paul Strydom	General Manager	Meat Board	Meeting with MBN	13/08/2008
Susanne Thalwitzer	Consultant FAN-Meat	Meat Board	Meeting with MBN	13/08/2008
Cleopas Bamhare	Deputy CVO	DVS	Meeting with MBN	13/08/2008
Frans Joubert	Acting CVO	DVS	Meeting with MBN	13/08/2008
Albertina Shilongo	Import Control Veterinary Officer	DVS	Visit to Trans Kalahari Border Post	14/08/2008
Frans Joubert	Acting CVO	DVS	Visit to Trans Kalahari Border Post	14/08/2008
Naftali Kambungu	Border Post technician	DVS-Transkalahari Border Post	Visit to Trans Kalahari Border Post	14/08/2008
Jessey A. Kamwi	Chief Veterinarian, Veterinary Public Health	DVS	Visit to local slaughterhouse in Gobabis	14/08/2008
Cornelia Kandetu	Environmental Health Assistant or Environmental Health Inspector	Ministry of Health	Visit to local slaughterhouse in Gobabis	14/08/2008
Omega Aochab	Municipal worker	Municipality of Gobabis	Visit to local slaughterhouse in Gobabis	15/08/2008
Faan Conradie	Senior Manager: Factories	MEATCO	Visit to export slaughterhouse in Okahandja	15/08/2008
Gert Olivier	Plant Manager	MEATCO	Visit to export slaughterhouse in Okahandja	15/08/2008
Abel Kationdorotu	Veterinary Hygiene Inspector	DVS	Visit to export slaughterhouse in Okahandja	15/08/2008
Selina P.N. Shipepe	Veterinary Hygiene Inspector	DVS	Visit to export slaughterhouse in Okahandja	15/08/2008

Forename and Name	Position	Institution	Meeting(s)/visits	Date
Heinis Isaac	Slaughterhouse Veterinarian	DVS	Visit to export slaughterhouse in Okahandja	15/08/2008
Z.C. Zamuel	Quality Assurance Manager	MEATCO	Visit to export slaughterhouse in Okahandja	15/08/2008
Jessey A. Kamwi	Chef Veterinarian, Veterinary Public Health	DVS	Visit to export slaughterhouse in Okahandja	15/08/2008
Christine Marais	Chief Technician	DVS	Meeting with Epidemiology Division	15/08/2008
Maria Christiaan	Data Typist	DVS	Meeting with Epidemiology Division	15/08/2008
Cleopas Bamhare	Deputy CVO	DVS	Meeting with Epidemiology Division	15/08/2008
Alec Bishi	Veterinary Epidemiologist	DVS	Meeting with Epidemiology Division	15/08/2008
Natangwe Amuthenu	Veterinary Surgeon	DVS	Meeting with Epidemiology Division	15/08/2008
Ermelinda Tijmune	Veterinary Training Technician	DVS	Meeting with Epidemiology Division	17/08/2008
Dr. Hartmann	Veterinary Surgeon	Private Practitioner	Visit to a private veterinarian in Otjiwarongo	18/08/2008
Alaster Samkange	Chief Veterinarian	DVS	Visit to a communal and a commercial farm, Veterinary Cordon Fence, Quranteen Station	18/08/2008
Shylock Siyoka	Chief Animal Health Technician	DVS	Visit to a communal farm	18/08/2008

Forename and Name	Position	Institution	Meeting(s)/ visits	Date
John Williams	Chief Animal Health Technician	DVS	Visit to a communal and a commercial farm, Veterinary Cordon Fence, Quarantine Farm	18/08/2008
Frank ?	Animal Health Technician	DVS	Visit to the Oshivella Quarantine Farm	18/08/2008
Mrs. Shahali	Farmer	Owner of a communal farm	Visit to a communal farm	18/08/2008
Gert Sachse	Farmer	Owner of a commercial farm	Visit to a commercial farm	20/08/2008
Rosa Katjivena	Group QA Manager	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Lorna Kuvare	QA Magager	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Jannie Breytenbach	Windhoek Plant NCA Magager	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Zelda Muulaua	QA Administrator	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Ndelitungab Nghinanundara	Chief Veterinary Hygiene Inspector	DVS	Visit to export slaughterhouse in Windhoek	20/08/2008
Anton Hölbling	Plant Engineer	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Frank Grock	Veterinary Health Inspector	DVS	Visit to export slaughterhouse in Windhoek	20/08/2008
Hannes Kannemayer	Production	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
K.C. Dihawa	VPH Specialist	DVS	Visit to export slaughterhouse in Windhoek	20/08/2008

Forename and Name	Position	Institution	Meeting(s)/visits	Date
Pulé Katamana	Operations Manager	MEATCO	Visit to export slaughterhouse in Windhoek	20/08/2008
Kahijoro Kahuure	Permanent Secretary	Ministry of Health	Visit to the Ministry of Health	20/08/2008
Harald Marggraff	Manager of Commodities	NAU	Visit to NAU	20/08/2008
Raimar von Hase	President	NAU	Visit to NAU	20/08/2008
Brownwen Currie	Chief Biologist	Ministry of Fisheries and Marine Resources, Contact point to OIE	Meeting with Ministry of Fisheries	21/08/2008
Mr. Louw	Municipal Health Inspector	Municipality of Windhoek	Visit to two local slaughterhouses	21/08/2008
Bernd Neumann	Chief Animal Health Technician	State Veterinary Services Windhoek	Visit to cattle auction	21/08/2008
Jonas Shihungaleri	Animal Health Technician	State Veterinary Services Windhoek	Visit to cattle auction	21/08/2008
Cleopas Bamhare	Deputy CVO	DVS	Debriefing	21/08/2008
Georgina Tjipura-Zaire	Veterinary Diagnostician	CVL	Debriefing	21/08/2008
Anna Marais	Chef Veterinarian, Central Namibia	DVS	Debriefing	21/08/2008
K.C. Dihawa	Specialist Veterinary Public Health	DVS	Debriefing	21/08/2008
Jessey A. Kamwi	Chief Veterinarian, Veterinary Public Health	DVS	Debriefing	21/08/2008
Alex Bishi	Veterinary Epidemiologist	DVS	Debriefing	21/08/2008
Alexander Toto	State Veterinarian, NAMLITS	DVS	Debriefing	21/08/2008

Appendix 2: List of documents collected electronically or in paper

Name of document (in alphabetic order)	Type of document	Electronic (E) or paper (P) version
A guide to Livestock Traceability in Namibia Version 1.01 - March 2007	Guide	P
An Example of an Abattoir's Validation in Namibia - June 2008	Report	P
An Example of Validation in the North Region of Namibia - June 2008 - Vet Services Office	Report	P
Animal Health Technicians' Protocol for Routine Farm Inspections	Protocol	P
Annex 4-Annual Report Namibia 2006	Report	E
Application for Veterinary Import Permit for Animals/ Animal Products into Namibia (Act 13, 1956)	Document	P
Application for Veterinary Import Permit for Importation of Cattle, Sheep and Goats into Namibia (Act 13, 1956)	Document	P
Aquaculture Act GOVERNMENT GAZETTE	Legislation	E
Aquaculture import export regulations1TC Bronwen	Legislation	E
Aquaculture Policy, March 2001	Policy	E
Arthur namibia2002report	TCP Project Draft	E
CIA World Factbook – Namibia August 7 2008	Data	E
Clinical examination	Training Material	P
Collection of samples for specialized techniques	Training Material	P
Contingency Plan AI and Pandemic Flu Sept 07	Contingency Plan	E
Directorate of Veterinary Services - Annual Report 2005	Report	P
Directorate of Veterinary Services - Annual Report 2006	Report	E
Directorate of Veterinary Services - Available Databases	Data	P
Disease Report Form - TC.3937.FAO.TAD.002 V 2.00	Document	P
Duties of Chief Veterinary Technician - Epidemiology Section	Post description	P

Name of document (in alphabetic order)	Type of document	Electronic (E) or paper (P) version
DVS - Animal Health Declaration - Guidance Notes Version 1.0 February 2008	Guide	P
DVS - Animal Health Declaration - Official animal health declaration for all livestock farmers	Document	P
DVS - Contingency Plan for Bovine Spongiform Encephalopathy - February 2006	Contingency Plan	P
DVS - Contingency Plan for Foot and Mouth Disease - February 2008	Contingency Plan	P
DVS - Disease Listing and Notes - July 2008	Report	P
DVS - Disease Report Forms - capital press 00-2442	Document	P
DVS - Herd Health Form, Detail for Specimen(s):-Laboratory - print press	Document	P
DVS - National Summary Report June 2008	Report	P
DVS: Post Profile - Chief Veterinarian (Epidemiology)	Post description	P
DVS: Post Profile - Deputy Chief Veterinary Officer	Post description	P
DVS: Post Profile - Senior Technical Assistant (Epidemiology)	Post description	P
DVS: Post Profile - Systems Administrator (Control Veterinary Technician) Epidemiology	Post description	P
DVS: Post Profile - Veterinarian (Import/Export Control)	Post description	P
DVS: Post Profile - Veterinary Epidemiologist	Post description	P
DVS: Post Profile - Veterinary Specialist. Veterinary Epidemiologist	Post description	P
Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, No 36 of 1947 as amended	Legislation	E
Gazetted Marine Resources Act, 2000	Legislation	E
Handbook for Meat Examiners, Course in Meat Hygiene and Meat Inspection	Training Material	P
IMPORTS OF LIVESTOCK AND MEAT PRODUCTS	Data	E
Letter to Abattoir State Veterinarians on Training Program for Public Veterinary Hygiene Inspector Assistants at Tsumis Park, Namibia, from 04 February 2008 to 29 February 2008.	Letter	P
Licensing regulations Aq Act	Legislation	E
List of DRF Codes	Data	P

Name of document (in alphabetic order)	Type of document	Electronic (E) or paper (P) version
MEATCO News, Volume 29, Number 14, July 2008	Journal	P
Ministry of Agriculture, Water and Forestry - Press Release 31 July 2008: Suspected Foot and Mouth Disease Outbreak at Kamutjonga village in Mukwe Constituency Kavango Region	Press release	P
Ministry of Agriculture, Water and Rural Development - Basic Veterinary Manual for Communal Livestock Farmers of Namibia	Manual	P
Movement of Animals and Products through the VCF	Photo	E
Movement of Animals/ Products and infectious things through veterinary cordon gates - To all Veterinary Staff Members and the General Public	Information brochure	P
Namibia Abstract	Presentation	E
Namibia Agricultural Union - The mouthpiece of organised agriculture in Namibia	Information brochure	P
Namibia OIE June 08	Presentation	E
Namibian Meat - Sense the taste	Journal	P
NASSP - Training Manual of Community Animal Health Agents - September 2006	Training Material	P
National Contingency Plan for Avian & Pandemic Influenza - September 2007	Contingency Plan	P
Necropsy: post-mortem examination	Training Material	P
Oshivelo Quarantine Farm - map	Photo	E
Post Profiles of DVS positions	Reports	E
Press Release	Press release	E
Press Release2	Press release	E
Professionals at DVS with post grad degrees	Report	E
PVS CVL updated 25 Jul 2008 version	Report	E
PVS Evaluation of VS - NAMIBIA Aug 2008	Report	E
PVS presentation CVL 12 Aug 2008	Presentation	E
Quarterly Report Jan-Mar 2008	Report	E
Recommendations 2006 Report to DVS by AGRIVET	Report	E
REPORT ON EUS 2007-2008	Report	E
Restructuring DVS 2008	Report	E
Risk Analysis Caprivi region of Namibia Final2	Report	E
Role and Functions of the Meat Board of Namibia	Information brochure	P

Name of document (in alphabetic order)	Type of document	Electronic (E) or paper (P) version
Summary for report FMD 29_08_08	Outbreak Report	E
Surveillance Model Draft Sep_08	Surveillance Draft	E
Surveillance Narrative	Narrative	E
Surveillance of sheep scab	Training Material	P
Surveillance protocol for anthrax	Training Material	P
Surveillance protocol for CBPP	Protocol	P
SVS - Quarterly Report Jan-Mar 2008	Report	P
The Namibian Epidemiology and Animal Health Information System	Narrative	E
Tracking Down - From Assured Namibian Meat - Introducing Namibia's red meat industry	Information brochure	P
Training Budget for DVS 2008/2009	Budget	P
University of Namibia, Faculty of Agric and Nat Resources, Yearbooks 2007 and 2008	Course curriculum for Animal Health Technicians	P
University of Pretoria - Continuing Education - Advanced Level	Course announcement	P
University of Pretoria - Continuing Education - Technical Level	Course announcement	P
Vehicle Needs Assessment for the Directorate of Veterinary Services - June 2008	Data	P
Vet News Namibia Vol.5 Issue 2: April-June 2008	Journal	P
Veterinary Council of Namibia 2008 - Information Brochure	Information brochure	P
Veterinary Information System for Namibia - Figure 1	Data	P