

Annex A

SandraDAC

From: Caesar H. Lubaba <caesar.lubaba@googlemail.com>
Sent: 22 September 2014 05:12 PM
To: SandraDAC
Cc: 'Caesar H. Lubaba'; 'Joseph Mubanga'; Mpho.Maja
Subject: Zambia - Veterinary Services and Disease Control Questionnaire
Attachments: 2013 Annual Report - CP.pdf; Animal Health Act.pdf; FMD pre_post_survey plan.pdf; Staff returns-districts August 2014 (2).xlsx; DVS Organogram.pdf; Signature Page.pdf; Zambian Veterinary Services questionnaire for Sables answered.pdf; DVS Annual report 2013 Final.pdf

Dear Ms Sandra Da Camara,

Please receive the answered questionnaire on the Zambian Veterinary Services and accompanying documents.

Kind Regards,

Caesar H. Lubaba

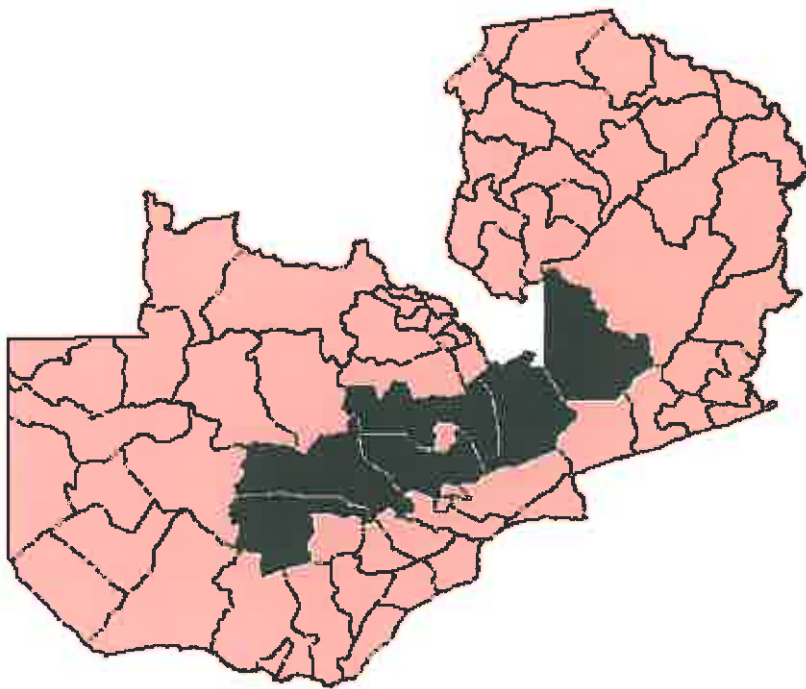
Principal Epidemiologist

Department of Veterinary Services



REPUBLIC OF ZAMBIA

**MINISTRY OF AGRICULTURE AND LIVESTOCK
DEPARTMENT OF VETERINARY SERVICES**



**2013
ANNUAL REPORT
CENTRAL PROVINCE**

Prepared by:

Gilbert NGULUBE
Provincial Epidemiology & Information Centre
(PEIC)
For/Provincial Veterinary Officer – Central Province

DISTRIBUTION LIST

1. The Permanent Secretary, OPPA, Central Province, **Kabwe**
2. The Director, Veterinary Services – **Lusaka**
3. The Deputy Director, Epidemiology and Research– **Lusaka**
4. The Chief Veterinary Officer - **Lusaka**
5. The Chief Veterinary Research Officer, C.V.R.I.- **Lusaka**
6. The Provincial Agricultural Coordinator – **Kabwe**
7. The Provincial Veterinary Officer– **Kabwe**
8. The District Veterinary Officer – **Chibombo**
9. The District Veterinary Officer - **Kabwe**
10. The District Veterinary Officer – **Kapiri Mposhi**
11. The District Veterinary Officer - **Mkushi**
12. The District Veterinary Officer - **Mumbwa**
13. The District Veterinary Officer – **Serenje**
14. The District Veterinary Officer – **Itezhi-tezhi**

EXECUTIVE SUMMARY

The year under review saw the successful implementation of both phases of Foot and Mouth Disease (FMD) vaccinations in Itezhi-tezhi and Mumbwa districts respectively. A total of 163,360 cattle were vaccinated in the first round of the vaccinations in both districts. Of these vaccinates Itezhi-tezhi accounted for 85,571 (52.4%) while Mumbwa accounted for 77,789 (47.6%).

In the second round of FMD vaccinations which were carried out in the fourth quarter, Itezhi-tezhi vaccinated 80,919 cattle while Mumbwa vaccinated 79,812 cattle. All in all a total of 160,731 cattle had been vaccinated by the time of reporting. There was an overall total decrease of 2,629 vaccinates from the first round vaccinations. The exercise was funded by the Livestock Development and Animal Health project for the second round vaccination operations while GRZ bought the vaccine.

Tick-borne diseases continued to wreak havoc among the cattle population with Theileriosis accounting for 53.6% of the cases recorded and 57.1% of the recorded mortalities in 2013. There were 3,569 ECF cases and 1,267 mortalities reported during 2013. There were 3,545 cases reported in 2011 compared to 3,445 reported in 2012 with corresponding deaths totalling 1,393 in 2011 and 1,131 in 2012.

Most Capital projects planned for by the department which included dip tanks were not fully achieved due to a lot of red tape in the procurement procedures and a lack of proper instructions on tender procedures by higher authorities. There were also delays in preparation of Bill of Quantities (BOQs) by relevant institutions. The same was the case with camp house construction and rehabilitation. However, the department made progress on the construction of a check-point in Mumbwa district at Nalusanga as well as a dip tank in the same area.

As a matter of public health rabies campaigns and vaccinations were also carried out as well as testing for Brucellosis and Tuberculosis.

Compared to the previous years (i.e. 2011 and 2012) the department recorded an increase in revenue from Kwacha Eleven Thousand Eight Hundred (K 11,800.00) and Kwacha Sixteen Thousand, One Hundred and Sixty Nine, Twenty Seven Ngwee (K16,169. 27) to Kwacha Sixteen Thousand Two Hundred and Nineteen One, Ninety One Ngwee (K16,291.91) by the end of the reporting period.

Several members of staff were recruited in various positions in the newly created districts of Chisamba, Chitambo, Luano and Ngabwe including Itezhi-tezhi.

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1.0 INTRODUCTION

This report covers activities and operations of the Central Province Department of Veterinary Services during the period January to December 2013.

The department in the province endeavoured to control diseases through treatments, vaccinations, movement controls, surveillance and encouraged farmers to practice appropriate animal husbandry methods. The department also carried out farmer trainings in disease prevention and control in various districts as a way of enhancing farmer/livestock owner knowledge in the fields in various diseases.

The department further monitored disease control activities of the private sector in the province as a way of enhancing government-private partnership interventions in increased livestock production and productivity.

2.0 BACKGROUND

The department is mandated to improve the productive efficiency of the livestock sector in a sustainable manner and facilitate the production and marketing of livestock products in an effort to improve the livelihood of farmers through income generation; assuring food safety for consumers; and promote trade in livestock and livestock products.

The guiding policies of the livestock sector as defined by the Sixth National Development Plan (SNDP) are to control livestock diseases of an epidemic nature and with Trans-boundary significance. Government has also emphasised on restocking, stocking and increased overall production, productivity and management of marketable livestock and livestock products especially in the traditional sector.

3.0 AGRICULTURAL CONDITIONS

3.1 Weather

During the period under review maximum and minimum temperatures were around 27°C and 7°C, while humidity was at 42% (least) and 82% (most humid).

3.2 Livestock Conditions

Livestock conditions were good during the first and second quarter becoming poor in the third quarter due to the continued scarcity of good grazing land. Pastures and harvest remains had mostly been destroyed by fires and had been grazed out by the end of the third quarter. However, with the start of the rain season in the fourth quarter conditions had started to improve as there was lush grass for cattle to graze on.

4.0 PLANNED ACTIVITIES AND ACHIEVEMENTS

4.1 Veterinary Services

Appendices 1 to 8 summarise information captured during activities in this programme.

Tick-borne diseases continued to wreak havoc among livestock as they remained prevalent among other diseases. The province recorded 3,569 Theileriosis cases with Kapiri Mposhi recording the highest at 1,048 cases. The fatality rate of all Theileriosis cases was 35.5%.

The province also recorded 1,141 cases of Trypanosomosis mostly from Itezhi-tezhi district.

A total of 692 cases of Lumpy Skin Disease (LSD) were recorded throughout the province with 8 resulting deaths.

The province also recorded 4,755 cases of Newcastle Disease (NCD) in traditional chickens with 3,494 resulting into deaths.

4.1.1 Clinical Services

Since most rural communities either failed to afford private veterinary charges or had no access to clinical services, the district offices continued to actively offer these as part of the fulfilment of the Sixth National Development Plan (SNDP) strategy of promoting primary health care. This was also done as a matter of public health concern.

4.1.2 Public Health

Refer to appendix 2 and 3.

A total of 1,668 persons were reported to have been victims of dog bites of whom 1,467 were referred to medical centres. Of these 1,280 received treatment. There was one suspected rabies human death recorded in Nalusanga camp of Mumbwa.

As part of the province's Tuberculosis control measures, a total of 343 dairy cattle were tested out of which 7 reacted positively and were subsequently culled.

Condemned offal and edible viscera amounted to 496kg, while 716.98kg of livers was condemned. One whole carcass weighing 200kg was condemned. Total worth of condemned organs and the carcass was not estimated.

4.1.3 Veterinary Research & Diagnostics

4.1.3.4 Laboratory diagnosis

Since the province lays in the Disease Free Zone (DFZ), there was need to upgrade the provincial laboratory in order to enable it handle samples to test for serological purposes other than the conventional tests it has been carrying out. Despite its status, the laboratory handled a total of 2,507 samples to diagnose for both scheduled and non-scheduled diseases. These samples were submitted to the laboratory by various districts though the laboratory itself collected some of the samples from the field when need arose. The provincial laboratory also submitted 52 samples of whole blood, lymph and blood smears to the Central Veterinary Research Institute (CVRI) for screening Theileriosis (ECF) and Foot and Mouth Disease (FMD) for the purpose of issuing stock movement permits to North-western Province. The laboratory also submitted 5 brain samples to the same institute for rabies screening. A total of 120 dairy and 4 traditional cattle were tested for Brucellosis out of which 3 of the traditional animals reacted to the Brucella Antigen Test. Of the total tested, 121 came out negative on Rose Bengal Plate Test (RBPT). Out of a total of 343 animals tested for bovine Tuberculosis using the Comparative Tuberculin Test (CCT) method, only 7 animals reacted to the bovine skin test used by the laboratory.

4.1.3.4.1 Scheduled diseases

Further, some of the samples that were handled by the laboratory included those to diagnose Theileria and Anaplasmosis. The total number of animals sampled for Theileriosis disease was 622 (six hundred and twenty two) out of which 179 (one hundred and seventy nine) samples came out positive for Theileriosis, while 443 came out negative.

Out of a total of 279 (two hundred and seventy nine) animals sampled and tested for Anaplasmosis, 91 were positive, while 188 came out negative.

For further information please refer to appendices 7a to 7c.

4.1.3.4.2 Unscheduled Diseases

Refer to appendix 8a to 8e.

4.1.4 Disease Control

Appendix 1a to 1b summarises disease control measures carried out during the period under review.

During the year under review, the department vaccinated a total of 12,923 dogs of the dog population.

The department also managed to vaccinate only 4,889 cattle against Lumpy Skin Disease (LSD).

Blackleg vaccinates amounted to 25,152 with Mumbwa district recording the highest at 17,157 while Kabwe district recorded the lowest at 35. Foot and Mouth Disease (FMD) vaccinates amounted to 160,731. FMD vaccinations were only carried out in Itezhi-tezhi and Mumbwa districts which are considered to be high risk areas due to their proximity to the Kafue River and the Kafue National Park. Itezhi-tezhi recorded 80,919 while Mumbwa recorded 79,812 vaccinates. The incidence for FMD remained at 0% as there were no outbreaks reported in the province since 2011.

A total of 122,272 chickens were reported to have been vaccinated against Newcastle Disease during the period under review in the traditional sector.

4.1.5 Disease Surveillance and Monitoring

Refer to Appendix 5a to 5e.

Disease surveillance and monitoring was mainly through passive surveillance and as such was used to estimate frequency measures. The assumption was that coverage was representative. However, the estimates were prone to biases arising largely from poor sensitivity and specificity of the surveillance system due to lack of laboratory diagnostic confirmation in most cases; reporting bias by farmers; lack of veterinary staff in certain veterinary camps; and large zone of camp operation. However, it was also assumed that potential biases had a non-differential distribution among districts such that the comparative quality of the data was preserved.

4.1.5.1 Tick-borne diseases (TBDs)

Appendix 5 describes the distribution of TBDs during the period under review. It was noted that TBDs accounted for 90.3% of mortalities among cattle in the province. There was an increase in TBDs cases from 4,921 in 2011 to 5,230 ending December 2012 and 5,483 in 2013. Chibombo, Kapiri Mposhi, and Mumbwa reported the highest incidences in that order. About 295,167 cattle in central province were determined to be at risk of at least one or more of the major tick-borne diseases during the year 2013.

4.1.5.2 Theileriosis

Graphs in appendix 5 describe the distribution of Theileriosis in Central Province during the period under review.

The province recorded a total of 3,569 cases attributed to Theileriosis during the period under review with 1,267 attributed mortalities. It accounted for 65.1% of the recorded cases and 63.7% of the attributed mortalities of TBDs respectively.

4.1.5.3 Trypanosomoses

The province recorded 1,141 cases of bovine Trypanosomoses during the period under review with Itezhi-tezhi district accounting for 88.4% of the reported cases. The incidence was determined to be 3.2% by the end of 2013 compared to 5.84% and 7.4% for 2011 and 2012 respectively.

4.1.6 Disease Control Extension

Disease control extension was centred on micro training of small scale farmers at dip-tanks and crush pen sites; stock movement controls; prevention and awareness on preventable diseases and sensitizing farmers about ectoparasite control.

5.0 MARKETING & INPUT SUPPLY

Refer to Appendices 6, 9 & 10 for the description of livestock exports from the traditional sector, input suppliers and related organisations.

6.0 HUMAN RESOURCE AND ADMINISTRATION

Details are as indicated in Appendices 12 – 16.

6.1 Meetings, Conferences and Workshops

- The Senior Livestock Production Officer (SLPO), Senior Tsetse Control Biologist (STCB) and District Veterinary Officers (DVO) for all districts attended the Livestock Development and Animal Health project launch at Misuku Lodge here in Kabwe in the first quarter. The SPLO is the project coordinator for the same for Central and Copperbelt provinces.
- During the second quarter, the Provincial Epidemiology and Information Centre (PEIC) was backstopped by a team from National Epidemiology and Information Centre

(NALEIC) to look at reporting levels and transmission of district reports. The team then proceeded to Kapiri Mposhi and Chibombo districts to look at their reporting constraints.

- The Provincial office was also visited by a team from CVRI who came to explain on the establishment of a web based support system to laboratory diagnosis.
- The Laboratory Technician attended a results based workshop on Monitoring and Evaluation organised under the Livestock Development and Animal Health Project held here in Kabwe.
- The Provincial Veterinary Officer (PVO) attended a Smallholder Agribusiness Promotion Programme (SAPP) workshop hosted under the Ministry of Agriculture and Livestock (MAL) on beef validation. The main purpose of the workshop was for sector stakeholders to provide technical feedback on a number of draft deliverables prepared for MAL by the SAPP Beef Service Provider. The workshop was held on 27th August 2013 at Southern Sun Ridgeway Hotel, Lusaka.
- The PVO also attended a 2014 Budget Preparation Workshop held at Gonde Lodge in Kabwe. The workshop had emphasis on Disease Control, Public Health and Regulation and Control.

6.2 Staff Position

Appendix 11 describes the staffing status in the province. More staff are required to fill vacant posts created by retirements, transfers, the creation of new districts and deaths.

6.3 Office accommodation

Departmental office structures required rehabilitation and expansion works particularly in Serenje and Itezhi-itezhi districts. All in all, most of the office and staff accommodation required renovation works. The province also has challenges of office accommodation for the newly established districts.

6.4 Staff accommodation

Staff accommodation continued to be a major problem in most camps as some camp officers had to stay in rented houses.

6.5 Staff Training

Medium and long term trainings were on-going during the period under review and are indicated in the Appendix 13.

6.6 Transport Situation

Most of the transport continued to be in good working condition except for those stationed in Itezhi-tezhi. However, the district received three motor bikes from headquarters which were just on time for the first round of Foot and Mouth Disease (FMD) vaccination. The list of vehicles that have been pooled is as indicated in Appendix 14.

6.7 Equipment and Furniture

See appendix 12 and 16.

7.0 FINANCIAL RESOURCES

7.1 Recurrent Departmental Charges (RDCs)

The year under review saw erratic and low funding to the budget for activities throughout the province. This was despite submitting funding profiles as requested by the Provincial Agricultural Coordinator's office through the Provincial Planner. The total budget release for operations for the Provincial office was 43.58% of the total budget which meant that most activities could not be undertaken and most especially backstopping and supervision of districts in order to monitor and evaluate their activities.

7.2 Capital Projects

Various districts received funds for capital projects like rehabilitation of dip tanks and camp houses, constructions included. However, most of the funds were still held up at headquarters/Ministry of Finance due to various reasons including late preparation of Bill of Quantities (BOQs), late submission of tender documents and lack of sensitisation on various tender procedures.

7.3 Poverty Reduction Programmes (PRP)

No funds were released for PRP projects during the period under review.

8.0 COMMENTS, CONSTRAINTS AND RECOMMENDATIONS

As has been reported above, late and inadequate funding hampered service delivery to the farmers throughout the period. This made making follow up visits on reports by the districts rather difficult. The districts equally went without funding for much of the first quarter resulting in lower disease follow-ups and hence reporting.

With very few structured disease surveys, the department has mainly relied on passive surveillance to capture disease data which involves Farmer Reporting Systems (FRS). It has been observed over time that this system is far from perfect due to:

- ❖ Farmers not recognizing some signs of disease
- ❖ Farmers being unwilling or uninterested to report disease incidents
- ❖ Failure of the reporting system to correctly diagnose disease and;
- ❖ Failure of reporting districts to quickly transmit reports.

A lack of enforcement of legislation (the Animal Health Act No. 27 Of 2010) to compel farmers to assemble livestock for programmes such as vaccinations and dipping has also impacted negatively on achieving low disease incidences and disease free zone status.

Further, a lack of staff in most veterinary camps had an impact on disease control and data capture, this was further worsened by poor housing for staff in camps and a lack of dipping infrastructure. A lack of housing in most camps meant that officers had to rent in the central camp of a particular district away from their camps.

The department also saw very little of backstopping by headquarters in order to provide adequate guidance on policy interpretation.

Poor release of approved funds for operation for the department and for project implementation (constructions and rehabilitations) equally affected meeting set out targets by the department and hence had a direct effect on implementation of strategic plans in the SNDP.

9.0 CONCLUSION

As reported above poor infrastructure and staff housing impacted negatively on the SNDP objectives and strategies. There is need to construct enough livestock handling facilities in all districts as well as constructing and rehabilitating staff houses and offices if the set goals in the SNDP are to be achieved. There is also need to upgrade the provincial laboratory so that it can handle serological diagnoses of major diseases unlike the current situation where samples have to be submitted to CVRI in Lusaka which has led in quality loss as well as time loss in addressing positive cases.

There is also need to enforce the Animal Health Act No. 27 of 2010 if the disease incidences are to be reduced to acceptable levels.

Monitoring and Evaluation by headquarters who are part of the Sector Advisory Groups (SAGs) will also be critical in achieving the MDGs as well as fulfilling the SNDP.

Proper training of farmers and staff; creation of Standard Operating Procedures (SOPs) for officers; recruitment of more staff; adherence to approved budgets and profiles; early release of project funds to spending agencies; adequate supervision and evaluation of operations will be the key determinants of the success of the department in achieving the visions outlined in the SNDP and Vision 2030.

Appendix 1a: Disease Control Measures

Disease	District	Control Measure	Species	Number
Anthrax	Mumbwa	Vaccination	Bovine	4111
Blackleg	Chibombo	Vaccination	Bovine	1995
	Itezhi-tezhi	vaccination	Bovine	5151
	Kabwe	Vaccination	Bovine	35
	Kapiri Mposhi	Vaccination	Bovine	639
	Mkushi	Vaccination	Bovine	175
	Mumbwa	Vaccination	Bovine	17157
Brucellosis	Kapiri Mposhi	Vaccination	Bovine	80
	Mumbwa	Vaccination	Bovine	6
	Itezhi-tezhi	vaccination	Bovine	6
Foot and Mouth	Itezhi-tezhi	Vaccination	Bovine	83457
	Mumbwa	Vaccination	Bovine	79853
Haemorrhagic Septicaemia	Itezhi-tezhi	vaccination	Bovine	5271
	Kabwe	Vaccination	Bovine	40
	Kapiri Mposhi	Vaccination	Bovine	120
	Mumbwa	Vaccination	Bovine	7666
Helminthiasis	Chibombo	De worming	Bovine	1846
	Chibombo	De worming	Caprine	211
	Chibombo	Deworming	Ovine	60
	Chibombo	De worming	Porcine	800
	Itezhi-tezhi	Deworming	Avian	1800
	Itezhi-tezhi	Deworming	Bovine	2051
	Itezhi-tezhi	Deworming	Caprine	468
	Kabwe	Deworming	Bovine	187
	Kabwe	Deworming	Canine	23
	Kabwe	Deworming	Caprine	64
	Kabwe	Deworming	Porcine	205
	Kapiri Mposhi	Deworming	Avian	500
	Kapiri Mposhi	Deworming	Bovine	1592
	Kapiri Mposhi	De-worming	Caprine	2470
	Kapiri Mposhi	Deworming	Ovine	250
	Kapiri Mposhi	Deworming	Porcine	367
	Mkushi	Deworming	Bovine	145
	Mumbwa	Deworming	Bovine	3876
	Mumbwa	Deworming	Caprine	1952
	Mumbwa	Deworming	Ovine	229
	Mumbwa	Deworming	Porcine	112
	Serenje	De-worming	Bovine	829
	Serenje	Spraying	Bovine	304
Serenje	Deworming	Canine	6	
Serenje	Deworming	Caprine	155	
Infectious Bursal	Itezhi-tezhi	Vaccination	Avian	3000
	Mkushi	Vaccination	Avian	4200
	Mumbwa	Vaccination	Avian	12600
Lumpy Skin	Kabwe	Vaccination	Bovine	3067
	Mkushi	Vaccination	Bovine	408
	Mumbwa	Vaccination	Bovine	1414
Newcastle	Chibombo	Vaccination	Avian	3395
	Itezhi-tezhi	Vaccination	Avian	7630
	Kabwe	Vaccination	Avian	1169
	Kapiri Mposhi	Vaccination	Avian	25296
	Mkushi	Vaccination	Avian	6338
	Mumbwa	Vaccination	Avian	77524
	Serenje	Vaccination	Avian	920

Appendix 1b: Disease Control Measures

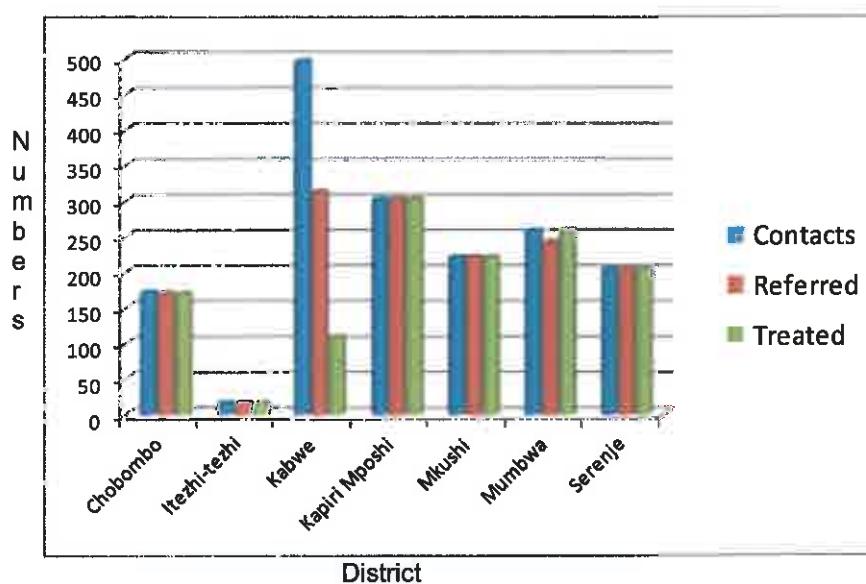
Disease	District	Control Measure	Species	Number
Parvovirus	Kabwe	Vaccination	Canine	11
Rabies	Chibombo	Vaccination	Canine	1166
	Itezhi-tezhi	Vaccination	Canine	329
	Kabwe	Vaccination	Canine	4160
	Kapiri Mposhi	Vaccination	Canine	3020
	Mkushi	Vaccination	Canine	1853
	Mumbwa	Vaccination	Canine	1566
	Serenje	Vaccination	Canine	829
TBDs	Chibombo	Spraying	Bovine	83990
	Chibombo	Dipping	Bovine	20974
	Itezhi-tezhi	Dipping	Bovine	2200
	Itezhi-tezhi	Spraying	Bovine	21
	Kabwe	Spraying	Bovine	159
	Kapiri Mposhi	Dipping	Bovine	10276
	Kapiri Mposhi	Spraying	Bovine	4780
	Mkushi	Dipping	Bovine	78199
Serenje	Spraying	Bovine	1126	
TBDs and Mange	Chibombo	Spraying	Caprine	2412
Trypanosomosis	Itezhi-tezhi	Inoculation	Bovine	968
	Mumbwa	Inoculation	Bovine	594

Appendix 2: Slaughter organ condemnations

Organ Condemned	District	Species	Weight (kg)	Pathology	Disease
Intestines	Itezhi-tezhi	Bovine	28	Worms	Helminthiasis
	Mkushi	Caprine	11	Worms	Helminthiasis
Kidneys	Mkushi	Bovine	1	Infarcts	Necrosis
	Mumbwa	Bovine	2	Worms	Helminthiasis
Liver	Chibombo	Bovine	39	Liver Flukes	Fascioliasis
	Chibombo	Caprine	8	Worms	Helminthiasis
	Chibombo	Ovine	5	Worms	Helminthiasis
	Itezhi-tezhi	Bovine	53	Liver Flukes	Fascioliasis
	Kabwe	Bovine	12	Haemorrhages	.
	Kabwe	Caprine	16	Worms	Helminthiasis
	Mkushi	Bovine	422.08	Liver Flukes	Fascioliasis
	Mkushi	Caprine	18	Worms	Helminthiasis
	Mkushi	Caprine	10	Worms	Taeniasis
	Mkushi	Caprine	3	Worms	Fascioliasis
	Mkushi	Caprine	5	Worms	Fibrosis
	Mumbwa	Bovine	38.8	Liver Flukes	Helminthiasis
	Mumbwa	Bovine	10	Liverflukes/congestion	Hepatomegaly
	Mumbwa	Bovine	6	Haemorrhagic	Hepatomegaly
	Mumbwa	Bovine	11	Liver Flukes	Hepatomegaly + Fasciolosis
Lungs	Serenje	Bovine	14	Liver Flukes	Fascioliasis
	Serenje	Bovine	46.1	Liverflukes	Helminthiasis
	Chibombo	Bovine	200	.	Emphysema
	Itezhi-tezhi	Bovine	65	Congestion	.
Rumen	Mkushi	Bovine	13	Congestion	.
	Mumbwa	Bovine	168.3	Congestion	Emphysema
	Kabwe	Bovine	5	Wire	.
Spleen	Mumbwa	Bovine	2.7	Inflammation	Spleenomegaly
Whole Carcass	Mumbwa	Bovine	200	Decomposition	.

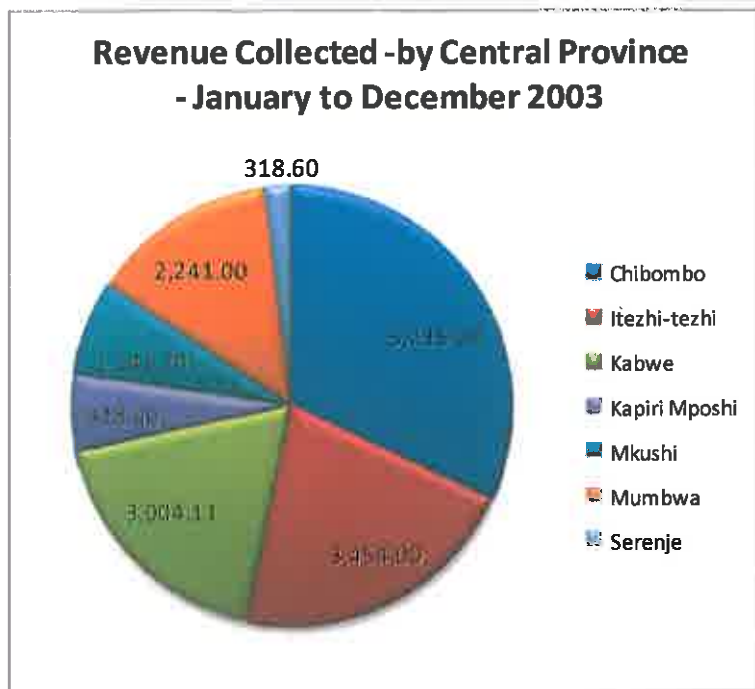
Appendix 3: Dog bites

District	Contacts	Referred	Treated	Rabies Human Deaths
Chobombo	171	170	170	0
Itezhi-tezhi	16	16	16	0
Kabwe	496	312	109	0
Kapiri Mposhi	302	302	302	0
Mkushi	221	221	221	0
Mumbwa	258	242	258	1
Serenje	204	204	204	0



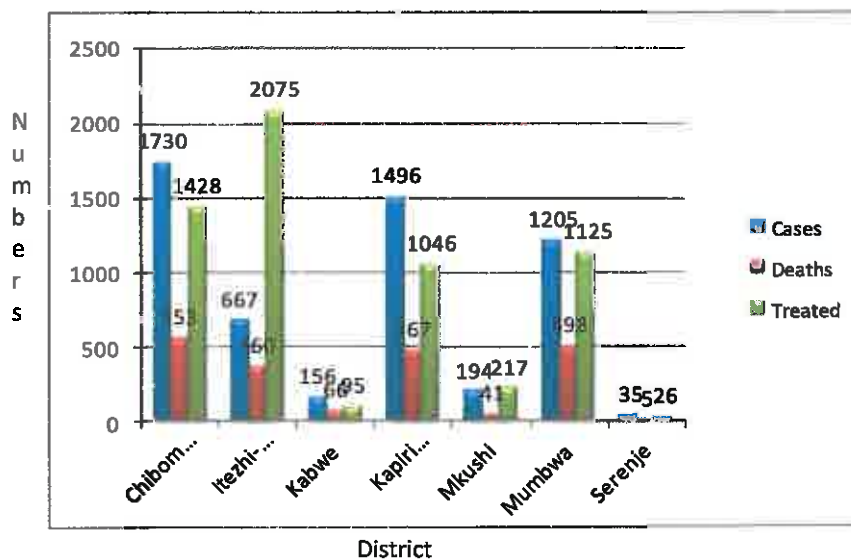
Appendix 4: Revenue collection

District	Source of Revenue	Amount (ZMK)
Chibombo	Stock Movement Permits	5,215.00
Itezhi-tezhi	Stock Movement Permits	3,454.00
Kabwe	Vaccinations, Stock Movement Permits & Lab.	3,004.11
Kapiri Mposhi	Stock Movement Permits	918.00
Mkushi	Stock Movement Permits	1,141.20
Mumbwa	Stock Movement Permits	2,241.00
Serenje	Stock Movement Permits	318.60

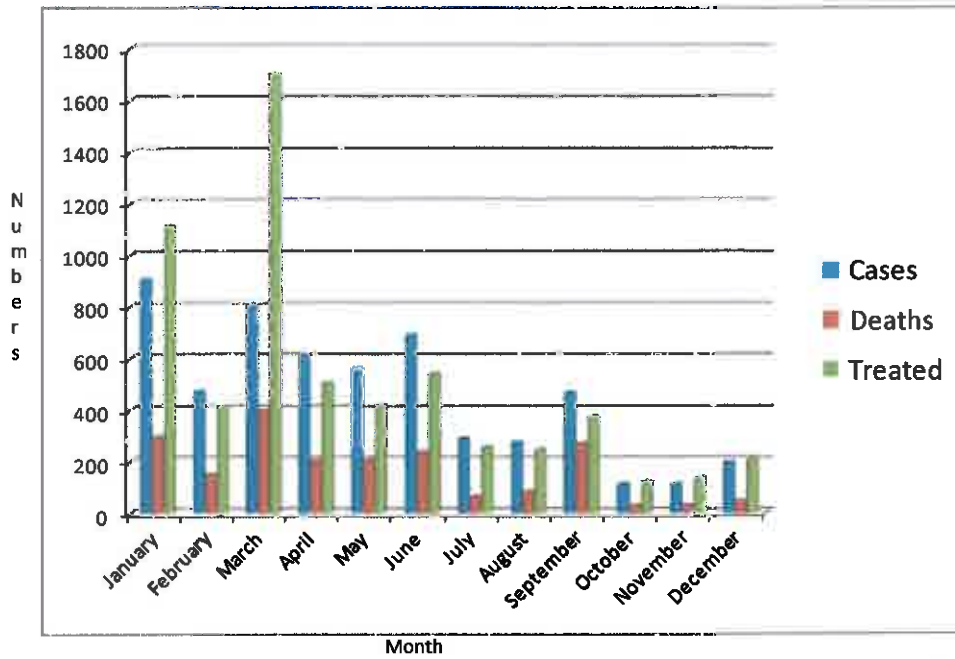


Appendix 5: Disease Frequency & Distribution

a) DISTRICT BOVINE TICK-BORNE (EFC, Cowdriosis, Anaplasmosis, Babesiosis)

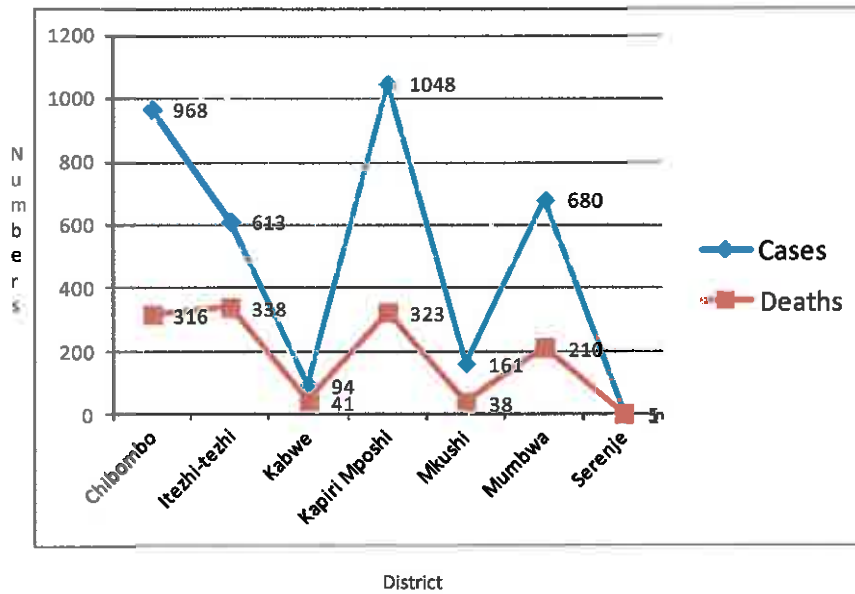


b) MONTHLY BOVINE TICK-BORNE DISEASES (EFC, Cowdriosis, Anaplasmosis, Babesiosis)

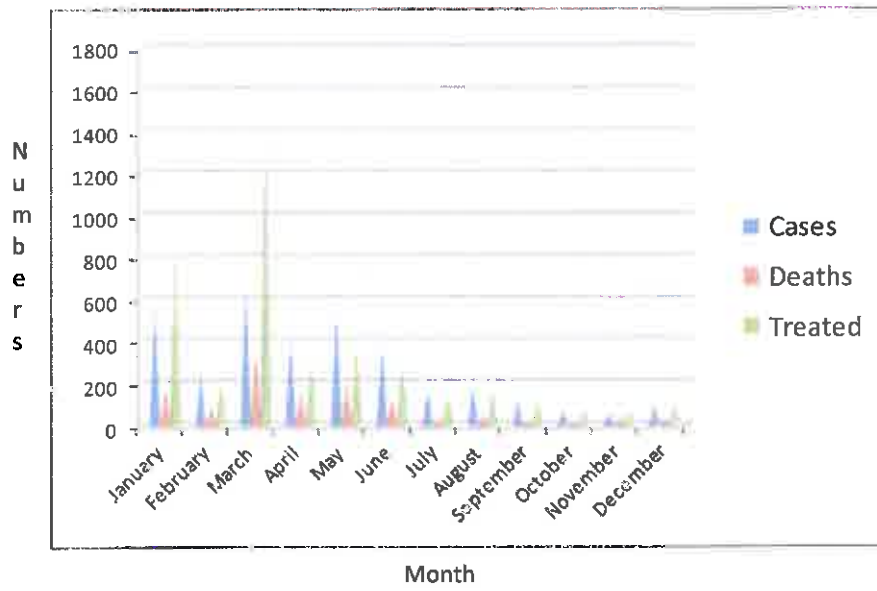


c) DISTRICT EFC FREQUENCY

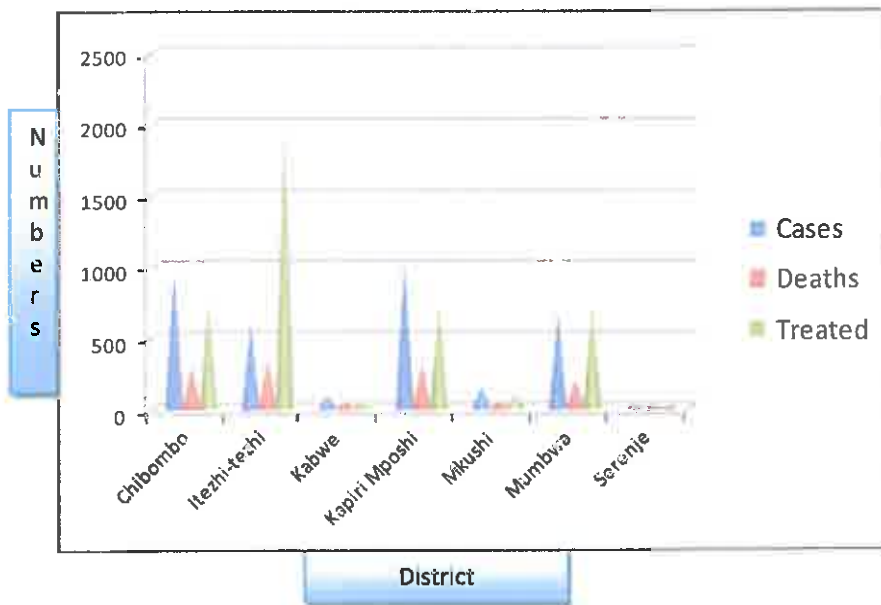
i. ECF: District distribution of case fatality and mortality rates



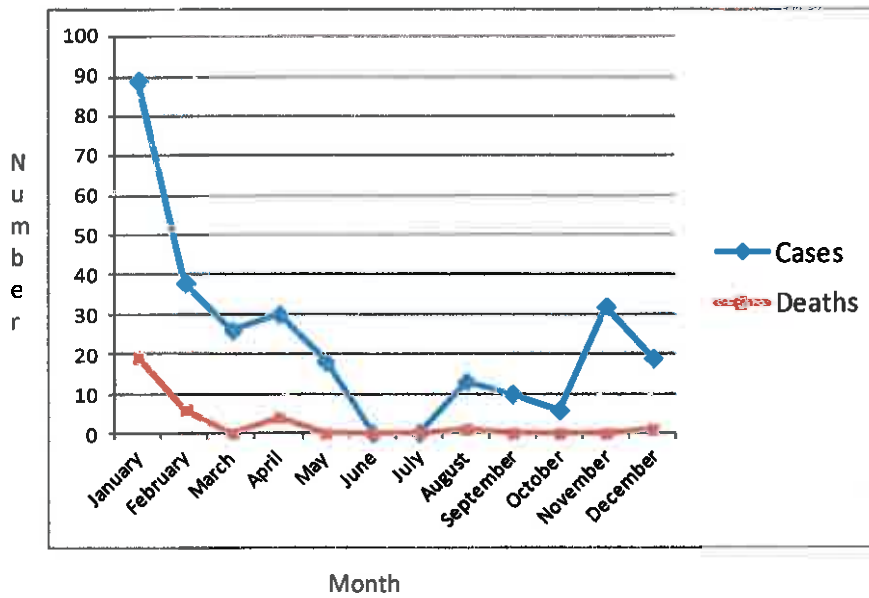
ii. ECF: Monthly distribution of case fatality, mortality and treatment rates



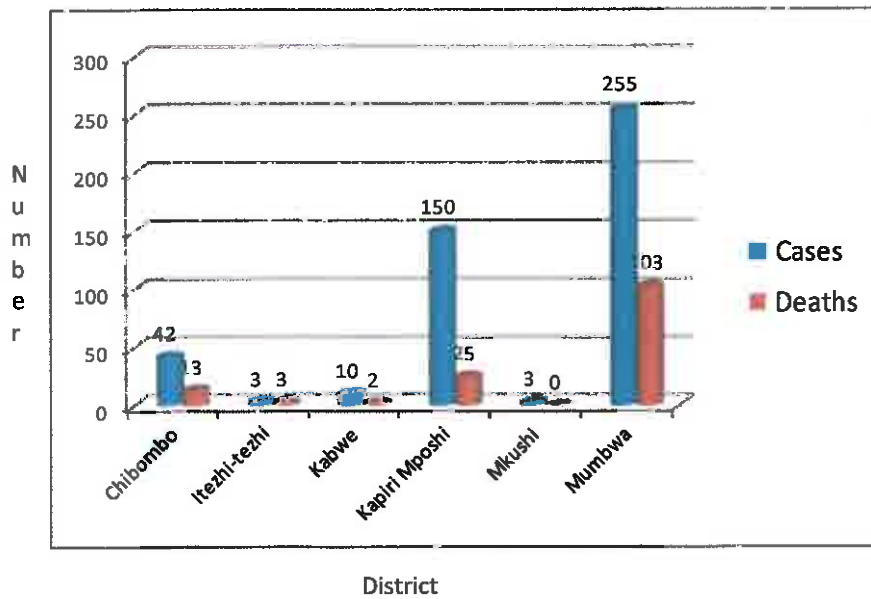
iii. ECF: District distribution of case fatality, mortality and treatment rates



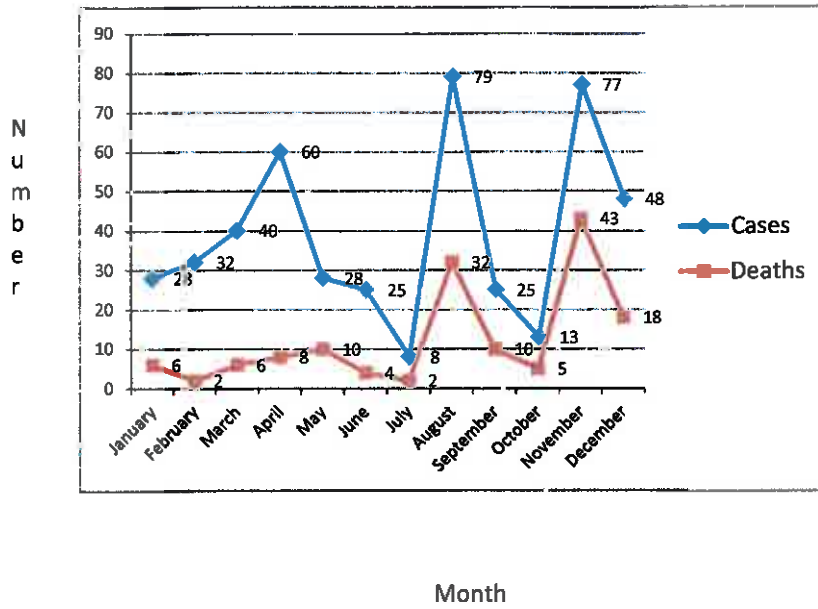
d) MONTHLY CAPRINE MANGE FREQUENCIES



e).i. DISTRICT BLACKLEG FREQUENCIES



e)ii. MONTHLY BLACKLEG FREQUENCIES



Appendix 6: a) Livestock Export

Distnict	Item	Species	Purpose	Out
Chibombo	Dressed Chickens	Avian	Sale	1,260,000kg
Chibombo	Eggs		Sale	36,000 Boxes
Chibombo	Live fowls		Rearing	36
Chibombo	Live fowls		Slaughter	4,772
Itezhi-tezhi	Dressed Chickens		Sale	700
Itezhi-tezhi	Guinea fowls		Sale	5
Itezhi-tezhi	Live Chickens		Sale	939
Itezhi-tezhi	Live Chickens		Slaughter	316
Kabwe	Live Chickens		Rearing	12
Kabwe	Live Chickens		Consumption	21
Kabwe	Live Chickens		Sale	1,850
Kapiri Mposhi	Live Chickens		Rearing	700
Kapiri Mposhi	Live Chickens		Sale	68
Kapiri Mposhi	Live Chickens		Slaughter	704
Mkushi	Live Chickens		Rearing	122
Mkushi	Live Chickens		Sale	57
Mkushi	Live Chickens		Slaughter	50
Mumbwa	Live Chickens		Consumption	2
Mumbwa	Turkeys		Rearing	6
Mumbwa	Live Chickens		Rearing	406
Mumbwa	Live Chickens		Sale	565
Serenje	Live Chickens		Rearing	27
Serenje	Live Chickens		Sale	8
Serenje	Live Chickens		Slaughter	60

b) Livestock Export

District	Item	Species	Purpose	Out
Chibombo	Cattle	Bovine	Breeding	820
Chibombo	Beef		Sale	1,148,200 kg
Chibombo	Milk		Sale	780,000 Litres
Itezhi-tezhi	Beef		Consumption	98
Itezhi-tezhi	Beef		Sale	177
Itezhi-tezhi	Carcass		Sale	64
Itezhi-tezhi	Cattle		Slaughter	1,652
Kabwe	Beef		Consumption	1
Kabwe	Bull		Breeding	42
Kabwe	Bull		Feedlot	10
Kabwe	Bull		Sale	12
Kabwe	Bull		Slaughter	100
Kabwe	Calves		Breeding	145
Kabwe	Calves		Feedlot	6
Kabwe	Calves		Sale	3
Kabwe	Cow		Consumption	1
Kabwe	Cow		Feedlot	453
Kabwe	Cow		Rearing	791
Kabwe	Cow		Sale	10
Kabwe	Cow		Slaughter	62
Kabwe	Heifers		Breeding	130
Kabwe	Heifers		Feedlot	36
Kabwe	Heifers		Sale	4
Kabwe	Heifers		Slaughter	45
Kabwe	Oxen		Rearing	141
Kabwe	Oxen		Sale	56
Kabwe	Oxen		Slaughter	263
Kabwe	Steer		Feedlot	809
Kabwe	Steer		Rearing	210
Kabwe	Steer		Slaughter	212
Kabwe	Weaner		Rearing	51
Kapiri Mposhi	Cattle		Rearing	39
Kapiri Mposhi	Cattle		Sale	90
Kapiri Mposhi	Cattle		Slaughter	356
Mkushi	Carcass		Consumption	1
Mkushi	Carcass		Sale	75
Mkushi	Hides		Sale	100
Mkushi	Live Cattle		Rearing	705
Mkushi	Live Cattle		Slaughter	3,752
Mumbwa	Carcass		Consumption	1
Mumbwa	Carcass	Sale	4,336	
Mumbwa	Hides	Sale	446	
Mumbwa	Live Cattle	Consumption	3	
Mumbwa	Live Cattle	Exhibition	7	
Mumbwa	Live Cattle	Feedlot	150	
Mumbwa	Live Cattle	Rearing	793	
Mumbwa	Live Cattle	Sale	8	
Mumbwa	Live Cattle	Slaughter	2,778	
Serenje	Live Cattle	Rearing	48	
Serenje	Live Cattle	Slaughter	63	

c) Livestock Export

District	Item	Species	Purpose	Out
Kabwe	Dog	Canine	Rearing	19
Kabwe	Puppy		Breeding	1
Mkushi	Dog		Rearing	17
Mumbwa	Dog		Rearing	4
Serenje	Dog		Rearing	9

d) Livestock Export

District	Item	Species	Purpose	Out
Chibombo	Goats	Caprine	Breeding	10
Chibombo	Goats		Slaughter	2,692
Itezhi-tezhi	Carcass		Consumption	104
Itezhi-tezhi	Carcass		Sale	40
Itezhi-tezhi	Goats		Sale	274
Itezhi-tezhi	Goats		Slaughter	111
Kabwe	Goats		Consumption	2
Kabwe	Goats		Rearing	34
Kabwe	Goats		Sale	6,484
Kapiri Mposhi	Goats		Sale	721
Kapiri Mposhi	Goats		Slaughter	1,017
Mkushi	Goats		Consumption	1
Mkushi	Goats		Rearing	262
Mkushi	Goats		Sale	434
Mkushi	Goats		Slaughter	193
Mumbwa	Goats		Consumption	3
Mumbwa	Goats		Exhibition	26
Mumbwa	Goats		Sale	3,127
Serenje	Goats		Slaughter	465

e) Livestock Export

District	Item	Species	Purpose	Out
Chibombo	Horses	Equine	Polo	12
Kabwe	Horses		Training	4
Kapiri Mposhi	Donkies		Rearing	2
Mkushi	Live animals		Rearing	13

f) Livestock Export

District	Item	Species	Purpose	Out
Chibombo	Sheep	Ovine	Breeding	41
Chibombo	Sheep		Slaughter	4
Kabwe	Sheep		Consumption	1
Kabwe	Sheep		Rearing	5
Kabwe	Sheep		Sale	193
Kabwe	Sheep		Slaughter	28
Kapiri Mposhi	Sheep		Sale	5
Mkushi	Sheep		Rearing	1
Mkushi	Sheep		Sale	30
Mkushi	Sheep		Slaughter	130
Mumbwa	Sheep		Consumption	1
Mumbwa	Sheep		Exhibition	2
Mumbwa	Sheep		Sale	296
Serenje	Sheep		Slaughter	46

g) Livestock Export

District	Item	Species	Purpose	Out
Chibombo	Pigs	Porcine	Breeding	66
Chibombo	Pigs		Slaughter	1,337
Itezhi-tezhi	Carcass		Consumption	1
Itezhi-tezhi	Pigs		Sale	261
Itezhi-tezhi	Pigs		Slaughter	49
Kabwe	Pigs		Breeding	96
Kabwe	Pigs		Sale	380
Kabwe	Pigs		Slaughter	328
Kapiri Mposhi	Pigs		Sale	25
Kapiri Mposhi	Pigs		Slaughter	111
Mkushi	Carcass		Sale	2,204
Mkushi	Pigs		Breeding	30
Mkushi	Pigs		Sale	557
Mkushi	Pigs		Slaughter	785
Mumbwa	Carcass		Sale	1
Mumbwa	Pigs		Consumption	3
Mumbwa	Pigs		Sale	1,745
Serenje	Pigs		Rearing	1
Serenje	Pigs		Slaughter	368

Appendix 7a: Scheduled Diseases during the period January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Anaplasmosis	Chibombo	Traditional	Bovine	521	185	5,716	9,713	421
	Chibombo	Traditional	Ovine	2	1	14	14	2
	Itezhi-tezhi	Traditional	Bovine	46	17	3,344	28,095	32
	Kabwe	Commercial	Bovine	7	2	122	350	7
	Kabwe	Traditional	Bovine	48	18	559	3,933	31
	Kapiri Mposhi	Traditional	Bovine	433	143	3,152	18,745	296
	Mkushi	Commercial	Bovine	2	0	230	478	2
	Mkushi	Traditional	Bovine	30	2	317	1,130	94
	Mumbwa	Traditional	Bovine	207	55	1,932	32,023	197
	Mumbwa	Traditional	Ovine	2	1	17	40	1
Serenje	Traditional	Bovine	28	2	400	718	22	
Babesiosis	Chibombo	Traditional	Bovine	63	4	1,021	1,547	61
	Itezhi-tezhi	Traditional	Canine	1	0	3	3	1
	Kabwe	Traditional	Bovine	1	1	29	200	0
	Kapiri Mposhi	Traditional	Bovine	14	0	259	1,201	14
	Mumbwa	Traditional	Bovine	15	2	184	2,252	30
	Serenje	Traditional	Bovine	2	2	64	64	0
Blackleg	Chibombo	Traditional	Bovine	42	13	521	2,501	31
	Itezhi-tezhi	Traditional	Bovine	3	3	195	195	2
	Kabwe	Commercial	Bovine	1	0	43	300	1
	Kabwe	Traditional	Bovine	9	2	163	1,470	9
	Kapiri Mposhi	Traditional	Bovine	150	25	1,369	5,706	108
	Mkushi	Traditional	Bovine	3	0	58	125	3
Brucellosis	Mumbwa	Traditional	Bovine	255	103	2,956	31,415	206
	Itezhi-tezhi	Traditional	Bovine	22	5	693	693	14
Canine Distemper	Kabwe	Traditional	Bovine	6	2	53	350	0
	Chibombo	Traditional	Canine	3	1	9	250	2
Chronic Respiratory	Mkushi	Traditional	Canine	2	0	3	40	1
	Chibombo	Traditional	Avian	100	18	541	541	541
Coccidiosis	Kapiri Mposhi	Traditional	Avian	64	36	340	680	275
	Mumbwa	Traditional	Avian	49	3	492	3,700	492
	Kapiri Mposhi	Traditional	Avian	32	8	89	117	71
	Kapiri Mposhi	Traditional	Bovine	3	0	26	48	3
	Kapiri Mposhi	Traditional	Caprine	1	1	7	21	0
Cowdriosis	Mumbwa	Traditional	Avian	42	14	232	2,614	200
	Mumbwa	Traditional	Bovine	5	1	96	274	4
	Chibombo	Traditional	Bovine	178	48	1,377	3,074	155
	Chibombo	Traditional	Caprine	51	19	263	516	46
	Itezhi-tezhi	Traditional	Bovine	8	5	163	163	4
	Kabwe	Traditional	Bovine	6	4	49	590	6
	Kapiri Mposhi	Traditional	Bovine	1	1	7	71	0
	Mkushi	Traditional	Bovine	1	1	280	280	0
Mumbwa	Traditional	Bovine	303	231	6,861	7,805	138	
	Traditional	Caprine	8	0	49	813	8	

Appendix 7b: Scheduled Diseases during the period January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Dermatophilosis	Chibombo	Traditional	Bovine	1	0	6	50	1
	Itezhi-tezhi	Traditional	Bovine	4	0	148	148	4
	Kabwe	Traditional	Bovine	6	0	21	23	6
	Kapiri Mposhi	Traditional	Bovine	2	0	34	158	0
	Mkushi	Traditional	Bovine	3	0	15	27	3
	Mumbwa	Traditional	Bovine	16	1	777	10,397	12
	Serenje	Traditional	Bovine	39	10	391	619	36
Fowl Cholera	Kapiri Mposhi	Traditional	Avian	60	15	102	201	42
	Serenje	Traditional	Avian	9	3	28	70	25
	Kapiri Mposhi	Traditional	Avian	14	2	58	471	33
Fowl Pox	Mumbwa	Traditional	Avian	88	22	600	8,750	230
	Serenje	Traditional	Avian	20	0	460	460	0
	Kapiri Mposhi	Traditional	Avian	14	2	58	471	33
Haemorrhagic Septicaemia	Itezhi-tezhi	Traditional	Bovine	33	15	615	615	15
	Kapiri Mposhi	Traditional	Bovine	3	1	24	204	2
	Mumbwa	Traditional	Bovine	18	4	95	1,483	22
	Serenje	Traditional	Bovine	1	1	13	22	0
Infectious Bursal	Chibombo	Traditional	Avian	116	35	450	620	306
	Mkushi	Traditional	Avian	15	8	41	115	0
Lumpy Skin	Chibombo	Traditional	Bovine	111	1	908	2,506	85
	Itezhi-tezhi	Traditional	Bovine	215	0	53,760	53,760	172
	Kabwe	Commercial	Bovine	4	0	55	111	4
	Kabwe	Traditional	Bovine	45	3	368	1,983	44
	Kapiri Mposhi	Traditional	Bovine	48	0	219	1,301	42
	Mkushi	Commercial	Bovine	7	0	2,000	2,000	7
	Mkushi	Traditional	Bovine	227	4	1,776	4,064	177
	Mumbwa	Traditional	Bovine	35	0	766	7,199	40
Mange	Chibombo	Traditional	Bovine	4	0	60	51	4
	Chibombo	Traditional	Caprine	169	25	1,088	1,459	242
	Chibombo	Traditional	Porcine	1	0	20	19	1
	Kabwe	Commercial	Bovine	1	0	91	350	1
	Kabwe	Traditional	Bovine	21	6	154	1,250	41
	Kabwe	Traditional	Canine	6	0	11	45	6
	Kabwe	Traditional	Caprine	29	0	130	522	29
	Kabwe	Traditional	Ovine	6	0	10	40	6
	Kabwe	Commercial	Porcine	2	0	58	150	2
	Kabwe	Traditional	Porcine	64	4	174	401	64
	Kapiri Mposhi	Traditional	Bovine	5	0	5	11	5
	Kapiri Mposhi	Traditional	Caprine	8	0	15	250	8
	Mkushi	Traditional	Caprine	7	0	18	35	7
	Mumbwa	Traditional	Bovine	22	1	105	3,202	21
	Mumbwa	Traditional	Canine	1	0	4	30	1
	Mumbwa	Traditional	Caprine	68	6	553	7,419	96
	Mumbwa	Traditional	Ovine	28	0	44	110	44
	Mumbwa	Traditional	Porcine	4	1	11	50	4

Appendix 7c: Scheduled Diseases during the period January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Newcastle	Chibombo	Traditional	Avian	1,155	793	2,350	4,730	1,631
	Itezhi-tezhi	Traditional	Avian	234	378	863	863	45
	Kabwe	Traditional	Avian	79	42	409	2,128	309
	Kapiri Mposhi	Traditional	Avian	826	559	2,554	5,802	874
	Mkushi	Commercial	Avian	59	32	950	917	859
	Mkushi	Traditional	Avian	345	157	1,321	3,430	690
	Mumbwa	Traditional	Avian	1,697	1,372	5,811	18,648	916
	Serenje	Traditional	Avian	360	161	2,011	4,625	1199
Rabies	Chibombo	Commercial	Canine	1	1	0	1,500	0
	Itezhi-tezhi	Traditional	Canine	4	3	0	4	1
	Kapiri Mposhi	Traditional	Canine	2	2	7	25	1
	Mkushi	Traditional	Canine	3	2	6	303	0
	Mumbwa	Traditional	Canine	1	1	0	40	0
	Serenje	Traditional	Canine	39	38	147	1,710	0
Salmonellosis	Kapiri Mposhi	Traditional	Avian	57	21	144	212	124
	Serenje	Traditional	Avian	432	248	2431	3,333	2,241
Theileriosis	Chibombo	Commercial	Bovine	64	15	293	332	52
	Chibombo	Traditional	Bovine	904	301	6,172	13,497	739
	Itezhi-tezhi	Traditional	Bovine	613	338	12,097	25,141	2,039
	Kabwe	Traditional	Bovine	94	41	731	7,591	51
	Kapiri Mposhi	Traditional	Bovine	1,048	323	5,861	29,825	736
	Mkushi	Commercial	Bovine	42	0	35,682	36,013	42
	Mkushi	Traditional	Bovine	119	38	816	3,629	79
	Mumbwa	Traditional	Bovine	680	210	6,028	66,879	760
	Serenje	Traditional	Bovine	5	1	90	188	4
Trypanosomosis	Itezhi-tezhi	Traditional	Bovine	1,009	0	3,463	31,814	1,007
	Kabwe	Traditional	Bovine	1	0	43	250	1
	Mumbwa	Traditional	Bovine	112	1	506	3,325	188
	Serenje	Traditional	Bovine	18	2	205	241	18
	Serenje	Traditional	Canine	1	0	14	14	1
Tuberculosis	Itezhi-tezhi	Traditional	Bovine	2	2	106	106	0
	Mumbwa	Traditional	Bovine	2	0	15	804	0

Appendix 8a: Non-Scheduled Diseases, January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Abortion	Chibombo	Traditional	Bovine	14	0	656	293	14
	Chibombo	Traditional	Caprine	13	0	53	53	4
	Kabwe	Traditional	Bovine	2	0	49	350	2
	Kabwe	Traditional	Caprine	2	1	13	60	1
	Kapiri Mposhi	Traditional	Bovine	5	0	303	743	5
	Kapiri Mposhi	Traditional	Caprine	1	0	11	100	1
	Mumbwa	Traditional	Bovine	1	0	15	250	1
	Serenje	Traditional	Bovine	4	0	120	120	0
Abscess	Chibombo	Commercial	Bovine	1	0	49	49	1
	Chibombo	Traditional	Caprine	1	0	30	0	1
	Itezhi-tezhi	Traditional	Bovine	3	0	43	43	3
	Kabwe	Traditional	Bovine	2	0	87	320	2
	Kabwe	Traditional	Porcine	1	0	18	18	1
	Kapiri Mposhi	Traditional	Bovine	7	0	145	788	7
	Mkushi	Traditional	Caprine	6	2	111	206	4
	Mumbwa	Traditional	Bovine	4	0	33	450	4
Serenje	Traditional	Bovine	7	0	22	22	3	
Arthritis	Kabwe	Traditional	Bovine	1	0	7	300	1
	Kapiri Mposhi	Traditional	Bovine	1	0	33	244	1
	Mkushi	Traditional	Bovine	1	0	180	300	1
	Mumbwa	Traditional	Bovine	4	0	50	133	4
Ascites	Mkushi	Traditional	Canine	1	0	2	9	0
Bloat	Chibombo	Traditional	Bovine	3	0	53	53	3
	Chibombo	Traditional	Caprine	7	2	11	0	5
	Chibombo	Traditional	Ovine	1	1	17	27	0
	Itezhi-tezhi	Traditional	Caprine	1	0	82	82	1
	Kabwe	Traditional	Caprine	7	3	7	150	7
	Kapiri Mposhi	Traditional	Bovine	11	5	226	661	6
	Kapiri Mposhi	Traditional	Caprine	9	2	13	61	7
	Mumbwa	Traditional	Bovine	1	0	4	250	1

Appendix 8b: Non-Scheduled Diseases, January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Diarrhoea	Chibombo	Commercial	Avian	14	6	145	145	145
	Chibombo	Traditional	Bovine	39	6	868	1,043	36
	Chibombo	Traditional	Caprine	53	10	219	366	53
	Chibombo	Traditional	Porcine	55	29	521	549	25
	Itezhi-tezhi	Traditional	Bovine	3	2	107	107	1
	Itezhi-tezhi	Traditional	Canine	3	1	15	15	1
	Itezhi-tezhi	Traditional	Caprine	1	-	458	458	1
	Kabwe	Commercial	Avian	13	6	315	400	309
	Kabwe	Traditional	Avian	93	19	599	1,300	396
	Kabwe	Traditional	Bovine	25	5	127	271	25
	Kabwe	Traditional	Caprine	5	-	13	220	4
	Kabwe	Commercial	Porcine	17	2	66	180	17
	Kabwe	Traditional	Porcine	69	18	410	587	53
	Kapiri Mposhi	Traditional	Bovine	18	-	156	949	18
	Mkushi	Traditional	Caprine	3	1	8	30	2
	Mkushi	Traditional	Canine	1	-	4	10	1
	Mumbwa	Traditional	Avian	32	4	72	617	48
	Mumbwa	Traditional	Bovine	36	3	187	2,642	29
	Mumbwa	Traditional	Caprine	5	5	23	80	-
	Mumbwa	Traditional	Porcine	23	20	72	92	3
Serenje	Traditional	Bovine	19	2	114	156	18	
Serenje	Traditional	Canine	1	-	2	2	1	
Serenje	Traditional	Caprine	18	4	87	165	15	
Dystocia	Chibombo	Traditional	Bovine	28	2	502	155	23
	Chibombo	Traditional	Caprine	2	1	20	20	-
	Itezhi-tezhi	Traditional	Bovine	4	1	608	608	3
	Itezhi-tezhi	Traditional	Caprine	8	-	88	88	-
	Kabwe	Commercial	Bovine	3	-	947	1,750	3
	Kabwe	Traditional	Bovine	9	2	223	1,449	6
	Kapiri Mposhi	Traditional	Bovine	11	1	159	491	10
	Mkushi	Traditional	Bovine	2	2	27	54	1
	Mumbwa	Traditional	Bovine	21	3	440	2,052	440
	Serenje	Traditional	Bovine	9	3	434	582	4

Appendix 8c: Non-Scheduled Diseases, January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Fascioliasis	Serenje	Traditional	Bovine	4	1	56	56	56
Footrot	Chibombo	Traditional	Bovine	45	-	424	568	41
	Itezhi-tezhi	Traditional	Bovine	128	-	44,013	44,013	128
	Kabwe	Traditional	Bovine	1	-	78	350	1
	Kapiri Mposhi	Traditional	Bovine	3	-	76	283	3
	Mkushi	Traditional	Porcine	9	-	21	21	9
	Mumbwa	Traditional	Bovine	84	-	1,044	3,148	80
	Mumbwa	Traditional	Caprine	7	-	78	379	7
	Serenje	Traditional	Bovine	5	-	148	148	5
Helminthiasis	Chibombo	Traditional	Bovine	332	64	4,009	4,070	3,223
	Chibombo	Traditional	Canine	5	1	4	4	4
	Chibombo	Traditional	Caprine	343	39	1,500	1,876	560
	Chibombo	Traditional	Ovine	3	1	16	31	1
	Chibombo	Traditional	Bovine	7	-	102	102	102
	Itezhi-tezhi	Traditional	Bovine	59	-	659	4,189	649
	Itezhi-tezhi	Traditional	Caprine	36	-	950	2,235	776
	Itezhi-tezhi	Traditional	Porcine	10	-	24	24	24
	Kabwe	Traditional	Bovine	222	-	244	1,348	224
	Kabwe	Traditional	Canine	29	-	31	267	20
	Kabwe	Traditional	Caprine	83	7	126	1,302	75
	Kabwe	Traditional	Ovine	30	-	59	170	29
	Kabwe	Traditional	Porcine	97	2	128	696	94
	Kapiri Mposhi	Traditional	Bovine	680	10	1,508	6,103	1,147
	Kapiri Mposhi	Traditional	Canine	61	-	20	40	59
	Kapiri Mposhi	Traditional	Caprine	437	60	692	1,843	583
	Kapiri Mposhi	Traditional	Ovine	80	30	250	250	50
	Kapiri Mposhi	Traditional	Porcine	93	1	118	280	106
	Mkushi	Traditional	Bovine	168	-	362	2,548	180
	Mkushi	Traditional	Canine	12	-	19	238	12
	Mkushi	Traditional	Caprine	11	-	43	97	43
	Mkushi	Traditional	Porcine	42	-	64	92	64
	Mumbwa	Traditional	Avian	36	13	511	2,403	505
	Mumbwa	Traditional	Bovine	522	2	1,975	8,483	2,003
	Mumbwa	Traditional	Canine	4	-	9	45	9
	Mumbwa	Traditional	Caprine	223	38	1,019	2,196	961
	Mumbwa	Traditional	Ovine	4	1	60	300	60
	Mumbwa	Traditional	Porcine	34	3	62	419	65
	Serenje	Traditional	Bovine	38	-	193	303	67
	Serenje	Traditional	Canine	5	-	6	38	9
	Serenje	Traditional	Caprine	34	2	155	190	137

Appendix 8d: Non-Scheduled Diseases, January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No Treated
Hypocalcaemia	Kabwe	Traditional	Bovine	4	1	258	962	2
Mastitis	Itezhi-tezhi	Traditional	Bovine	1	-	8	8	1
	Kabwe	Commercial	Bovine	3	-	18	147	3
	Kabwe	Traditional	Bovine	23	-	334	2,215	23
	Kabwe	Traditional	Caprine	1	-	57	200	1
	Kapiri Mposhi	Traditional	Bovine	9	-	122	392	9
	Mumbwa	Traditional	Bovine	3	-	195	549	3
Pink Eye	Chibombo	Traditional	Bovine	62	-	447	1,088	55
	Chibombo	Traditional	Caprine	35	22	223	622	38
	Kapiri Mposhi	Traditional	Bovine	6	-	122	315	6
	Kapiri Mposhi	Traditional	Caprine	6	-	19	19	6
	Mkushi	Traditional	Bovine	1	-	7	7	1
	Mumbwa	Traditional	Bovine	25	-	445	2,148	24
Pneumonia	Chibombo	Traditional	Bovine	2	-	87	87	2
	Itezhi-tezhi	Traditional	Caprine	1	1	468	468	-
	Kabwe	Traditional	Porcine	36	15	385	380	5
	Kapiri Mposhi	Traditional	Caprine	1	1	17	124	-
	Kapiri Mposhi	Traditional	Bovine	1	1	17	380	-
	Mkushi	Traditional	Bovine	4	-	33	110	45
	Mkushi	Traditional	Caprine	5	-	13	58	5
	Mkushi	Traditional	Porcine	1	-	2	10	1
	Serenje	Traditional	Porcine	4	-	10	10	4
Poisoning	Chibombo	Traditional	Bovine	13	11	50	40	2
	Kabwe	Commercial	Bovine	1	1	2	10	-
	Kapiri Mposhi	Traditional	Bovine	1	-	1	56	1
	Kapiri Mposhi	Traditional	Canine	2	1	4	11	1
	Mkushi	Traditional	Avian	2	2	14	32	-
	Mkushi	Traditional	Porcine	1	1	2	1	1
	Mkushi	Traditional	Bovine	2	-	2	50	2
	Mumbwa	Traditional	Porcine	8	3	72	150	5
	Mumbwa	Traditional	Bovine	1	1	4	250	-
	Mumbwa	Traditional	Caprine	4	4	15	70	-
	Serenje	Traditional	Bovine	3	-	22	22	3
	Serenje	Traditional	Canine	6	4	8	20	2
	Serenje	Traditional	Caprine	4	2	50	50	2

Appendix 8e: Non-Scheduled Diseases, January - December, 2013

Disease	District	Farming System	Species	Cases	Deaths	Herd Size	Population at Risk	No. Treated
Retained placenta	Chibombo	Traditional	Bovine	17	2	182	14	16
	Kabwe	Commercial	Bovine	1	-	103	103	1
	Kabwe	Traditional	Bovine	5	-	136	710	5
	Kapiri Mposhi	Traditional	Bovine	2	-	22	152	2
	Mumbwa	Traditional	Bovine	9	-	188	1,420	9
	Serenje	Traditional	Bovine	3	-	105	105	3
Wounds	Chibombo	Traditional	Bovine	27	-	389	288	26
	Chibombo	Traditional	Canine	1	-	6	6	1
	Chibombo	Traditional	Caprine	1	-	9	11	1
	Itezhi-tezhi	Traditional	Bovine	11	1	30,246	30,246	10
	Itezhi-tezhi	Traditional	Equine	1	-	4	4	1
	Kabwe	Commercial	Bovine	2	-	85	85	2
	Kabwe	Traditional	Bovine	13	-	298	1,720	14
	Kabwe	Commercial	Porcine	1	-	28	50	1
	Kabwe	Traditional	Canine	1	-	2	50	1
	Kabwe	Traditional	Caprine	10	-	67	260	4
	Kabwe	Traditional	Equine	1	-	5	10	1
	Kabwe	Traditional	Porcine	4	-	152	650	3
	Kapiri Mposhi	Traditional	Bovine	43	1	389	2,647	35
	Kapiri Mposhi	Traditional	Canine	11	-	23	68	11
	Kapiri Mposhi	Traditional	Caprine	6	1	48	218	3
	Mkushi	Traditional	Bovine	15	-	135	413	14
	Mkushi	Traditional	Canine	2	-	2	15	2
	Mumbwa	Traditional	Bovine	48	-	664	4,428	42
	Mumbwa	Traditional	Canine	1	-	2	40	1
	Mumbwa	Traditional	Caprine	11	1	52	380	17
	Mumbwa	Traditional	Ovine	1	-	5	20	1
	Mumbwa	Traditional	Porcine	1	-	15	90	1
	Serenje	Traditional	Bovine	15	-	153	216	15
	Serenje	Traditional	Canine	4	-	6	30	6

Appendix 9: Input Suppliers

District	#	Name	Description of Supplies
Kapiri Mposhi	1	Animal medicine shop	Stock feed, poultry medicine
	2	Hybrid ltd	Day-old chicks
	3	Mine lands	Stock feed, Ross chicks, Tiger stock Feed
	4	National Milling	Stock feed
	5	Olympic Milling	Stock feed, poultry drugs
Serenje	1	Lima agro	Livestock drugs and chemicals
	2	National Milling	Stock feed
	3	Chimsoro Milling	Maize bran
	4	Serenje Farmers Association	Veterinary Pharmaceuticals
Mumbwa	1	Vethaven Agro Suppliers	Veterinary Pharmaceuticals & chemicals
	2	Pandor Drug Store	Veterinary Pharmaceuticals & Chemicals
	3	Manna Agro	Veterinary Pharmaceuticals & Chemicals
	4	Chinmak	Veterinary Pharmaceuticals & Chemicals
	5	Crop serve	Veterinary Pharmaceuticals
Kabwe	1	Hybrid Poultry Ltd	Day old chicks & Cockerels
	2	Medpharm	Veterinary Pharmaceuticals, chemicals, equipment
	3	Jigry Auto Works	Veterinary Pharmaceuticals, chemicals, equipment
	4	Lima Agro	Veterinary Pharmaceuticals, chemicals
	5	Crop Serve	Veterinary Pharmaceuticals
	6	LVS	Veterinary Clinic
Chibombo	1	Mine lands	Veterinary Drugs Pharmaceuticals
	2	Kumishesu	Veterinary Drugs Pharmaceuticals
	3	HGVAS	Veterinary Drugs Pharmaceuticals
	4	Chisamba Agric Marketing	Veterinary Drugs Pharmaceuticals
	5	Novatec	Broiler, Layer, Pig & cattlestock feed
Mkushi	2	Lima Agro	Veterinary Pharmaceuticals, chemicals
	3	Leloisa Veterinary Services	Veterinary Pharmaceuticals, Chemicals, stock
	4	National Milling	Stock feed
		Olympic Milling	Stock feed

Appendix 10: Related Institutions

District	#	Name	Description of Services
Kapiri Mposhi	1	CRAIDS	Small scale Livestock procurement and infrastructure development
	2	Heifer International	Dairy cattle and goat pass-on schemes
	3	Corridors of Hope	HIV/AIDS mitigation through provision of livestock procurement funds
	4	DAPP	Livestock extension and infrastructure development
	5	World Vision	Goat & Chicken Pass-on scheme
Serenje	1	DAPP	Livestock extension services
	2	ZWAAZ	Promotion of Cattle and goats rearing in women's groups
	3	CARITAS	Promotion of Pig Farming
	4	HPI	Promotion of goat & pig production
Mumbwa	1	World Vision	Goat & Chicken Pass-on scheme
	2	Heifer International	Dairy cattle and goat pass-on schemes
	3	Community Development	Goat Pass-on Scheme
Kabwe	1	Heifer International	Goat pass-on project
Chibombo	1	World Vision	Goat & Chicken Production
	2	Plan International	Goat Production
	3	Community Development	Goat and Chicken Production
	4	Child Fund	Goat and Chicken Production
	5	All Children Can Learn	General Livestock Production
	6	Development Aid From People to People DAPP	Goat and Chicken Production
	7	Zambeef	Dairy Production
Mkushi	1	Leloisa Veterinary Services	Veterinary clinical & Herd health services
	2	HOD	Funding poultry and Pig production among small scale farmers
	3	Fiwila Development Trust	Funding poultry and Pig production among small scale farmers
	4	DAPP	Goat production extension
	5	Community Development	Goat Pass-on Scheme

Appendix 11: Staff Returns

PROVINCIAL HEADQUARTERS

#	SURNAME	FIRST NAME	RANK	STATION	REMARK
1	Dr. Liazambi	Allan K.	Acting Provincial Veterinary Officer	Kabwe	-
2	Dr. Makungu	Chitwambi	Veterinary Officer, PEIC	Kabwe	On study leave (Phd.).
3	Ngulube	Gilbert	Senior Tsetse Control Biologist	Kabwe	Also assisting with PEIC operations & disease control matters.
4	Sikazwe	Edwin F.	Principal Livestock Officer	Kabwe	-
5	Leonard	Ncholeka	Veterinary Assistant	Kabwe	Assisting with PEIC operations.
6	Nambela	Patricia	Veterinary Assistant	Kabwe	Assisting with PEIC operations.
7	Mbasela	Mayoyo	Typist	Kabwe	Attached to PACO.
8	Lungu	Joseph	Laboratory Technician	Kabwe	-
9	Lupasi	Motern	Acting Laboratory Technician	Kabwe	Due for confirmation.
10	Zulu	Catherine W.	Registry Clerk	Kabwe	Attached to Procurement unit.
11	Mpande	Sunday	Office Orderly	Kabwe	Attached to PACO.
12	Mulenga	Clara K.	Office Orderly	Kabwe	Attached to PACO.
13	Pezulu	Ellison	Office Orderly	Kabwe	Retired
14	Chipikauka	Epyson	Registry Clerk	Kabwe	Assisting with accounts office in MAL/Livestock.
15	Mulope	Richard	Driver	Kabwe	-

ITEZHI-TEZHI

S/N	NAME	RANK	STATION	REMARKS
1	Dr. Shepherd Phiri	District Vet. Officer	Itezhi-tezhi	On study leave
2	Mr. Albert Mwiinga	Ag. Senior Tsetse Control Technician	Itezhi-tezhi	Awaiting Confirmation
3	Mr. Beatson Kaunda	Livestock Officer	Itezhi-tezhi	On study leave
4	Mr. Kennedy Simwanga	Tsetse Control Assistant	Itezhi-tezhi	Completed Studies
5	Mr. Wilson Sakala	Veterinary Assistant	Itezhi-tezhi camp	On Duty
6	Mr Professor Mizanda	Veterinary Assistant	Banamwaze	On Duty
7	Mrs Patricia Simwanga	Veterinary Assistant	Itezhi-tezhi central	On Duty
8	Mr Isaac Mutenje	Tsetse Control Guard	Makunku	Overdue for retirement
9	Dennis Muchimba	Tsetse Control Assistant	Basanga	New Appointment
10	Mr Cosmas Mulinda	Tsetse Control Assistant	Makunku	Overdue for retirement
11	Miss Mutinta Chelebele	Typist	Itezhi-tezhi	On Duty

CHIBOMBO DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1	Dr. Elasto	Zulu	District Veterinary Officer	District Office	Transferred to Rufunsa
2	Paradzai	Potoka	Senior Livestock Officer	District Office	-
3	Isaac	Lungu	Veterinary Assistant	Chibombo West	-
4	Loveness K.	Kaunda	Veterinary Assistant	Chibombo East	-
6	Dawn	Kadyamoto	Veterinary Assistant	Lifwambula	-
7	Wilson	Mpande	Veterinary Assistant	Keembe Ranch	-
8	Swina	Chilyambuto	Veterinary Assistant	Muswishi	-
9	Richard	Tembo	Veterinary Assistant	Chipembi	-
10	-	-	Veterinary Assistant	Mwachisompola	Station Vacant
11	Doras	Phiri	Veterinary Assistant	Mbosha	-
12	-	-	Tsetse Control Assistant	Mulungushi	Station Vacant
13	Eliad	Siame	Tsetse Control Assistant	Keembe Central	-
14	Iven	Chibochi	Veterinary Assistant	Chisamba	Deceased
15	Mackenzie	Busiku	Livestock Officer	Chisamba	Recently Promoted
16	Beezer	Njobvu	Tsetse Control Assistant	Chipembi	-
17	Edith	Chipilli	Veterinary Assistant	Chikumbi	-
18	Eric	Chilala	Veterinary Assistant	Chiyuni	-
19	Chaddy	Kantumoya	Veterinary Assistant	Chuunga	-
20	Prisca	Chikopela	Veterinary Assistant	Katuba	Studying at NRDC
21	Adrian	Lungu	Station handman	Chisamba	-

KABWE DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1	Dr.Geoffrey	Mainda	District Veterinary Officer	District Office	On study leave (Phd)
2	Edrine C.	Siabbalo	Livestock Officer	District Office	-
3	Wetson R.	Mbewe	Tsetse Control Assistant	Waya	-
4	Mary	Sichangwa	Veterinary Assistant	Munga West	-
5	Montford	Zulu	Veterinary Assistant	Mpima	-
6	Kenny	Chisha	Assistant Laboratory Technician	District Office	Distant studies at NRDC
7	Agness	Muwana	Office Orderly	District Office	-
8	McBeth	Ng'andu	Office Orderly	District Office	-
9	Maxwell	Ilutaki	General Worker	District Office	-
10	Christopher	Moomba	General Worker	District Office	-
11	Most	Namundamana	Veterinary Assistant	Munyama	-
12	Eveny	Munkonze	Tsetse Control Assistant	Kabwe Central	Distant studies at NRDC
13	John	Lupikisha	Tsetse Control Assistant	Kabwe District	-
14	Martin	Kashita	Veterinary Assistant	Munga North	-

KAPIRI-MPOSHI DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1	Dr. Emmanuel	Chileshe	Veterinary Officer	District Office	Studying for MSc. At UNZA
2	-	-	Senior Livestock Officer	District Office	-
3	Patrick	Kawambwa	Livestock Officer	District Office	Study leave
4	Wilfred	Silwimba	Veterinary Assistant	Chibwe	-
5	Levy B	Ngoma	Veterinary Assistant	Likumbi	-
6	Maambo	Chifwepa	Veterinary Assistant	Mukubwe	-
7	Emmanuel	Sikazwe	Veterinary Assistant	Musosoloke	-
8	Edwin	Ondya	Veterinary Assistant	Lunchu	-
9	Nchema	Ngoma	Veterinary Assistant	Nkole	Transferred to Ikelenge
10	Chandy M.	Mwape	Veterinary Assistant	Kapiri Mposhi Central	-
11	-	-	Driver	District Office	Vacant
12	-	-	Typist	District Office	Vacant
13	Abraham	Ngoma	Watchman	District Office	-
14	Mathews	Mwansa	Watchman	District Office	-

MKUSHI DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1			District Veterinary Officer	District Office	Vacant
2	Mitson	Simuyala	Livestock Officer	District Office	Study Leave-UNZA
3	Peter	Kabichi	Livestock Officer	District Office	Transferred to Luano district
3	Elitas	Chilola	Tsetse Control Assistant	Mkushi-Central	-
4	MacLean	Chilela	Veterinary Assistant	Chalata	-
6	Akoombelwa	Simainga	Veterinary Assistant	District Office	Transferred to Serenje
7	Victor	Mudenda	Veterinary Assistant	District Office	-
8	Kabisa Nicholas	Nyambe	Veterinary Assistant	Fiwila	Fiwila
10	-	-	Veterinary Assistant	Nkumbi	Vacant
11	Mundia	Muyendekwa	Tsetse Control Assistant	Old Mkushi	-
12			Veterinary Assistant	Masansa	Vacant
13	-	-	Office Orderly	District Office	Vacant
14	-	-	Tsetse Control Assistant	Musofu	Vacant

MUMBWA DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1	Dr. Ricky	Chazya	District Veterinary Officer	District Office	Studying for MSc. At UNZA
2	Presley	Mushikita	Tsetse Control Biologist	District Office	-
3	Michael	Masinja	Livestock Officer	District Office	Transferred to Lwampa
4	John	Ngoma	Office Orderly	District Office	-
5	Victoria	Shamilimo	Typist	District Office	-
6	Mutakela M.	Kamungoma	Tsetse Control Assistant	Lutale Research	-
7	Grant	Mwiinga	Veterinary Assistant	Lutale Research	-
8	Daniel	Motoka	Veterinary Assistant	District	-
9	Naulu	Mweemba	Tsetse Control Assistant	Shibuyunji	In Shibuyunji district
10	Shadreck	Siawwapa	Veterinary Assistant	Nangoma	-
11			Veterinary Assistant	Kapyanga	Vacant
12	George	Nyondo	Veterinary Assistant	Mukulaikwa	-
13	Kennedy	Mukuwa	Veterinary Assistant	Muchabi	-
14	Ricky	Namoomba	Veterinary Assistant	Mumbwa Central	On study leave
15	Doreen	Banda	Veterinary Assistant	Nalusanga	-
16	Mildred	Botha	Veterinary Assistant	Kabile	-
17	Mary	Kaluba	Typist	Lutale	-
18	Collins	Kashweka	Office Orderly	Lutale	-
19	David	Kasanga	Office Orderly	Nalusanga	-
20	Sebastian	Mwiinga	Veterinary Assistant	Myooye	-
21	Agrippa	Mweene	Veterinary Assistant	Nalubanda	Distance studies at NRDC
22	Boyd Chilombwana	Chifwepa	Veterinary Assistant	Kaindu	-
23	Lewis	Mubita	Driver	District	-
24	Phillimon	Muleya	Watchman	District	-
25	Wendy	Namoooba	Tsetse Control Assistant	District	-
26	Andrew	Chongo	Tsetse Control Assistant	Moono	-
27			Veterinary Assistant	Keezwa	Vacant

SERENJE DISTRICT

#	FIRST NAME	SURNAME	RANK	STATION	REMARK
1			District Veterinary Officer	District Office	Vacant
2	George	Chisebuka	Senior Livestock Officer	District Office	DACO
3	-	-	Veterinary Assistant	Lupiya	Station Vacant
4	Christopher	Ngosa	Veterinary Assistant	Kanona	-
5	-	-	Veterinary Assistant	Chibale	Station vacant
6	-	-	Veterinary Assistant	Mulembo	-
7	Promil M.	Simulunda	Veterinary Assistant	Serenje Central	-
8	-	-	Veterinary Assistant	Chitambo	Station Vacant
9	-	-	Veterinary Assistant	Chisebwa	Station Vacant
10	-	-	Veterinary Assistant	Masase	Station Vacant
11	-	-	Veterinary Assistant	Katikulula	Station Vacant
12	-	-	Veterinary Assistant	Kamena	Station Vacant
13	-	-	Tsetse Control Assistant	Chisomo	Station Vacant
14	-	-	Tsetse Control Assistant	Kasanka	Station Vacant
15	-	-	Veterinary Assistant	Chalilo	Station Vacant
16	Neil	Mwiinga	Tsetse Control Assistant	Serenje Central	-
17	Alick L.	Ngulube	Veterinary Assistant	Chibale	
18	-	-	Typist	District Office	Station Vacant
19	Ivy	Mangani	Office Orderly	District Office	-

List of Newly Appointed Staff – New Districts

CHITAMBO DISTRICT					
S/No.	FIRST NAME	SURNAME	RANK	STATION	REMARK
1	Cynthia	Dr. Kapena	District Veterinary Officer	Chitambo	Newly appointed
2	Weaven Ukahata	Moyo	Veterinary Assistant	Chitambo	Newly appointed
3	Faince	Sianjina	Veterinary Assistant	Chitambo	Newly appointed
4	Vincent	Sillilo	Livestock Assistant	Chitambo	Newly appointed
5	Arthum	Chikaye	Livestock Assistant	Chitambo	Newly appointed
LUANG DISTRICT					
1	Dr. Maggie Mfula	Phiri	District Veterinary Officer	Luano	Newly appointed
2	Benon	Yandikani	Livestock Assistant	Luano	Newly appointed
3	Peggy	Chanda	Livestock Assistant	Luano	Newly appointed
4	Chansa	Luanga	Livestock Production and Extension Off.	Luano	Newly appointed
5	Peter	Banda	Veterinary Assistant	Luano	Newly appointed
6	Don	Mufwambi	Veterinary Assistant	Luano	Newly appointed
CHISAMBA DISTRICT					
1	Sydney	Kalenga	Ag. Veterinary Officer	Chisamba	Transfer from Kafue & now Ag. appointment
2	Joshua	Njolomba	Ag. Livestock Production and Extension Off.	Chisamba	Transfer from Mpika & now Ag. appointment
3	Julius	Chunda	Livestock Assistant	Chisamba	Newly appointed
4	Mwila Betty	Muloshi	Veterinary Assistant	Chisamba	Newly appointed
5	Jimmy	Chiliba	Veterinary Assistant	Chisamba	Newly appointed
NGABWE DISTRICT					
1	Dr. Suzyo	Muwowo	Veterinary Officer	Ngabwe	Newly appointed
2	Chipego	Syafunko	Livestock Assistant	Ngabwe	Newly appointed
3	Collins	Kapembwa	Livestock Production and Extension Officer	Ngabwe	Newly appointed
4	Martin K.	Mwale	Livestock Assistant	Ngabwe	Newly appointed
5	Suzyo Grace	Kanema	Veterinary Assistant	Ngabwe	Newly appointed
6	Dissan	Ndlovu	Veterinary Assistant	Ngabwe	Newly appointed
ITEZHI-TEZHI DISTRICT					
1	Dennis	Muchimba	Tsetse Control Assistant	Itezhitzezi	Newly appointed

Appendix 12: Staff Positions

#	Post	Target Number	Number at Start of Year	Transfers		Transfer Destination	Resignation	Deaths	Retirement	Dismissals	Retirements	Recruitments	Number at end of 2013
				In	Out								
	1	2	3	4		5	6	7	8	9	10	11	12
1	Provincial Veterinary Officer	1	1	0	0	-	0	0	0	0	0	0	1
2	Senior Veterinary Officer	1	1	0	0	-	0	0	0	0	0	0	1
3	Veterinary Officer	10	5	5	1	To Rufunsa District	0	0	0	0	0	0	9
4	Senior Tsetse Control Biologist	1	1	0	0	-	0	0	0	0	0	0	1
5	Tsetse Control Biologist	1	1	0	0	-	0	0	0	0	0	0	1
6	Principal Livestock Officer	1	1	0	0	-	0	0	0	0	0	0	1
7	Principal Tsetse Control Officer	1	0	0	0	-	0	0	0	0	0	0	0
	Senior Tsetse Control Technician	1	1	0	0	-	0	0	0	0	0	0	1
8	Senior Laboratory Technician	1	1	0	0	-	0	0	0	0	0	0	1
9	Laboratory Technician	1	1	0	0	-	0	0	0	0	0	0	1
10	Laboratory Assistant	2	2	0	0	-	0	0	0	0	0	0	2
11	Senior Livestock Officer	4	1	0	0	-	0	0	0	0	0	0	1
12	Livestock Officer	10	6	0	0	-	0	0	0	0	0	0	6
13	Veterinary Assistant	61	43	8	1	Transferred to Lwampa	0	0	0	0	0	0	50
14	Tsetse Control Assistant	20	15	1	1	Transferred to Ikelenge	0	0	0	0	0	0	15
15	Assistant Laboratory Technician	7	2	0	0	-	0	0	0	0	0	0	2
16	Typist	1	1	0	0	-	0	0	0	0	0	0	1
17	CIE Typist	10	2	0	0	-	0	0	0	0	0	0	2
18	Registry Clerk	1	1	0	0	-	0	0	0	0	0	0	1
19	Receptionist	1	0	0	0	-	0	0	0	0	0	0	0

20	Driver	12	1	0	0	-	0	0	0	0	0	0	0	0	0	0	0	1
21	Station Handyman	3	2	0	0	-	0	0	0	0	0	0	0	0	0	0	0	2
22	Watchman	12	4	0	0	-	0	0	0	0	0	0	0	0	0	0	0	4
23	Office Orderly	13	6	0	0	-	0	0	0	0	0	0	0	0	0	0	0	6
	TOTAL	176	99	14	3	-	0	0	0	0	0	0	0	0	0	0	0	110

Appendix 13: Staff Training

S/N	Name of Staff	Institution of Training	Work Station
1	Dr. Ricky Chazya	UNZA	Mumbwa
2	Dr. Emmanuel Chileshe	UNZA	Kapiri Mposhi
3	Dr. Chitwambi Makungu	UNZA	Kabwe HQ
4	Dr. Geoffrey Manda	UK	Kabwe District
5	Dr. Shepherd Phiri	Sokoine University of Agric (TZ)	Itezhi-tezhi District
6	Even Mukonze	NRDC – Distant learning	Kabwe
7	Prisca C. Simuntala	NRDC – Full time	Chibombo
8	Wilfred Silwimba	NRDC – Full time	Kapiri Mposhi
9	Andrew Chongo	NRDC-Distant learning	Mumbwa
10	Mitson Simuyala	UNZA	Mkushi
11	Swina Chilyambuto	NRDC – Full time	Chibombo
12	Doras Phiri	NRDC – Distant learning	Chibombo
13	Patrick Kawambwa	Netherlands	Kapiri Mposhi
14	Beatson Kaunda	UNZA	Itezhi-tezhi

Appendix 14: Vehicles & Motorcycles

A. Vehicles

S/n	Location	Type of Vehicle	Registration No.	Station	Condition	Remarks
1	Kabwe	Ford Ranger	GRZ 529 CA	Provincial Office	Good runner	Being used by SPLO
2	Kabwe	Nissan Hard Body	ABV 7818	Provincial Office	Needs Major Service	SADCC TADS Vehicle
3	Kabwe	Toyota Hilux	GRZ 144 CB	Provincial Office	Poor running condition	On and off road
4	Kabwe	Toyota Hilux	GRZ 500 BX	Provincial Office	Fair running Condition	Old vehicle but serviceable
5	Kabwe	Tata Van	GRZ 737 BV	Provincial Office	Non Runner	Marked for BOS (Moved from Mkushi Vet)
6	Kabwe	Toyota Land Cruiser	GRZ 675 CF	District Office	Excellent running Condition	Fairly New Vehicle
7	Mkushi	Toyota Land Cruiser	GRZ 895CF	District office	Excellent running Condition	Fairly New
8	Mumbwa	Land Rover 110	GRZ 804 BM	District Office	Poor running condition	Broken down
9	Mumbwa	Toyota Land Cruiser	GRZ 585 CE	District Office	Excellent running Condition	Fairly New Vehicle
10	Mumbwa	Mobile Trailer	GRZ 2697T	Mukulaikwa B. Centre	Excellent running Condition	Fairly New Vehicle
11	Chibombo	Toyota Land Cruiser	GRZ 572 CE	District Office	Excellent running Condition	Fairly New Vehicle
12	Kapiri Mposhi	Toyota Land Cruiser	GRZ 586 CE	District office	Excellent running Condition	Fairly New Vehicle
13	Serenje	Toyota Land Cruiser	GRZ 805 CF	District office	Excellent running Condition	Fairly New Vehicle
14	Itezhi-tezhi	Nissan Hard Body		District Office	Non Runner	Non runner
15	Itezhi-tezhi	Pajero		District Office	Fair running	Needs repairs
16	Itezhi-tezhi	Toyota Land Cruiser		District Office	Fair running	Still at Toyota Zambia

B. Motor Bikes

S/n	Location	Type of Vehicle	Registration No.	Station	Condition	Remarks
1	Kabwe	Motorbike-Honda	AAR 8658	Provincial Office	None- Runner	Recommended for BOS
2	Kabwe	Motorbike - Honda	ABC 4067	District Office	None- Runner	Recommended for BOS
3	Kabwe	Motorbike - Honda	GRZ 91 DV	Kabwe Central	Runner	-
4	Kabwe	Motorbike - Honda	GRZ 92 DV	Kabwe Laboratory	Runner	-
5	Kabwe	Motorbike - Honda	GRZ 23 EN	Kabwe Laboratory	Runner	-
6	Kabwe	Motorbike - Honda	GRZ 37 EP	Mpima Camp	Runner	-
7	Kabwe	Motorbike - Honda	GRZ 32 EP	Munga West	Runner	-
8	Kabwe	Motorbike - Honda	GRZ 46 EP	Kabwe Central	Runner	-
9	Kabwe	Motorbike - Honda	GRZ 02 EP	Waya	Runner	-
10	Kabwe	Motorbike - Honda	GRZ 03 EP	Munyama	Runner	-
11	Mumbwa	Motorbike - Honda	GRZ 77 EN	Mukulaikwa B. Centre	Runner	-
12	Mumbwa	Motorbike - Honda	GRZ 25 EP	Mukulaikwa B. Centre	Runner	-
13	Mumbwa	Motorbike - Honda	GRZ 17 EN	Keezwa	Runner	-
14	Mumbwa	Motorbike - Honda	GRZ 70 EN	Lutale	Runner	-
15	Mumbwa	Motorbike - Honda	GRZ 64 EN	Mumbwa Central	Runner	-
16	Mumbwa	Motorbike - Honda	GRZ 74 EN	Shibuyunji	Runner	-
17	Mumbwa	Motorbike - Honda	GRZ 74 EN	Nangoma	Runner	-
18	Mumbwa	Motorbike - Honda	GRZ 16 EN	Myooye	Runner	-
19	Mumbwa	Motorbike - Honda	GRZ 71 EN	District Office	Runner	-
20	Mumbwa	Motorbike - Honda	GRZ 35 EN	Mukulaikwa	Runner	-
21	Mumbwa	Motorbike - Honda	GRZ 65 EN	Moono	Runner	-
22	Mumbwa	Motorbike - Honda	GRZ 90 EN	Nalubanda	Runner	-
23	Mumbwa	Motorbike - Honda	GRZ 99 EN	Muchabi	Runner	-
24	Mumbwa	Motorbike - Honda	GRZ 45 EN	Nalusanga	Runner	-
25	Mumbwa	Motorbike - Honda	GRZ 38 DM	Muchabi	Runner	FMD Surveillance
26	Mumbwa	Motorbike - Honda	GRZ 35 DM	Nalubanda	Runner	FMD Surveillance
27	Mumbwa	Motorbike - Honda	GRZ 93 DV	Shibuyunji	Runner	Avian Influenza Surveillance
28	Mumbwa	Honda - Trail 110	GRZ 08 BX	District Office	Runner	Poor Condition
29	Mumbwa	Honda - Trail 110	GRZ 25 DP	Lutale	Runner	Tsetse Control
30	Mumbwa	Motorbike - Suzuki	ABC 5516	District Office	Runner	Fair condition
31	Chibombo	Motorbike - Honda	ABX 631	District Office	Runner	Integrated Agricultural Development Project
32	Chibombo	Motorbike - Honda	GRZ 97 EN	Chibombo East	Runner	-
33	Chibombo	Motorbike - Honda	GRZ 67 EN	Chibombo West	Runner	-

34	Chibombo	Motorbike - Honda	GRZ 68 EN	District Office	Runner	-
35	Chibombo	Motorbike - Honda	GRZ 36 EN	District Office	Runner	-
36	Chibombo	Motorbike - Honda	GRZ 21 EN	Chisamba	Runner	-
37	Chibombo	Motorbike - Honda	GRZ 69 EN	Chikumbi	Runner	-
38	Chibombo	Motorbike - Honda	GRZ 66 EN	Keembe Ranch	Runner	-
39	Chibombo	Motorbike - Honda	GRZ 32 EN	Keembe Central	Runner	-
40	Chibombo	Motorbike - Honda	GRZ 20 EN	Muswishi	Runner	-
41	Chibombo	Motorbike - Honda	GRZ 54 EN	Mboshya	Runner	-
42	Chibombo	Motorbike - Honda	GRZ 93 EN	Chiyuni	Runner	-
43	Chibombo	Motorbike - Honda	GRZ 18 EN	Chisamba	Runner	-
44	Chibombo	Motorbike - Honda	GRZ 75 EN	Chipembi	Runner	-
45	Chibombo	Motorbike - Honda	GRZ 56 EN	Chipembi	Runner	-
46	Chibombo	Motorbike - Suzuki		District Office	Non - Runner	Repairable
47	Chibombo	Motorbike - Honda	GRZ 88 BV	Chisamba	Runner	Fair
48	Kapiri Mposhi	Honda CTX 200	GRZ 39 EN	Mukubwe	Runner	
49	Kapiri Mposhi	Honda CTX 200	GRZ 18 EP	Kapiri Central	Runner	
50	Kapiri Mposhi	Honda CTX 200	GRZ 41 EN	Chilumba	Runner	
51	Kapiri Mposhi	Honda CTX 200	GRZ 27 EP	Lunchu	Runner	
52	Kapiri Mposhi	Honda CTX 200	GRZ 19 EP	Likumbi	Runner	
53	Kapiri Mposhi	Honda CTX 200	GRZ 76 EN	District Office	Runner	
54	Kapiri Mposhi	Honda CTX 200	GRZ 15 EP	Chibwe	Runner	
55	Kapiri Mposhi	Honda CTX 200	GRZ 47 EP	Musosoloke	Runner	
56	Kapiri Mposhi	Honda CTX 200	GRZ 73 EN	Nkole	Runner	
57	Kapiri Mposhi	Honda NXR 125	ABF 3889	District Office	Non - Runner	Repairable
58	Kapiri Mposhi	Honda Yamaha	ABA 5217	District Office	Non - Runner	Repairable
59	Kapiri Mposhi	Honda Yamaha	ABA 5216	District Office	Non - Runner	Repairable
60	Kapiri Mposhi	Honda Trail	GRZ 04 BX	District Office	Non - Runner	Repairable
61	Mkushi	Honda CTX 200	GRZ 39 EP	District Office	Runner	
62	Mkushi	Honda CTX 200	GRZ 82 EN	Ilume	Runner	
63	Mkushi	Honda CTX 200	GRZ 43 EP	Mkushi Central	Runner	
64	Mkushi	Honda CTX 200	GRZ 57 EP	Old Mkushi	Runner	
65	Mkushi	Honda CTX 200	GRZ 84 EN	Fiwila	Runner	
66	Mkushi	Honda CTX 200	GRZ 81 EN	Masansa	Runner	
67	Mkushi	Honda CTX 200	GRZ 44 EP	Chalata	Runner	
68	Mkushi	Honda CTX 200	GRZ 83 EN	Musofu	Repairable Condition	Involved in accident
69	Mkushi	Honda	ABF 4041	District Office	Non-runner	Old
70	Serenje	Honda CTX 200	GRZ 05 EP	Kanona	Runner	

71	Serenje	Honda CTX 200	GRZ 09 EP	Serenje Central	Runner	
72	Serenje	Honda CTX 200	GRZ 10 EP	District Office	Runner	
73	Serenje	Honda CTX 200	GRZ 11 EP	Chibale	Runner	
74	Serenje	Honda CTX 200	GRZ 26 EP	Kamena	Runner	
75	Serenje	Honda CTX 200	GRZ 33 EP	Lupiya	Runner	
76	Serenje	Honda CTX 200	GRZ 89 EN	Mulembo	Runner	
77	Serenje	Honda CTX 200	GRZ 80 EN	District Office	Runner	Old
78	Itezhi-tezhi	Honda CTX 200			Runner	Old
79	Itezhi-tezhi	Honda CTX 200			Runner	Old
80	Itezhi-tezhi	Honda CTX 200			Runner	Old
81	Itezhi-tezhi	Honda CTX 200			Runner	Old
82	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
83	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
84	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
85	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
86	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
87	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
88	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
89	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
90	Itezhi-tezhi	Honda CTX 200			Non Runner	Old
91	Itezhi-tezhi	Honda CTX 200			Non Runner	Old

C. Boats

S/n	Location	Type of Boat	Registration No.	Station	Condition	Remarks
1.	Itezhi-tezhi	Mercury			Poor	Needs repairs
2.	Itezhi-tezhi	Bayliner 175			Good	Good
3.	Itezhi-tezhi	Banana			Fair	

Appendix 15: Equipment

#	Type of Equipment	Total No.	Number Operational	Number Non Operational	Number Repairable	Number Scraps
1	Computers	15	11	1	1	-
2	Printers	13	9	1	-	-
3	Photocopier	1	-	1	-	1
4	Fax machine	3	3	-	-	-
5	Microscope	9	7	-	2	-
6	Typewriter (Electrical)	2	1	-	-	1
7	Typewriter (Manual)	3	3	-	-	-
8	Refrigerators	21	14	-	4	1
9	Fans (Electrical)	5	2	3	-	3
10	Electrical Generator	1	1	-	-	-
	TOTAL	72	51	6	7	6

Appendix 16: Furniture

S/N	Item	KABWE	CHIBOMBO	MUMBWA	KAPIRI MPOSHI	MKUSHI	SERENJE	ITEZHI-TEZHI
1	Office chairs	3 swivel 7 wooden	1 swivel 3 wooden	2 swivel 7 wooden	2 swivel 5 wooden	2 swivel 4 wooden	2 swivel 6 wooden	
2	Filing cabinet	1	1	3	1	2	1	
3	Drug cabinet	3	-	2	2	1	-	
4	Office tables	4 surgical	4	6	3	3	5	4
5	Staplers	3	2	3	2	2	2	
6	Perforator	3	2	2	2	2	2	
7	Benches	-	3	2	1	1	-	
8	Cool-boxes	5x5lts	10 x 5lt	9x25lts, 12x5lts	2x25lts, 10x5 lts	8x5lts	6x5lts	
9	Weigh scale	-	-	1	-	-	-	
10	Wall clock	-	2	2	-	1	1	
11	Date stamps	1	2	2	2	1	1	
12	Stock boxes	-	1	-	2	-	1	
13	Gloria sprayers	-	-	-	-	-	4	

THE ANIMAL HEALTH ACT, 2010

ARRANGEMENT OF SECTIONS

Section

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-
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GOVERNMENT OF ZAMBIA

ACT

No. 27 of 2010

Date of Assent: 14th August, 2010

An Act to provide for the appointment of the Director responsible for veterinary services and other staff and define their powers and functions; provide for the prevention and control of animal diseases; provide for the quarantine of animals; regulate the importation and exportation of animals, animal products, animal by-products, articles and animal feed; establish the Animal Disease Control Fund; repeal and replace the Stock Diseases Act, 1961; and provide for matters connected with, or incidental to, the foregoing.

[16th August, 2010

ENACTED by the Parliament of Zambia.

Enactment

PART I

PRELIMINARY

1. This Act may be cited as the Animal Health Act, 2010. Short title
2. In this Act, unless the context otherwise requires— Interpretation
 - “animal ” means any vertebrate, other than a human being, which is a member of the Phylum Chordata and includes a bee, butterfly and other insect used in the production of animal products, including the carcass of such animals; and
 - “ animal by-product ” means any part or entire body of an animal or products of animal origin that are not intended to be eaten by human beings;

“ animal feed ” means—

(a) any—

(i) substance obtained by a process of crushing, gristing or grinding or by the addition to any substance or removal therefrom of any ingredient;

(ii) condimental foodstuff or mineral substance which possesses, or is alleged to possess, nutritive properties; or

(iii) substance of animal origin;

which is intended or offered for the feeding of animals; or

(b) any stock lick or substance which can be and is used as a stock lick, whether or not it possesses medicinal properties;

but does not include straw, chaff, hay, silage, cereal in the grain or any substance which has been crushed, gristed or ground for a farmer in accordance with the farmer’s directions for own use, unless such substance has been declared by the Minister, by notice in the *Gazette*, to be animal feed for the purposes of this Act;

“ animal product ” means any meat, meat product or product of animal origin for human consumption, for use in animal feeding or for pharmaceutical or agricultural use, and includes an embryo, ova, semen, blood, bone or bone meal, hide, skin, horn, fat, honey, unprocessed wool and feathers;

“ animal quarantine station ” means a place where any animal, animal product, animal by-product or article may be kept for observation, research, inspection, testing, treatment, detention or destruction for the purposes of disease control and prevention;

“ article ” includes gear, harness, seed, grass, forage, hay, straw, manure or any other thing likely to act as a carrier of any disease;

“ border inspection post ” means a veterinary inspection post near or at the border or the point of entry designated by the Minister, by statutory instrument;

“ carcass ” means the carcass of an animal, and includes part of a carcass, and the meat, bone, hide, skin, feather, hoof, horn, offal, fur, wool, teeth or any other part of an animal;

-
- “cattle” means bulls, cows, heifers, calves, steers and oxen;
- “Chairperson” means a person appointed as such under section *sixty-seven*;
- “check point” means a point where any animal, animal product, animal by-product or article may be inspected for purposes of disease control and prevention;
- “cleanse” in relation to Part V, means the maintaining of livestock free from tick infestation by using an effective tick destroying agent in such manner as the Director may direct;
- “Committee” means the Animal Disease Control Interdisciplinary Committee constituted under section *sixty-seven*;
- “controlled veterinary action” in relation to an animal, means
- (a) the isolation, detention, inspection, testing, immunisation, observation, sampling, marking, treatment, care, destruction or disposal thereof; and
 - (b) the carrying out of any post mortem examination on any animal;
- “conveyance” means an aircraft, ship, vessel, train, vehicle, carriage, cart or other conveyance of whatever kind, including the fittings and equipment of the conveyance and, in the case of animals, the harness and tackle thereof;
- “Department” means the Department responsible for Veterinary Services;
- “dipping” means the complete immersion of cattle in a dipping tank containing an effective tick destroying agent;
- “dipping tank” means any apparatus for the cleaning of animals by submerging or any other structure used for that purpose as the Director may approve;
- “Director” means the Director responsible for veterinary services, and includes the Deputy Director responsible for veterinary services;
- “disease” means the pathological condition of a part, organ or system of an animal resulting from various causes such as infection, genetic defect or environment;
- “disease control zone” means an area declared by the Director as a disease control zone where controlled veterinary actions are instituted to prevent the entry,

Act No. 14
of 2004

- occurrence or spread of a causative agent, and includes a disease free zone, a buffer zone, a disease free compartment, a protective zone, a surveillance zone and an infected zone;
- “ disease free zone ” means an area established for the maintenance of disease free status of a sub population of animals with a distinct health status, from specified disease or diseases, separated by natural or artificial boundaries;
- “ disease free compartment ” means an area smaller than a zone with a clearly defined management practice and biosecurity plan and can be recognised as such within an infected zone;
- “ effective tick destroying agent ” means a drug or chemical registered as an acaricide under the Pharmaceutical Act, 2004, or as the Minister may prescribe;
- “ emerging disease ” means a new infection resulting from the evolution or change of an existing pathogenic agent, a known infection spreading to a new geographic area or population or a previously unrecognised pathogenic agent diagnosed for the first time and which has a significant impact on animal or public health;
- “ Fund ” means the Animal Diseases Control Fund established under section *sixty-four*;
- “ immature cattle ” means cattle, male or female, under the age of eighteen months or not having four permanent incisor teeth yet erupted;
- “ infected area ” means an area declared as such under section *thirteen*;
- “ livestock ” means any breed or population of animal kept by a human being for a useful or commercial purpose, and includes domestic animals, semi-domestic animals and captive wild animals;
- “ livestock cleansing area ” means an area declared as such under section *forty*;
- “ notifiable disease ” means an animal disease or other disease which fulfils one or more of the following conditions and which the Minister may, by statutory instrument, declare:
- (a) is not indigenous or native to Zambia;
 - (b) spreads rapidly with serious socio economic consequences;

(c) is of major importance in the international trade of animals or animal products;

(d) is common to human beings and animals; or

(e) for which any general or particular control measures have been prescribed;

“officer” means a veterinary officer, livestock officer, veterinary assistant or animal scientist employed by the Government;

“outbreak of disease” means an occurrence of one of the notifiable diseases or any other disease which the Minister may, by statutory instrument, declare in—

(a) any agricultural or breeding establishment, premises or building and all the adjoining premises where animals are present; or

(b) any area where animals are communally grazed as specified by the Director;

“owner” —

(a) in relation to an animal, includes the person for the time being having the management, custody or control of such animal; and

(b) in relation to any land or place, includes any person who, whether lessee or licensee, has the charge, control and management or occupation of such land or place;

“para veterinary” has the meaning assigned to it in the Veterinary and Para Veterinary Professionals Act, 2010;

Act No. of
2010

“permit” means a permit issued under the provisions of this Act;

“police officer” has the meaning assigned to it in the Police Act;

Cap. 107

“pour-on” means a chemical with a vector destroying capacity applied on the skin surface of an animal;

“public road” has the meaning assigned to it in the Public Roads Act, 2002;

Act No. 12
of 2002

“railway company” means the Zambia Railways and any other railway company operating in Zambia;

“rendering” means the process that converts waste animal tissue or animal by-products into stable value added materials;

“spraying” means the complete saturation of animals with an effective vector destroying agent, manually or mechanically;

“spray race” means any effective apparatus approved by the Director for the cleansing of animals by spraying;

“tick infestation” means the presence on any cattle of one or more ticks;

“vector” means a disease spreading agent;

“veterinary inspector” means a veterinary surgeon appointed by the Director to undertake designated official duties on behalf of the Department for a specified period and location;

“veterinary officer” means an officer in the service of the Government who is a registered veterinary surgeon;

Cap. 243

“veterinary surgeon” means a person registered as a veterinary surgeon under the Veterinary Surgeons Act; and

“Vice Chairperson” means a person appointed as such under section *sixty-seven*.

PART II

ADMINISTRATION

Appointment
of
Director and
other staff

3. The Public Service Commission shall appoint, as public officers, a Director responsible for veterinary services, a Deputy Director responsible for veterinary services, veterinary officers, tsetse control biologists, animal scientists and other staff for the Department, within the Ministry responsible for livestock development, as shall be necessary for the proper administration of this Act.

Functions of
Department

4. (1) The functions of the Department are to—
- (a) prevent and control animal diseases;
 - (b) control vectors that contribute to disease propagation in animals;
 - (c) regulate the importation and exportation of animals, animal products, animal by-products and articles;
 - (d) regulate the importation, manufacturing and use of animal feed;
 - (e) regulate the provision of veterinary services;

- (f) collect, analyse and present data related to the livestock sector;
- (g) certify for trade measures, import and export measures and veterinary services, animals, animal products, animal by-products, articles and premises; and
- (h) do all such acts and things as are necessary, incidental or conducive to the better carrying out of its functions under this Act or any other law.

(2) The Director shall, in the execution of the functions of the Department as specified under subsection (1) —

- (a) regulate the delivery of veterinary services;
- (b) regulate the control of animal diseases and vectors;
- (c) categorise diseases into lists and maintain lists of all notifiable diseases according to the criteria prescribed under this Act;
- (d) establish expert advisory committees to advise on technical matters relating to the provisions of this Act;
- (e) establish and maintain a national veterinary laboratory system and other means for analysing animal products and samples for the purpose of this Act; and
- (f) do all such acts and things as are necessary, incidental or conducive for the execution of the functions of the Department.

5. (1) An officer may—

- (a) at any reasonable time, enter upon and inspect any land, building or premises where animals, animal products, animal by-products, articles or animal feed may be found or processed for the purposes of inspection and data collection;
- (b) open and examine any container, conveyance, package or wrapping suspected to contain an animal, animal product, animal by-product, article or animal feed to ensure sanitary compliance;
- (c) inspect any animals, animal products, animal by-products, articles or animal feed destined for import into or export from Zambia to determine whether the consignment is sanitary compliant;

Powers of
officer

- (d) inspect and examine any conveyance which the officer has reasonable grounds to believe is transporting an animal, animal product, animal by-product, article or animal feed to ensure sanitary compliance; and
- (e) search any person whom the officer has reasonable grounds to believe is carrying an animal, animal product, animal by-product, article or animal feed or carrying out activities contrary to this Act.

(2) An owner of any land, building or premises or of any conveyance shall afford an officer access thereto and shall give such information and provide such reasonable assistance as the officer may require for the purposes of data collection and carrying out an inspection.

(3) An officer may, in the performance of any functions under this section, be accompanied and assisted by a police officer.

(4) An officer may detain an animal, animal product, animal by-product, article or animal feed for a period not exceeding two weeks.

Powers of
veterinary
officer

6. (1) A veterinary officer may—
- (a) apply or order the application of measures which are necessary or prescribed for the control or prevention of the spread of a disease;
 - (b) destroy or order the destruction at any time of any animal, animal product, animal by-product, article or animal feed which is diseased, moved or used contrary to the provisions of this Act;
 - (c) order the adoption of measures prescribed to ensure the welfare of animals; and
 - (d) seize or order the seizure of a conveyance carrying an animal, animal product, animal by-product, article or animal feed in contravention of this Act or any other law.
- (2) A veterinary officer may, in the course of an inspection carried out under this section—
- (a) seize, re-call, destroy, detain, treat or otherwise dispose of any animal, animal product, animal by-product, article or animal feed, or order that any such action be taken, at the expense of the owner;
 - (b) obtain any sample of any animal, animal product, animal by-product, article or animal feed as the veterinary officer considers necessary;

- (c) order any person to produce for inspection, or for purposes of obtaining extracts or copies, any book, document or other information concerning any matter relevant to the administration of this Act;
- (d) suspend one or more activities or temporarily, partially or completely close an inspected premises; and
- (e) suspend or withdraw any permit issued under this Act, relating to any premises.

(3) Where a veterinary officer detains, treats, disposes of or destroys an animal, animal product, animal by-product, article or animal feed under sub section (2), the veterinary officer shall within fourteen days of the detention, treatment, disposal, or destruction, of the animal, animal product, animal by-product, article or animal feed, notify in writing, the owner of the animal, animal product, animal by-product or article of the steps taken and the reasons therefor.

(4) Where—

- (a) at any place within Zambia, any animal, animal product, animal by-product, article or conveyance is infected or is suspected of being infected with any disease;
- (b) any animal, animal product, animal by-product, article, animal feed or conveyance has been introduced into any place in Zambia without the permit required for such introduction, or having been introduced under a permit is moved or dealt with otherwise than in accordance with such permit; or
- (c) any animal is found straying into Zambia from outside Zambia or straying within, into, or out of any specified area in Zambia;

a veterinary officer may make such order as the veterinary officer considers necessary for all or any of the following purposes:

- (i) to direct that such animal, animal product, animal by-product, article, animal feed or conveyance be seized or detained;
- (ii) to direct that such animal, animal product, animal by-product, article, animal feed or conveyance be slaughtered, disposed of or destroyed, as the case may be; or
- (iii) to direct that such animal, animal product, animal by-product, article or conveyance be dealt with in such manner as is considered necessary to prevent the spread of any disease.

(5) A person who contravenes an order made pursuant to this section commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

(6) Where a person fails or refuses to do anything which that person is required to do under an order made under this section, a veterinary officer may do or cause such thing to be done.

(7) The cost of anything which a veterinary officer does or causes to be done under subsection (6) shall be recoverable by the Director from the person who failed or refused to comply with the order.

Power to
carry out
tests

7. An officer shall for the purposes of this Act—

(a) take or cause to be taken from an animal, any samples or specimen;

(b) take or cause to be taken from a building, shed, place or conveyance, any article, sample or specimen; and

(c) apply such other tests as the officer may consider necessary.

Release,
seizure and
destruction

8. (1) Where a veterinary officer reasonably believes that it is not necessary to destroy an animal, animal product, animal by-product or article seized, the veterinary officer shall—

(a) release the animal, animal product, animal by-product, article, animal feed or property to its lawful owner; or

(b) release the animal, animal product, animal by-product, article, animal feed or property to its lawful owner on conditional payment of any charges incurred, in connection with its impounding or other measures taken by the veterinary officer.

(2) At the time of release, a veterinary officer shall, by order in writing, require an owner of any animal, animal product, animal by-product, article or animal feed to take measures to eliminate any risk associated with a notifiable disease.

Appointment
of veterinary
inspectors

9. (1) The Director may, for purposes of this Act, appoint a registered veterinary surgeon as a veterinary inspector.

(2) The Director, on appointment of a veterinary inspector, shall specify—

(a) the duties of the veterinary inspector;

(b) the area of operation; and

(c) the period of operation.

10. A person who —

(a) wilfully delays or obstructs an officer, veterinary officer or veterinary inspector in the carrying out of their duties; or

(b) knowingly or negligently gives an officer, veterinary officer or inspector false or misleading information orally, in writing or otherwise;

Obstruction
of
veterinary
officer,
veterinary
inspector or
officer

commits an offence and is liable, upon conviction, to a fine not exceeding one hundred thousand penalty units or to imprisonment for a period not exceeding one year, or to both.

11. An action shall not lie against an officer, veterinary officer or veterinary inspector in respect of any act done by the officer, veterinary officer or veterinary inspector in good faith and without negligence in the execution of the powers vested in them under this Act.

Indemnity

PART III

MEASURES FOR CONTROLLING AND PREVENTING ANIMAL DISEASE

12. Where at any place within or outside Zambia there exists, or is suspected to exist, any disease which is likely to affect animals in Zambia, the Minister or Director may make such order as the Minister or Director considers necessary for all or any of the following purposes:

Power to
control
introduction
and spread
of disease

(a) to prohibit or prevent the introduction of any disease from such place into Zambia or any part of Zambia;

(b) to prohibit or regulate the entry and movement of any animal, animal product, animal by-product, article or conveyance within or out of any part of Zambia named in the order;

(c) to regulate the quarantine, isolation, disinfection or treatment of any animal, animal product, animal by-product, article or conveyance in any part of Zambia named in the order;

(d) to prohibit or regulate the sale of any animal, animal product, animal by-product or conveyance and control agricultural show grounds, stock markets or sale yards in any area specified in the order;

- (e) to provide for the establishment of veterinary spot checks and check points on roads and such other areas as may be necessary to control diseases;
- (f) to regulate and provide for the conduct of meat inspection in a slaughter facility for the purpose of controlling animal diseases and residues in meat; or
- (g) to regulate the production, distribution and use of veterinary drugs, biologicals, vitamins, minerals, hormones, growth promoters, animal feed and feed additives for the purposes of animal disease control, drug resistance, residue control and imbalances.

Declaration
of infected
area

13. (1) An officer may, where any land, premises or building are suspected of being contaminated with a notifiable or emerging disease—

- (a) enter the land, premises or building for purposes of inspection or taking of such samples as the officer may consider necessary to contain or eradicate the disease;
- (b) prohibit the removal from the land or premises of any animal, animal product, animal by-product or article or anything whatsoever capable of spreading the disease; and
- (c) order, by notice in writing, the owner of the land, premises or building and an owner of any land, building or premises in the vicinity, to take within a specified period of time such measures as are necessary to eradicate, contain or restrict the spread of the disease.

(2) The Director shall, where there is reasonable suspicion or confirmation of the presence of a notifiable or emerging disease in any area declare the area an infected area.

(3) A veterinary officer may seize, detain and destroy without compensation, any animal, animal product, animal by-product or article removed from an infected area in contravention of the provisions of this Act or an order made in terms of this Act.

(4) A veterinary officer may order the disposal of an animal, animal product, animal by-product, article, carcass and any other thing associated with any disease within an infected area.

Owners of
land to
provide
handling and
other
facilities

14. (1) An owner of land on which livestock are kept shall provide facilities for the handling and housing of livestock and disease control facilities for the humane maintenance of such livestock.

(2) An owner of land who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding one hundred thousand penalty units or to imprisonment for a period not exceeding one year, or to both.

15. (1) The Minister may provide livestock structures in appropriate places for the common use of the owners of livestock, and may charge such fees for the use of the structures as may be prescribed.

Government
to provide
livestock
structures

(2) A person shall not damage, break, tear down or deface a livestock structure provided under subsection (1) or use it for any other purpose contrary to the provisions of this Act.

(3) A person who contravenes subsection (2) commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

16. (1) A person shall not move any animal, animal product, animal by-product, article or anything as may be prescribed, without a permit.

Restriction
of movement

(2) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

17. (1) An owner of an animal suspected of being infected with any disease shall immediately inform the nearest officer, police officer, agriculture officer, veterinary surgeon, district executive officer, chief or village headman.

Notification
of suspected
disease

(2) Where a person, other than an officer, is notified under subsection (1), that person shall immediately notify the nearest officer or veterinary inspector.

(3) Notwithstanding subsection (1), a veterinary inspector who has reasonable grounds to believe that an animal is infected with a disease shall immediately give notice of that fact to an officer.

(4) A person who contravenes this section commits an offence and is liable, upon conviction, to a fine not exceeding one hundred thousand penalty units or to imprisonment for a period not exceeding one year, or to both.

18. (1) An owner of an animal suspected of being infected with any disease shall—

Isolation and
separation of
diseased
animal

(a) as far as is practicable, keep such animal separate from other animals that are not infected;

(b) prevent the movement of such animal outside the infected area; and

(c) prevent the sale of such infected animal.

(2) A veterinary inspector or officer shall, for the purpose of isolating animals in an infected area—

- (a) require the owner of the infected animals within the infected area to isolate the infected animals from other animals;
- (b) regulate the movement of animals within the infected area; and
- (c) cause any animal in the infected area to be marked for the purposes of identification.

(3) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

(4) A person in charge of a livestock market or fair who suspects that an animal infected with a disease is being sold or exposed or offered for sale or disposal, shall seize and isolate the animal and forthwith notify the nearest officer or veterinary inspector.

Power of entry into farm, ranch, etc.

19. (1) An officer may enter on any land, farm or ranch, or into any stable, pen, sty or outbuilding or any kraal, enclosure or conveyance with such persons, animals and things as the officer considers necessary for the purposes of inspecting, examining or collecting samples from any animal, animal product, animal by-product, article, carcass, animal feed or conveyance or doing or causing to be done or supervising and inspecting the doing of anything which is required to be done under this Act or under any order made under the provisions of this Act.

(2) A person who prevents an officer from entering on any land, farm or ranch or into any sty or outbuilding or any kraal, enclosure or conveyance or who impedes or obstructs an officer in doing anything which the officer is empowered to do under subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Power to order assembly of animals for inspection, etc.

20. (1) An officer may instruct an owner of any animals to assemble the animals or any part of the animals at any specified place for the purposes of inspection or inoculation, or for any purpose authorised under the provisions of this Act or under any order made under the provisions of this Act.

(2) An instruction issued in accordance with subsection (1) to the headman of a village shall be deemed to be an instruction to an owner of animals in such village:

Provided that such notice is issued in writing and in such language or dialect as is commonly spoken by, or understood among, the majority of the inhabitants of that village.

(3) A headman of a village to whom an instruction is issued in accordance with subsection (2) shall immediately take all reasonable steps to communicate the contents of the instruction to every owner of animals in such village.

(4) A person who—

(a) fails to comply with any instruction given under subsection (1) or (2); or

(b) fails to communicate the contents of an instruction in accordance with subsection (3);

commits an offence and is liable, upon conviction, to a fine not exceeding one hundred thousand penalty units or to imprisonment for a period not exceeding one year, or to both.

21. The Director shall, for the purpose of disease control and animal and animal product traceability, use an animal and animal product identification system that allows for the tracing of animals and animal products from origin to end-use for the purpose of disease control.

Identification
and
traceability
of animals

22. (1) The Director may, in order to control, prevent and eradicate disease declare an area a disease control zone.

Declaration
of disease
control zone

(2) Where the Director declares a disease control zone under subsection (1), the Director shall cause the disease control zone to be *gazetted* and made public through the media.

(3) An officer may, in order to control any disease use any barriers, notices or beacons to identify and demarcate the disease control zone.

23. (1) The Director may declare any land, premises or area that is infected or is suspected to be infected with a notifiable disease to be a quarantine area for such period as the Director may determine.

Declaration
of quarantine
area

(2) The Director may, where the Director declares an area a quarantine area under subsection (1) —

(a) determine measures for the treatment or disposal of any animal, animal product, animal by-product or article in the area;

(b) order the treatment of any conveyance, whether infected or not;

(c) prohibit the movement of any person, conveyance, animal, animal product, animal by-product or article from or to the area; and

(d) order the taking of any other measure to eradicate the disease as the Department considers necessary.

Designation
of animal
quarantine
stations

24. (1) The Director may designate any place as an animal quarantine station.

(2) The Director may require any animal, animal product, animal by-product or article, to be kept at an animal quarantine station or at any other location identified by the Director, on such conditions as the Director may determine.

Lifting of
quarantine

25. The Director may, by written notice served on an owner of animals which are in a quarantine station or area, lift the quarantine where the Director determines that a notifiable disease is no longer present in the quarantine station or area and does not pose a threat to other animals outside the quarantine station or area.

Permit to
manufacture
or sell virus,
vaccine, etc.

26. (1) A person shall not import, export manufacture, sell or expose for sale in Zambia a virus, vaccine, serum or an analogous product used for the purpose of diagnosis or treatment of any animal disease except under a permit, in writing, issued by the Director.

(2) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both.

Import of
animal,
animal
product or
article

27. (1) A person shall not import an animal, animal product or article without an import permit issued by the Director.

(2) The Minister may, by statutory instrument, provide for the prohibition, restriction and regulation of the importation of any animal, animal product, animal by-product or article.

(3) Without derogating from the generality of subsection (1), the Minister may, by regulation:

(a) provide for the disinfection or treatment of any imported animal, animal product, animal by-product or article or their containers;

(b) designate ports of entry, routes and methods of transportation;

(c) provide for the detention of any animal, animal product, animal by-product or article which is imported and the measures to be taken during the detention;

- (d) provide for the imposition and recovery of fees for disinfecting, or treating any animal, animal product, animal by-product or article which is imported; and
- (e) provide for the disposal of any imported animal, animal product, animal by-product or article in respect of which prescribed fees are not paid and of the proceeds resulting from their disposal.

28. The Minister may, in consultation with the Director, authorise the entry of an animal, animal product or article for scientific or research purposes, subject to such terms and conditions as the Minister may consider necessary.

Importation for scientific, educational or research purposes

29. (1) A person shall not export an animal, animal product, animal by-product or article without an export permit issued by the Director.

Export of animal, animal product, animal by-product and article

(2) The Minister may, by statutory instrument, prohibit the export of animals, animal products, animal by-products or articles from Zambia, or any part of Zambia, in general or to one or more designated countries of destination, unless and until all regulations with regard to their export have been complied with, and may at any time, by like notice rescind such prohibition.

(3) The Minister may, by statutory instrument, make regulations for the purposes of regulating and controlling the export of animals, animal products, animal by-products or articles from Zambia or any part of Zambia and prescribing the fees to be paid.

(4) The Minister shall take into account, in the regulations prescribed under subsections (2) and (3), the requirement to fulfill international treaties and agreements and the requirements of the countries of destination.

30. (1) The Minister may, for the purposes of disease control and veterinary public health, approve a laboratory for—

Approval of laboratories

- (a) the testing of animal feed, vaccine, veterinary products, animal products and animal by-products; or
- (b) disease diagnosis; or
- (c) food safety and assurance; or
- (d) any other activity considered necessary under this Act.

(2) The Director shall cause to be kept a register of approved laboratories in the prescribed manner and form.

Regulatory powers for eradication of diseases

31. (1) The Minister may, by statutory instrument, provide for the eradication of diseases and the prevention or control of the spread of diseases.

(2) Without derogating from the generality of subsection (1), the Minister may provide for—

- (a) the disinfection, treatment, destruction or disposal of an animal, animal product, animal by-product or article infected, or appearing to be infected, with a disease, or anything liable to infect an animal with a disease;
- (b) the prohibition, restriction and regulation of the transportation of animals, animal products, animal by-products and articles;
- (c) the prohibition, restriction and regulation of the keeping of animals where a disease cannot otherwise be readily or adequately controlled or eradicated;
- (d) the reporting of the occurrence of a disease by the public and the collection and transmission of specimens of a disease by an officer or a veterinary inspector;
- (e) the method, age, and time limits for the slaughter of animals;
- (f) the inspection and registration of slaughter houses, slaughter slabs, abattoirs, farms, hatcheries, livestock markets and animal product processing plants and the imposition of registration fees for such registration and inspection;
- (g) the collection, processing methods and authorised uses of animal by-products;
- (h) the disinfection, fumigation and treatment of land, warehouses, buildings and structures suspected of being or having been used for the storage of anything likely to infect an animal with a disease;
- (i) the declaration of disease control zones and the prohibition, restriction and regulation of the removal of animals, animal products, animal by-products and articles or any other thing whatsoever to or from a disease control zone;
- (j) the maintenance of a disease free area;
- (k) the forms of records to be kept and of records to be made by owners of approved laboratories;
- (l) the standards of hygiene and quality assurance to be maintained in rendering plants and approved laboratories;

- (m) the methods to be employed by an approved laboratory in the testing of animal feed for purposes of this Act and the fees to be paid for such testing;
- (n) the inspection, disinfection or fumigation of any conveyance used in the transportation of an animal, animal product, animal by-product or article; and
- (o) the payment and recovery of fees for any inspection, disinfection, fumigation or treatment carried out by an officer or a veterinary inspector.

PART IV

TRANSPORTATION OF ANIMALS

32. A transporter of any animals in transit by any conveyance, within or through Zambia, shall appoint a person to be in control of the animals, and, in default of such appointment

Obligation of transporter of animals in transit

- (a) in the case of a motor vehicle, the driver of the motor vehicle;
- (b) in the case of a train, the guard of the train;
- (c) in the case of an aircraft, the captain of the aircraft; and
- (d) in the case of a ship, the captain of the ship;

shall be deemed to be the person in control of such animals.

33. (1) A transporter of animals shall be in possession of a movement permit authorising the conveyance of such animals.

Transportation of animals

(2) The Minister may, by statutory instrument, make regulations for the purposes of regulating and controlling the mode and manner in which animals shall be transported.

34. (1) A transporter of animals shall maintain a record of the animals conveyed in the prescribed manner and form.

Transporter of animals to maintain records

(2) A transporter referred to in subsection (1) shall, at the request of an officer, make available to the officer any record kept in accordance with subsection (1).

PART V

LIVESTOCK SLAUGHTER AND CLEANSING

35. (1) A person shall not slaughter any immature livestock, or pregnant livestock unless the person is in possession of a permit granted under section *thirty six* in respect of the slaughter.

Prohibition of slaughter of certain livestock

(2) Any person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Permit to
slaughter
livestock

36. (1) Any person who wishes to slaughter immature livestock or pregnant livestock shall apply to the Director for a permit in the prescribed manner and form upon payment of the prescribed fee.

(2) The Director may, upon receipt of an application under subsection (1) and where the application meets the requirements of this Act, grant the applicant a permit authorising the slaughter of such number of livestock as may be specified on the permit.

(3) A person shall, where the person slaughters immature livestock or pregnant livestock, furnish an officer with—

(a) the permit granted in respect of the slaughter; and

(b) such other information relating to the livestock and the slaughter thereof as the Minister may, by statutory instrument, prescribe.

Permit for
slaughterhouse

37. (1) A person who intends to operate any premises as a slaughterhouse shall apply to the Director for a permit in the prescribed manner and form upon payment of the prescribed fee.

(2) The Director shall, upon receipt of an application under subsection (1) and where the application meets the requirements of this Act, grant the applicant a permit to authorise the operation of the slaughterhouse.

Power of
entry

38. (1) An officer may, at any reasonable time, enter any land or premises where livestock are kept for slaughter or offered for sale, and may inspect any livestock or carcass found on the land or premises.

(2) An officer may, in the exercise of the officer's powers under subsection (1), prohibit the slaughtering of any livestock and may seize and remove any carcass or part thereof.

Regulations
in respect of
livestock
slaughtering

39. The Minister may, by statutory instrument, prescribe the manner and form for the registration of any premises as a slaughterhouse.

Declaration of
livestock
cleansing area

40. The Minister may, by notice in the *Gazette*, declare an area, or any part thereof, to be a livestock cleansing area.

Obligation of
owner of
livestock
cleansing
area

41. (1) An owner of livestock in a livestock cleansing area shall cleanse the livestock at such intervals as may be prescribed:

Provided that where it is impossible or inexpedient to cleanse the livestock within such prescribed interval, the interval may be extended by the Director for a further period not exceeding fourteen days.

(2) Livestock shall not be moved from a livestock cleansing area to another area unless the livestock is cleansed twice within fourteen days immediately prior to the movement or until such time as an officer shall certify the livestock as free from ticks.

(3) A person who contravenes subsection (1) or (2) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

42. (1) The Director may, for considerations of weather, drought or condition of the livestock, or for other causes beyond the control of the owner of the livestock, temporarily exempt an owner of livestock from the provisions of section *forty-one* and may during such period prescribe the interval of cleansing.

Exemption
to cleanse
livestock

(2) The Director shall notify any exemption granted under this section to the local authority of the area in which such exemption is granted.

(3) A person shall not move any livestock from an area in which an exemption from cleansing under this section is in force unless the livestock are cleansed twice within fourteen days immediately prior to the movement.

(4) A person who contravenes subsection (3) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

43. (1) An officer may, in any livestock cleansing area, at any reasonable time, enter any land or premises and inspect and count any livestock thereon, take a sample from the contents of any dipping tank, spray race or pour-on and call upon an owner of the livestock to produce all the livestock in the owner's possession for the purpose of inspection and enumeration.

Powers of
officer in
livestock
cleansing
area

(2) An owner of livestock shall advise an officer of the usual date, place and method of tick control of the livestock and of any change of such date or place.

(3) A person who refuses to allow an officer to enter any land or premises or to examine livestock, or who impedes or hinders or attempts to impede or hinder an officer in the execution of the officer's duties, commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Owner of land to provide cleansing facilities

44. (1) An owner of land on which livestock are found shall provide facilities for tick control of the livestock and shall make provision for sufficient quantities of effective tick-destroying agent for the cleansing of such livestock.

(2) An owner of land who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Provision of tick control facilities

45. (1) An officer may require an owner of land or livestock in a livestock cleansing area to provide tick control facilities of an approved design on the land, or may require the owner of land or livestock to make efficient by repair or otherwise, an existing tick control facility on the land at the expense of the owner of the land or livestock:

Provided that nothing in this section shall be deemed to prohibit the provision of tick control facilities for the common use of two or more owners of land or livestock with the approval of an officer.

(2) For the purposes of this section, an officer may enter any land or premises and may give written notice to the owner of land or livestock found thereon to provide tick control facilities within a reasonable period, being not less than thirty days, to be specified in such notice.

(3) An officer may, where a person fails to comply with a notice under subsection (2), proceed to provide tick control facilities and may recover the cost thereof from the owner of the land or livestock.

(4) An owner of land or livestock who refuses or fails to comply with any notice given by an officer under this section commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Government to provide dipping tanks or spraying races

46. (1) The Minister may provide dipping tanks or spraying races in suitable places for the common use of owners of the livestock, and may charge such fees for the cleansing of livestock in such tanks or spraying races as may be prescribed.

(2) The Minister may, in any livestock cleansing area, direct local authorities to provide dipping or spraying races for the common use of owners of livestock within the areas under the control of the local authorities and the local authorities may charge the fees prescribed pursuant to subsection (1).

47. (1) A person shall not sell or offer for sale as an effective tick destroying agent any article or fluid which does not conform to the prescribed standard.

Tick
destroying
agent to
conform to
prescribed
standard

(2) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

PART VI

TSETSE CONTROL

48. (1) In this Part —

Interpretation

“ domestic animal ” includes any horse, cattle, mule, ass, sheep, hog, pig, goat, fowl, ostrich, dog, cat, or any other domesticated animal, fowl or bird, and any wild animal, fowl, bird or reptile in a state of captivity;

“ officer ” means a tsetse control biologist, tsetse control officer or tsetse assistant employed by the Government;

“ private land ” means any land, the ownership of which has by law, grant or title deed, become vested in any person other than the President, and includes any land held by any person under an agreement whereby such person is entitled to obtain from the President title thereto on the fulfilment by the person of the conditions prescribed by such agreement;

“ tsetse control picket ” means any barrier erected on any road or recognised footpath in terms of paragraph (e) of section *fifty-one*;

“ tsetse fly area ” means an area declared as such under section *forty-nine*; and

“ tsetse fly control area ” means a defined area where techniques to control or eradicate tsetse flies are applied.

(2) For the purposes of this Part, the terms “ persons ”, “ domestic animals ” and “ vehicles ” include any baggage or other articles carried by or on such persons, domestic animals or vehicles.

49. (1) The Minister may, by statutory notice, declare any defined area to be a tsetse fly area or a tsetse fly control area.

Declaration
of tsetse fly
area

(2) A declaration made pursuant to subsection (1) may provide for the introduction of any of the following measures in respect of any tsetse fly area or part thereof and may confer powers and

impose duties on an officer or owner of private land in connection with the carrying out and enforcement of such measures:

- (a) the cutting, clearing or removal of any trees, timber or vegetation where the control of tsetse flies is hampered by the presence of such trees, timber or vegetation;
- (b) the control of bush fires;
- (c) the removal of any persons or domestic animals from the area or any part thereof where such removal is considered necessary for the application of any scheme for the eradication or effective control of tsetse flies;
- (d) the application of insecticides to clear an area of tsetse flies:

Provided that where the insecticide is to be applied on a private land, the owner of the land shall be given prior notification; and

- (e) the application of any other method or technique that may be considered appropriate and effective.

Powers of
Minister in
respect of
private land

50. (1) The Minister may order an officer to take such steps as may be necessary for the introduction on private land of any measures under this Act, and require the owner of such land to permit the introduction of such measures.

(2) A notice requiring an owner to permit any measures under subsection (1) shall be published in the *Gazette*.

Regulations
on tsetse fly
control

51. The Minister may, by statutory instrument, make regulations—

- (a) prohibiting the travel or movement of persons, domestic animals and conveyances to, from or within, a tsetse fly area or a tsetse fly control area;
- (b) restricting travel or movement to certain defined routes and to specified periods of the day or night;
- (c) where any travel or movement is authorised in terms of this Act, providing for the inspection, by officers, of persons, domestic animals and conveyances, for the purpose of detecting the presence of tsetse flies, and for the introduction and enforcement of measures for ridding such persons, domestic animals and conveyances, of tsetse flies;
- (d) providing for the protection of loads on conveyances by tarpaulins or similar coverings for the purpose of preventing the entry of tsetse flies amongst the loads;

- (e) providing for the establishment of tsetse control pickets and check points on roads and recognised footpaths;
- (f) preventing the entry, introduction or carrying, of tsetse fly into a tsetse fly control area or tsetse fly free area and for matters incidental to such purposes;
- (g) regulating or prohibiting, except under a permit issued under this Act, the performance of any specified act or the carrying on of any operation including trading, whether within or outside a tsetse fly control area, where such regulation or prohibition is reasonably required for the purpose of controlling the spread of tsetse flies;
- (h) providing for the issue and revocation of permits, for the performance of any act or the carrying on of any operation which is mentioned in paragraph (g);
- (i) prescribing the form of permits, the conditions attaching to them, the conditions precedent to their issue and the periods of their validity and providing for the production of permits to officers;
- (j) prescribing the fees payable for permits; and
- (k) generally for the better carrying into effect of the provisions of this Act.

PART VII

GENERAL PROVISIONS ON CONTROL OF ANIMAL DISEASE

52. (1) The Minister may, by statutory instrument, in consultation with the Director, establish zoosanitary border posts and internal check points.

Zoosanitary border posts and internal check points

(2) The Department shall control livestock at zoosanitary border posts and internal check points established under subsection (1), and shall conduct veterinary inspections at such posts and check points.

53. The Director shall, for the purpose of early detection of diseases have in existence an early warning system of diseases.

System for disease control

54. (1) The Minister may, by statutory instrument, in consultation with the Director, declare an area to be a disease free zone and prescribe—

Declaration of disease free zone

- (a) the use of such area;
- (b) the measures to be undertaken by owners of livestock within a disease free zone; and

(c) measures to be undertaken by owners of livestock outside a disease free zone in order to prevent introduction of diseases into such area.

(2) Without prejudice to subsection (1), an area shall be declared disease free if —

(a) any disease announced by the Director has not occurred in that area for a period specified by the Director;

(b) measures to prevent the introduction of disease or infection are in place;

(c) barriers, either natural or artificial exist to prevent animal sub-populations from mixing; and

(d) no disease declared by the Director under this Act has been detected in adjacent zones including wildlife areas.

Prohibition
of use of
pesticides,
etc. an
animal
without
permit

55. (1) A person shall not test, register, sell or use any pesticide, chemical, drug or hormone on any animal without a permit issued by the Director in respect of that pesticide, chemical drug or hormone.

(2) A person shall not—

(a) distribute, sell or offer or expose for sale any pesticide or chemical for animals which does not conform to the requirements of this Act; and

(b) carry out research or activities related to research on notifiable diseases without a permit from the Director.

(3) A person who produces, distributes, stores, sells or deals in any manner with pesticides for animals and any other chemical shall—

(a) ensure that the chemical is maintained according to standards approved by the Minister; and

(b) provide information of any change or anticipated change in the pesticide three months prior to the introduction of the change.

(4) A person who contravenes this section commits an offence and is liable, upon conviction, to a fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both.

Restriction
on bee
keeping

56. A person shall not import or export honey, bee or hive products or run, keep or maintain a bee keeping farm or enterprise for purposes of sale without a permit from the Director.

- 57.** The Minister may, by statutory instrument make regulations for—
- Prevention and control of fish diseases
- (a) the assessment of fish health status in the production sites through inspections and standardised procedures;
 - (b) the eradication of fish diseases by slaughtering of infected stocks, and re stocking with fish from approved disease free resources; and
 - (c) regulating and monitoring the introduction and transportation of fish.
- 58.** (1) A person shall not herd or graze animals or allow that person's animals to herd or graze within two hundred metres of a public road unless there is a barrier between the public road and the area of herding or grazing.
- Prohibition of herding or grazing near public road
- (2) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.
- PART VIII**
- ANIMAL FEED
- 59.** (1) A person shall not import, manufacture or sell any animal feed without a permit from the Director.
- Restriction on importation, manufacture or sale of animal feed
- (2) A person shall not import, manufacture or sell any animal feed unless the animal feed conforms to the standards and specifications prescribed under this Act.
- (3) A person who contravenes subsections (1) and (2) commits an offence and is liable, upon conviction, to a fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both.
- 60.** (1) A person shall not import without a permit from the Director—
- Restriction on importation, manufacture, etc. of animal feed containing certain substances
- (a) any animal feed which contains bone or any other substance derived from an animal carcass; or
 - (b) bones or any other substance derived from an animal carcass for the purpose of manufacturing any animal feed.
- (2) A person shall not manufacture or sell any animal feed containing bone or any other substance derived from an animal carcass unless such bone or substance has been sterilised in the prescribed manner.

(3) A person who contravenes subsections (1) and (2) commits an offence and is liable, upon conviction, to a fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both.

Permit for rendering plant

61. (1) A person shall not operate a rendering plant without a permit from the Director.

(2) A person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both.

Regulatory provisions for animal feed

62. The Minister may, by statutory instrument make regulations for—

- (a) the form of register, applications, permits, reports of sampling and analysis;
- (b) the manner of branding, labelling, marking or sealing packages or containers of any animal feed;
- (c) the prohibition or restriction of the disposal, acquisition or use of any animal feed;
- (d) the restriction, limitation or prohibition of the importation of any animal feed or class of animal feed into Zambia and the conditions under which the animal feed may be imported; and
- (e) the methods to be employed for rendering.

PART IX

THE ANIMAL DISEASE CONTROL FUND

Declaration of animal disease emergency

63. (1) The Minister may declare an animal disease emergency where—

- (a) an introduced disease is capable of spreading rapidly;
- (b) the presence, impact and extent of the disease, the potential for spread and its rate of spread, requires emergency eradication measures to eliminate the disease;
- (c) a disease is of immediate or potential danger to the health of other animals or to human health;
- (d) a Group 1 notifiable disease is detected in any area in Zambia; or
- (e) the animal was diseased at the time of slaughter.

(2) The Director may, where the Minister declares an animal disease emergency under subsection (1)—

- (a) designate a disease control zone;
- (b) prohibit or restrict the entry or removal of any animal, animal product, article or animal feed from the area;
- (c) specify the activities to be carried out in the area;
- (d) restrict the movement of persons, vehicles and goods to, and from, the area; and
- (e) take any other action that the Director considers appropriate to prevent the introduction or spread of the disease.

64. (1) There is hereby established the Animal Diseases Control Fund.

Animal
Diseases
Control Fund

(2) The Fund shall consist of—

- (a) such moneys as Parliament may appropriate for the purpose of the Fund;
- (b) voluntary contributions to the Fund from any person or organisation; and
- (c) any grants from any source within or outside Zambia approved by the Minister responsible for finance.

(3) The monies of the Fund shall be applied for —

- (a) the prevention, control and eradication of emergency diseases declared under section *sixty-three*;
- (b) the payment of compensation due to any person whose animals are destroyed under powers conferred by this Act; and
- (c) any other matter relating to the prevention, control and eradication of emergency diseases.

65. The financial year of the Fund shall be the period of twelve months ending on 31st December in each year.

Financial
year

66. (1) The Minister shall cause to be prepared proper books of accounts in relation to the Fund.

Accounts
and audit

(2) The accounts of the Fund for each financial year shall be audited by the Auditor General and, for that purpose, the Auditor General and any officer authorised by the Auditor General shall have access to all books and other records relating to the accounts for the Fund.

(3) The Auditor General shall, not later than nine months after the end of each financial year, submit a report on the accounts of the Fund for that financial year to the Minister.

(4) The Minister shall, not later than seven days after the first sitting of the National Assembly next after the receipt of the report, lay it before the National Assembly.

Establishment
of Animal
Disease
Control
Interdisciplinary
Committee

67. (1) There is hereby established the Animal Disease Control Interdisciplinary Committee.

(2) The Committee shall consist of the following members who shall be appointed by the Minister:

(a) the Permanent Secretary in the Ministry responsible for livestock development, who shall be the Chairperson; and

(b) one Permanent Secretary each from the Ministries responsible for—

(i) home affairs;

(ii) local government;

(iii) transport;

(iv) information;

(v) health; and

(vi) finance.

(3) The Minister shall appoint a Vice-Chairperson from amongst the members of the Committee.

(4) The functions of the Committee are to —

(a) mobilise resources for the prevention and control of animal diseases;

(b) control disbursements from the Fund; and

(c) co ordinate the implementation of the measures in respect of preventing and controlling the spread of a notifiable disease or other disease using the sectoral skills and resources of line ministries.

(5) The Committee may exercise its functions notwithstanding any vacancy in its membership.

(6) The provisions of the Schedule apply to the Committee.

Reports to
Committee

68. (1) The Director shall, where there is an animal disease emergency, submit to the Committee a periodic report at such intervals as may be determined by the Chairperson.

(2) The report referred to in subsection (1) shall include the following:

- (a) the status of the outbreak of disease;
- (b) the measures that have been undertaken to prevent the spread of the outbreak of disease; and
- (c) such other information as may be requested by the Chairperson.

PART X

COMPENSATION

69. The Minister may, by statutory instrument, regulate the procedure, criteria, type and determination of compensation to be given to any person under this Act. Regulatory powers with respect to compensation

70. (1) A claim for compensation shall be made to the Director in the prescribed manner and form. Claim for compensation

(2) Subject to the other provisions of this Act, the Minister may order the payment of compensation to the owner of an animal, animal product, animal by-product, article or animal feed destroyed or disposed of, under the powers conferred by this Act, where physical evidence is provided that the animal, animal product, animal by-product, article or animal feed was destroyed or disposed of as a consequence of the exercise of powers conferred under this Act.

(3) In determining the amount of compensation to be paid under this Act, no allowance for loss of profit occasioned by breach of contract or loss of production or any other consequential losses shall be made.

71. The Minister may withhold compensation in whole or in part where — Compensation to be withheld in certain circumstances

- (a) doubt or dispute arises as to the entitlement of a person to receive compensation as stipulated under this Act;
- (b) the owner of the animal, animal product, animal by-product, article or animal feed in respect of which compensation is claimed has committed an offence under this Act;
- (c) the animal, animal product, animal by-product, article or animal feed was at the time it was imported into the country already infected or contaminated by a disease or did not meet the prescribed standard;
- (d) the animal is slaughtered on humane grounds; or
- (e) the animal was diseased at the time of slaughter.

PART XI

GENERAL PROVISIONS

Appeals

72. (1) A person aggrieved with any decision made by an officer or Director under this Act may, within seven days of the date of the decision, lodge with the Minister an appeal against the order.

(2) There shall be no right of appeal against—

(a) an order for the destruction or disposal of an animal, animal product or animal by-product declared by a veterinary officer to be infected with a disease;

(b) an order for the destruction or disposal of an animal, animal product or animal by-product kept or transported contrary to the provisions of this Act or any other law; or

(c) an order for the disposal of animal feed imported, compounded, mixed, manufactured or used contrary to the provisions of this Act.

(3) An appeal lodged under subsection (1) shall be in writing and shall specify in detail the grounds upon which it is made.

(4) A person aggrieved with a decision of the Minister may appeal to the High Court within thirty days of receiving the decision.

General offences

73. A person who—

(a) contravenes or fails to comply with a provision of this Act, regulations or any order or notice made or issued under this Act;

(b) contravenes or fails to comply with any condition of a permit issued under this Act;

(c) intentionally introduces or causes the introduction or spread of a disease;

(d) on being required to do so, fails or refuses to produce to an officer, veterinary officer, veterinary inspector, police officer or other authorised person a permit or other document relevant for purposes of this Act;

(e) fails or refuses, without reasonable cause, to give information to an officer, veterinary officer, veterinary inspector or a police officer when required to do so under this Act;

- (f) knowingly or recklessly gives false or incomplete information for purposes of obtaining a permit or other requirement under this Act;
- (g) for the purpose of obtaining the issue of a permit whether for that person or any other person, makes a declaration or statement which the person knows to be false in any material particular or makes use of a declaration, statement or document containing the same;
- (h) grows, possesses, sells, offers for sale, transports or distributes in any manner, any animal, animal product, animal by-product or article knowing that the animal, animal product, animal by-product or article is infected with a disease;
- (i) tampers with any sample taken for purposes of this Act; or
- (j) alters, forges, defaces or destroys any document issued under this Act;

commits an offence and is liable—

- (i) for a contravention of paragraphs (c) and (h), to a fine not exceeding five hundred thousand penalty units or to imprisonment for a period not exceeding five years, or to both; or
- (ii) for any other offence, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

74. Except where otherwise expressly provided in this Act, any person who is convicted of an offence under this Act for which no penalty is provided, is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

General penalty

75. (1) A person shall not, without the consent in writing given by, or on behalf of, the Department, publish or disclose to any person otherwise than in the course of duties, the contents of any document, communication or information which relates to, and which has come to that person's knowledge in the course of that person's duties under this Act.

Prohibition of disclosure of information to unauthorised persons

(2) Any person who contravenes subsection (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

(3) A person who, having any information which to the knowledge of that person has been published or disclosed in contravention of subsection (1), unlawfully publishes or communicates the information to any other person, commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Arrest
without
warrant

76. (1) An officer may arrest a person without warrant where the officer has reasonable grounds to believe that the person-

- (a) has committed an offence under this Act;
- (b) is about to commit an offence under this Act and there is no other way to prevent the commission of the offence;
- or
- (c) is willfully obstructing the officer in the execution of the officer's duties.

(2) An officer who makes an arrest under subsection (1) shall, without undue delay, have the person so arrested brought before a court of competent jurisdiction to be dealt with accordingly.

Forfeiture
provisions
on
conviction

77. (1) Upon the conviction of any person of an offence under this Act, the court may in addition to any other penalty imposed, declare any animal, animal product, animal by-product or article or subject to subsections (2) to (8) inclusive, any conveyance with which the offence was committed, or which was used in, or for the purpose of, or in relation to, or in connection with, the commission of the offence, to be forfeited without compensation and shall order the same to be disposed of as the State considers fit.

(2) Where the prosecution requests a declaration of forfeiture in respect of any conveyance, the court shall make an order, to the effect that unless any person other than the convicted party claims, under this section, any right of ownership in the conveyance within three months of the date referred to in subsection (5), the prosecution may apply to the court *ex parte* for a declaration for forfeiture under subsection (1), and the court shall make the declaration.

(3) Upon the making of an order under subsection (2), the Director shall, within one month thereafter, cause to be published in the *Gazette* and in at least one daily newspaper of general circulation in the place where the offence was committed, a notice of the making of the order, which notice shall be in the prescribed form, or if no such form is prescribed, in a form approved by the court.

(4) If under any written law requiring the registration of any conveyance referred to in subsections (1) and (2), the conveyance is registered in Zambia in the name of any person other than the person convicted, the Director shall, within seven days after publication of the notice in the *Gazette* cause a copy to be sent by registered post in a sealed envelope addressed to the person at the address appearing on the register, and the registration of the letter shall be conclusive evidence of service of the notice upon such person.

(5) Any person who claims any right of a conveyance may, within three months after the making of the order referred to in subsection (2), serve upon the Director and lodge with the clerk of the court an application in writing for the discharge of the order setting out the claim of ownership in the conveyance, whereupon the clerk of the court shall fix a date, not less than one month after the lodgement of the application for a hearing and shall, within seven days after the lodgement, cause notice of the hearing of the application to be served upon the Director.

(6) In any proceedings brought under subsection (5), the onus of proof shall be on the applicant and no order discharging the order shall be made unless the applicant has adduced evidence and proved to the satisfaction of the court that the applicant was not in any way privy to the offence and that the conveyance was, at the time of the commission of the offence, being used for such purpose without the knowledge or consent of the applicant and without any negligent disregard on the part of the applicant, of its use by the convicted person.

(7) Where, upon an application made under subsection (5), the court is satisfied that the conveyance is owned jointly by the claimant and the convicted party, or is the subject matter of a hire purchase agreement between the claimant and the convicted party, and the claimant has discharged the onus of the proof prescribed by subsection (6), the court shall declare forfeited all of the estate or interest of the convicted person in and to the conveyance, or all of the rights therein accrued to that person under the hire purchase agreement or pursuant to the Hire Purchase Act and order the estate, or interest or rights to be disposed of as the State may consider fit.

Cap. 399

(8) Except with the consent of the State, any right vested in any claimant under any hire purchase agreement or pursuant to the Hire Purchase Act to repossess any conveyance which is subject to an order made under subsection (2), shall be suspended pending

Cap. 399

the determination of any application brought under subsection (5), and in the event of the court declaring the rights therein accrued to the convicted party to be forfeited, the accrued right to repossess the conveyance shall not be exercisable against the Government.

Disposal of
seized animals,
etc.

78. (1) Where any animal, animal product, animal by-product or article or any conveyance or animal feed is seized under this Act, or any other written law, in relation to or in connection with the commission of any offence under this Act, and —

- (a) the person suspected of having committed the offence is unknown;
- (b) the person suspected of having committed the offence cannot be found for the purpose of service of the process of the court charging that person with the offence; or
- (c) having been served with such process, the person suspected of having committed the offence fails to appear in answer to the charge;

the Director may, one month after publication of a notice of intention to apply for a court order for forfeiture in one daily newspaper of general circulation in the district in which the offence is alleged to have been committed, apply by way of original application, *ex parte*, to the court for an order declaring the animal, animal product, animal by-product, article, animal feed or conveyance, as the case may be, to be forfeited without compensation and ordering it to be disposed of as the Director may consider fit.

(2) If any person claims any right of ownership in any conveyance to which a notice published under subsection (1) applies, the person may, within one month after the date of publication, lodge with the clerk of the court a notice of claim of ownership and serve a copy of the notice upon the Director, and the provisions of subsections (4) to (8) of section *seventy seven* shall apply, with the necessary modifications, to the claim of ownership.

(3) If any animal, animal product, animal by-product, article or animal feed is seized under this Act, or any other written law, in relation to, or in connection with, the commission of any offence under this Act, or any other written law, the Director may apply to the court by way of original application, *ex parte*, for an order

for the immediate disposal by sale or otherwise of the animal, animal product, animal by-product, article or animal feed and the proceeds shall be held by the Director pending the determination of any proceedings brought in respect of the offence and shall be dealt with by the Director as the court may direct or, if the person suspected of having committed the offence is unknown or cannot be found for the purposes of service of the process of the court, subsection (1) shall apply, with necessary modifications, to the proceedings.

79. Where the holder of any permit or authority, issued under this Act, is convicted of an offence under this Act, the court shall, in addition to any penalty imposed, order the person to surrender forthwith to the Director the permit or authorisation, as the case may be, to be dealt with by the Director in accordance with the provisions of this Act.

Surrender of
permit on
conviction

80. (1) The Minister may make regulations for the better carrying out of the provisions of this Act and, in particular but without prejudice to the generality of the foregoing, such regulations may provide for—

Regulations

- (a) the prevention of the introduction of, or the spread of, any animal disease in Zambia;
- (b) the prohibition or control of movements of animals, animal products, animal by-products and articles and the mode of their transfer;
- (c) the establishment of animal disease control check points;
- (d) the controlling of—
 - (i) any disease common to human beings and animals;
and
 - (ii) any parasite injurious both to human beings and animals or capable of introducing or spreading among human beings or animals any disease referred to in sub paragraph (i);
- (e) the quarantine or isolation of any animal, animal product, animal by-product or article;
- (f) the control, immunisation, treatment, compulsory tick control and other prescribed measures by the owner of an animal and the manner in which community participation in control measures shall be conducted;
- (g) the manner in which any infection or contaminated article or anything suspected of being an infected or contaminated article, shall be cared for, treated,

disinfected, destroyed or disposed of by the owner thereof or by any owner of premises on which such article is present;

- (h) the manner in which animals suspected to have been in contact with diseased animals shall be disposed of;
- (i) the cleansing, disinfecting and disinfection of any building or place where animals infected with disease are kept;
- (j) the cleansing, disinfecting and disinfection of any conveyance or premises used for the conveyance, sale, exhibition or other purpose of animals;
- (k) the control of public markets, sales yards and agricultural show grounds, animal production, health programmes or schemes for purposes of this Act;
- (l) the dividing of Zambia into veterinary districts;
- (m) the declaration of specified areas for purposes of this Act, including the declaration and regulation of certain areas as disease control zones;
- (n) generally for the prevention and control of disease;
- (o) the control of animals in captivity and the prevention of zoonotic diseases;
- (p) the standards of animal welfare;
- (q) the competence and supervision of veterinary inspectors;
- (r) the fees to be paid for anything done or to be done under this Act; and
- (s) generally the carrying into effect of the purposes of this Act.

(2) Any regulations under subsection (1) may provide that any person who contravenes or fails to comply with such regulations commits an offence and is liable, upon conviction, to a fine not exceeding three hundred thousand penalty units or to imprisonment for a period not exceeding three years, or to both.

Repeal of
Cap. 252

81. (1) The Stock Diseases Act, 1961, is hereby repealed.

Cap. 248
Cap. 249
Cap. 250

(2) Notwithstanding subsection (1), and the repeal of the Cattle Cleansing Act, the Tsetse Control Act and the Cattle Slaughter (Control) Act, any permit, licence or authorisation issued under the repealed Acts shall be in force for three months after the commencement of this Act, after which the holder shall apply for a permit in accordance with the provisions of this Act.

FIRST SCHEDULE

(Section 65 (6))

ADMINISTRATION COMMITTEE

- | | |
|---|---|
| <p>1. A person shall not be appointed as a member of the Committee if that person—</p> <p>(a) holds office in, or is an employee of, any political party; or</p> <p>(b) has been convicted of an offence involving fraud or dishonesty, or any other offence under this Act or any other written law and sentenced therefor to a term of imprisonment of six months or more without the option of a fine.</p> | <p>Qualification for appointment of member of Committee</p> |
| <p>2. (1) A member of the Committee shall, subject to the other provisions of this Schedule, hold office for a term of three years and may be appointed for a further period of three years.</p> <p>(2) A member of the Committee may resign upon giving one month's notice in writing to the Minister.</p> <p>(3) The office of a member of the Committee shall become vacant—</p> <p>(a) if the member is absent, without reasonable excuse from three consecutive meetings of the Committee of which the member has had notice;</p> <p>(b) if the member is adjudged bankrupt;</p> <p>(c) if the member is convicted of an offence under this Act or any other written law and sentenced therefor to imprisonment for a term of six months or more, without the option of a fine;</p> <p>(d) if the member is declared to be of unsound mind; or</p> <p>(e) upon the member's death.</p> | <p>Tenure of office of member of Committee</p> |
| <p>3. (1) Subject to the other provisions of this Act, the Committee may regulate its own procedure.</p> <p>(2) The Committee shall meet for the transaction of business at least once in every four months at such places and times as the Chairperson may determine.</p> <p>(3) A meeting of the Committee may be called by the Chairperson upon giving notice of not less than fourteen days, and shall be called by the Chairperson if not less than one third of the members so request in writing:</p> | <p>Proceedings of Committee</p> |

Provided that if the urgency of any particular matter does not permit the giving of such notice, a special meeting may be called upon a shorter notice given by three members of the Committee.

(4) The Chairperson and Vice-Chairperson with two other members shall constitute a quorum at any meeting of the Committee.

(5) There shall preside at any meeting of the Committee -

(a) the Chairperson;

(b) in the absence of the Chairperson, the Vice-Chairperson;
or

(c) in the absence of both the Chairperson and the Vice-Chairperson, such other member as the members present may elect for the purpose of that meeting.

(6) A decision of the Committee on any question shall be by a majority of the members present and voting at the meeting and in the event of an equality of votes, the person presiding at the meeting shall have a casting vote, in addition to that person's deliberative vote.

(7) The Committee may invite any person, whose presence is in its opinion desirable, to attend and to participate in the deliberations of a meeting of the Committee, but such person shall have no vote.

(8) The validity of any proceedings, acts or decisions of the Committee shall not be affected by any vacancy in the membership of the Committee or by any defect in the appointment of any member or by reason that any person not entitled to do so, took part in the proceedings.

Sub-
committees
of
Committee

4. (1) The Committee may, for the purpose of performing its functions under this Act, establish such sub-committees as it considers necessary and delegate to any of those sub-committees such of its functions as it considers fit.

(2) Subject to subparagraph (1), the Committee may appoint as members of a sub-committee persons who are, or are not, members of the Committee, except that at least one member of the Committee shall be a member of the sub-committee.

(3) A person serving as a member of a sub-committee shall hold office for such period as the Committee may determine.

(4) Subject to any specific or general direction of the Committee, a sub-committee may regulate its own procedure.

Allowances
of member

5. There shall be paid to a member of the Committee or sub-committee such allowances as the Minister may determine.

6. (1) If any person is present at a meeting of the Committee or any sub-committee at which any matter is the subject of consideration, and in which matter that person or that person's spouse is, directly or indirectly, interested in a private capacity, that person shall, as soon as is practicable after the commencement of the meeting, declare such interest and shall not, unless the Committee or the sub-committee otherwise directs, take part in any consideration or discussion of, or vote on, any question relating to that matter.

Disclosure of interest

(2) A disclosure of interest made under subparagraph (1) shall be recorded in the minutes of the meeting at which it is made.

7. (1) A person shall not, without the consent in writing given by, or on behalf of, the Committee, publish or disclose to any unauthorised person, otherwise than in the course of duties of that person, the contents of any document, communication or information whatsoever, which relates to or which has come to the knowledge of that person in the course of that person's duties under this Act.

Prohibition of publication of, or disclosure of, information to unauthorised persons

(2) A person who contravenes subparagraph (1) commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

(3) A person who, having any information which to the knowledge of that person has been published or disclosed in contravention of sub-paragraph (1), unlawfully publishes or communicates the information to any other person, commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

8. An action or other proceeding shall not lie or be instituted against a member of the Committee or a sub-committee, or in respect of, any act or thing done or omitted to be done in good faith in the exercise of or performance, or purported exercise or performance of any of the powers, functions or duties conferred under this Act.

Immunity





Ministry of Livestock and Fisheries Development
Department of Veterinary Services

Pre- and Post FMD Vaccination Sero-Monitoring Protocol
Southern, Western and Central Provinces districts

2014

Martin C. Simuunza (BVM, MSc, PhD); Dr Caesar H. Lubaba (BVM, MSc, PhD); Dr.
George Dautu (BVM, PhD)

Background

Foot-and-mouth disease (FMD) is one of the most important diseases of livestock known to man due to its high infection rate (ease of spread) and its effect on the limitation of livestock movement and trade. The disease is widely considered the single biggest global threat to trade in livestock and livestock products due to its threat to countries or regions where disease is absent. It affects most of the major livestock animals of importance (cattle, pigs, sheep, goats, and buffalo) in both high intensity/productivity countries and in lower producing, developing countries. In Zambia, FMD outbreaks have repeatedly occurred in the southern parts of Western and Southern Provinces bordering the Caprivi strip of Namibia and Botswana; the border of Central and Southern Province on the Kafue river (Kafue flats) with extensions to Kalomo, Namwala, Monze, Mazabuka, Choma and Mumbwa districts and the border of Northern Province with Tanzania. (Chilonda et al., 1999; Overby and Zyambo, 1983). In all these areas vaccination of susceptible animals against foot-and-mouth disease (FMD) and movement controls has been the main method used to control the disease and prevent incursion into disease free areas. However repeated outbreaks of the disease in Zambia and the region have raised debate as to the effectiveness of the current control strategies. Despite considerable knowledge of how FMD spreads, the availability of efficacious vaccines and a battery of diagnostic tests, FMD remains one of the most important diseases of domestic livestock in the region (Mason, 2003). The disease has caused losses in millions of dollars in control measures and loss of access to both local and international markets.

To initiate control measures for FMD, the following must be identified: origin of infection, links between outbreaks, extent of genetic variation of the causative viruses, and antigenic relationship of field isolates to the available vaccines (Ayelet et al., 2009). The FMD virus (FMDV) has a high mutation rate because the viral RNA-dependent RNA polymerase lacks proofreading ability, resulting in 7 immunogenically distinct serotypes O, A, C, Southern African Territories [SAT] 1, SAT 2, SAT 3, and Asia 1, and numerous and constantly evolving variants showing a spectrum of antigenic diversity. In Zambia, four of these (O, SAT1, 2 and 3) have been reported.

Some of the risk factors identified include; cattle densities, uncontrolled cattle movements, drought, existence of carrier animals, mortalities from other diseases, contact with migratory wild African buffalo (*syncerus caffer*), heavy poaching of buffalo, migration of and intensive livestock trade (Bastos et al., 2003; Chilonda et al., 1999; Mweene et al., 1996). Vaccination is an effective way to control FMD; however, the protection conferred by vaccination or infection is usually serotype specific and sometimes incomplete within serotype (Ayelet et al., 2009). Proper use of vaccines and vaccination programs helps to prevent subclinical FMD that may cause the disease to spread (Joern Klein, 2008). Asymptomatic carriers of FMD are defined as animals (vaccinated or not vaccinated) that do not develop clinical disease but are infected following challenge (Vosloo et al., 2002). Such carriers serve as a reservoir of the infection to other susceptible animals. The significance of viral diversity (thus antigenic diversity) as a complicating factor in effective vaccination against FMD in Africa is frequently ignored. Immunity is induced only to virus serotypes and subtypes included in the vaccine. An effective and systematic progressive FMD control programme using vaccination in endemic regions should therefore include vaccine strains that are likely to protect against

challenge by field viruses circulating in the specific localities. This is hindered by the fact that most outbreaks of FMD are not investigated thoroughly enough with respect to the occurrence of intratypic variants.

Vaccination has been used as a control strategy in Zambia but the degree of effectiveness has never been assessed. Dawe et al., (1994) showed the importance of continuous monitoring of field strains of the virus as a routine control measure in areas where vaccination is used in controlling and preventing the spread of the disease. It is often assumed that high vaccination coverage results in high herd immunity levels. Caution should be applied and herd immunity should be established through post vaccination sero-monitoring (PVM). Therefore PVM should be made an integral part of routine FMD management. For PVM to be successful, it is essential that the antigen employed in the serological test is homologous with antigens incorporated into the vaccine.

Zambia practices bi-annual routine (May/November) vaccination of cattle against FMD in Central (Mumbwa), Southern (Kazungula, Namwala, Itezhi tezhi, Monze, Mazabuka, Choma), and Western (Mongu, Senanga, Kalabo, Sesheke) provinces. These areas have long been identified as High risk areas, with SAT 1 circulating in the Zambezi basin and SAT 2 in the Kafue Basin (Chilonda et al., 1999; Mweene et al., 1996; Perry, 1984). Until recently in 1995 in the Zambezi Basin SAT 3 had not been identified in Zambia (Chilonda et al., 1999). These areas are proximal to National parks, habitat to the African buffalo that is known to be a reservoir/carrier to the SAT FMD subtypes (Chilonda et al., 1999). The trivalent (SAT1, SAT2, and SAT3) vaccine manufactured by Botswana Vaccine Institute (BVI) had been used from 1995 to 2009 when there was a shift to bivalent vaccine (SAT1, SAT2) and the reason for the change was due to fewer numbers of outbreaks reported as a result of SAT3 and the costs involved in producing a trivalent vaccine. The aim of the proposed study is to verify whether the cattle population in the vaccinated areas mounts a protective humeral immune response following vaccination using the BVI bivalent (SAT1, SAT2) vaccine.

Specific objectives

1. To determine the sero-prevalence of FMD in the study areas prior to vaccination
2. To establish whether Herd level Immunity has been achieved following vaccination
3. To establish the dynamics of and quantify antibody response in vaccinated cattle.

Materials and Methods

Study areas

The districts of Sesheke, kazungula, Mumbwa, Mazabuka and namwala will be included in the survey. FMD is known to be endemic in all these districts and vaccination against the disease is carried out bi-annually. In each of these district, one camp will be randomly selected and all the samples will be collected from that camp

Study design and sampling

This will be a longitudinal study with day zero being the day when animals are vaccinated against FMD. Subsequent samples will be collected on days 30, 60, 90 and 120. Only calves that are between six and 12 months old (should not have been vaccinated before) and from herds that belong to owners that are willing to participate and agree to follow up sampling will be included in the study. Hundred animals will be sampled from each district. The animals included for sampling will be ear tagged. Systematic sampling will be used.

At the same time of sampling, the following information will be gathered using a questionnaire: details of the owner, FMD vaccination history, herd sizes, grazing practices/transhumance tendencies or epidemiology unit they belong to, trade patterns, GPS for Crush pen/kraals/village or nearest school, climate data (temperature and rainfall) for the last 5 years. For details see attached annex.

Sample collection, handling and recording

Blood will be collected in plain vacutainer tubes from randomly selected cattle in each district. Each sample will be labelled according so that it is identified with the animal from which it will be collected. Samples will be transported on ice in cooler boxes to the laboratory. In the laboratory, serum will be separated and stored at -20°C until needed for analysis. All laboratory analysis of samples will be carried out at CVRI.

Compliance

Before collecting any samples, explanations will be made to farmer about the government FMD control strategy and the purpose of sampling. Only those farmers who agree to make their animals for follow up sampling will be included in the study. It is expected that this will increase compliance by the farmers.

Laboratory tests

It would have been desirable that disease-induced antibodies are differentiated from vaccine-induced antibodies (the so-called DIVA system), by detecting the non-structural proteins (NSP) which are specific for a natural infection. However this is not yet possible for SAT viruses for 2 reasons: the commercially available NSP tests are not specifically developed for SAT viruses and the Botswana Vaccine Institute (BVI) vaccine is not 100% purified, hence also expresses NSP to a certain degree. However, since only calves that have not been vaccinated before will be included in the study, this is not likely to be a problem.

All samples (including day 0) will be titrated and tested for structured proteins of serotype specific antibody using liquid phase blocking Elisa (LPBE) for SAT1 and SAT2 following the standard methods by OIE/Pilbright manual.

Assumptions

1. As a result of the high cost of vaccines losses, spillage and under dosage will be kept to a minimum.
2. 80% of the vaccinated cattle population achieve protective titre levels after vaccination
3. 20% of the vaccinated cattle population fail to mount an effective antibody response.
4. Protective titre levels last for 4 – 6 months post vaccination
5. There is no active FMD outbreak at the time of sampling
6. The animals are reared in an extensive communal grazing system
7. The population to be sampled will be assumed to be uniform for a given geographic area and thus there are no herd specific differences (minimum or no clustering)
8. Samples will be collected at a time when the animals are expected have peak titre levels.

Data analysis

Descriptive statistics showing the number of serologically positive cattle and titre levels will be calculated for each crash pen and district for each time of sampling. Categorical variables will be compared using the chi-square test while the T-test or the one-way analysis of variance (ANOVA) will be used to compare continuous variables.

References

- ADB (2006). "Strengthening institutions for risk management of transboundary animal diseases (TADs) in the Southern African Development Community (SADC) region."
- Ayelet, G., Mahapatra, M., Gelaye, E., Egziabher, B. G., Rufeal, T., Sahle, M., Ferris, N. P., Wadsworth, J., Hutchings, G. H., and Knowles, N. J. (2009). Genetic characterization of foot-and-mouth disease viruses, Ethiopia, 1981-2007. *Emerg Infect Dis* **15**, 1409-17.
- Bastos, A. D., Haydon, D. T., Sangare, O., Boshoff, C. I., Edrich, J. L., and Thomson, G. R. (2003). The implications of virus diversity within the SAT 2 serotype for control of foot-and-mouth disease in sub-Saharan Africa. *J Gen Virol* **84**, 1595-606.
- Chilonda, P., Woodford, J. D., Ahmadu, B., Samui, K. L., Syakalima, M., and Mlangwa, J. E. (1999). Foot and mouth disease in Zambia: a review of the aetiology and epidemiology and recommendations for possible control. *Rev Sci Tech* **18**, 585-92.
- Dawe, P. S., Flanagan, F. O., Madekurozwa, R. L., Sorensen, K. J., Anderson, E. C., Foggin, C. M., Ferris, N. P., and Knowles, N. J. (1994). Natural transmission of foot-and-mouth disease virus from African buffalo (*Syncerus caffer*) to cattle in a wildlife area of Zimbabwe. *Vet Rec* **134**, 230-2.
- DVS (1983-2008). "Annual reports." Department of Veterinary services.
- Joern Klein, M. H., Munir Ahmad, Muhammad Afzal, Soren Alexandersen (2008). Epidemiology of foot-and-mouth disease in Landhi Dairy Colony, Pakistan. *Virology Journal* **5**.
- Mason, P. W., Pacheco, J. M., Zhao, Q. Z., Knowles, N. J. (2003). Comparisons of the complete genomes of Asian, African and European isolates of a recent foot-and-mouth disease virus type O pandemic strain (PanAsia). *J Gen Virol* **84**, 1583-93.
- Mweene, A. S., Pandey, G. S., Sinyangwe, P., Nambota, A., Samui, K., and Kida, H. (1996). Viral diseases of livestock in Zambia. *Jpn J Vet Res* **44**, 89-105.
- Overby E., Z. G. C. N. (1983). Foot and Mouth Disease Outbreaks in Zambia. *Rev. sci. tech. Off. int. Epiz* **2**, 189 - 197.
- Perry, B. D., Hedger, R. S. (1984). History and epidemiology of foot-and-mouth disease in Zambia: a review. *Trop Anim Health Prod* **16**, 107-14.
- Tully, D. C., Fares, M. A. (2009). Shifts in the selection-drift balance drive the evolution and epidemiology of foot-and-mouth disease virus. *J Virol* **83**, 781-90.
- Vosloo, W., Bastos, A. D., Sangare, O., Hargreaves, S. K., and Thomson, G. R. (2002). Review of the status and control of foot and mouth disease in sub-Saharan Africa. *Rev Sci Tech* **21**, 437-49.

Annex 1:

PRE- AND POST FMD VACCINATION MONITORING

HERD LEVEL INFORMATION FORM

Date of sampling:.....

Name of Officer:.....

Farm/Locality Details

Name of Farmer:.....District:.....

Camp.....Village.....

Chiefdom:.....Crush-pen / Dip-tank:.....

GPS LatitudeLongitude.....

Farming system:.....

3. Details and History of Livestock Sampled

i) Species:.....Breed:.....

ii) Total Population in the herd:.....

iii) Calves:..... Heifers:..... Steers:..... Cows:..... Bulls:.....
Oxen:.....

iv) Do your animals graze in the Kafue flood plains

4. Disease status

Disease in last 12 months:.....

Main Presenting signs:.....

Was diagnosis made by vet or not:.....

Type of treatment instituted:.....

Number died from suspected disease.....Number of animals at risk

Number of households in the village (area in question).....

Did disease affect other house Hold?..... How many?.....

4. Disease Control Measures Applied

a. Vaccinations

i) Type of vaccine:.....ii) Number vaccinated:.....

iii) Last vaccinated.....

b. Dipping/Spraying/Pour-on

i) Frequency.....ii) Date last done.....iii) Type of acaricide:.....

5) Farm population dynamics/Animal Movements

I. Any new Livestock been introduced in the village/herd?

II. If yes, how many?species

III. When and where did they come from?.....

IV. How many animals have been in contact with new animals?.....

V. Have any livestock from the village/herd been moved out recently?.....

VI. If yes,

i) How many

ii) From where?

iii) Reasons for moving (specify).....

iv) Any routes of Livestock movement nearby.....

6. Feeding and watering

a. What are animals fed on?.....

b. Source of feed if any?..

c. Source of water?..

d. Animals graze in the flood plains? i) Only in the dry season

ii) Through out the year

iii) Never

e. Any contact with wildlife? Yes/No

f. If yes, specify.....

Annex 2: Sample Collection Form for Longitudinal Study

District.....Constituency..... Crush-pen

Samples Collected By..... Position.....

Sample collected on (Please tick) Day 0 Day 30

Day 60

Date of Sample collection.....

<i>Lab Use only</i>	
Date of Arrival of Samples at Lab.....	Date Lab Test.....

	Owner	ID Tag No	Age	Sex	Breed	Body Cond Score	Health status	Lab Result	Remarks
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

General

Remarks:.....
.....
.....

Annex 3

Blood Sample Collection and Handling

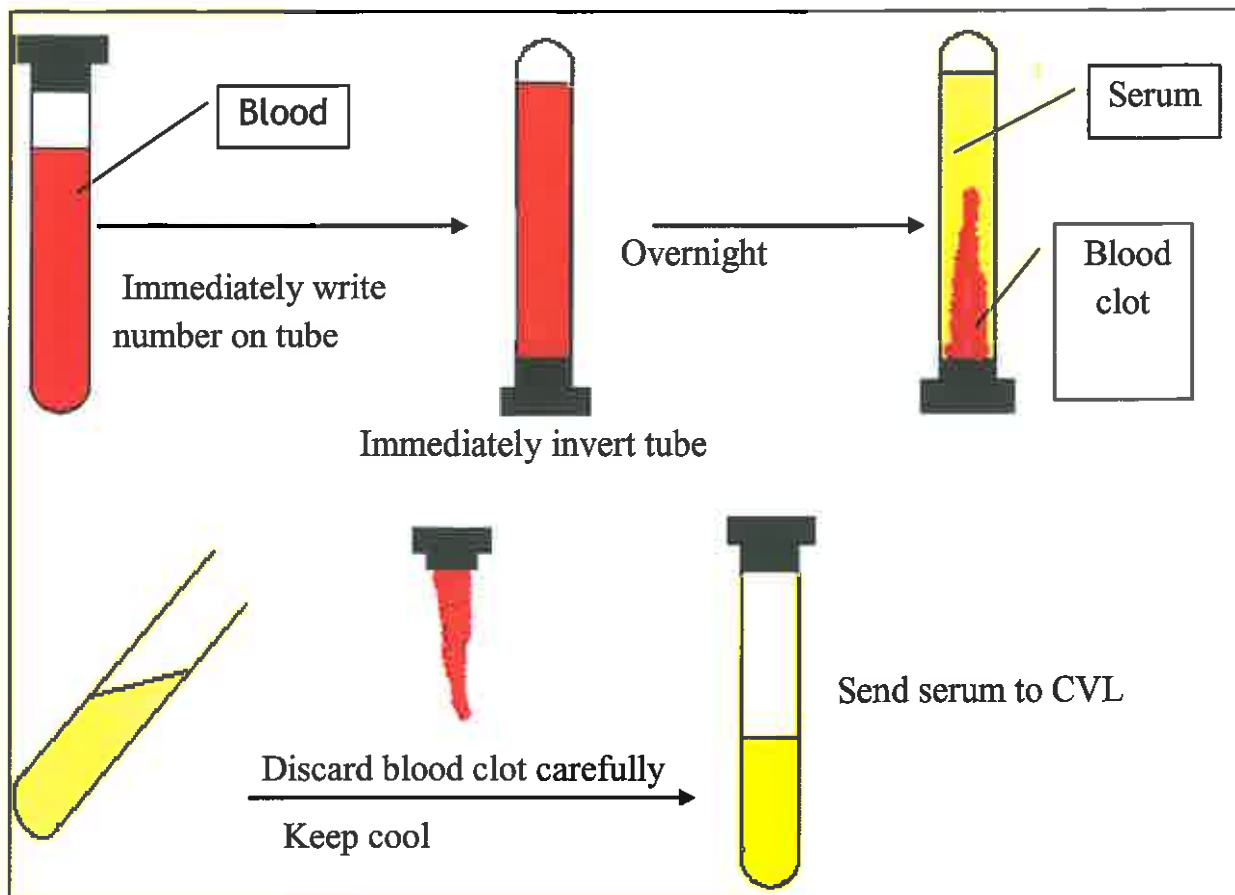
Blood will be collected from the animal (uncontaminated) using the correct vacutainer method. The tube is then labelled. Ensure that the number on the tube corresponds with the number of the animal, age, sex, breed on the sampling form. The form must accompany samples to the lab and copies must be retained by the sender for records.

After drawing the blood, the vacutainer is immediately turned upside-down and must be kept upside-down (cooled) if possible overnight (see fig below). The blood cells and serum will then separate and the blood cells (clotted) will adhere to the rubber cap of the vacutainer. To avoid freezing the blood samples, keep the amount of ice in the cooler box to a minimum and do not place the samples directly onto the ice.

The next morning, remove the cap from the vacutainer. The blood clot will then come away with the cap. Shake the clot loose and throw it away. Replace the cap on the vacutainer (now containing only serum) and send the serum, with completed sample sheet, to the laboratory as soon as possible. Make sure the cap is firmly in place to ensure that no spillages take place. Try to keep the samples as cool as you can at all times.

Labeling and packaging is very important to avoid mixing-up of sampling forms and samples. So please pay extra attention to this. It must be clear to you and to everyone which form goes with which samples.

Sample Handling Procedure



NB: If Centrifuging is preferred do not invert tubes!

Clotted blood should be delivered to the district office without delay; care should be taken to avoid haemolysis: by avoiding excessive shaking of the samples during transport from the field; by preventing tubes from coming into direct contact with ice packs (which could cause freeze-thaw rupture of erythrocytes) AND by avoiding excessive delay before harvesting serum.

For shipping, package the serum samples in a leak proof cooler box with cooler packs. Clearly label the cooler box "**FMD Samples**" and ship to the laboratory. The sampling form must accompany the samples to the lab. Avoid shipping samples if the estimated arrival date at the laboratory is not on a working day.

Acknowledgements

I am thankful to Dr Yona Sinkala for proving the initial document on which this protocol was adopted from.

APPENDIX I: INSTITUTIONAL ORGANIGRAMMES

Figure 1: Department of Veterinary & Livestock Development (National)

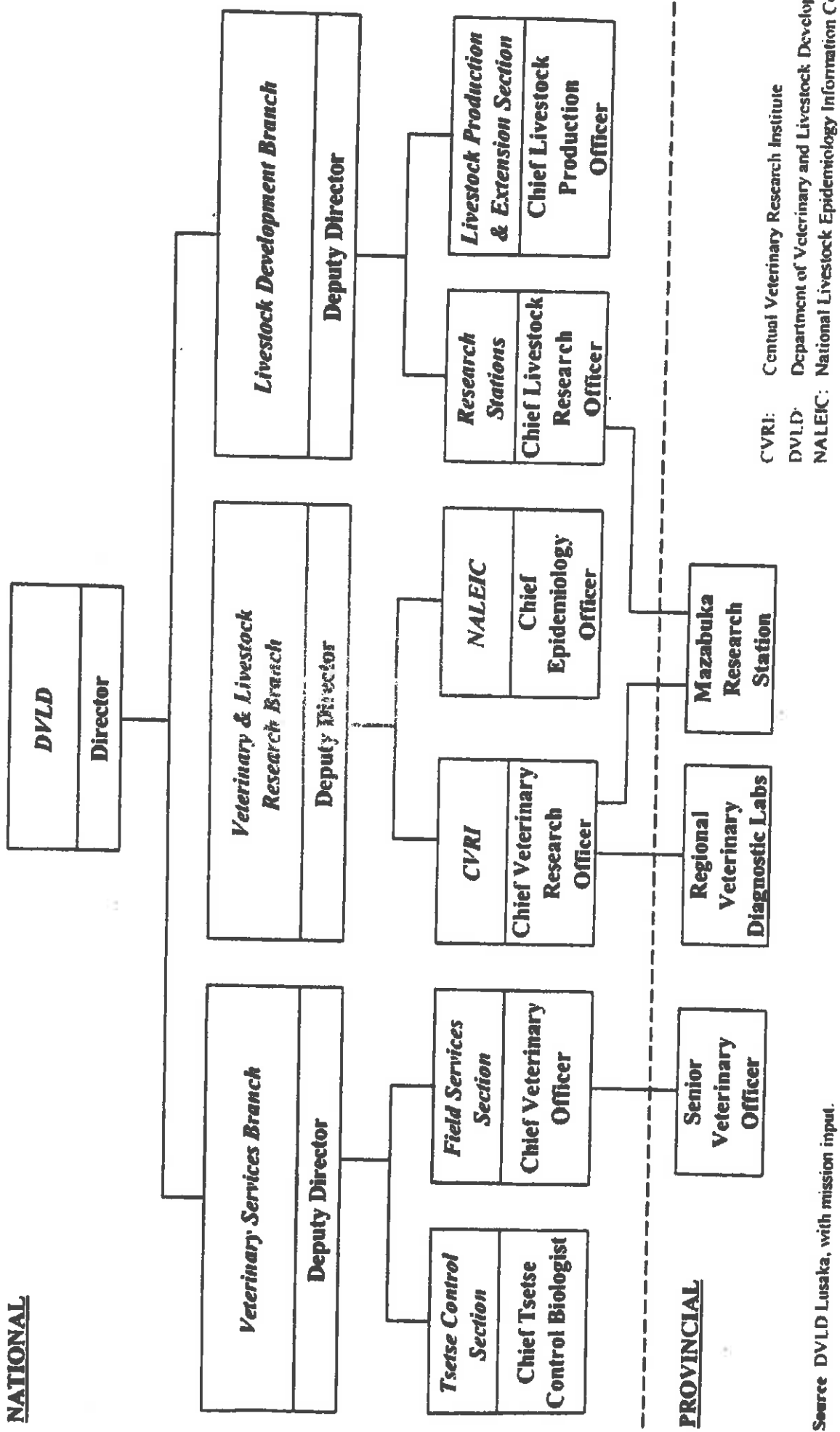
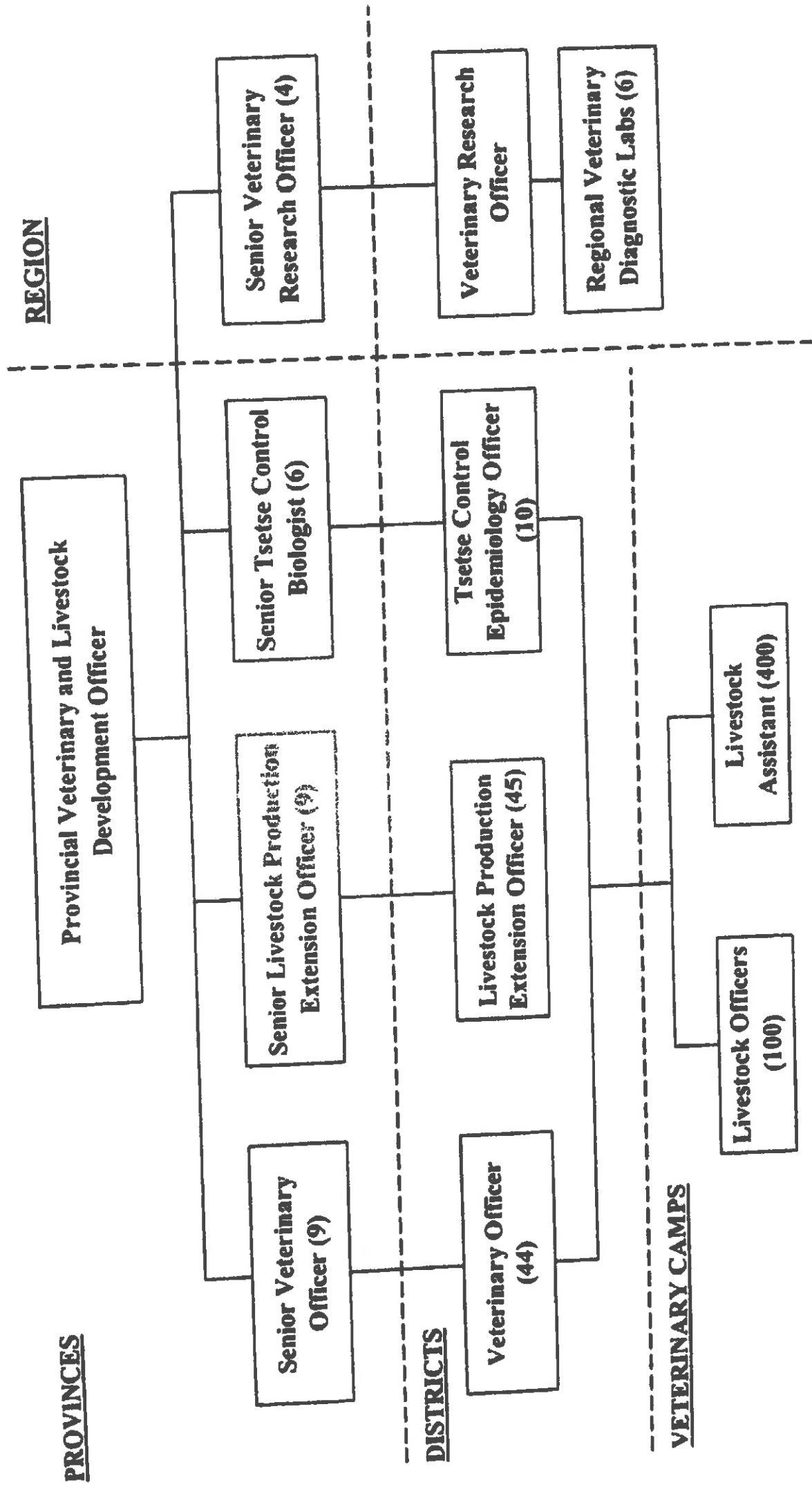


Figure 2: Department of Veterinary & Livestock Development (Field)



I certify that the information provided is correct.


.....

(Signature)

Name in Print: Dr Caesar H. Lubaba

Rank: Principal Epidemio-surveillance and Information Officer

Comments:

Date: 19th September 2014

I certify that the information provided is correct.


.....

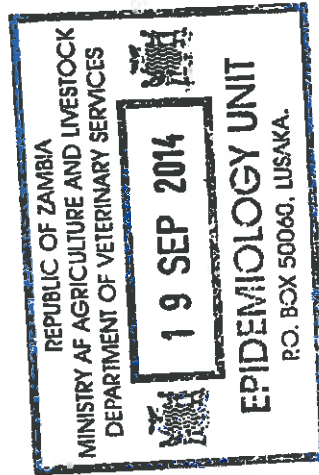
(Chief Veterinary Officer Signature)

Name in Print (Chief Veterinary Officer):

Contact details: Department of Veterinary Services, MoAL, P.O. Box 50060, Mulungushi House, Lusaka

Date: 19th September 2014

Official stamp of veterinary authorities:



**INFORMATION REQUIRED TO ASSESS THE STATUS OF
VETERINARY INFRASTRUCTURE IN A COUNTRY**

Name of country: Zambia
Department / Ministry: Department of Veterinary Services/ Ministry of Agriculture and Livestock

Please Note: This questionnaire is by no means complete and your response may also lead to further enquiries.

1. Organization and Structure of Veterinary Services

1.1 Please provide an organisational chart of the National Veterinary Services

See scanned organogrammes Appendix 1-figures 1 and 2

1.2 Indicate numbers of personnel, positions, and number of vacancies.

See attached excel sheet titled staff returns-districts

1.3 Describe the role of veterinarians in establishing national and provincial animal health policy.

The Department of Veterinary Services (DVS) under the Ministry of Agriculture and Livestock is responsible for the provision and regulation of animal health service delivery. The department works with line ministries, cooperating partners and the private sector. As a government department, DVS operates at national, provincial, district and camp levels. Zambia has ten (10) provinces, 108 districts and 502 veterinary camps. All provinces and districts have DVS offices.

The department is divided into various units at the Head Quarters these are; the Central Veterinary Research Institute-CVRI; Veterinary Field Services; National Livestock Epidemiology and Information Centre; Tsetse Control and Ecology Section, The units are responsible for specialized activities.

- The Epidemiology unit (National Livestock Epidemiology and Information Centre –NALEIC) is in charge of imports and export regulation, surveillance and documentation of livestock diseases. Data and livestock information flows from the camp to the district, Provincial Epidemiology and Information Office then to NALEIC.
- The Central Veterinary Research Institute-CVRI is responsible for the diagnosis and research of all livestock diseases.
- The Veterinary Field Services unit is responsible for implementation of disease control and public health programmes. The public health functions are undertaken in collaboration with the Ministry of Health, Municipal and Districts councils. The national headquarters of DVS is involved in management policy formulation and resource mobilisation to facilitate provincial and district operations. The provincial offices of the department are involved with the supervision of districts and facilitate control of diseases of national economic importance. The district is the interface between the livestock farmers, different agencies, the private sector and the DVS. The District Veterinary Officers and the Livestock Officers with the Veterinary assistants are responsible for provision of services such as extension, meat inspection, disease surveillance, implementation of diseases control programmes and import and export inspections.

- The Tsetse and Ecology Unit is mandated to control tsetse and trypanosomiasis in the country. The country is divided into 5 regions following geographic distribution of infestation with tsetse flies. The unit coordinates the activities of the regions in liaison with the provincial veterinary officers.

The field vets and various units provide the input into national policy formulation. The field staff are also involved in stakeholder awareness about change in policy. The DVS headquarters in conjunction with the Policy and Planning Department in the Ministry of Agriculture and Livestock then review, analyse and make recommendation for policy formulation.

- 1.4 Does the country have a full-time provincial veterinary service? **Yes**
- 1.5 Provide an organisational chart, which includes numbers and positions.
Please refer to question 1.1 & 1.2 answers.
- 1.6 Describe linkage with other providers of veterinary services.
 - **The University of Zambia (UNZA) train veterinarians conduct research and have a vet clinic. They provide information**

to the Epidemiology unit on disease occurrence and update the DVS on survey/research conducted.

- The Zambia College of Agriculture, Zambia Animal Health Institute, Palabana Dairy Institute and Natural Resources Development College train para-veterinarians in certificate and diploma courses. These are then employed by the department in the provision of animal health services.
- Zambia Wildlife Authority has established a veterinary section. Wildlife disease data and translocation issues are transmitted and liaised with DVS.
- Private Veterinarians- are mandated to provide monthly disease occurrence reports to DVS
- Land O' Lakes has been a strong partner in dairy development and continued to provide capacity building services to the small scale farmers in order to reduce food insecurity through dairy production.
- Heifer International is another NGO partner operating in five Provinces in the country they are mainly involved in restocking programmes for areas where livestock numbers had dwindled due to disease outbreaks. The main species distributed are cattle and goats.
- All veterinarian and para vets are registered through the Veterinary Council of Zambia and are members of the Veterinary Association of Zambia (VAZ). There is interaction of the professionals during the regular council and VAZ meetings as well as extra-ordinary meetings as need arises.

2. Human and Material Resources

- 2.1 Provide the total number of veterinarians registered by the National Competent Authority.
Provide a document detailing requirements for registration.
- 2.2 Provide the number of private veterinarians authorized to perform official veterinary functions. Provide a list of authorised veterinarians per function. **NON**
- 2.3 Animal health
Please provide the number of government veterinarians, listed by geographical area (show categories and numbers to

differentiate staff involved in field service, laboratory, administration, import/export, and other functions, as applicable).

See answer in 1.2

2.4 Veterinary public health

Provide the number of government veterinarians employed in food inspection and list by commodity.

Currently there are 3 officers directly in charge of the Public health section. These are the Principle officer supervising two senior vets namely for food safety and zoonosis. The food inspections are done through the 10 provincial and 108 district field staff.

2.5 Provide the number of technical assistants employed by the Veterinary Services:

2.5.1 involved with farm livestock

2.5.2 involved with food safety

Total number of Veterinary Assistants (VA) is 328, with 55 Livestock officers (LO) and 74 tsetse control assistants in DVS. The VA are involved with all aspects of animal health at the smallest vet unit, the camp. The VAs and LO are involved in both farm livestock and food inspection where the DVS carries out meat inspection.

2.6 Provide the total budgetary allocations to the Veterinary Services for the current and previous 3 financial years.

YEAR	BUDGET ALLOCATION (ZMK)
2012	53,370,291.78
2013	70,815,408.88
2014	48,718,454.00

2.7 Provide a summary of the forms of communication systems available to the veterinary

Services, on a nationwide and local area basis.

Mobile telecommunication- Coverage is country-wide, this is available to all districts. However there is limited access in certain rural areas of some camps (Government does not provide mobile phones but officers do use their private phones for Government work)

Internet –Headquarters up to all district vet offices. In certain camps due to limited mobile telecommunication transmission there is limited or no access to internet

Landline/fax communication- available in the provinces and districts, (some provinces and districts lines are not functioning)

Radio messaging- available at headquarters and some provinces and districts.

Postal services- country wide.

✉ **Letters and Reports (Hard and soft copies via email)**

2.8 Provide a summary of the numbers and distribution of official administrative centres of the veterinary services (national and sub-national) in the country. See excel sheet on staff returns

See attached excel sheet titled staff returns-districts August 2014

3. Training and Information Dissemination

3.1 What is done in terms of training of and information dissemination to farmers, farm workers and abattoir staff to ensure adequate awareness of controlled diseases?

The field staff carry out farmer group training and sensitization on various aspects of animal production and health. The farmers are trained in small groups at a farmer training institutes which are located in districts throughout the country. The farmers are trained when need arises or as a regular program according to the annual work plan of the provinces or districts.

- 3.2 What is done in terms of training and ongoing professional development of veterinarians, technicians and laboratory personnel to ensure adequate awareness of controlled diseases?
Technical and professional staff are trained in-house in disease surveillance and control from time to time. A number of trainings have been conducted in the last 3 years in ECF, CBPP, FMD, PPR surveillance and control. There are also international courses which staff attend in different areas of animal health and production.
- 3.3 What type of training relating to recognising controlled diseases do inspectors at airports, ports, borders, checkpoints and quarantine stations receive?
They receive in-house training from time to time as and when funds permit.

4. Animal population

- 4.1 Please provide the figures for the most recent census of the domestic animal population including cloven hoofed livestock, game, equids and pigs as well as their geographic distribution.

	Cattle	Goat	Pig
Central	505,016	585,200	135,590
Copperbelt	54,774	129,715	77,221
Eastern	637,912	381,930	574,710
Luapula	13,867	157,108	37,572
Lusaka	100,371	131,475	180,103
Muchinga	134,373	129,798	46,721
Northern	67,277	208,005	71,185
North-Western	71,313	185,766	35,113
Southern	1,636,298	1,040,732	248,510
Western	711,070	73,857	108,065
Grand Total	3,932,271	3,023,586	1,514,790

Form 2013 Annual report

Number and percentage distribution of poultry by type, province (in the village free range)

	Chicken	Ducks/Geese	Guinea Fowl
Central	2,034,000	48,000	77,000
Copperbelt	934,000	24,000	1,000
Eastern	2,149,875	77,000	67,375
Luapula	781,000	59,000	11,000
Lusaka	2,094,000	17,000	10,000
Muchinga	1,160,875	40,833	12,292
Northern	1,195,250	43,167	2,333
North-Western	473,000	7,000	2,000
Southern	3,034,000	54,000	78,000
Western	568,000	9,000	1,000
Grand Total	14,424,000	379,000	262,000

Poultry Population in the commercial sector

As of 2013
 68 million broilers
 3.9 million layers
 1.5 million Parent stock (combined broiler and layer)
 700,000 Grandparent stock (combined broiler and layer)

Total for commercial 74.1 million
 Total indigenous 14.5 million
 Country total 88.6 million

4.2 Does the auctioning of animals take place and if so how many animals are present at such auctions and what is the geographic location of the auctions?

Auction of animals in the country is majorly undertaken by the private sector. The Zambia Farmer's Union does advertise on behalf of its members where auction will be held. Auctions are mostly held in Lusaka, Southern and Central Provinces, as and when farmers deem it fit.

4.3 What is the geographic location and number of abattoirs operational in the country?

Dairy Processing Plants						
No.	Establishment Name	Installed * Capacity (Litres)	Utilization * Capacity (%)	Location		
1	Parmalat	120,000	60	Lusaka		
2	Finta	120,000	35	Livingstone		
3	Zammilk	30,000	75	Lusaka		
4	Diamondale	15,000	60	Lusaka		
5	Kaposhi	6,000	40	Lusaka		
6	Kalwa	2,500	40	Lusaka		
7						
Poultry Processing Plants						
No.	Establishment Name	Installed Capacity	Utilization Capacity (%)	Location		
1	Zamchick	40,000 per week	35,000 per week	Lusaka		
2	Crest Chickens	100,000 per week	16,000 per week	Lusaka		
3	Eureka Chickens	40,000 per week	35,000 per week	Lusaka		
4	Verino	100,000 per week	65,000 per week	Lusaka		
Beef Processing Plants (some have double line to include pork)						
No.	Establishment Name	Installed Capacity	Utilization Capacity (%)	Location		
1	Agro support Lt			Kalomo		
2	Best Beef-Best Beef Company			Lusaka		
	Best pork- Best beef limited			Lusaka		
3	Dayow Beef Co Ltd			Senanga, Choma		
4	All Halaal			Lusaka		
5	Kembe			Lusaka, Monze		
6	King Quality Products-Dai Farms			Senanga		
7	Luscold-Galaun			Lusaka		

	Holdings			
8	Majoru Investmnets			Lusaka
9	Master Butcherries			Lusaka, Senanga
10	Mwana-maiinda			Kafue
11	More beef			Under construction
12	Pama-(Meats-Northern Traders Zambezi)			Mazabuka
13	Quicksave			Ndola
14	Savannah Beef			Lusaka
15	Star Beef			Namwala, Senanaga
16	Top Cat			Chipata
17	Turn Pike Abattoir			Kafue
18	Zambeef Products Plc			Chisamba, Mongu, Chipata Namwala, Mumbwa, Livingstone, Mazabuka Senanga, Sinazongwe
19	Zamzam			Choma, Senanga
20	Twikatane			Lusaka
21	King Quality meat produc			Lusaka
22	Real Meat-Real Meat Company			Lusaka

***Blank spaces indicate data not available at the time of report**

4.4 What species and how many animals do they handle? **See above**

5. Legislation

5.1 Please provide information to verify the legal mandate to regulate animal health and veterinary public health issues on national and regional basis with specific reference to:

The powers to regulate animal health and veterinary public health are contained in the Animal Health Act No. 27 of 2010. This piece of legislation empowers the Veterinary Department to regulate the import and export of livestock and livestock products and biological. Issues pertaining to public health are also contained in the Public Health Act 295 of 1996 and is mainly administered by the Ministry of Health, Local Authorities and to a lesser extent by the Vet Department. (For questions 5.1.1 to 5.1.4 please refer to the Animal Health Act)

- 5.1.1 animal and veterinary public health controls at national and provincial (state) borders,
- 5.1.2 control of endemic diseases of livestock,
- 5.1.3 emergency powers for control of exotic disease outbreaks,
- 5.1.4 compensation provisions for animal owners that are affected by disease control measures, and
- 5.1.5 registration and use of veterinary pharmaceutical products, including vaccines.

The Zambia Medicines Regulatory Authority is responsible for the registration and regulation of medicines and allied substances. The piece of legislation that supports this regulation is the Medicines and Allied Substances Act of 2013 provides.

- 5.2 Copies of current legislation for animal health and veterinary public health must please be provided (English translation required).

Public Health Act 295 of 1996

Animal Health Act No. 27 of 2010

These pieces of legislation can be viewed or downloaded from <http://www.zambialii.org> or <http://www.parliament.gov.zm/>

- 5.3 Is there legislation which requires the reporting of cases or suspect cases of certain animal diseases to veterinary authorities? (In general) **Yes. Animal Health Act No. 10 of 2010**

If 'yes', please provide a list of diseases notifiable in the country. See attached excel sheet titled staff returns-districts

5.4 Which legislation exist that permits veterinary authorities to:

- 5.4.1 Quarantine or isolate animals and/or premises on a suspicion of certain diseases?
- 5.4.2 Establish control zones or quarantine zones around premises containing animals infected with these diseases and control movements into and out of such zones or areas?
- 5.4.3 Destroy and dispose of the carcasses of animals infected with these diseases?
- 5.4.4 Destroy or clean and disinfect vectors and premises contaminated with the etiologic agents of such diseases?
- 5.4.5 Compensate owners for property destroyed by the above activities?

Animal Health Act No. 10 of 2010 for all the above questions

5.5 Which legislation regulates for the feeding of waste to pigs? **Animal Health Act No. 10 of 2010** What surveillance is done on holdings to ensure that these regulations are complied with? **Field staff undertake farm visits from time to time to check on Animal health situations and carry out sanitary inspections.**

5.6 Does your country permit the feeding of commercial garbage to swine? If so, what restrictions are imposed? **No. Restrictions outlined in the Animal Health Act No. 10 of 2010**

6 Surveillance procedures

6.1 Please provide information on the targeted surveillance conducted and methods used for any animal diseases in the past 3 years, in particular the following:

6.1.1 Classical and African Swine Fever

Passive surveillance for ASF in endemic areas. In Lusaka and Southern provinces (ASF free areas) where there were outbreaks in 2013, Active surveillance was undertaken with targeted at the all farms within a specified radius from an identified foci of infection.

6.1.2 PRRS

6.1.3 East Coast Fever

Passive surveillance undertaken. All animals ear-marked for movement for breeding are subjected to testing for ECF.

6.1.4 Foot and Mouth Disease

Passive surveillance is being undertaken. Pre and Post Vaccination sero monitoring survey have been undertaken in 2012 and 2014.

6.1.5 Brucellosis

6.1.6 Tuberculosis

6.1.7 Highly Pathogenic Notifiable Avian Influenza

Passive surveillance is being undertaken, there is no active surveillance being conducted.

Together with auditable records of such surveillance (please provide records for the past 3 years)

Field monthly reports are sent monthly to headquarters from all 108 districts. In a year we receive 1,296 reports. In three years we have received 3,888 monthly reports. It is not practical to provide you with these records. However, you are most welcome to come to our offices at the National Livestock Epidemiology and Information Centre (NALEIC) and have access to them.

6.2 If a serological screening for antibodies was to be conducted in the zone/region/country by accredited veterinarians, describe the method used and the statistical data obtained.

Please refer to the attached FMD pre and post vaccination sero-monitoring report.

6.3 Is reporting of sick animals to government or national veterinary services mandatory?

YES for notifiable diseases.

Explain procedure.

The reporting of animal health problems involves the farmer/s who notices typical disease signs reporting them to Veterinary Assistants (VA)/District Veterinary Officers (DVO) who are the field officer for DVS, or private veterinarians. The VA may also encounter cases during his/her routine farm visits. These cases are then further investigated and samples submitted for diagnosis to laboratories. This information is relayed through the district monthly report, using a standard reporting form. The DVO in turn aggregates data from all camps in the districts and sends standard monthly district reports to the National Livestock Epidemiology and Information Centre (NALEIC) who maintain the national data base. There is a systematic ongoing collection, collation and analysis of data and dissemination of information to responsible officers. In cases of a notifiable disease, if a rumor, report is made to the VA/DVO he/she informs headquarters (the Director of DVS) within 24 hours. The field officers are required to fill in an outbreak form which is relayed to the NALEIC and Headquarters within 24 hours using the fastest possible means.

6.4 Describe the reporting method to the National Veterinary Authorities. **(see 6.3)**

6.5 Describe the reporting method of suspicious and/or confirmed diagnoses to other countries.

If the zone/region/country was recognized a free area, what process would be used to notify trading partners of an outbreak?

Outbreaks (suspected and confirmed) are reported to other countries using the OIE WAHIS web based immediate notification system.

6.6 Are quarantines imposed on premises with suspicious cases, pending final diagnosis?

Yes

6.7 Describe the animal identification system in use for animals

Branding is the national wide identification system used. However, some of farmers combine this with ear tagging.

6.8 What geographic and environmental characteristics of the exporting region may influence the prevalence of the disease agent?

Question not understood.

7. Monitoring and Audit Programs

7.1 Provide a descriptive summary of any compliance unit that monitors the work of the Veterinary Services.

The Ministry has a Monitoring and Evaluation Unit which monitors the activities of the DVS.

7.2 Provide copies of official annual reports of the National and sub-national Veterinary Services. **Attached 2013 DVS annual report and Central province annual report 2013.**

7.3 Provide Copies of reports of official reviews of the function or role of the Veterinary Services, which have been conducted within the last three years. **Non**

8. Import and movement control

8.1 From what countries or parts of countries do you allow the importation of animals including game? Has your country recognized parts of countries to be free from disease? If so, which ones and on what basis?

Animal imports are allowed from countries after conducting a risk assessment. No blanket permission is given to a country but applications are dealt with on individual basis taking into account disease situation of the exporting country at the time of the import and looking at risk mitigation measures that have been put in place.

Imports have mainly been from South Africa and Namibia.

8.2 Identify major classes of animal products being imported and source countries.

Category of products	Main Counties of Origin
Fish	South Africa, Namibia, Mozambique, & China
Dairy	South Africa, France and New Zealand
Beef	South Africa, Namibia, Ireland and UK
Feed additives	South Africa, Namibia,
Live animals	Main Counties of Origin
Poultry: Breeding stock-day old chicks	Netherlands, South Africa, UK, France
Cattle (heifers,cows,bulls,calves)	South Africa & Namibia
Goats and sheep	Namibia and South Africa

8.3 Describe your import policies with regard to disease status of the exporting country. Please include copies of the veterinary import permits.

The general policy regarding imports of livestock and livestock products is to ensure that the imported food is safe for consumers, and to prevent the entry and spread of animal diseases into the national herds. The exporting country (or zone within the country) needs to be free of notifiable diseases at the time of the export.

8.4 Describe the program with specific reference to inspection procedures at international air and sea ports, and provincial airports, and land border posts from neighbouring countries.

Zambia has no designated sea port as it is a land linked country. All ports of entry are manned by the district veterinary

officer in whose jurisdiction the ports of entry fall. The veterinary officer is responsible for inspection of the import consignment for livestock and livestock products coming into the country. Inspections are also undertaken by other government wings such as the Ministry of Health for food safety and Fisheries department .

8.5 What are the control measures for the entry of imported animals and animal products (for example certification, inspection, quarantine, tests)? Provide examples of relevant documents and verification process used.

Inspections includes document verification (export permits, import permits, health certificates, laboratory results). Animal identification verifications is verified by inspection and clinical inspection of the herd undertaken at ports of entry. The verification that import permit conditions have been met is also conducted. Samples are obtained in suspicious cases or randomly after a number of inspection to check for compliance.

8.6 Provide statistics on international border inspection activities, including the number of commercial imported consignments inspected, the number of vehicles inspected, and the quantity of animals and animal products confiscated by your inspectors.

8.7 Describe the import program for veterinary biologics, and provide details on livestock vaccine importation (quantity, country of origin) and medication imports.

The import of veterinary biological involves the client writing a letter to the directorate indicating the reason for the import. Supporting documentation from country of origin (these include, attestation from country of origin on the export, certificate of analysis, registration and inspection certification of production premises, good manufacturing practice certificate, invoice). For medication imports if the product is being imported for the first time there is a registration process required from the Zamiba Medicines Regulatory Authority (ZEMRA).

8.8 Describe any policies relative to the disposal of food wastes from arriving international

aircraft and ships.

- 8.9 What are the patterns of livestock movements within the zone/region/country evaluated?
Livestock movements within the country are rigorously controlled using the Animal Health Act No. 27 of 2010. All in-country livestock movement are required to be under a Stock Movement permit issued by the department of Veterinary Services. The field staff are responsible of ensuring every consignment leaving the district is inspected and relevant laboratory tests conducted based on the in-country livestock movement protocol. There are restriction on movement of livestock based on endemic diseases in various regions in the country. For example :
- **No pigs and pig products are allowed out of Eastern Province as the province is endemic for African Swine Fever.**
 - **No live cattle are allowed out of Western Province as the some districts are infected with CBPP, hence only carcasses are allowed out of the province.**
 - **Movement restrictions are also applied based on the strains of ECF prevailing in that region. Animals are only permitted to move from one district to another if the strain are the same or if the animals are free of the infection.**

- 8.10 How are the animals transported and handled during market transactions?

Animals are transported in open or closed vans/trucks with the driver of vehicle charged with the welfare of the animals in the absence of the owner. The Animal Health Act Part V deals with the aspect of transportation of animals.

9. Vaccination

Please answer each question below in this section for each of the following diseases:

Foot and Mouth Disease, Vesicular Stomatitis, Peste des Petits Ruminants, Rinderpest, Contagious Bovine Pleuropneumonia, Anthrax, Brucellosis, Bovine tuberculosis, Porcine Reproductive And Respiratory Syndrome, Rift Valley Fever, Bluetongue, Highly Pathogenic Notifiable Avian Influenza, Aujeszky's disease, Newcastle Disease, Classical Swine Fever, Swine Vesicular Disease.

9.1 When was a vaccine last officially or legally used in the area? How do you ensure it is no longer being used (if applicable)?

9.2 Where are the laboratories that currently produce vaccine located?

9.3 What types of controls are applied in the laboratories?

9.4 In what areas is vaccination for the disease permitted? Number of doses of vaccine used annually? Types of vaccine used? How are vaccinated animals identified? Provide examples of certification and tag used.

9.5 What are the rules governing the distribution and use of these vaccines?

Disease	9.1	9.2	9.3	9.4	9.5
FMD	May 2014	BVI Botswana		High risk areas of the diseases in the country (a total of 10 districts in 3 provinces of the country)	This vaccine is only purchased and administered by Government
PPR	Never				
CBPP	September 2014			Vaccination is undertaken in areas adjacent to the infected zones (a total of 4 districts in North Western Province and 4 districts in Western Province)	This vaccine is only purchased and administered by Government

Anthrax	Currently being used	CVRI¹		Vaccinations are ongoing in endemic areas (Western province)	Farmers can access vaccine through pharmacies/ CVRI
Brucellosis	Currently being used	CVRI¹			Farmers can access vaccine through pharmacies
NCD	Currently being used	CVRI¹			Farmers can access vaccine through pharmacies/ CVRI/VAs

¹CVRI stands for Central Veterinary Research Institute which is a section under the department of Veterinary Services

10. Control measures

Please answer each question below in this section for each of the following diseases:

Foot and Mouth Disease, Vesicular Stomatitis, Peste des Petits Ruminants, Contagious Bovine Pleuropneumonia, Scrapie, Bovine Spongiform Encephalopathy, Anthrax, Brucellosis, Bovine tuberculosis, Porcine Reproductive And Respiratory Syndrome, Rift Valley Fever, Bluetongue, Notifiable Avian Influenza (including Highly Pathogenic), Aujeszky's disease, Newcastle Disease, Classical Swine Fever, African Swine Fever, Swine Vesicular Disease, Theileriosis, Malignant Catarrhal Fever.

10.1 What is the country's status? If zoned, please elaborate.

10.2 If an outbreak should occur in the area, what control procedures would be used?

- 10.2.1 How do they compare with the National eradication program?
- 10.2.2 Are the procedures different for infected herds vs exposed herds?
- 10.2.3 Do you practice total depopulation with burial, burning, or rendering of infected herds?
- 10.2.4 Would slaughter with carcass salvage at abattoir be permitted (salvage of apparently healthy animals from infected herds or exposed herds)?
- 10.2.5 Can you describe the compensation program funded by producer organisations?
- 10.3 What restrictions are placed on the movement of domestic livestock exposed to communicable diseases?
- 10.4 How are investigations, which determine the source of infection, routinely conducted?
- 10.5 Are quarantines placed on premises and/or areas where a disease outbreak is suspected? If so what quarantine radius is used?
- 10.6 What movement controls are placed on animals and animal products during a disease outbreak?
- 10.7 After depopulation of an area that was infected, what methods are used to detect and prevent the introduction of infection through repopulation?
- 10.8 Is vaccination permitted? If so, under what conditions? Who may administer?
- 10.9 What is the process for gathering information on disease outbreaks? (electronics, otherwise)

10.10 Please provide information on the number of outbreaks for the above listed diseases, in the last 3 years.

	10.1	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.10
Foot and Mouth Disease	Has been reported in the past in Central, Southern and Northern	Complete livestock movement ban in affected area (District/Province)	Passive and active surveillance	Area – 20Km	Complete livestock product movement ban in affected area (District/Province)	N/A	Yes. Control Plan. Government administered.	Outbreak report forms used (submitted as hard copy or e-mail)	0
Vesicular Stomatitis	Not reported	N/A		N/A	N/A	N/A	N/A	N/A	0
Peste des Petits Ruminants	Not Reported	N/A	Passive and active surveillance	N/A	N/A	N/A	N/A	N/A	0
Contagious Bovine Pleuropneumonia,	Has been reported in the past in Western	Complete livestock movement ban in affected area	Passive and active surveillance	Area – 20Km	Livestock movement restriction for the affected	N/A	Yes. Control Plan. Government administered.	Outbreak report forms used	3

	and Northwestern Provinces	(District/Province)			herd		d.	(submitted as hard copy or e-mail)
Scrapie	Not Reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	0
Bovine Spongiform Encephalopathy	Not Reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	0
Anthrax	Has been reported in the past in Western Province	Complete livestock movement ban in affected area (District/Province)	Passive and active surveillance	Area – 20Km	Complete livestock & livestock product movement ban in affected area (District/Province)	N/A	Yes. Farmer administered.	6 Outbreak report forms used (submitted as hard copy or e-mail)
Brucellosis	Has been reported in the past in all parts of the country	Livestock movement restriction for the affected herd	Passive and active surveillance	Premises	Livestock movement restriction for the affected herd	N/A	Yes. Farmer administered.	5 Outbreak report forms used (submitted as hard copy or e-mail)

Bovine tuberculosis	Has been reported in the past in all parts of the country	Livestock movement restriction for the affected herd	Passive and active surveillance	Premises	Livestock movement restriction for the affected herd	N/A	N/A	N/A	Outbreak report forms used (submitted as hard copy or e-mail)	9
Porcine Reproductive And Respiratory Syndrome	Not Reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	N/A	N/A	0
Rift Valley Fever	Not Reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	N/A	N/A	0
Bluetongue	Not reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	N/A	N/A	0
Notifiable Avian Influenza (including Highly Pathogenic)	Not Reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	N/A	N/A	0

Disease	Has been reported in the past in all parts of the country	Livestock movement restriction for the affected herd	surveillance Passive and active surveillance	Premises	Livestock movement restriction for the affected herd	N/A	Yes (in calves). Control Part. Government administered.	Outbreak report forms used (submitted as hard copy or e-mail)	18
Theileriosis	Has been reported in the past in all parts of the country	Livestock movement restriction for the affected herd	Passive and active surveillance	Premises	Livestock movement restriction for the affected herd	N/A	Yes (in calves). Control Part. Government administered.	Outbreak report forms used (submitted as hard copy or e-mail)	18
Malignant Catarrhal Fever	Not reported	N/A	Passive surveillance	N/A	N/A	N/A	N/A	N/A	0

N/A = Not applicable

*Please provide examples of documentation used in disease control activities.

11. Laboratories

11.1 Elaborate on the diagnostic laboratory infrastructure (descriptive summary of the organizational structure and role of the government veterinary laboratory service, particularly its relevance to field veterinary services).

The Central Veterinary Research Institute (CVRI) located in Lusaka is the main research and diagnostic unit with the DVS. It carries

out livestock research and provides services to the government and the general public. The CVRI has five regional laboratories located in various parts of the country that feed into the Lusaka station.

The main objectives and functions of CVRI are as

1. To provide laboratory diagnostics of livestock diseases;
2. Production of animal vaccines and other biologicals;
3. Epidemiological surveillance and disease investigations;
4. To plan and design and carry out appropriate research programmes;
5. To render university and college students' practicals and in-service training.

The following are the sections at CVRI:

1. Acaricides
2. Bacteriology
3. Biochemistry and Toxicology
4. Parasitology
5. Pathology
6. Quality Control and Assurance
7. Vaccine Production Unit
8. Virology

11.2 What biosecurity is required for diagnostic laboratories?

Biosecurity is maintained for all diagnostic laboratories at CVRI. Standard Operating Procedures (SOP's) have been developed by CVRI to ensure that biosecurity is maintained.

11.3 What specimens are routinely collected for diagnosis and how are they transported?

Specimen routinely collected include whole blood, sera, cadavers, organs, tissues, surface swabs, Cloacal swabs, chicken litter, eggs and dipwash samples. These different specimens are collected and transported according to the OIE recommendations (The Manual of Diagnostic Tests and Vaccines for Terrestrial Animals are

followed.)
).

11.4 What diagnostic methods are used?

The diagnostic methods used are many and varied and will be dependent upon the type of samples collected and purpose of testing (e.g. isolation of pathogen or detection antibodies etc). In general, the guidelines in the OIE The Manual of Diagnostic Tests and Vaccines for Terrestrial Animals are followed.

11.5 What reference laboratories are used to confirm diagnosis of diseases notifiable to the OIE?

Onderstepoort Veterinary Institute

Private Bag X05

Onderstepoort 0110

SOUTH AFRICA

National Veterinary Laboratory

Sebele Content Farm

P.O.Box. 0035

Gaborone

BOTSWANA

Botswana Vaccine Institute

Department of Animal Health and Production

Broadhurst Industrial Site

Lejara Road

Private Bag 0031

Gaborone

BOTSWANA

Institute for Animal Health

Molecular Characterisation and Diagnostic Group

Livestock Viral Diseases Research Programme

Ash Road, Pirbright

Woking, Surrey, GU24 0NF

UNITED KINGDOM

Animal Health and Veterinary Laboratories Agency

New Haw, Addlestone

Surrey KT15 3NB

Weybridge

UNITED KINGDOM

CIRAD-BIOS

Control of Exotic and Emerging Animal Diseases

Programme Santé Animale

Campus International de Baillarguet TA A-15/G

34398 Montpellier Cedex 5

FRANCE

11.6 List the number of samples (and sample types) received for the disease diagnosis from (i) the zone/region and (ii) nationally, for the last three years. Provide results.

In 2013, the Central Veterinary Research Institute received 804 submissions with a total of 72,690 samples analysed. The samples were distributed for analysis in the various sections of the CVRI to be tested for specific diseases that were requested for by the clients. The majority of samples received included whole blood (32), sera (26,092), cadavers (64), organs (46), tissues (8), Surface swabs (27,646), Cloacal swabs (7,242), Chicken litter (1,435), eggs (1,482) and the rest being dipwash samples.

11.7 What internal and external quality assurance program do you use (e.g. ISO).

CVRI undertakes regular development and implementation of the internal and external Quality Management System (QMS) to meet and maintain ISO 17025 standards

11.8 Do private laboratories receive samples for testing? If so, describe accreditation process and reporting of results.

Yes. The accreditation process is currently being developed.

11.9 What kind of training and continuing professional development have the diagnostic personnel received regarding the specific disease agents of concern?

CVRI has a continuing professional development programme where members of staff are sent to other laboratories abroad to learn new skills and techniques. Trainers have also been brought to the institute to train a larger group of technicians. In the recent past trainings have been supported by our co-operating partners such as the Food and Agricultural Organization and

12 Agricultural / Industrial / Chemical Residues and Veterinary Drugs

- 12.1 Please supply a copy of legislation used to regulate agricultural / industrial chemical residues and veterinary drugs. The following main topics should be covered:

Pesticide residues
Industrial pollutants (PCB and pentachlorophenol)
Heavy metals
Sulphonamides
Antibiotics
Hormonal substances
Medicating feed ingredients
Other compounds

[Animal Health Act \[No. 27 of 2010\]](#)

[Medicines and Allied Substances Act, 2013 \[No. 3 of 2013\]](#)

[Environmental Protection and Pollution Act, 1999 \[No. 12 of 1999\]](#)

[Dairy Industry Development Act, 2010 \[No. 22 of 2010\]](#)

[Control of Goods \(Amendment\) Act, 2004 \[No. 12 of 2004\]](#)

[Public Health Act 295 of 1996](#)

12.2 Supply a list of tolerances used in your country for the aforementioned compounds in meat products.

Please refer to the various acts outlined in answers to question 12.1

12.3 Are lay persons permitted to administer injectable drugs?

No.

12.4 Supply a list of pesticides and herbicides applied to crops used as animal feed and describe the application of these substances on the farm, at feedlots and in slaughter facilities.

Please refer to 12.1

12.5 Describe the residue testing programs in effect in your country with reference to:

- Which compounds are being tested for and how many samples are processed annually?
- On what criteria are the annual sampling volumes based (e.g., slaughter figures)?
Please quantify.
- What levels of residues are found for each of the aforementioned chemicals?
- What is the percentage of prohibited residue found?
- How many animals are represented in one sample?
- What types of laboratory facilities are used for the analyses (government, industry, private, etc.)?
- Please supply a copy of analytical methods or test methods used in all residue testing programs.
- Please supply a copy of your laboratory quality control manual.

We were unable to collect the data before this report was due.

13. Please provide information pertaining to dairy, poultry, beef and pig farms for the following questions:

13.1 Industry

- Please provide a summary on the above-mentioned industries (dairy, poultry, beef and pig) in your country.

The total current annual animal source food production in Zambia, is projected at about 56,000 MT beef, 32,000 MT pork, 42,000 MT poultry meat, 306 million liters of milk and 437 million eggs.

- Does the industry have its own animal health programmes (guidance, sanitary monitoring, vaccinations etc.)?

Yes.

- If yes, have these programmes been discussed with (and approved by) the authorities?

Yes.

13.2 Registration and Inspection on Farms

- Do the veterinary authorities register farms?

Yes

- If yes, describe the system used to register livestock holdings. (Any exemptions from this system should be indicated.)

Individual livestock farms are registered onto farmer register database. Data captured includes but not limited to Provincial, District, Veterinary Camp, Chief, Headman, Village level and GPS coordinates of the farm.

- Describe the method used to identify individual holdings.

Farm is identified from Provincial, District, Veterinary Camp, Chief, Headman and Village level.

How often does the state (government employed) veterinarian visit the farms?

Variable but at least twice per year.

How often do Para-veterinary technicians (government employed) visit the farms?

Variable but at least four times per year.

Number of farms per official veterinarian:

Variable. Depends on the location.

Number of farms per Para-veterinary technician:

Variable. Depends on the location.

I certify that the information provided is correct.

.....

(Signature)

Name in Print: Dr Caesar H. Lubaba

Rank: Principal Epidemio-surveillance and Information Officer

Comments:

Date: 20th September 2014

I certify that the information provided is correct.

.....

(Chief Veterinary Officer Signature)

Name in Print (Chief Veterinary Officer):

Contact details:

Date:

Official stamp of veterinary authorities: