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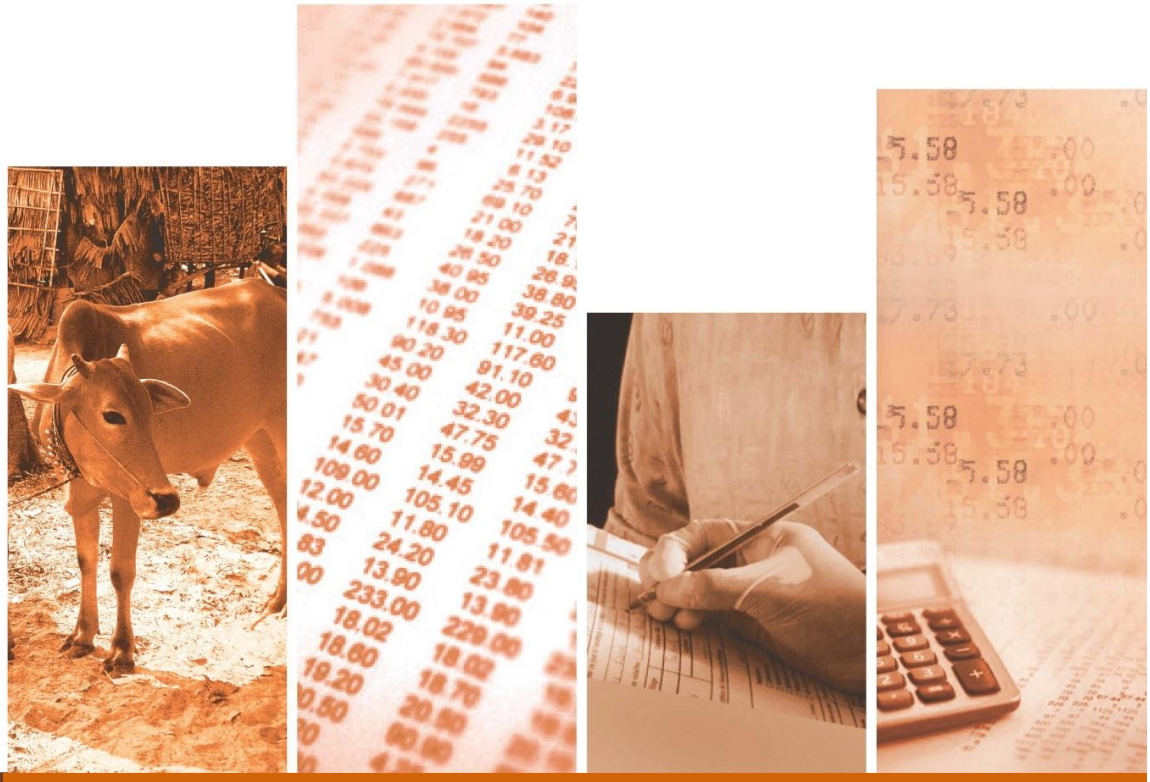
PVS Gap Analysis Report

Kenya



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PVS Gap Analysis report

Kenya

11 to 21 July 2011

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LIST OF ACRONYMS, ABBREVIATIONS AND/OR SPECIAL TERMS

AH	Animal Health
AHA(s)	Animal Health Assistant(s)
AHITI	Animal Health and Industry Training Institute
AHS	African Horse Sickness
AI	Artificial Insemination
ALLPRO	ASAL Based Livestock and Rural Livelihoods Support Project
ASALs	Arid and Semi-Arid Lands
ASF	African Swine Fever
AU	African Union
BIP	Border Inspection Post
BSE	Bovine Spongiform Encephalopathy
CAHNET	Community based Animal Health Network
CAHW	Community based Animal Health Worker
CBPP	Contagious Bovine Pleuropneumonia
CC	Critical competency (PVS)
CE	Continuing education
COMESA	Common Market of Eastern and Southern Africa
CPD	Continuous Professional Development
CVL	Central Veterinary Laboratory
CVO	Chief Veterinary Officer
CVS	County Veterinary Services
DFZ	Disease Free Zone
DPT	Digital Pen Technology
DVM	Doctor in veterinary medicine
DVO	District Veterinary Officer
DVS	Department of Veterinary Services
EAC	East African Community
ELISA	Enzyme-Linked Immuno-Sorbent Assay
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FMD	Foot and Mouth Disease
FVP	Field Veterinary Post
GDP	Gross Domestic Product
GO(s)	Government Organization(s)
HA	Hemagglutination
HACCP	Hazard Analysis Critical Control Point
HPAI	Highly Pathogenic Avian Influenza
IBAR	Interafrican Bureau for Animal Resources (AU)
IHA	Indirect Hemagglutination
ILRI	International Livestock Research Institute
ISO	International Standards Organisation

IT	Information Technology
JKIA	Jomo Kenyatta International Airport
KARI	Kenya Agricultural Research Institute
KDB	Kenya Dairy Board
KEBS	Kenya Bureau of Standards
KEVEVAPI	Kenya Veterinary Vaccines Production Institute
KMC	Kenya Meat Commission
KNBS	Kenya National Bureau of Statistics
KSH	Kenya Shilling
KVA	Kenya Veterinary Association
KVB	Kenya Veterinary Board
KWS	Kenya Wildlife Service
LD	Livestock Development
LITS	Livestock Identification and Traceability System
LSD	Lumpy Skin Disease
LSRIM	Livestock Surveillance, E-Reporting and Information Management
LSRWG	Livestock Disease Surveillance and Reporting Working Group
MoF	Ministry of Fisheries
MoH	Ministry of Health
MoLD	Ministry of Livestock Development
MoU	Memorandum of Understanding
MRT	Milk Ring Test
MTI	Meat Training Institute
NAI	Notifiable Avian Influenza
NCD	Newcastle Disease
NGO	Non-Governmental Organisation
OIE	World Organisation for Animal Health
OIE-PVS	OIE Tool for the Evaluation of Performance of Veterinary Services
PAN SPSO	Participation of African Nations in Sanitary and Phyto-sanitary Standard Setting Organisations (AU)
PAS	Performance Appraisal System
PATTEC	Pan-African Tsetse and Trypanosomosis Eradication Campaign
PDVS	Provincial Director of Veterinary Services
PPB	Pharmacy and Poisons Board
PPLDU	Policy, Planning and Legal Development Unit
PPP	Public – Private Partnership
PPR	Peste des petits ruminants
PRSP	Poverty reduction Strategy Paper
PVO	Provincial Veterinary Office
RFID	Radio Frequency Identification Device
RVF	Rift Valley Fever
RVIL	Regional Veterinary Investigation Laboratory
SADCAVEE	SADC Association of Veterinary educational Establishments
SMS	Short Message Service
SOP	Standard Operating Procedures

SPS	Sanitary and Phyto-Sanitary (agreement) WTO
TADs	Trans-boundary Animal Diseases
TAHS	OIE Terrestrial Animal Health Code
USD	United States Dollar
VACNADA	Vaccines against Neglected Animal Diseases in Africa (AU)
VEEU	Veterinary Epidemiology and Economics Unit
VLU	Veterinary Livestock Unit
VO	Veterinary Officer / Office
VPH	Veterinary Public Health
VS	Veterinary Service(s)
VSB	Veterinary Statutory Body as per OIE Code definition
VSDF	Veterinary Services Development Fund
WHO	World Health Organisation
WTO	World Trade Organisation

ACKNOWLEDGEMENTS

The use of the PVS for PVS Gap Analysis purposes by Dr. Patrick Bastiaensen, Dr. Herbert Schneider and Dr. Francisco D´Alessio (hereinafter called **"the Team"**) has been formally authorized by the OIE.

The Team wishes to express their appreciation and gratitude to the Government of Kenya, the **Ministry of Livestock Development** and the **Department of Veterinary Services** for their full support, logistical assistance and willingness to provide all information needed in a frank, cooperative and transparent manner.

The team also thanks the OIE Sub-Regional Representation for Eastern Africa in Nairobi for its hospitality.

A special word of thanks is recorded to **Dr. Peter Maina Ithondeka, Director of Veterinary Services (DVS)** and to **Dr. Hesbon Awando** who assisted the Team throughout the Mission and served as a very valuable resource person and able and competent facilitator.

No animals were harmed in the making of this PVS Gap Analysis.

EXECUTIVE SUMMARY

Introduction

Following a request to the OIE from its government, a PVS Gap Analysis mission based on the outcomes of the OIE PVS report was conducted from July 11 to 21st, 2011 by a team of independent OIE certified experts: Dr Patrick Bastiaensen as team leader and Dr Francisco D'Alessio and Dr. Herbert Schneider as technical experts. The mission was conducted according to the "pillar" approach, clustering critical competencies according to theme and organising consecutive group meetings with relevant veterinary officers, and sometimes, representatives of the veterinary statutory body (KVB) and the veterinary association (KVA). Despite the request of the team to open up the discussions to (other) representatives of the private sector, this did not materialise.

As in many developing countries, a high percentage of the government allocations serve the purpose of paying salaries. Kenya is no exception to this rule. The recurrent budget is mainly dedicated to the payment of salaries (83%) while the development budget is mainly dedicated to provide the operational means and comply with counterpart contributions in public development aid projects. The approach of the team has therefore consisted in promoting the strengthening of operational means to balance these means with the available personnel and administrative breakdown. In addition, rather than to foresee new recruitments for new areas of intervention or inspection of the veterinary services, redeployment of existing staff has been promoted as much as possible. In addition, other strategic options favoured by the Team were to strengthen training efforts (incl. Continuing Education), adopt a programmatic approach to disease prevention, control and eradication (programmes, PPP, targets, SOPs), rationalise the veterinary field network; and re-assess the laboratory service delivery. The latter could only partially be conducted and the Team recommends that Kenya request to the OIE the organisation of a specialised PVS Pathway Laboratory mission as soon as possible.

This exercise however is merely *facilitated* by the Team and the present report reflects above all the opinions, strategic choices and ambitions of the Kenya Veterinary Services, not (necessarily) those of the Team. In our view, the targets set (i.e. the expected increases in level of advancement) are high, ambitious, but by no means unachievable, provided political willingness, social stability and economic prosperity prevail in the coming years.

Development priorities

According to the DVS the main priorities which will guide the future development and investment plan are closely related to the overall livestock development policy which aims to increase food security and sustainable income for rural communities, as well as to increase competitiveness and access to (foreign) markets. This priority is translated in the animal health priorities, which consist of a poverty reduction strategy (based on the national *Poverty Reduction Strategy Paper)* and a market oriented strategy to establish disease free-zones for trade-sensitive cattle diseases (FMD and CBPP mainly) in order to export beef to high-value markets by 2030.

The veterinary public health priorities are to strengthen the control of the veterinary services over meat inspection services at district (local) level and to take over from the current system whereby numerous local abattoirs are being inspected by the *Ministry of Health* (MoH). The second priority consist of strengthening the veterinary public health controls and impacts over non-meat commodities, such as milk, eggs, honey as well as meat products from non-traditional or emerging farmed animal species, such as ostriches, rabbits, snails, etc. The only priority, as far as the Department of Veterinary Services is concerned, is to maintain its current chain of command to the underlying layers of the veterinary services delivery throughout and after the constitutional and institutional reform process that is underway and

which will lead to the devolution of powers from central government, to county-based authorities (47). Due consideration and attention will have to be given to the regional integration, in particular the EAC Customs Union, Common Market and Monetary Union which are rapidly turning to reality.

PVS Gap Analysis: general overview

From the 46 critical competencies that form part of the PVS framework, only 7 were deemed to be satisfactory or unlikely to be improved in a 5-year span, irrespective of investments made. All 39 remaining critical competencies were deemed to be improvable over the next 5 years. Physical resources, if the investment programme materialises, is expected to increase from the current level 1 to level 4: *"the VS have suitable physical resources at all levels (national, provincial and district) and these are regularly maintained";* the operative word lacking today, more than the absolute lack of physical resources, is "*maintenance*". The proposal contained in this report is an attempt to balance capital investments with the likelihood that these can be effectively maintained.

Pillar 1. Strengthening competencies for international trade

The 8 critical competencies covered under this heading are: quarantine and border security, identification and traceability (for animals, and for animal products), international certification, equivalence agreements, transparency, zoning and compartmentalisation. These trade related critical competencies match the two livestock development goals: *to enhance food security and improvement of livelihoods* (for the home-consumers), but foremost *to enhance competitiveness and access to markets.* When referring to the latter, one generally mentions beef-sector and its supposed potential for accessing international markets through the establishment of *disease free zones* (DFZ). To kick-start the process, one will tackle the issues of identification/traceability first, before considering further steps, such as biosecurity (i.e. fencing, movement control). The activities outlined in this report suggest the establishment of a livestock identification and traceability system (LITS) for bovines and the funding of an international consultancy to assist in drafting a comprehensive roadmap. Still with regard to traceability, the programme foresees investments in the establishment of traceability for two major (export) commodities: meat (various species) and dairy. The negotiation of bilateral equivalence agreements with third countries is strongly encouraged, as it may offer the opportunity to export these commodities at a lower price to countries with less stringent sanitary requirements (compared to the focus on the European markets and European retailer prices), leading to a better net profit for less constraining investments (e.g. in fencing, which is unlikely to be popular in a country which relies heavily on photographic-safari based wildlife tourism). In addition, a strategic choice has been made to focus on 3 major terrestrial international border posts, where the volume of animal-related traffic justifies the investments in infrastructures, amongst which quarantine stations, to bring them to international standards.

Pillar 2. Strengthening competencies for animal health.

The chapter covers the following 5 critical competencies: epidemio-surveillance (passive and active), early detection and emergency response, disease prevention, control and eradication, and animal welfare. The strategy is related to animal health priority nr. 1, which states *"….promote animal health by reactivating and expanding (…) services, including monitoring and control of animal diseases"* in reference to the PRSP, an implicit recognition that the current system or strategy has failed, as confirmed by the PVS Pathway Follow-Up mission in March 2011. The number of human resources allocated to the animal health and welfare services is disproportionate to the material and non-material resources put at their disposal and leads to a dormant, inert, heavily bureaucratic and ineffective animal health management system. The strategy will therefore consist in balancing human resources with operational resources by the redeployment, when and where possible, of staff and the upgrading or establishment of functional animal health surveillance, early detection, prevention, control and eradication units at (mostly) district level, with binding technical (not

just administrative) triages to meet and standard operation procedures (SOPs) to implement and respect. Passive surveillance will have to be (re)activated across the country to meet DVS objectives in five years' time, while active surveillance will have to be broadened to include important diseases for the dairy sector (tuberculosis and brucellosis), the beef sector (FMD and CBPP) and emerging and exotic diseases, such as NAI. From a public health point of view, active surveillance for RVF will have to be pursued, while from a smallholder perspective, due attention should be given to the surveillance of PPR. Keeping in mind that numerous veterinary public health and trade related activities are carried out by or through the network of district veterinary offices, the "weight" of the animal health component may seem disproportionate, both in terms of human resources and financial resources. Indeed, the financial resources needed add up to an estimated USD 50 million per annum, along with a USD 6.3 million investment budget (allegedly to be mobilised in year one), totalling an estimated USD 256 million over the 5 year period.

Pillar 3. Strengthening competencies for veterinary public health

The chapter covers the following 4 critical competencies: food safety (animals and animal products), veterinary products and residue testing. The present PVS Gap Analysis encourages investments, however modest, in strengthening compliance with international standards, not just in the beef sector, but in all food-producing sectors, and in particular the dairy sector. With regard to veterinary products, it is felt that within 5 years, Kenya could be moving from the current level 2 to level 3 whereby the veterinary services will *"exercise effective administrative control and implement quality standards for most aspects of the regulation of veterinary medicines and veterinary biologicals."* To achieve this, the enactment of the new Veterinary Medicinal Product Act is a prerequisite, enabling the establishment of the long-awaited autonomous *Veterinary Medicines Directorate.* In terms of residues, one should move away from a private-sector driven, self-regulated residue testing for a limited number of products to a public-sector driven *"comprehensive residue testing programme for all animal products for export, and some for domestic use".*

Pillar 4. Strengthening competencies for veterinary laboratories

The main strategy and in consequence, activities, evolve around the operation of the main, national reference laboratory in Kabete. From a conceptual (and institutional) point of view, the 6 regional laboratories (Karatina, Kericho, Nakuru, Mariakani, Eldoret and Garissa) are part and parcel of the national laboratory, are accountable to the national laboratory, and contribute to the output of the national laboratory. The proposed investment plan nevertheless recommends the rehabilitation of all 7 facilities, i.e. Kabete and the 6 RVILs, along with the equipment (cold chain mostly) of the 6 main BIPs withheld under pillar 1 on "trade". The PVS Gap Analysis tool does not entertain estimates, based on the need(s) for equipment and reagents as such, without these needs being justified by the expected turnover of samples, generated by the veterinary field network and other facilities or services (e.g. export abattoirs). Furthermore the PVS Gap Analysis tool uses parity pricing for laboratory analysis in the private sector labs, rather than to use a subsidised pricing structure of numerous public sector laboratories. The veterinary laboratory diagnosis capacities should be improved in order to ensure that diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/or that could enter the country, can be correctly diagnosed. The financial resources required are based on a 40 % financial increase in "diagnostic performance" by year 5, or USD 750,000 per annum for the technical services of the laboratories. Including renovation of premises, salaries, training and general operating expenses, the annual budget for the laboratory services is estimated at USD 2.3 million per annum or USD 11.5 million or KSH 1 billion over the 5 years. In addition, an investment budget of USD 860,000 or KSH 77 million is earmarked for renovations, means of transport and training abroad. The cost of the to-be-established quality assurance management (and manager) is grossly estimated at 5% of the overall veterinary laboratory budget. Irrespective of the outcomes of the financial analysis conducted within the framework of this report, it is believed that the complexities, the size and scope of the laboratory services in Kenya cannot

be fully and adequately addressed by a team of veterinary experts, not necessarily endowed with specialised laboratory – related expertise. Furthermore, the outcomes of the analysis a too generic to be useful as a basis for a comprehensive rehabilitation programme for laboratory diagnostic services. Which is why the Team recommends that this PVS Gap Analysis exercise be completed by a specific and dedicated OIE laboratory assessment (including quality assurance), as offered by the OIE under the PVS Pathway.

Pillar 5. Strengthening competencies for general management and regulatory services

The current general organisation of the Veterinary Services is by all standards comprehensive. With the rare exception of not having a dedicated risk analysis or import/export desk officer/unit, the flow chart of the Department seems to tick all the boxes and requires little or no alteration. The veterinary field network is based on the current set-up with 284 district offices (DVO) and 8 provincial offices (PVO). This number is not based on a needs assessment, but on the political and administrative breakdown of government structures. Allegedly, staff numbers within DVOs, rather than the number of DVOs, reflect the needs in terms of veterinary services. How these offices stand to survive the on-going constitutional reform and delegation of powers to counties, remains unclear and is not considered in this model. Nevertheless, a simulation, based on 284 district offices and 47 county offices is presented in appendix 2

The main improvements with regard to Veterinary practice organisation and policy are expected in risk analysis and the management of emerging issues, as well as in the establishment and operation of the *Kenya Veterinary Board.* The latter will have a pivotal role to play in the improvement of performances in these and other critical competencies. At present, under the current Cap. 366, the KVB has no authority over veterinary para-professionals. Hence, a lot is expected from the new *Veterinary Surgeons and Veterinary Para-professionals Bill* which meets OIE Code requirements as contained in Section 3: Quality of Veterinary Services; article 3.2.12. The proposed action plan is based on the approval and enactment (eventually) of this Bill, without which only few any of the activities can be implemented.

Professional competencies of veterinary professionals and veterinary para-professionals are deemed to be of an already very acceptable level and will be further strengthened through updating, international harmonisation and or evaluation. Looking at the plethora of staff within government service, there seems to be no need to increase the output of any of the Universities awarding veterinary degrees today. In terms of quality however, there seem to be challenges at the horizon, i.e. the establishment and multiplication of private veterinary educational establishments (VEE). The KVB, especially when the new Veterinary Surgeons and Veterinary Para-professionals Bill will have been approved, will be expected to develop and implement an evaluation programme for veterinary professionals and paraprofessionals under their jurisdiction, and to strengthen collaboration with the respective veterinary educational establishments in Kenya, subject to legal provisions, regarding uniform training standards and general curriculum development, and in the case of veterinary professionals, required day-1-competencies.

Continuing education is going to be pivotal in achieving a large number of targets. It is withheld as the mechanism of choice to increase capacity by current and future staff to address the weaknesses observed in the previous PVS report. Institutionally, this continuing education system, or *continuous professional development* (CPD) programme, is largely unavailable at present and needs to be developed, not only by the veterinary authority (DVS), but also by the veterinary statutory body (KVB) and the veterinary association (KVA) if one wishes to achieve the required level in year 5. In terms of legislation and irrespective of where the on-going Constitutional reform process will lead the veterinary services, it is recommended that this same veterinary authority be given the authority and capability to participate in the (future) preparation of national legislation and regulations, adopting a formal methodology which is in line with Kenya Government policies and legal provisions, and

ensuring adequate internal and external quality, the latter through stakeholder consultations, amongst others. Furthermore the veterinary authority will have to truly implement veterinary legislation in all domains of their competence and work actively with stakeholders to enable law enforcement.

Overall financial resources required

There is no doubt that the current level of funding of the Veterinary Services, while inadequate in numerous fields, forms a sound and sustainable basis for the further development of the Veterinary Services. Donor funded activities are relatively modest in comparison to the activities, funded through the Kenyan recurrent and development budgets. The existence of a dedicated *Ministry of Livestock Development* reflects the commitment of past and current Governments to support this sector, which not only represents an important economic activity, but is at the heart of social, religious and cultural life in Kenya. In this sense, and within a democratic framework, it will always represent a key feature of (rural) development. The main challenge today resides in the disproportionate weight of salary costs, which are not commensurate with operational costs. The present investment plan proposes to address this problem within certain politically acceptable boundaries, whist simultaneously boosting the financial resources of the veterinary services to meet international standards. The total financial requirements for a five-year long investment programme for the Kenya veterinary services is estimated at USD 349 million, constituted of a once-off capital investment budget of USD 8.6 million and 5 consecutive annual budgets of USD 68 million. In KSH, this represents a total amount of KSH 31,5 billion, of which 0.775 billion are earmarked for capital investments. Most of the funds required are earmarked for the “animal health” pillar, but as highlighted in the relevant sections, some of the expenditures under this pillar cover the field veterinary network at district level and hence, also trade and veterinary public health related human, physical and financial resources. The “Animal Health” pillar represents an amount of USD 256 million or KSH 23 billion or 73% of the overall budget.

Conclusions

The funding gap over the five year period, as compared to a status quo situation, is therefore USD 137 million, or approximately USD 26 million per annum. This target could be met in part by the Government of Kenya (as part of the funding of its decentralisation process) and by the international donor community. For the latter to materialise, the Team recommends that –subject to formal endorsement of the PVS evaluation and the PVS Gap Analysis reports by the MoLD- a donor round table be organised in 2012, with the support of the OIE Sub-Regional Representation for Eastern Africa, also based in Nairobi.

In conclusion, only time will tell whether this exercise has been useful for the veterinary services as they exist today or whether the exercise will have to be repeated (shortly) to take account of the devolution of responsibilities and duties to the counties. Whatever the case may be, the Team acknowledges the active participation of central and provincial staff in this exercise and believes that its outcomes are fully understood and supported by the veterinary administration. It nevertheless regrets the limited participation of private stakeholders in this exercise.

METHODOLOGY OF THE PVS GAP ANALYSIS MISSION

A PVS Gap Analysis mission facilitates the definition of a country's Veterinary Services' objectives in terms of compliance with OIE quality standards, suitably adapted to national constraints and priorities. The country PVS Gap Analysis report includes an indicative annual budget and one exceptional budget (for exceptional investments), when relevant, consolidated to propose an indicative 5 year budget for the Veterinary Services. In practice, this means:

- Defining, together with the Veterinary Services, and in accordance with national priorities and constraints, the expected result (i.e. level of advancement defined in the OIE PVS tool) at the end of the five-year period for the critical competencies of the OIE PVS tool which are relevant to the national context;
- Determining the activities to be carried out in order to achieve the expected results for the critical competencies of the OIE PVS Tool which are relevant to the national context of the country;
- Determining, with the help of information, data or interviews, the tasks and human, physical and financial resources required to implement these activities to enable the Veterinary Services to function appropriately.

I The PVS Gap Analysis process

I.1 Background information

Following a request to the OIE from its Government, an evaluation of the Veterinary Services of Kenya using the OIE PVS Tool for the evaluation of Performance of Veterinary Services, based on OIE international standards on quality of Veterinary Services[1], was conducted in July 2007 and a PVS Pathway Follow up mission in March 2011, by two different teams of independent OIE certified experts. In order to adequately understand the objectives of the country, as well as the figures presented in the PVS Gap Analysis report, it is important to have access to some key information. A part of this information comes from the country PVS evaluation report, other parts come from other sources, such as the FAO's statistical department, the World Bank and Kenya's own livestock and statistics reference institutions.

Given the fact that the last PVS evaluation was conducted a mere four months ago, most hard data generated by this mission could be used "as is" for the PVS Gap Analysis.

I.1.A Country details

Kenya has overcome the quadruple shock of 2008 and 2009 (post-election violence, drought and the global food and financial crises) and achieved balanced growth in all sectors. Favourable weather conditions have led to the recovery of agriculture and also contributed to more reliable energy which has an immediate positive impact on the manufacturing sector. In addition, the economic stimulus programme, which only came into full effect in 2010, is now also contributing to the economic rebound[2].

[1] Section 3 of the OIE Terrestrial Animal Health Code: http://www.oie.int/eng/normes/mcode/en_titre_1.3.htm
[2] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011) : 2010 World Bank Kenya Economic Update

Table 1. Gross economic data[3]

	2010	2011
Nominal GDP (million USD)	33 523,1	35 940.8

GDP Contribution by sector (2010 estimate)[4]	%
Primary sector : Agriculture	22
Secondary sector : Industry	16
Tertiary sector : Services	62

Contribution to the National GDP[5]	%
Livestock sector (estimate)	12
Contribution to the Total Agricultural GDP	%
Livestock sector (estimate)	42

2010-2011 Annual public sector contribution to agriculture[6]	337 million USD
2009-2010 VSDF Annual budget of the Veterinary Services[7]	1.8 million USD

Source: KNBS, DVS and World Bank staff estimates

Agricultural productivity is central to Kenya's export industry. More than 75% of the population is engaged in agriculture and allied activities. Horticultural produce and tea are the major items of export for Kenya. In 2006, the combined share of these two products was 10 times higher than the share of the other export items. The country has subsistence petroleum production, which is consumed internally and exported to neighboring countries. Apart from horticulture and tea, other major items of export are coffee, fish and cement. In 2009, Kenya's exports grossed over USD 4.9 billion. The UK is the largest export partner of Kenya, accounting for more than 10% of the total export volumes. It is followed by the Netherlands, Uganda, Tanzania, the USA and Pakistan.[8] The following is a list of the top agricultural commodity imports and thereafter, exports from Kenya in 2008. Livestock and livestock products feature in none of these statistics.

[3] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011) : 2010 World Bank Kenya Economic Update
[4] https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html
[5] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)
[6] http://www.parliament.go.ke/
[7] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)
[8] http://www.economywatch.com/world_economy/kenya/export-import.html

Table 2. **Main imports and exports**[9]

Rank	The 10 main imported commodities	Quantity (tonnes)	Flag	Value (.000) USD
1	Palm oil	415,761		462,145
2	Wheat	538,500	*	202,780
3	Maize	243,656		96,971
4	Sugar Refined	158,863	*	71,777
5	Tobacco, unmanufactured	25,771		57,228
6	Rice Milled	139,277		44,803
7	Rice Broken	122,929		40,911
8	Food Prep Nes	10,993		30,953
9	Sugar Raw Centrifugal	61,313		28,509
10	Food Prep,Flour,Malt Extract	35,669		17,719

Rank	The 10 main exported commodities	Quantity (tonnes)	Flag	Value (.000) USD
1	Tea	396,641		934,921
2	Vegetables fresh nes	57,198		207,121
3	Coffee, green	41,649	*	148,057
4	Cigarettes	15,033		91,717
5	Pineapples Cand	94,682		75,760
6	Palm oil	35,877		52,400
7	Sugar Confectionery	28,011		50,642
8	Tobacco, unmanufactured	22,606		46,392
9	Beans, green	15,371		42,347
10	Vegetables Preserved Nes	20,040		32,471

* : Unofficial figure

Source : Food Agriculture Organization (FAO), some figures may be estimates

Table 3. Livestock census[10]

Number of live animals by species for 2009	
	2009
Cattle	17 467 774
Sheep	17 129 606
Goats	27 740 153
Pigs	334 689
Rabbits	500 000
Donkeys	1 832 519
Camels	2 971 111
Chickens	31 827 529

Source: Ministry of Livestock (countrystat.kenya@kilimo.go.ke)

[9] Food Agriculture Organization (FAO), some figures may be estimates

[10] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)

Table 4. Annual production of animal products

Production (tonnes)

Product (commodity)	2007		2008		2009	
Beef and Buffalo Meat	445 000	A	369 000	A	396 000	A
Eggs Primary	68 600	A	69 000	A	70 000	A
Milk	4 420 790	A	4 182 375	A	4 257 806	A
Poultry Meat	23 960	A	24 660	A	24 000	A
Sheep and Goat Meat	78 700	A	80 082	A	77 575	A

A = May include official, semi-official or estimated data
Source : FAOSTAT | © FAO Statistics Division 2011 | 27 July 2011

Recent and specific data on trade of animals and animal products are rather hard to come by, probably due to their relative insignificance when compared to other agricultural commodities, such as tea and coffee. According to FAO[11], in 2002, agricultural exports represented 17% of overall export values and livestock and livestock products a mere 0.2% or USD 6 million, of overall export values (USD 3.3 billion at the time). The major currency earners in 2002 were hides and skins (USD 3.6 million), pork (USD 1.1 million) and milk (USD 1.0 million). Beef only accounted for USD 217,000 in export earnings. FAOSTAT provides livestock data dating back to 2008, which is before and during the various crises' referred to above.

Table 5. Imports of live animals into Kenya

Import quantity (.000 head) and value (.000 USD)

	Quantities						Value					
Animal	**2006**		**2007**		**2008**		**2006**		**2007**		**2008**	
Chickens	66		92		117	*	125		209		419	*
Ducks	45		4		0	*	23		14		0	*
Turkeys	8		2		1	*	15		14		10	

Import quantity (per head) and value (.000 USD)

	Quantities						Value					
Animal	**2006**		**2007**		**2008**		**2006**		**2007**		**2008**	
Cattle	296		158		0	*	28		63		0	*
Goats	1 200	*	1 550		0	*	86		126		0	*
Horses	42		41		51		15		38		30	
Pigs	0	*	12		6		0	*	9		3	
Sheep	0	F	6		24		0	F	7		1	

* = Unofficial figure | [ ] = Official data | F = FAO estimate
Source : FAOSTAT | © FAO Statistics Division 2011 | 27 July 2011

[11] FAO (2005) Livestock sector brief : Kenya

According to the FAO, exports of live animals amounted to USD 727,000 in 2008, while exports of livestock products amounted to USD 29 million, which represents 3% compared to exports of tea.

Table 6. Exports of live animals from Kenya

Export quantity (.000 head) and value (.000 USD)

	Quantities						Value					
Animal	**2006**						**2007**					
Chickens	1 648				**2008**		**2006**		**2007**		**2008**	
Ducks	11		1 516		1 768	*	303		763		619	

Export quantity (per head) and value (.000 USD)

	Quantities						Value					
Animal	**2006**		**2007**		**2008**		**2006**		**2007**		**2008**	
Asses	0	F	0	F	0	F	0	F	0	F	0	F
Cattle	1 695		16	*	478	*	649		3		86	
Goats	169		158		100	*	5		5		2	
Horses	6		19	*	38	*	9		5		20	
Pigs	0	F	0	F	0	F	0	F	0	F	0	F
Sheep	532		0	*	0	F	22		0	*	0	F

* = Unofficial figure | [ ] = Official data | F = FAO estimate
Source : FAOSTAT | © FAO Statistics Division 2011 | 27 July 2011

Table 7. Exports of animal products from Kenya

Export quantity (tonnes) and value (.000 USD)

	Quantities						Value					
Product	**2006**		**2007**		**2008**		**2006**		**2007**		**2008**	
Beeswax	0		1		10		0		3		24	
Cattle meat	172		338		520		574		1 036		1 515	
Chicken meat	15		20		185		40		99		583	
Cow milk,whole,fresh	114		1285		543		103		778		282	
Duck meat	0		1		1		2		5		2	
Fat of Pigs	0	F	0	F	0	F	0	F	0	F	0	F
Fat of Poultry	0	F	0	F	0	F	0	F	0	F	0	F
Game meat	0	F	0		2		0	F	1		7	
Goat meat	34		42		29		55		102		97	
Hair Coarse Nes	0	F	0	F	0	F	0	F	0	F	0	F
Hair Fine	0	M	0	M	36		0	M	0	M	10	
Hair of Horses	7		0	*	0	F	36		0	*	0	F
Hen eggs, in shell	210		42		27		76		53		48	
Honey, natural	9		27		8		26		63		33	
Horse meat	0	F	0	F	0		0	F	0	F	1	
Karakul Skins	0	F	0	F	0	F	0	F	0	F	0	F
Meat nes	3		25		6		12		45		20	
Offals Liver Chicken	0	F	0	F	0	F	0	F	0	F	0	F
Offals Liver Geese	5		0		30		13		1		28	
Offals Nes	2		0		1		8		2		6	
Offals Cattle, Edible	1		0		11		3		1		28	
Offals Pigs, Edible	1		0		1		2		0		5	
Offals Sheep,Edible	0		0		0		0		0		0	
Oils,Fats of Animal	1		5		16		4		9		128	
Pig Butcher Fat	17		11		35		96		75		204	
Pig meat	560		638		689		1 829		2 285		2 598	
Sheep meat	81		103		107		309		367		402	
Silk-worm cocoons	0	*	0	F	0	F	0	*	0	F	0	F
Skin Furs	0	F	0	F	0	F	0	*	0	F	0	F
Skins of Rabbits	0	F	0	F	0	F	0	F	0	F	0	F
Skins w/wool (ov)	57		0	*	0	F	62		0	*	0	F
Turkey meat	2		2		17		9		13		76	
Wool, greasy	1 315		1 952		1 328		1 777		3 402		2 231	

* = Unofficial figure | [ ] = Official data | F = FAO estimate | M = Data not available
Source : FAOSTAT | © FAO Statistics Division 2011 | 27 July 2011

The following table summarises the export data for eggs, milk and meat :

Table 8. Consolidated export value (.000 USD) of major animal products

Commodities	2006	2007	2008
Eggs in shell	76	53	48
Eggs liquid, dried	19	30	9
Milk dry	4 276	10 418	8 185
Milk fresh	2 111	2 857	5 061
Meat	6 778	8 670	12 419

Based on official, semi-official or estimated data
Source : FAOSTAT | © FAO Statistics Division 2011 | 27 July 2011

I.1.B Current organisation of the Veterinary Services

The Veterinary Services Department of the Ministry of Livestock Development is responsible for[12]:

- Veterinary Disease Control: to control and eradicate epizootic notifiable diseases in collaboration with stakeholders, facilitate and regulate trade in animals and animal products.
- Vector Control: to control and eradicate vectors such as tsetse and ticks in collaboration with stakeholders.
- Veterinary Laboratory Services: to undertake disease diagnosis, epidemiological surveys quality assurance of veterinary inputs, and acquire, test and adopt new technologies.
- Veterinary Epidemiology: Surveillance and Economics, to undertake disease surveillance
- Veterinary Public Health: to ensure safety of food of animal origin
- Veterinary Training and Clinics: to undertake human resource development
- Artificial Insemination Services: to regulate the provision of A.I. services
- Veterinary Extension: to provide extension services
- Veterinary Project Management Support Unit: to coordinate project planning, monitoring and evaluation
- Veterinary Administration and Management Support Services: to provide support services.

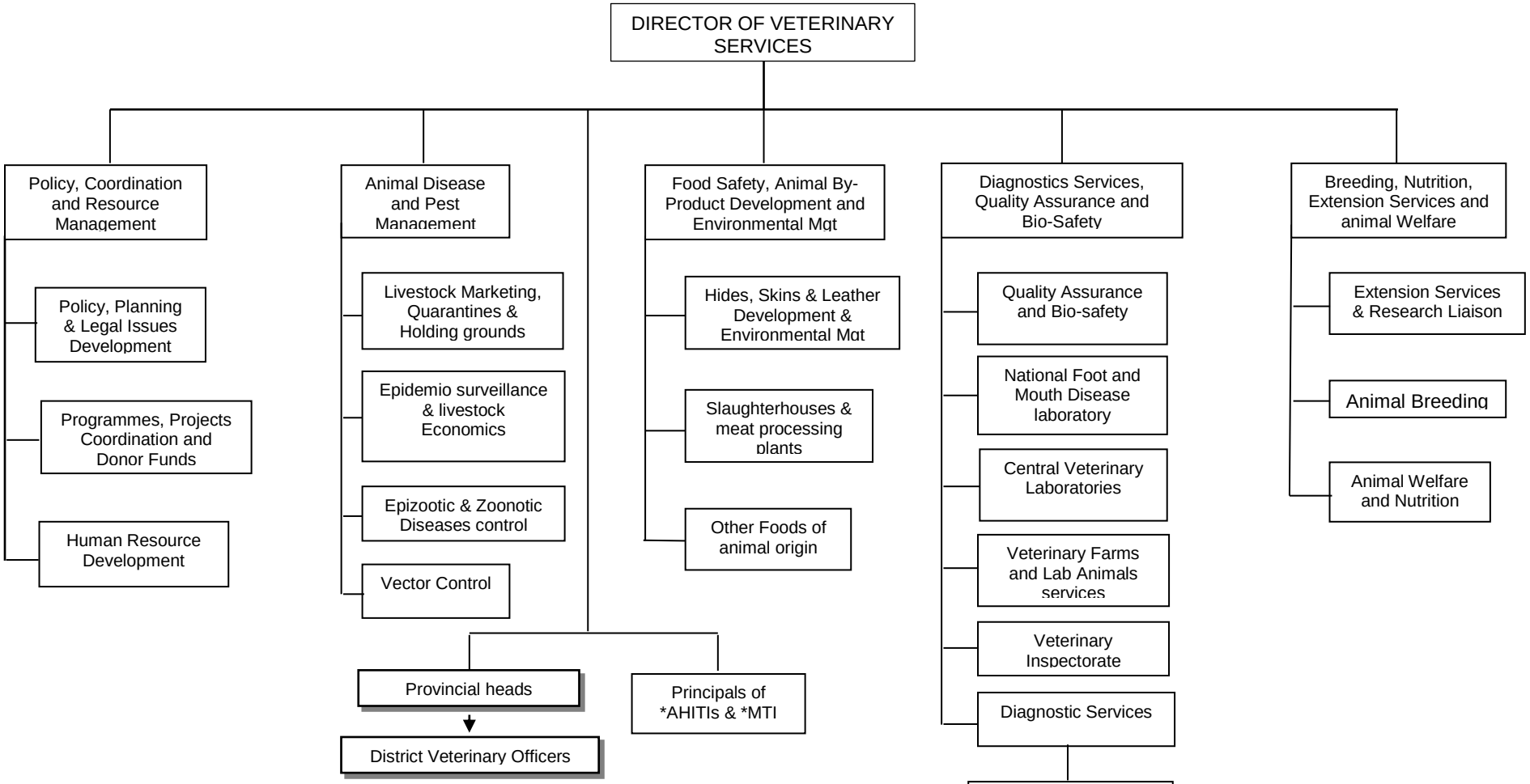
The structure and organogram of the VS is illustrated on the following page.

The national (central) VS has 6 management divisions, all of which report directly to the Director of VS. They are:

1. Policy, Coordination and Resource Management
2. Animal Disease and Pest Management
3. Food Safety, Animal By-product development and Environmental Management
4. Diagnostic Services, Quality Assurance and Bio-Safety
5. Breeding, Nutrition, Extension Services and Animal Welfare
6. Provincial /District VO & Principals of Training Institutes (MTI & AHITI)

[12] Ministry of Livestock Development (MoLD)

ORGANOGRAMME OF THE VS



MTI : Meat Training Institute AHITI : Animal Health & Industry Training

Table 9. List of entities or sites related to Veterinary Services

	Terminology or names used in the country	Number of sites
GEOGRAPHICAL ZONES OF THE COUNTRY		
Climatic zones	1. Humid >80% 1100-2700 mm 2. Sub-humid >65% 1000-1600 mm 3. Semi-humid >50% 800-1400 mm 4. Semi-humid to semi-arid >40% R.H. 600-1100 mm p.a. 5. Semi-arid >25% 450-900 mm 6. Arid >15% 300-550 mm 7. Very arid <15% 150-350 mm	7
Topographical zones	1. Temborari, or the coastal strip. 2. The Nyika and Tana Plains 3. The eastern plateau 4. The northern plains. 5. The Kenya Highlands 6. The Rift Valley 7. The western plateau	7
Agro-ecological zones	*Same as the climatic zones*	7
ADMINISTRATIVE ORGANISATION OF THE COUNTRY		
1st administrative level	National	1
2nd administrative level	Province	8
3rd administrative level	County	47
4th administrative level	District	283
VETERINARY SERVICES ORGANISATION AND STRUCTURE		
Central (Federal/National) VS	Department of Veterinary Services (DVS)	1
Internal division of the central VS	Division	6
1st level of the VS	Provincial DVS (PDVS) to be abolished	8
2nd level of the VS	County VS (CVS) to be established	47
3rd level of the VS	District Veterinary Office (DVO)	283
Veterinary organisations (VSB, unions…)	Kenya Veterinary Board (KVB) VSB Kenya Veterinary Association (KVA)	1 1
FIELD ANIMAL HEALTH NETWORK		
Field level of the VS for animal health	District Veterinary Office (DVO)	283
Private veterinary sector	(negligible)	
Other sites (dip tank, crush pen….)		
VETERINARY MEDICINES & BIOLOGICALS		
Production sector		32
Import and wholesale sector		18
Retail sector	Veterinary pharmacies	unknown
Other partners involved	AGROVET drug shops	2666
VETERINARY LABORATORIES		
National labs	Central Veterinary Laboratory Kabete	1
Regional and local labs	Regional Laboratory	6
Associated, accredited and other labs	Kenya Agricultural Research Institute	1
ANIMAL AND ANIMAL PRODUCTS MOVEMENT CONTROL		
Bordering countries		6
Airports and ports border posts		3
Main terrestrial border posts		3
Minor terrestrial border posts		30
Quarantine stations for import		10
Internal check points		unknown
Live animal markets		unknown
Zones, compartments, export quarantines	Zones (not yet established) Compartments (not yet established) Quarantine for export of Boran embryos Quarantine for export of live animals	0 0 1 10

PUBLIC HEALTH INSPECTION OF ANIMALS AND ANIMAL PRODUCTS		
Export slaughterhouse	7 for red meats and 1 for poultry	8
National market slaughterhouses Local market slaughterhouse	(no distinction)	146
Slaughter areas/slabs/points		1 182
On farm or butcher's slaughtering sites		unknown
Processing sites (milk, meat, eggs, etc)	Major meat cutting/deboning plants Major milk processing plants Major fish processing plants	17 8 3
Retail outlets (butchers, shops, restaurants)		unknown
TRAINING AND RESEARCH ORGANISATIONS		
Veterinary university	University of Nairobi	1
Veterinary paraprofessional schools	AHITI	4
Veterinary research organisations	Kenya Agricultural Research Institute	1
STAKEHOLDERS' ORGANISATIONS		
Agricultural Chamber / room /organisation		unknown
National livestock farmers organisations		0
Local (livestock) farmers organisations		
Other stakeholder organisations	CAHNET: community-based animal health network	1
Consumers organisations	Consumer International	1

It should be noted that, from an accounting point of view, the following activities are regarded as part of the public veterinary services and are (sometimes) funded in accordance (also refer the organisational flow chart on page 14) :

- Animal breeding and nutrition
- Research services
- Extension services
- Subsidies to the KVB
- Artificial insemination services
- Tick control services
- Tsetse control services (partly under the AU-PATTEC project)
- Establishment of disease-free zones
- Subsidies to the KEVEVAPI (partly under the AU-VACNADA project)
- Inspection of leather and leather products in tanneries
- Training of animal health assistants in the various AHITIs
- Training of meat inspectors in the various MTIs
- Subsidies to veterinary farms

The definition and scope of the Veterinary Services, as the OIE understands it, does not usually include these activities. However; the PVS Gap Analysis experts have taken the expenditures/budgets related to these "satellite" operations into account, on a *status quo* basis (no expected changes in the next five years) in order to respect the Kenyan definition of the activities falling under the responsibility of the Veterinary Services.

Map 1: Provincial map of Kenya[13]

[13] http://mappery.com/map-of/Kenya-Overview-Map

I.1.C Summary results of the (last) OIE PVS evaluation

An OIE-PVS team conducted a PVS Pathway follow-up mission in Kenya with the assistance of the *Department of Veterinary Services* (DVS) of the *Ministry of Livestock Development* (MoLD) who facilitated consultations with a wide range of stakeholders throughout Kenya. The mission was conducted by Drs. Herbert Schneider (team leader), Francisco D´Alessio (technical expert) and Antoine Maillard (observer) from the 14th to the 25th of March 2011. The key recommendations from this follow-up evaluation were taken on board by this PVS Gap Analysis mission. The recommendations were formulated as follows :

Human, physical and financial resources

Most of the Veterinarians in Kenya are graduated from the University of Nairobi, a recognized local institution with a long history of training professionals for the region. This degree provides the graduated persons with the required competences and entitles them to conduct all professional/technical activities in the country.

The legislation regulating the practice of activities related to animal health and production should be updated in order to regulate the work performed by veterinary para-professionals by submitting all veterinary associated practices to the supervision of a registered veterinary professional as indicated in the OIE Code.

Practice of veterinary para-professionals should be registered and regulated by the VSB (see CC. III.5). The tasks for each category of veterinary para-professional should be defined by the VSB depending on qualifications and training, and according to need.

The team also noted, that the KVB is addressing the need in order to supervise the quality of the training being offered by the other institutions. Such actions should be formalized and properly regulated in order to homogenize, oversee and guarantee the services provided by the veterinary para-professionals

Science based guidelines, manuals and standard procedures should be prepared for the activities of the Veterinary Services, taking into account international standards when applicable. This will give solid support for any decision to be taken in a transparent way, and free of any forms of commercial, financial, hierarchical or political influences

The single most important constraint identified by the Team is the state of physical resources available to the DVS in general. Actions required are:

- Develop a comprehensive plan of activities to be performed for each of the levels of the VS according to the national priorities and estimate the resources needed to perform these activities.
- Develop a database of the existing resources aiming to identify those existing and working, those that could be recoverable and those that should be written off.
- Rationally adjust the physical (and human) resources to the planned activities and develop a progressive plan to restore the operative capacity to the DVS in the coming years while assuring the provision of the most important services. The operational budget should be taken into account in order to be able to use and maintain the resources once in place.

Technical authority and capability

In order to be able to comply with OIE Code standards regarding the prevention, control and eradication of animal diseases and zoonoses, it is imperative that:

- Priority attention is paid to the much needed infrastructural rehabilitation of existing facilities;
- The provision of standard laboratory equipment, consumables, laboratory disposables and reagents is executed in a timely manner;
- A quality assurance system and procedures for good laboratory practice in accordance with the OIE Code is established;
- BIPs for trans-boundary animal disease control are identified and are provided with the necessary veterinary infrastructure in accordance with OIE Code chapter 3.2, article 3.2.7;
- The veterinary public- private partnership linkages in all provinces in the country are strengthened to ensure prompt disease outbreak reporting;
- Measures are undertaken to increase vaccination coverage in general to optimize disease control;
- The movement of animals from an infected FMD zone to other parts of Kenya for slaughter meets the OIE Code requirements of chapter 8.5.10;
- SOPs and "contingency plans" for all animal diseases of importance in Kenya are compiled and available; and
- All frontline/border veterinary offices are equipped with the necessary early disease detection equipment as well as emergency control/quarantine/ movement restriction facilities.

In view of the "Vision 2030" policy for the establishment of *Disease-Free-Zones* (DFZs), active surveillance protocols should be designed and implemented in accordance with the relevant OIE Code provisions

Introduce regulatory and administrative controls over Veterinary Medicinal Products as a matter of priority.

The establishment of formal linkages with institutions having sanitary data, such as the Ministry of Health, should be attended to as this will greatly enhance early awareness of emerging diseases, such as zoonoses.

As a major tool in the prevention, control and eradication of animal diseases, animal identification is a high priority action. To achieve this, it is recommended to:

- Design and implement an animal identification system to achieve animal traceability in accordance with Chapter 4.2 of the OIE Code.
- Develop procedures in accordance with the OIE Code in respect of on-farm disease control measures targeting products of animal origin (meat, dairy products, poultry products, venison products, hides & skins, animal waste etc.)

Interaction with stakeholders

Adequate financial resources should be given to DVOs and PVOs so as to strengthen links with farmers. As a result, it will improve, for instance, passive surveillance.

It is recommended that high priority action is instituted in order to investigate and ensure that the anticipated new Veterinary Surgeons and Veterinary Para-Professionals Bill is in compliance with the OIE Code standards

Access to markets

Address existing and future veterinary legislation as to its compliance with OIE international standards, with particular reference to Chapter 3.2, article 3.2.7

Institute an administrative control and verification system at PDVS and DVO level regarding the enforcement of veterinary legislation and the compliance thereof by stakeholders, which would include records of legal action and prosecutions made

The proposed DFZs must meet in detail the OIE Code standards in order to achieve OIE "free" certification.

Ensure timely reporting of animal disease outbreaks to the OIE.

I.2 Methodology

Following a request to the OIE from its government, a PVS Gap Analysis mission based on the outcomes of the OIE PVS report was conducted from July 11 to 21st, 2011 by a team of independent OIE certified experts: Dr Patrick Bastiaensen as team leader and Dr Francisco D'Alessio and Dr. Herbert Schneider as technical experts.

I.2.A Organisation of the mission

The mission was conducted according to the "pillar" approach, clustering critical competencies according to theme and organising consecutive group meetings with relevant veterinary officers, and sometimes, representatives of the veterinary statutory body (KVB) and the veterinary association (KVA). Despite the request of the team to open up the discussions to (other) representatives of the private sector, this did not materialise.

The CVO and OIE Delegate of Kenya chose only to attend the opening meeting and the closing meeting, so as (in his own words) not to intimidate or hamper the discussions by his technical and administrative staff.

1.2.B Estimation of resources needed

A logical approach to estimating the budget for strengthening the Veterinary Services is used. This approach is as follows:

The Veterinary Services should have the financial resources sufficient to carry out essential tasks and duties, and be able to adapt to changes in health status. The budget for field activities (for government staff and officially delegated private veterinarians) must allow for planned activities, but should also support a flexible approach necessary to allow immediate responses when these are required. The amount of expenditure for each activity should be adjusted according to the national constraints, human resources (number and public/private split), priorities and trends in animal health and changes of animal health status.

The budget is developed for specific activities so that the desired level of advancement may be achieved as determined by the objectives, situation and characteristics of the country. The necessary tasks and resources required are identified and budgeted. Priorities are set out to provide assistance with the actual allocation of funds - these will need to be finalised by the Veterinary Services during operational planning.

In some chapters, the specific additional resources required are described in more detail: this includes items such as the inspection and control of veterinary medicines, increased laboratory capacity, support of international trade access and cross-cutting communication. In other chapters, the additional resources required may appear very low: for example direct spending on 'animal health' may only be the purchase of

vaccine for a control programme - so the budget appears low for this component as other fixed costs are covered elsewhere – salaries, communications, training, etc.

The overall budget analysis (Chapter VI) synthesises the different budget lines: ongoing investment, salaries, repairs and maintenance, operations, etc. This budget demonstrates the effectiveness of the PVS Gap Analysis, its sustainability and also identifies the need to incorporate the programme into the quality control policy of the Veterinary Services.

The international currency used in this report for the estimation of costs and the budget is the US dollar (USD or US$).

In Kenya the annual renewal rate of buildings/facilities, transport and equipment has been determined as such:

- 5% of construction cost for building maintenance
- 20 % of purchasing value for transport means and cold chain (in average)
- 20 % of purchasing value for laboratory equipment (in average)
- 25 % of purchasing value for telecommunication and computer equipment sets

The overall strategy adopted when dealing with most, if not all of the critical competencies was to :

- Maintain and re-deploy staff as much as possible, and contain the personnel budget within reasonable boundaries.
- Strengthen training efforts (incl. Continuing Education).
- Strengthen operational budgets.
- Adopt a programmatic approach to disease prevention, control and eradication (programmes, PPP, targets, SOPs).
- Rationalise the veterinary field network, including the establishment of future county offices; and
- Re-assess the whole laboratory structure / network and service delivery.

The latter could only partially be conducted and the Team recommends that Kenya requests the organisation of a specialised Laboratory mission before the end of the year 2011.

1.2.C Organisation of the report

The desired levels of advancement for each critical competency were identified, recognising national priorities and constraints, in discussion with the Veterinary Services of Kenya. A PVS Gap Analysis was then completed to facilitate their compliance with recognised international standards as determined by the OIE. The following chapters indicate the resources and activities necessary to strengthen the Veterinary Services. The chapters follow a logical order identifying priorities, recognising constraints and issues, assessing processes and resources necessary and providing a work-plan for improvement.

Chapter II.2 of the methodology part sets out the levels of advancement to be reached as decided by the Veterinary Services in discussion with the PVS Gap Analysis mission team.

The first four chapters of the part presenting the PVS Gap Analysis set out the objectives to be achieved, identifying the needs to strengthen the technical independence and coordination of the Veterinary Services.

- Chapter I sets the standards required for International trade in animals and animal products. Establishing the levels of advancement required for exports sets the target for strengthening the Veterinary Services
- Chapter II addresses animal health issues, the recognised core mission of any Veterinary Services
- Chapter III considers veterinary public health, specifically food safety, veterinary medicines and biologicals and zoonoses
- Chapter IV considers the capability and capacity of veterinary laboratories, as required by the three preceding chapters.

Chapter V makes recommendations on the general management of the Veterinary Services and the related regulatory services, including both the public and private components, aiming to provide coordination and technical independence in line with OIE standards. Both the organisational structure of the national (public) Veterinary Services, including central and decentralised structures and the role of private veterinary practices are defined. This chapter is usually the major component of the budget as it includes the salaries, operations and investment for the national Veterinary Services and also for field activities. This chapter also identifies the reinforcement of cross-cutting skills (communication, legislation, education, etc.) required to run effective Veterinary Services in the country.

Chapter VI presents a global budget for strengthening the Veterinary Services and provide an analysis of this budget compared with GDP (national, agriculture and livestock), national budget (total, agriculture, Veterinary Services), value of national livestock and of imported and exported animal products.

II National and international priorities and expected levels of advancement

The first day's meeting was attended by the largest group of staff and evolved around the identification, based on several relevant policy orientations and documents, of the priorities for livestock development, animal health development, veterinary public health development and the institutional development of the department of veterinary services in Kenya. These priorities would later guide the policy and investment choices made when looking at the gaps for every of the 46 critical competencies.

II.1 National priorities

The national priorities, as discussed with divisional heads and provincial directors of veterinary services, target both domestic issues and export /market assess ambitions. These are perfectly illustrated in e.g. the overall livestock development policy which aims to increase food security and sustainable income for rural communities, as well as to increase competitiveness and access to (foreign) markets.

This priority is translated in the animal health priorities, which consist of a poverty reduction strategy (based on the national *Poverty Reduction Strategy Paper*[14]) and a market oriented strategy to establish disease free-zones for trade-sensitive cattle diseases (FMD and CBPP mainly) in order to export beef to high-value markets by 2030 (Vision 2030)[15].

[14] World Bank : Kenya Poverty Reduction Strategy Paper (PRSP) Report Number: 28524 Date : 2004/04/09
[15] http://www.vision2030.go.ke/

The veterinary public health priorities are to strengthen the control of the veterinary services over meat inspection services at district (local) level and to take over from the current system whereby numerous local abattoirs, butcheries and slaughter slabs are being inspected by Ministry of Health (MoH) staff. The second priority consist of strengthening the veterinary public health controls and impacts over non-meat commodities, such as milk, eggs, honey as well as meat products from non-traditional or emerging farmed animal species, such as ostriches, rabbits, snails, among other.

The only priority, as far as the Department of Veterinary Services is concerned, is to maintain its current chain of command to the underlying layers of the veterinary services delivery, one of its strengths today, throughout and after the constitutional and institutional reform process that is underway and which will lead to the devolution of powers from central government, to county-based authorities (47).

Table 10. Table for listing national priorities

Category of priorities	National priorities	Explanatory comments *(importance for the country)*
Policy on **livestock development (LD)** and trade	LD1: Food security and improvement of livelihoods LD2: Competitiveness and access to markets	
Technical priorities in **Animal Health (AH)**	AH1: Promote animal health by reactivating and expanding (…) services, including monitoring and control of animal diseases AH2: Disease-free zones : FMD control and eradication in cattle, including implementation of identification and traceability	(PRSP) (DFZ)
Technical priorities in **Veterinary Public Health (VPH)**	VPH1: Expand the coverage by the MoLD/DVS to all slaughterfacilities in Kenya VPH2: Expand the inspection services to other commodities such as eggs, milk and honey and emerging livestock species.	(currently in part inspected by MoH staff) (ostriches, rabbits, snails,…)
Policy on organisational structure and management of the **Veterinary Services (VS)**	VS1: Maintain the integrity of the Department of Veterinary Services and the chain of command to the field (local) veterinary services	

II.2 Level of advancement

The second exercise of the first day consisted in addressing the outcomes of the follow-up PVS evaluation conducted in March 2011 and –through very interactive debate- indicating what level of advancement would appear to be realistically achievable within 5 years, to be designed as a result of the present PVS Gap Analysis exercise.

From the 46 critical competencies, only 7 were deemed to be satisfactory or unlikely to be improved in a 5-year span, irrespective of investments made. These were :

- I.4. Technical independence : level 3
- I.6.A. Internal coordination (chain of command) : level 4
- I.6.B. External coordination : level 4
- II.8.A. Ante and post mortem inspection : level 3
- IV.4 International certification : level 3
- IV.6 Transparency : level 3
- IV.7 Zoning : level 4

All 39 remaining critical competencies were deemed to be improvable over the next 5 years. Major improvements in performance (more than one level of advancement) are expected for :

- I.3. Continuing education (+2) from level 2 to level 4
- I.7. Physical resources (+3) 1 4
- I.8. Operational funding (+2) 2 4
- I.10. Capital investment (+2) 1 3
- I.11. Management of resources and operations (+2) 2 4
- II.1 Veterinary laboratory diagnosis (+2) 2 4
- II.4 Quarantine and border security (+2) 1 3
- II.5.A. Passive epidemiological surveillance (+2) 2 4
- II.5.B. Active epidemiological surveillance (+2) 2 4
- II.6 Early detection and emergency response (+2) 2 4
- II.11 Emerging issues (+2) 1 3
- II.13.B. Identification and traceability of products (+2) 1 3

Table 11. Levels of advancement

Critical competencies	Level of advance-ment		National priorities				Comments on key activities
	current	expected	Organisational structure of VS	Livestock development	Animal health	Veterinary public health	
Chapter I: Human, physical and financial resources							
I.1. Professional and technical staffing of the Veterinary Services							
I.1.A. Veterinarians and other professionals	4	5	●			1	Redeployment
I.1.B. Veterinary para-professionals and other technical staff	4	5	●		1	1	Redeployment
I.2. Competencies of veterinarians and veterinary para-professionals							
I.2.A. Professional competencies of veterinarians	4	5	●	2		1 & 2	Continuing ed.
I.2.B. Competencies of veterinary para-professionals	4	5	●	2	1	1 & 2	Continuing ed.
I.3. Continuing education	2	4	●	2	1	1 & 2	
I.4. Technical independence	3	3	●	2	1		
I.5. Stability of structures and sustainability of policies	3	4	●	2		1	
I.6. Coordination capability of the Veterinary Services							
I.6.A. Internal coordination (chain of command)	4	4	●	2	1	1	
I.6.B. External coordination	4	4	●	2		2	
I.7. Physical resources	1	4	●	1 & 2	1	1	
I.8. Operational funding	2	4	●	1 & 2	1	1	
I.9. Emergency funding	2	3	●	1 & 2	1		
I.10. Capital investment	1	3	●	1 & 2	1	1	
I.11. Management of resources and operations	2	4	●	1 & 2	1	1	

Critical competencies	Level of advance-ment		National priorities				Comments on key activities
	current	expected	Organisational structure of VS	Livestock development	Animal health	Veterinary public health	
Chapter 2. Technical authority and capability							
II.1 Veterinary laboratory diagnosis	2	4		1 & 2	1	1	Specific mission
II.2 Laboratory quality assurance	1	2		2	2		
II.3 Risk analysis	2	3		1 & 2	2	2	
II.4 Quarantine and border security	1	3		2	1 & 2		
II.5 Epidemiological surveillance							
II.5.A. Passive epidemiological surveillance	2	4		1 & 2	1		
II.5.B. Active epidemiological surveillance	2	4		2	2		
II.6 Early detection and emergency response	2	4		1 & 2	1 & 2		
II.7 Disease prevention, control and eradication	2	3		1 & 2	1		
II.8 Food safety							
II.8.A. Ante and post mortem inspection	3	3		1 & 2		1 & 2	
II.8.B. Inspection of collection, processing and distribution	2	3		1 & 2		1 & 2	
II.9 Veterinary medicines and biologicals	2	3		1 & 2		1 & 2	
II.10 Residue testing	2	3		1 & 2		1 & 2	
II.11 Emerging issues	1	3		1	2	1 & 2	
II.12 Technical innovation	3	4		2	2	2	
II.13 Identification and traceability							
II.13.A. Animal identification and movement control	2	3		2	2	1	
II.13.B. Identification and traceability of animal products	1	3		1 & 2	2	1	
II.14 Animal welfare	2	3		2	2	1 & 2	
Chapter 3. Interaction with stakeholders							
III.1 Communications	4	5		1	1	2	
III.2 Consultation with stakeholders	4	5	●	1 & 2	1	1 & 2	
III.3 Official representation	3	4	●	2	2		
III.4 Accreditation / authorisation / delegation	3	4	●	2	1	1	
III.5 Veterinary Statutory Body							
II.5.A. VSB authority	2	5		2	1	1	
II.5.B. VSB capacity	2	4		2	1	1	
III.6 Participation of producers and stakeholders in joint programmes	2	3	●	1 & 2	1 & 2	1 & 2	
Chapter 4. Access to markets							
IV.1 Preparation of legislation and regulations	3	4	●	2	1 & 2	1 & 2	
IV.2 Implementation of legislation and regulation; and stakeholder compliance	2	4	●	1 & 2	1 & 2	1 & 2	
IV.3 International harmonisation	3	4	●	2	1 & 2	2	
IV.4 International certification	3	3	●	2	2	1 & 2	
IV.5 Equivalence and other types of sanitary agreements	3	4	●	2	2	2	
IV.6 Transparency	3	3	●	2	2		
IV.7 Zoning	4	4	●	2	2		Consultancy
IV.8 Compartmentalisation	2	4		2	2		

II.3 Impact and significance

It is the Team's considered opinion that the investment and institutional strengthening programme that results from the aspirations of DVS staff, as presented above, is highly ambitious and may not be entirely realistic, given the current performance of the veterinary services, as observed during the two consecutive PVS evaluations of 2007 and 2011, along with the uncertainties generated by the on-going institutional and constitutional reform process in Kenya. Notwithstanding these uncertainties, the Team acknowledges the dynamism and endeavour that is apparent towards the achievement of the 2030 Vision [16]. Furthermore, little or no account was taken of the on-going regional integration process in the framework of the COMESA, but more particularly the EAC (with Uganda, Tanzania, Rwanda and Burundi), which may have far-reaching consequences within five years, if continued at the current pace. Indeed, the Heads of State, meeting in August 2004, decided to explore options for fast-tracking the process towards achieving a Political Federation. The resulting Fast Tracking Report recommended that during the transitional phase (2006-2009) the implementation of the Customs Union, Common Market and Monetary Union would be enhanced sufficiently to lay sufficient conditions for the Political Federation for East Africa by 2010.[17]

[16] http://www.vision2030.go.ke/
[17] EAC Development Strategy 2006 – 2010 (www.eac.int).

PVS GAP ANALYSIS

The PVS gap analysis results will not be presented according to fundamental components (4) and critical competencies (46), but according to the following pillars, as described in section I.2.C on page 21:

- Chapter I sets the standards required for International trade in animals and animal products. Establishing the levels of advancement required for exports sets the target for strengthening the Veterinary Services
- Chapter II addresses animal health issues, the recognised core mission of any Veterinary Services
- Chapter III considers veterinary public health, specifically food safety, veterinary medicines and biologicals and zoonoses
- Chapter IV considers the capability and capacity of veterinary laboratories, as required by the three preceding chapters.
- Chapter V makes recommendations on the general management of the Veterinary Services and the related regulatory services, including both the public and private components, aiming to provide coordination and technical independence in line with OIE standards.

Most, if not all budgets are based on unit costs for labour, means of transport, construction or rehabilitation of premises and annual consumption of consumables, including fuel, which are defined in the first part of the exercise. The unit costs used in this report are presented in table 13 on the following page. They also include the usual accounting write-off period, as applied in Kenyan public services (e.g. 8 years for cars).

The current budget of the (public) veterinary services, as mentioned at the bottom of this table, is based on the approved 2010/2011 budget and 2011/2012 budget forecast and consists of the following components :

Table 12. Budget breakdown

Budget type	Code	Label	Code	KSH	USD
Recurrent budget	R19	Veterinary Services	R193	2,193,685, 735	24.35 million
Development budget	D19	Veterinary Services	D193	1,707,708, 201	19.00 million
Total				3.9 billion	43.35 million

It should be noted that, from an accounting point of view, the following activities are regarded as part of the public veterinary services and are funded through the “development budget”, which allegedly corresponds to the “public investment” or “capital investment” budget, as opposed to the “recurrent” or “general” budget : animal breeding and nutrition, research services, extension services, subsidies to the KVB, artificial insemination services, tick control services, tsetse control services (partly under the AU-PATTEC project), establishment of disease-free zones, subsidies to the KEVEVAPI (partly under the AU-VACNADA project), inspection of leather and leather products in tanneries, training of animal health assistants in the various AHITIs, training of meat inspectors in the various MTIs, and subsidies to veterinary farms.

Table 13. Reference and unit costs used in this exercise.

1- Currencies			
		Currency	**Conversion rate (exchange rate)**
Currency used for this report (USD or EUR)		USD	Number of KSH per USD
National currency		KSH	90
2- Material investments			
		Supply cost / unit	**Number of years for amortisation**
Buildings	*Unit of surface (m²) or (ft²)*	m²	
	Maintenance cost m²	23	
	Cost to renovate m²	215	10
	Cost to built m²	463	20
Transport	Cost of:		
	Motorbikes	4 000	3
	Cars	25 000	8
	4x4 vehicles	40 000	6
	Cost of Telecommunication equipment set (scanner+fax+telephone+photocopier)	200	3
	Cost of office equipment set (base computer and necessary peripherals)	1 000	3
3- Non material expenditure			
Training			
Initial training (per student)			
	Veterinarians (DVM, BVS) cost	20 000	
	Veterinary paraprofessionals training cost	5 000	
Specialised training (short courses, certificates, Masters degree, PhD, etc.)			
	Accommodation per month	1 500	
	Training fees per month	1 000	
	Travel per month	900	
	Cost of specialised training per month	**3 400**	
Continuing education (daily cost per man on a basis of a group of 15 people)			
	Per diem 15 participants	1 350	
	Room rental and educational tools per day	100	
	Daily fees for a national expert consultant	450	
	Daily cost per trainee	**127**	
National expertise (cost per day)			
	Daily fees	300	
	Per diem	150	
	Total per day and per expert	**450**	
International expertise (cost per week)			
	Daily fees	600	
	Per Diem	300	
	Intercontinental travel	1 500	
	Total cost per week	**7 800**	
4- Salaries (salaries, bonuses and social benefits) / year			
	Veterinarians	11 500	
	Other university degree	10 500	
	Veterinary para-professionals	5 300	
	Support staff	3 300	
5- Consumable resources			
Travel allowances			
	Per diem for technical staff	90	
	Per diem for drivers	35	
	Daily allowance for technical staff travelling abroad	300	
	Average cost of an international flight	1 500	
	Weekly allowance abroad	**3 600**	
Transport fees			Unit
	Price of fuel (average between petrol, diesel or mixt) per unit	1,30	litre
	Average number of km/miles per year		Unit
	Average distance per year by motorbike (miles or km)	48 000	km
	Average distance per year by car (miles or km)	24 000	km
	*Average distance per year by 4*4 car (miles or km)*	24 000	
	Average distance per year by		
	Average distance per year by		
		Fuel consumption per 100 km/miles	*Running (fuel + maintenance + insurance = consumption x 2)*
	Km or mileage cost (motorbike)	4,00	0,10
	Km or mileage cost (car)	8,00	0,21
	Km or mileage cost (4x4 vehicle)	14,00	0,36
	Km or mileage cost ()		
	Km or mileage cost ()		
6- National economic indicators			
GDP			**Sources**
	National GDP	31 409 000 000	World Bank (2010)
	Agriculture GDP	8 166 340 000	
	Livestock GDP	1 388 277 800	
	Value of exported animals and animal products	30 000 000	FAO (2008)
	Value of imported animals and animal products		
	Number of VLU	23 814 521	
Country budget			
	National Budget		
	Agriculture and Livestock Budget	337 066 667	PVS Evaluation March 2011
	Veterinary Services Current Budget	43 348 822	DVS Finance Unit

I Strengthening competencies for international trade

The purpose of this section is to explain the proposed activities in the field of international trade development, for both imports and exports.

This will include the activities presented in Critical Competency Cards II.4, II.13, IV.4, IV.5, IV.6, IV.7 and IV.8. If necessary, links could be made with the important cross-cutting competencies dealt with in the 5th pillar on management of Veterinary Services (e.g. chapter V.2 of the report) in the 2nd pillar on animal health or in the 3rd pillar on veterinary public health.

The 8 critical competencies covered under this heading are : quarantine and border security, identification and traceability (for animals, and for animal products), international certification, equivalence agreements, transparency, zoning and compartmentalisation.

I.1 Strategy and activities

The trade related critical competencies aim at working towards two livestock development goals: *to enhance food security and improvement of livelihoods* (for the home-consumers), but foremost *to enhance competitiveness and access to markets.* When referring to the latter, one generally refers to the beef-sector and its supposed potential for accessing international markets through the establishment of *disease free zones* (DFZ) as the OIE has defined them in the Terrestrial Code, with Botswana usually mentioned as a model (animal health objective 2). To kick-start the process, one would have to look at issues of identification/traceability first, before even considering further steps, such as biosecurity (i.e. fencing, movement control). The activities outlined in this report suggest the establishment of an identification and traceability system for bovines and the funding of an international consultancy to assist in drafting a comprehensive roadmap, as there seems to be some discrepancy between the views of the Kenya DVS on “zoning” when compared to the definitions of the OIE.

Still with regard to traceability, the programme foresees investments in the establishment of traceability for two major (export) commodities: meat (various species) and dairy. The negotiation of bilateral equivalence agreements with third countries is strongly encouraged, as it may offer the opportunity to export these commodities at a lower price to countries with less stringent sanitary requirements (compared to the focus on the European markets and European retailer prices), leading to a better net profit for less constraining investments (e.g. in fencing, which is unlikely to be popular in a country which relies heavily on photographic-safari based wildlife tourism).

On the other hand, a lot of emphasis is put on the regulation of imports of live animals (including cattle on foot) and animal products, through the tightening of the network of border inspection posts, holding facilities and quarantine station, most of which currently lead a dormant life. The expected number of inspection posts by year 5 should be 41. This complement will include the very important import terminals of Mombasa Port and the three international airports, the most important one being *Jomo Kenyatta International Airport* (JKIA) in Nairobi. In the framework of this PVS Gap Analysis, it was decided to focus on this port and equip it with adequate holding facilities and incinerator. The other 3 major terrestrial international border posts, where the volume of animal-related traffic justifies the investments in infrastructures, were provided with separate channels for inspection of people, animals and products (cargo). The relevance of having quarantine station in these BIPs should be assessed based on the number and type of consignements.

Table 14. Calculation tool for the requirements of the border inspection and quarantine facilities.

				Number of staff / shift			Human resources (full time equivalent)			Physical resources (for public Veterinary Services)						
	No of border posts	No of days / year	No shifts / day	No of veterinarians / shift	No of Other university degree / shift	No of veterinary para-professionals / shift	Veterinarians	Other university degree	Veterinary para professionals	Telecommunication equipment set (No)	Office equipment set (No)	Motorbikes (No)	Cars (No)	4x4 Vehicles (No)	Buildings m2	Other specific equipment (ref. currency)
Border posts							**63,9**		**246,4**	**63**	**42**	**34**	**2**	**4**		**420 000,00**
Ports																
Mombasa	1	365	1	24			36,5	-	-	24	3		1			420 000,00
	1	365	2			48	-	-	146,0							
Others	3	365	2	1		2	9,1	-	18,3	3	3	2		1		
Airports	3	365	2	1		2	9,1	-	18,3	3	3	2	1			
Roads		365						-								
Main	3	365	2	1		2	9,1	-	18,3	3	3			3		
Others	30	365	1			1	-	-	45,6	30	30	30				

(*) one holding grounds facility (based on the budget for the Namanga facility – USD 280,000) and one incinerator, estimated at USD 140,000.

The number of working days per year and per employee in the country is 240 days.

I.2 Human resources

Most human resources required are foreseen for the border inspection posts, where a total of 64 veterinarians and 246 veterinary para-professionals are needed. Mombasa Port operates a total of 24 inspection points, which can be considered as separate border inspection posts, under centralised management. It is foreseen that university-level veterinary inspectors will be present in each of these BIPs during the day (one shift), assisted by two shifts of veterinary assistants (e.g. 6 am – 3 pm and 3 pm – midnight), leading to a total of 36 veterinarians and 146 veterinary professionals for this port facility alone (refer to table 14 on the previous page). It could be noted that an alternative strategy could be to limit the number of staff at the Mombasa Port by providing vehicles so that the veterinarians could go from one border inspection post to another as necessary. These options should be analysed based on the number of consignments received in each border post in order to adapt the human resources needs to the workload.

The smaller terrestrial BIPs (around 30) require veterinary para-professionals only (supervised or assisted by the district veterinarian[s] when needed).

Due attention will be given to the upgrading of skills of redeployed personnel, in particular through the continuing education system to be put in place. This represents 1580 working days per year corresponding to:

- 2 days per year for all the staff involved in the BIPs management and consignments control;
- 2 days every 2 years for all the DVO staff involved in the animal identification programme;
- 2 days for all the staff involved in the dairy product value chain.

Moreover, 8 sensitisation workshops on the introduction of the identification and traceability system in the selected areas and 16 sensitisation workshops on the establishment of the disease-free zones will be needed to ensure a good cooperation of all stakeholders.

I.3 Physical resources

The budget (see table 15) takes into account:

- The renovation of all the BIPs, taking into account that each of them need on average 45 m² of offices;
- The equipment of these BIPs with 80 telecommunication equipment sets and 67 officie equipment sets;
- The upgrading/establishment of the Mombasa Port facility;
- Processing channels for animals and animal products foreseen for 6 major BIPs;
- The purchase of needed vehicles (34 motorbikes, 12 cars and 10 4x4);
- The use of laboratory consumables to take samples and diagnostic kits and reagents for a maximum of 6 (major) border inspection posts;
- The foreseen specific investments for an initial one million identification devices (RFID ear tags or reticular boluses) for cattle,

I.4 Financial resources

The financial resources needed add up to an estimated USD 7 million per annum, including:

- Almost USD 2.7 million for the human resources (salaries and continuing education), corresponding to 38% of the yearly budget;
- USD 3.2 million for the specific equipment (processing channels, facilities and incinerator for the main BIPs; laboratory consumables and identification devices), corresponding to 46% of the annual budget.

Additionally, an investment budget of approximately USD 815,000, allegedly to be mobilised in year one, should be considered for the following items:

- Approximately USD 670,000 for the material investments (buildings and vehicles);USD 85,000 for 25 months specialized training in animal identification programme's implementation, auditing techniques and implementation of a zoning strategy;
- USD 47,000 for a 6 weeks international expertise to design the zoning strategy;
- USD 12,000 for a study tour in New-Zealand on anima product traceability.

Table 15. Sub-Total for strengthening competencies for international trade

SUB-TOTAL TRADE						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		1980				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		1980	215	10	42 592	212 960
Building to be built (m²)			463	20		
Transport						
Number of motorbikes	1	34	4 000	3	45 333	
Number of cars		12	25 000	8	37 500	112 500
Number of 4x4 vehicles		10	40 000	6	66 667	66 667
Telecommunication equipment set	1	80	200	3	5 333	
Office equipment set	1	67	1 000	3	22 333	
Other specific equipment						
Other specific equipment for trade (1)					66 000	
Other specific equipment for trade (2)					28 000	280 000
Sub-total Material investments					**313 759**	**672 127**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)	-	25,0	3 400			85 000
Continuing education (man-days / year)	-	1 580,0	127		200 133	
National expertise (days/5 years)		-	450			
International expertise (weeks/5 years)		6,0	7 800			46 800
Special funds (/5 years) for training new off		2				12 000
Sub-total non material expenditure					**200 133**	**143 800**
Salaries / year						
Veterinarians	11,0	82,0	11 500		943 000	
Other university degree	-	5,0	10 500		52 500	
Veterinary para-professionals	30,0	274,0	5 300		1 452 200	
Support staff	-	10,0	3 300		33 000	
Sub-total Salaries					**2 480 700**	
Consumable resources / year						
Administration			20%		496 140	
Travel allowances						
staff within the country (man-days) / year	-	110	90		9 900	
drivers within the country (man-days) / year	-	50	35		1 750	
staff abroad (man-weeks) / year	-	2	3 600		7 200	
Transport fees						
Km or miles Motorbikes / year	48 000	1 632 000	0,10		169 728	
Km or miles cars / year	-	288 000	0,21		59 904	
Km or miles 4x4 vehicle / year	-	240 000	0,36		87 360	
km or miles / year	-	-				
km or miles / year	-	-				
Specific costs						
Targeted specific communication	-	-				
Consultation (number of 1 day meetings)	-	24			24 000	
Kits / reagents / vaccines	-	-				
Other costs for trade (1)	-	1 000 006			3 120 000	
Other costs for trade (2)	-	-				
Sub-total Consumable resources					**3 975 982**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***6 970 574***	***815 927***
Total in	***KSH***				***627 351 660***	***73 433 400***

II Strengthening competencies for animal health

The purpose of this section is to explain the activities proposed in the field of animal health.

These activities are chiefly those presented in the Critical Competency Cards II.5, II.6, II.7 and II.14. If necessary, links could be made with the important cross-cutting competencies dealt with in the 5th pillar on management of Veterinary Services (e.g. Chapter V.2 of the report).

The chapter covers the following 5 critical competencies: epidemio-surveillance (passive and active), early detection and emergency response, disease prevention, control and eradication, and animal welfare.

II.1 Strategy and activities

The strategy is clearly related to animal health priority nr. 1, which states *"….promote animal health by reactivating and expanding (…) services, including monitoring and control of animal diseases"* in reference to the PRSP, an implicit recognition that the current system or strategy, beyond the mere output of administrative reports, has failed, as confirmed by the PVS evaluation in March 2011. The number of human resources allocated to the animal health and welfare services is disproportionate to the material and non-material means put at their disposal and leads to a dormant, inert, heavily bureaucratic and ineffective animal health management system. The strategy will therefore consist in balancing human resources with operational resources by the redeployment, when and where possible, of staff and the upgrading or establishment of functional animal health surveillance, early detection, prevention, control and eradication units at (mostly) district level, with binding technical (not just administrative) triages to meet and standard operation procedures (SOPs) to implement and respect (the latter need to be developed in almost all cases and all areas of intervention).

Any planning undertaken should be preceded by the development of disease control strategies and clearly defined programmes, with identifiable targets and realistic outcomes.

Activities will include the upgrading of the capacity of veterinarians and veterinary para-professionals in the districts to conduct their tasks to satisfaction; this means procurement of equipment, ensuring availability of consumables, training, and more and better inter-action with farmers and other (rural) stakeholders and, where present, private veterinary surgeries and outlets.

Passive surveillance will have to be (re)activated across the country to ensure that the identified animal health programmes are science-based and apply to all susceptible population in five years time, while active surveillance will have to be broadened to include important diseases for the dairy sector (tuberculosis and brucellosis), the beef sector (FMD and CBPP) and emerging and exotic diseases, such as NAI. From a public health point of view, active surveillance for RVF will have to be pursued, while from a smallholder perspective, due attention should be given to the surveillance of PPR. Active surveillance, where applicable, should include surveillance of wildlife (in cooperation with the KWS) and civil society (NGOs) and health authorities for zoonoses.

The following table is a self-assessment of the existing and *–in extenso-* required active and passive animal disease surveillance activities in the country, as implemented either by the public sector or the private sector, though in the latter case it is often self-regulated and market driven, rather than regulated from the public sector. The public Veterinary Services may provide the vaccines (except where it is stated "private only"), even if vaccination is not part of an official compulsory vaccination programmes.

Table 16. Schematic overview of passive and active surveillance activities, as well as vaccinations, conducted in Kenya.

Disease	Scheduled	Surveillance		Vaccination
	(notifiable)	Passive	Active	
FMD	●	●	●	●
CBPP	●	●	●	●
Anthrax	●	●		●
LSD	●	●		●
Rabies	●	●		●
East Cost Fever	●	●		
RVF	●	●	●	●
Mange	●	●		
Sheep scab	●	●		
Sheep & goat pox	●	●		●
African animal trypanosomosis	●	●	●	
Surra	●	●	●	
BSE	●			
Bovine tuberculosis	●	●	●	
Contagious abortion / brucellosis		● MRT		● private only
ASF	●	●		
AHS	●	●		● private only
NCD	●	●	● jointly	●
NAI	●	●		
PPR	●	●	●	●
Contagious Caprine Pleuropneumonia	●	●	●	●
Bluetongue	●	●		● private only
Salmonella pullorum	●	●	●	●
Varroosis	●	●		

In terms of prevention of important (and OIE-listed) diseases, an ambitious roll-out of compulsory vaccination campaigns and animal movement restrictions will have to be put in place, if certification of animal products (for export, or for the domestic market) is to be credible in the future. The diseases earmarked for vaccination are listed in the table above and target vaccination figures were assessed through a participatory approach, and presented here against a hypothetical 2015 horizon, as compared to current vaccination statistics:

Table 17. Schematic overview of current and anticipated vaccination figures [18].

	2010	2015	Increase %	Comments
LSD	325 K	2,000 K	615 %	Once a year
RVF	350 K	2,000 K	570 %	Twice a year
Rabies	40 K	200 K	500 %	Cumulative over 3 years
FMD	792 K	2,500 K	315 %	Twice a year
Sheep & Goat Pox	200 K	350 K	57 %	Twice a year
PPR	350 K	350 K	-	Once a year

The human, physical and financial resources required were assessed using the "animal health" calculation tool, which is based on the expected workload of "field veterinary posts" or FVPs (in this case, *district veterinary offices* or DVOs). Based amongst others on the number of *Veterinary Livestock Units* (VLU) it will establish the number of offices required, the staff and the financial means required. In this particular case, the number of offices required was

[18] Excluding the poultry sector

adjusted to the existing number of 284 district veterinary offices, as this is a non-negotiable political/policy choice (i.e. to have one veterinary office per administrative district). Keeping in mind that numerous veterinary public health and trade related activities are carried out by or through the network of district veterinary offices, the "weight" of the animal health component may seem disproportionate, both in terms of human resources and financial resources. Suffice to mention that these resources will also benefit the other sectors and activities mentioned earlier.

Table 18. Calculation of Veterinary Livestock Units (VLU) per province

Administrative level	Number of animals						Equivalent number of VLUs
	Bovines	Small Ruminants	Suids	Equids, Asines, Camelids	Poultry	Others	
value of VLU	1,00	0,10	0,30	0,30	0,01		
Nairobi Province	54 546	81 554	29 976	12 844	622 185		81 769
Central Province	1 125 905	1 195 446	91 977	35 747	5 529 623		1 339 063
Coast Province	959 965	2 038 167	5 243	82 961	2 121 560		1 211 459
Eastern Province	2 260 161	6 619 955	43 480	552 883	4 652 430		3 147 590
North East Province	2 775 208	12 150 741	68	2 083 238	494 212		4 620 216
Nyanza Province	1 748 670	1 456 324	27 612	60 852	6 106 534		1 981 907
Rift Valley Province	7 479 807	20 829 901	48 495	1 956 839	7 896 657		10 243 364
Western Province	1 063 512	497 671	87 838	18 266	4 404 328		1 189 154
Total	17 467 774	44 869 759	334 689	4 803 630	31 827 529		23 814 521

Regarding animal welfare, it is suggested to strengthen the one-person animal welfare unit and link him to the OIE capacity-building programme as an OIE focal point, develop simple SOPs for animal welfare in export facilities only (at this stage), based on OIE standards and guidelines.

II.2 Human resources

The human resources needed are mainly based on the current numbers. As of today, the 284 district veterinary offices are manned by 430 veterinarians, 1,715 veterinary para-professionals and 769 support staff, or an average of 1.5 veterinarians, 8.5 veterinary para-professionals and 2.7 support staff per DVO. The proposal presented in table 19 on the next page proposes to keep the current number of FVPs and to redeploy staff so as to end up with 284 veterinarians and 2,272 veterinary para-professionals. This redeployment is inspired by the observation that veterinarians are entrusted with tasks for which they are (or should) be over-qualified, leading to over-payment of services and under-utilisation of skills expected from graduate veterinarians, which will no doubt eventually lead to professional frustration. Note also that province-level staff are not considered under this section, but under section V. Moreover, coordination team at central level will be needed to define and follow-up the implementation of active surveillance, early detection and disease control programmes as well as to consolidate the animal welfare team. This leads to a 28% decrease in veterinary staffing and a 32% increase of the number of veterinary para-professionals.

In addition, more than 7,700 of working days per annum are earmarked as follow:

- 3 days per year for the field veterinary network professionals, totalling 7668 days;
- 2 days per year for the team in charge of the coordination of the active surveillance and disease control programmes at central level, totalling 44 working days

Table 19. Calculation of number of VLU per field veterinary post, based on the current number of district veterinary offices.

Administrative level	Area in km²	Number of villages	Number of households or groups	Number of VLU / km²	Minimum number of FVPs*	Accessibility to minimum number of FVPs*	Proposed optimum number of FVPs*	Accessibility to optimum number of FVPs*	Number of village per FVP*	Number of households per FVP*	Number of VLU per FVP*
	l	n	o	p = m/l	q = (m/k)	r = √((0,5*l)/q)	s	t = √((0,5*l)/s)	u = (n/s)	v = (o/s)	w = (m/s)
Nairobi Province	684	71	985 016	119.55	1	20	9	6	8	109 446	9 085
Central Province	13 176	1 099	1 224 742	101.63	15	21	38	13	29	32 230	35 239
Coast Province	83 603	806	731 199	14.49	13	56	21	45	38	34 819	57 689
Eastern Province	159 891	413	1 284 838	19.69	34	48	60	37	7	21 414	52 460
North East Province	126 902	68	312 661	36.41	50	35	24	51	3	13 028	192 509
Nyanza Province	16 162	190	1 188 287	122.63	22	19	37	15	5	32 116	53 565
Rift Valley Province	173 868	639	2 137 136	58.91	112	28	66	36	10	32 381	155 202
Western Province	8 360	116	904 075	142.24	13	18	29	12	4	31 175	41 005
Total	**582 646**	**3 402**	**8 767 954**	**40.9**	**260**	**33**	**284**	**32**	**12**	**30 873**	**83 854**

This table basically illustrates the current situation with the existing number of FVP per province (Proposed optimum number of FVPs), in relation to the number of VLU and households per province, and in relation to the size of each of those provinces. The exercise illustrates some discrepancies in the distribution of some of these DVOs (FVPs). For instance, in North-eastern Province, the ratio VLU per DVO is 200,000 and in Rift Valley Province, it is 150,000 VLU per DVO, which is well below the average and seems to indicate relative understaffing. In contrast, Nairobi province boasts a mere 9,000 VLU per DVO and would seem to be well over-staffed. Likewise, the accessibility of DVO offices varies from an average of 9 km for Nairobi to 56 km in the Coastal Province.

While the Team acknowledges the willingness to adhere to the number of district offices (per province), there may be need to adjust staff numbers to compensate for the discrepancies noted above.

II.3 Physical resources

The physical resources earmarked in the budget will enable the full rehabilitation of all 284 district veterinary offices, rendering them operational. This enhanced operation will be essential to achieve the ambitious technical targets with regard to vaccination, surveillance and inspection services.

These physical resources will include the rehabilitation of 37,000 m² of offices (approximately 130 m² per DVO office) and the procurement of around 1,100 motorbikes and 300 four-wheel drive vehicles. These estimates include the various coordination offices (active and passive surveillance, early detection and response, disease prevention, control and eradication, and animal welfare) at headquarter' s level. Other physical resources include the establishment of an integrated animal disease reporting system, telecommunication equipment, office equipment, cold-chain and storage, GIS software and small technical equipment (field kits, PPE, gloves, necropsy kits, burdizzo's etc.).

Approximately USD 12 million p.a. cover the needs in terms of vaccine procurement, including for the vaccination of the backyard poultry sector (sectors 3 and 4).

II.4 Financial resources

The financial resources needed add up to an estimated USD 50 million per annum, along with a USD 6.3 million investment budget (allegedly to be mobilised in year one), totalling an estimated USD 256 million over the 5 year period. This corresponds to around KSH 23 billion at the current exchange rate (1 : 90).

The annual budget includes:

- Around USD 20 million for the human resources (salaries and continuing education), corresponding to 41% of the yearly budget;
- Around USD 5 million for the material investments (mostly building and vehicles); corresponding to 10% of the yearly budget;
- USD 12 million for the vaccines, corresponding to 24% of the annual budget.

The investment budget should be considered for the following items:

- Approximately USD 6 million for the material investments (buildings and vehicles);USD 68,000 for 20 months specialized training on active surveillance and animal disease control programmes;
- USD 31,000 for a 4 weeks international expertise to design the active surveillance programmes.

Table 20. Sub-Total for strengthening competencies for animal health

SUB-TOTAL ANIMAL HEALTH						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		37 280				
Existing building to be maintained (m²)	-	100	23	1	2 315	
Existing building to be renovated (m²)	-	37 180	215	10	799 783	3 998 916
Building to be built (m²)		-	463	20		
Transport						
Number of motorbikes	-	1 136	4 000	3	1 514 667	
Number of cars	-	-	25 000	8		
Number of 4x4 vehicles	-	293	40 000	6	1 953 333	1 953 333
	-	-				
	-	-				
Telecommunication equipment set	-	2 850	200	3	190 000	
Office equipment set	-	1 714	1 000	3	571 333	
Other specific equipment						
Other equipment for Animal Health (1)					11 000	
Other equipment for Animal Health (2)					42 600	213 000
Sub-total Material investments					**5 085 031**	**6 165 249**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)	-	20,0	3 400			68 000
Continuing education (man-days / year)	-	7 712,0	127		976 853	
National expertise (days/5 years)		-	450			
International expertise (weeks/5 years)		4,0	7 800			31 200
Special funds (/5 years) for training new off		-				
Sub-total non material expenditure					**976 853**	**99 200**
Salaries / year						
Veterinarians	-	308,0	11 500		3 542 000	
Other university degree	-	7,0	10 500		73 500	
Veterinary para-professionals	-	2 277,0	5 300		12 068 100	
Support staff	-	1 150,0	3 300		3 795 000	
Sub-total Salaries					**19 478 600**	
Consumable resources / year						
Administration			20%		3 895 720	
Travel allowances						
staff within the country (man-days) / year	-	440	90		39 600	
drivers within the country (man-days) / year	-	440	35		15 400	
staff abroad (man-weeks) / year	-	-	3 600			
Transport fees						
Km or miles Motorbikes / year		54 528 000	0,10		5 670 912	
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		7 032 000	0,36		2 559 648	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication	-	-				
Consultation (number of 1 day meetings)	-	108			108 000	
Kits / reagents / vaccines					11 600 000	
Other costs for Animal Health (1)					477 200	
Other costs for Animal Health (2)						
Sub-total Consumable resources					**24 366 480**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***49 906 965***	***6 264 449***
Total in	***KSH***				***4 491 626 820***	***563 800 400***

III Strengthening competencies for veterinary public health

The purpose of this section is to explain the proposed activities in the field of veterinary public health.

This will chiefly include the activities presented in the Critical Competency Cards II.8, II.9 and II.10. If necessary, links could be made with the important cross-cutting competencies developed in the 5th pillar on management of Veterinary Services (e.g. Chapter V.2 of the report).

The chapter covers the following 4 critical competencies: food safety (animals and animal products), veterinary products and residue testing.

III.1 Strategy and activities

In sharp contrast to the previous pillar of "animal health", the requirements stemming from the PVS Gap Analysis are rather modest, and not only because of the fact that some activities are covered under the "animal health" field veterinary network of DVOs. Indeed, whilst veterinary public health is of paramount importance, especially in the face of growing domestic consumer awareness and increasing import and export challenges (melamine tainted milk comes to mind), this section of the veterinary services, as observed by the PVS evaluation, has suffered some neglect and it bears repeating that : *"…at export slaughterhouses the DVS implements food safety measures with regard to the processing and distribution of products of animal origin, based on the conditions laid down by the importing country. HACCP plans are introduced on a voluntary basis. At all other slaughterhouses and slabs the veterinary inspection and food safety function is limited to the issuing of a movement licence for the animal product in question. The Team was informed, that there is no veterinary involvement after the sale – after the "farm gate" for dairy products. No DVS programmes are in place in respect of zoonoses control in dairy herds (bovine tuberculosis, bovine brucellosis) and non pasteurised milk (cows and goats) is widely consumed. The team noted based on discussions with relevant stakeholders and information screened from the Kenya Dairy Board internet site that there is little if any involvement of the VS in the dairy sector of Kenya."* [19]

The PVS Gap Analysis therefore encourages investments, however modest, in strengthening compliance with international standards, not just in the beef sector, but in all food-producing sectors, and in particular dairy. In this respect, the following proposals aim to proceed along the veterinary public health priorities which are (a) to expand the coverage by the MoLD/DVS to all slaughter facilities in Kenya and (b) to expand the inspection services to other commodities such as eggs, milk and honey and emerging livestock species, such as rabbits, ostriches, snails and other peri-livestock or non-traditional farmed species.

III.1.A Food safety

Although the level of advancement is not scheduled to improve over the next five years, numerous activities will have to be implemented to maintain this level of achievement and proceed to attain especially VPH priority number 2. With regard to the slaughter of animals, the intent is to have all slaughter facilities under the Veterinary Authority by year 5, i.e. for the MoLD to take over the remaining abattoirs under the mandate of the MoH. In addition, meat inspection will have to be linked to important surveillance activities, in particular CBPP and tuberculosis and be integrated into the to-be-developed integrated animal diseases reporting system, earmarked under the previous pillar.

[19] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)

Food safety inspection will have to be progressively expanded from red meats to white meats (poultry), fish, milk and honey. Specific surveillance and test and slaughter systems will have to be implemented in the dairy sector for tuberculosis and brucellosis.

III.1.B Veterinary medicines and biologicals

The latest PVS evaluation mission reports points out several weaknesses in the current system, the main weakness being the unbridle mushrooming of AGROVET shop across the country, which as it has been demonstrated, do not limit themselves to the sale of livestock remedies, but frequently sell antimicrobials over or under the counter. All hopes now focus on the approval of the new Act on Veterinary Medicinal Products which is allegedly going to help in addressing these issues. [20]

Whether the delays in the approval of this and other pieces of legislation which aim to strengthen the position of the veterinary profession in a landscape characterised by encroachment in the veterinary field by other, less suitable, professionals, is a matter of mere bureaucracy or deliberate action, is unclear.

Nevertheless, it is felt that within 5 years, the VS of Kenya could *"exercise effective administrative control and implement quality standards for most aspects of the regulation of veterinary medicines and veterinary biologicals."* To achieve this, the enactment of the new Veterinary Medicinal Product Act is a prerequisite, enabling the establishment of the long-awaited autonomous *Veterinary Medicines Directorate.*

III.1.C Residue testing

In the case of Kenya, the improvement of the residue testing programme means moving away from a private-sector driven, self-regulated residue testing for a limited number of products to a public-sector driven *"comprehensive residue testing programme for all animal products for export, and some for domestic use".* Currently, only the KMC, as well as the Farmer´s Choice abattoir, undertake yearly, random testing for hormones, pesticides, heavy metals and antibiotics. As pointed out by the PVS evaluation mission, these tests are undertaken on a voluntary basis, as there is no regulation existing on this matter[20]. Achieving this within 5 years will require the design and implementation of residue testing programmes for the export industry, based on bilateral agreements with the importing countries and the development of a long overdue testing programme, with the following products as a priority:

- antimicrobials in honey and milk
- trypanocides in red meat products
- growth promoters in pig and poultry products
- heavy metals in fisheries products

III.2 Human resources

The human resources listed under this pillar are limited to the personnel accountable directly to the national Department, i.e. the inspectors in the major national (domestic) and export abattoirs and the Kabete-based staff, under the *Division of Food Safety, Animal By-Product Development and Environmental Management.* Increases will be mostly linked to the strengthening of inspection in the dairy industry and other industries, such as fish-processing.

[20] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)

Table 21. Human resources needed to implement activities related to food safety

Sectors	PVS Critical competency	Number of units or plants	Number of days / unit / year			Human resources (Full time equivalent)		
						Total		
			Veterinarians	Other university degree	Veterinary para-professionals	Veterinarians	Other university degree	Veterinary para-professionals
Abattoirs and associated premises	**II.8A**					**10,5**	**-**	**78,1**
						-	-	-
EPORT RED M Slaughterh 2sh		1	480		3120	2,0	-	13,0
EPORT RED M Slaughterh 1sh		6	288		2304	7,2	-	57,6
Weekly slaughtering slabs						-	-	-
EXPORT Poultry slaughterhouses		1	312		936	1,3	-	3,9
						-	-	-
Cutting room		17			51	-	-	3,6
						-	-	-
						-	-	-
						-	-	-
Products of animal origin	**II.8B**					**11,3**	**-**	**7,8**
Dairy sector								
						-	-	-
Dairy farms supplying dairy plants						-	-	-
Milk processing units (small)						-	-	-
Milk processing units (per province)		8	240			8,0	-	-
						-	-	-
						-	-	-
Poultry sector								
Poultry farms producing eggs						-	-	-
Egg packaging plants						-	-	-
Fish sector								
						-	-	-
Fish processing units		3	260		624	3,3	-	7,8
Landing stage/wharf						-	-	-
Drying plant and processing						-	-	-
						-	-	-
Market and products for consumers								
						-	-	-
Meat retailers and butchers						-	-	-
Food retail market						-	-	-
Restaurants						-	-	-
Feeding stuff sector								
						-	-	-
Compound feed plants						-	-	-
						-	-	-

As presented in the above table, there is a need for 21,8 veterinarians and 85,6 veterinary para-professionals (FTE). However, considering the national context, the real needs were estimated to be 23 veterinarians and 88 veterinary para-professionals.

Apart from this, there will be a need to have a dedicated professional team at central level, based at the *Veterinary Medicines Directorate*, to register and inspect all matters related to veterinary medicines and biological. This team will be composed of 2 veterinarians, 6 veterinary para-professionals, 1 administration professional and 1 support staff.

Moreover, the CVL staff will be reinforced in order to cope with the requirements of the residue testing programmes. A team of at 7 veterinarians, 2 biochemists, 10 veterinary para-professionals and 3 support staff will conduct the required sampling and testing.

The total number of staff needed to improve the compliance of the VS of Kenya to the OIE standards will therefore be 32 veterinarians and 3 other university degree holders,

In order to ensure an adequate knowledge of the staff in charge of the implementation of these activities, a continuing education programme should be organised, totalling 22 working days per year for the 11 veterinarians in charge of ante and post mortem inspections.

III.3 Physical resources

Physical resources in this area will include the renovation of existing residue testing facility and the construction of a total of 330 m² for additional residue testing facilities/offices and the offices of the *Veterinary Medicines Directorate* (10 m²). These will be accompanied by the usual procurement of means of transport, telecommunication and office furniture and IT equipment

III.4 Financial resources

The financial resources needed add up to an estimated USD 1.5 million per annum including:

- Almost USD 1 million for the human resources (salaries and continuing education), corresponding to 41% of the yearly budget;
- Almost USD 100,000 for the material investments (mostly building and vehicles); corresponding to 6% of the yearly budget;
- Around USD 450,000 for the consumables, including USD 125,000 for the residue testing material and the inspection and sampling equipment.

Provide training for VMP capacity building. 1 semester of specialized training (medicines and biologicals regulation) abroad for 1 veterinarian

The investment budget accounts for USD 375,000 for the following items:

- Approximately USD 270,000 for the material investments (buildings and vehicles);USD 61,000 for 18 months (over the 5 year period) specialized training abroad (mostly for residue testing and the establishment of the *Veterinary Medicines Directorate);*
- USD 45,000 for a 5 months national expertise to develop the implementation guidelines and procedures for the *Veterinary Medicines Directorate* to become active.

Table 22. Sub-Total for strengthening competencies for veterinary public health

SUB-TOTAL VETERINARY PUBLIC HEALTH						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		340				
Existing building to be maintained (m²)	-	-	23	1		
Existing building to be renovated (m²)	-	10	215	10	215	1.076
Building to be built (m²)		330	463	20	7.639	114.587
Transport						
Number of motorbikes	-	8	4.000	3	10.667	
Number of cars	-	15	25.000	8	46.875	140.625
Number of 4x4 vehicles	-	2	40.000	6	13.333	13.333
	-	-				
	-	-				
Telecommunication equipment set	-	39	200	3	2.600	
Office equipment set	-	44	1.000	3	14.667	
Other specific equipment						
Other equipment for Vet. Public Health (1)						
Other equipment for Vet. Public Health (2)						
Sub-total Material investments					**95.996**	**269.621**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)	-	18,0	3.400			61.200
Continuing education (man-days / year)	-	22,0	127		2.787	
National expertise (days/5 years)		100,0	450			45.000
International expertise (weeks/5 years)		-	7.800			
Special funds (/5 years)		-				
Sub-total non material expenditure					**2.787**	**106.200**
Salaries / year						
Veterinarians	7,0	32,0	11.500		368.000	
Other university degree	-	3,0	10.500		31.500	
Veterinary para-professionals	6,0	104,0	5.300		551.200	
Support staff	3,0	4,0	3.300		13.200	
Sub-total Salaries					**963.900**	
Consumable resources / year						
Administration			20%		192.780	
Travel allowances						
staff within the country (man-days) / year	-	60	90		5.400	
drivers within the country (man-days) / year	-	-	35			
staff abroad (man-weeks) / year	-	-	3.600			
Transport fees						
Km or miles Motorbikes / year		384.000	0,10		39.936	
Km or miles cars / year		360.000	0,21		74.880	
Km or miles 4x4 vehicle / year		48.000	0,36		17.472	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication	-	-				
Consultation (number of 1 day meetings)	-	-				
Kits / reagents / vaccines	-	-				
Other costs for Vet. Public Health (1)					125.000	
Other costs for Vet. Public Health (2)						
Sub-total Consumable resources					**455.468**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***1.518.151***	***375.821***
Total in	***KSH***				***136.633.552***	***33.823.880***

IV Strengthening competencies for veterinary laboratories

The purpose of this section is to explain the proposed activities in the field of veterinary laboratories: Critical Competency Cards II.1 and II.2.: *Veterinary laboratory diagnosis* and *Laboratory quality assurance (QA).*

IV.1 Strategy and activities

The main strategy and in consequence, activities, evolve around the operation of the main, national reference laboratory in Kabete.

From a conceptual (and institutional) point of view, the 6 regional laboratories (Karatina, Kericho, Nakuru, Mariakani, Eldoret and Garissa) are part and parcel of the national laboratory, are accountable to the national laboratory, and contribute to the output of the national laboratory. Statistics about the performance of the individual regional laboratories are simply not available.

The PVS evaluation team, in March 2011, noted with concern that : *"The laboratory / disease investigation facilities visited in general, but in particular at the RVIL´s visited, the lack of maintenance of infrastructures and the presence of either obsolete or outdated laboratory instruments and equipment was evident. Good laboratory practice is hampered by infrastructural defects like broken floor tiles, flaking paint, defective ceilings, wooden non-disinfectable table tops and chairs. Post mortem facilities at both RVLI´s*[21] *were found to meet no standards of bio-security, hygiene or normal operational capacity. Two so-called mobile laboratories (mobile trailers) were empty shells and in a total state of disrepair."*

From the PVS Gap Analysis point of view, the proposed investment plan will however recommend the rehabilitation of all 7 facilities, I.e. Kabete and the 6 RVILs, along with the equipment (cold chain mostly) of the main BIPs withheld under chapter 1 on "Trade" (page 29 and onwards).

From a methodological point of view, the PVS Gap Analysis tool does not entertain estimates, based on the need(s) for equipment and reagents as such, without these needs being justified by the expected turnover of samples, generated by the veterinary field network and other facilities or services (e.g. export abattoirs). From the PVS Gap Analysis point of view a veterinary laboratory serves the purpose of servicing the field network(s), not the other way around. This simplified, modelling, approach to the veterinary laboratory diagnostic services, therefore disregards private veterinary services or services to the private sector, which may be considerable in the case of the Kabete laboratory. Furthermore the PVS Gap Analysis tool will peruse parity pricing for laboratory analysis in the private sector labs, rather than to use the heavily subsidised pricing structure of the public sector laboratories.

The table on the next page lists the diagnostic services offered by the Kabete Central Veterinary Laboratory and the reference parity unit costs withheld by the tool for calculation purposes. This table will be combined with the expected throughput of samples and diagnostic requests, generated by the field veterinary network (passive surveillance, and active surveillance for FMD, CBPP, RVF, vector-borne disease such as East Coast Fever and trypanosomosis, and NCD/NAI and PPR/Contagious Caprine Pleuropneumonia) along with associated national or regionalised services by year 5 of the investment programme (including surveillance for brucellosis and tuberculosis in the dairy sector and salmonellosis in the poultry sector).

[21] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011): Karatina and Garissa.

Table 23. Local costs of common diagnostic tests on which the laboratory calculations (private sector prices) were based.

Type of analyses	Prices in USD withheld by the experts
Immunological tests	
Agglutination or haemagglutination	**1,40**
Tube agglutination or precipitation	**2,40**
IHA	**2,10**
Complement fixation	**2,80**
AGID	**2,80**
ELISA and ELISA-based assays	**6,60**
Immunofluorescence (dir. or indir.)	**6,80**
Serum neutralisation	**15,30**
Gene sequencing	
PCR	**22,40**
Anatomical pathology	
Post mortem: large animals	**23,50**
Post mortem: medium animals	**11,80**
Post mortem: poultry	**5,90**
Histological diagnosis	**15,30**
Parasitology	
Direct microscopic examination	**2,80**
Culture techniques	**5,90**
Blood test	**2,40**
Medical microbiology	
Culture/isolation	**11,80**
Biochimemical identfication	**11,80**
Immunological identification	**9,40**
Virus culture	**29,40**
Food microbiology	
Standard 5 bacteria	**23,50**
Specific bacteria (List, Salm...)	**11,80**
Chemistry (residues)	
HPLC	**29,40**
Gas chromatography	**29,40**
Spectrofluorescence	**23,50**

This should enable the veterinary laboratory diagnosis to ensure a correct diagnosis *"For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/or that could enter the country."*

As a basis to extrapolate from, table 24 presents the current throughput and the current number of diagnostic services offered. Based on this modelling, a total of 80,000 diagnostic acts (not samples) are believed to be processed annually. The current throughput of samples is around 46,800 per annum, for the national (66%), and the 6 regional laboratory facilities (33%).

Table 24. Estimates of diagnostic tests conducted annually for different diseases and purposes.

Type of analyses	Programmes									
	Animal Health							Veterinary Public Health		
	FMD	CBPP	RVF	VBM	NCD/NAI	PPR/CCPP[22]	PASSIVE	BRUCELLOSIS	Milk (Brucel./tub.)	Salmonellosis
Immunological tests										
Agglutination or haemagglutination								6,000	200	
IHA					1,000					
Complement fixation		3000						6,000		
ELISA and ELISA-based assays	10,000	1,000	6,000		2,000	12,000	17,500			
Immunofluorescence (dir. or indir.)			50							
Serum neutralisation						50				
Gene sequencing										
PCR			50	50	500					
Anatomical pathology										
Post mortem: large animals							200			
Post mortem: medium animals							300			
Post mortem: poultry							1,000			
Histological diagnosis										
Parasitology										
Direct microscopic examination				100			2,500			
Blood test										
Medical microbiology										
Culture/isolation				30		3,000	1,000			
Biochimemical identfication							1,500			
Immunological identification							500			
Virus culture	300		15		500	50	500			
Food microbiology										
Standard 5 bacteria										1,200
Specific bacteria (List, Salm...)										1,200
Chemistry (residues)										
Totals	**10,300**	**4,000**	**6,115**	**180**	**4,000**	**15,100**	**25,000**	**12,000**	**200**	**2,400**

GRAND TOTAL (analyses units) **79,295**

Green cells indicate tests that are being conducted at present.
Green cells not containing data are deemed to be insignificant from a calculation point of view, because of low throughput or because of low unit cost.

[22] CCPP = Contagious Caprine Pleuropneumonia; VBM = Vector Borne Disease

Given the state of the veterinary diagnostic services today, ambitions in the field of quality-assurance are yet modest, the aim being to ensure that *"Some laboratories used by the public sector VS are using formal quality assurance systems".*

Irrespective of the outcomes of the financial analysis conducted within the framework of this report, it is believed that the complexities, the size and scope of the laboratory services in Kenya cannot be fully and adequately addressed by a team of veterinary experts, not necessarily endowed with specialised laboratory – related expertise. Furthermore, the outcomes of the analysis is too generic to be useful as a basis for a comprehensive rehabilitation programme for laboratory diagnostic services. Which is why the Team recommends that this PVS Gap Analysis exercise be completed by a specific and dedicated OIE laboratory assessment (including quality assurance), as offered by the OIE under the PVS Pathway. A 10-day in-depth assessment and fine-tuning of the current assessment and investment proposal should ideally be conducted as soon as possible in order to prepare a comprehensive investment portfolio for the Government and the international cooperation partners by the beginning of 2012. The following sections are therefore likely to undergo changes, before they can be presented for funding.

IV.2 Human resources

Given the conclusions of the PVS evaluation mission, which lists the current staff complement of the laboratories as one of its very few strengths, staff numbers are (for the time being) expected to remain *as-is* : 46 veterinarians, 2 zoologists and 82 laboratory technicians.

However, a 3 days continuing education programme should be proposed to all CVL staff on the animal health and veterinary health programmes and the related laboratory diagnostic techniques.

IV.3 Physical resources

Physical resources needed are defined in the competency card as required to:

- Rehabilitate, upgrade where necessary, existing physical infrastructure
- Determine and provide the required diagnostic equipment and material

IV.4 Financial resources

Based on the "Laboratory" tool, briefly presented earlier, the cost (or rather, market value) of the diagnostic services offered today is estimated at around USD 550,000 per annum. This should theoretically include all overhead costs such as personnel, infrastructure, write-off of equipment, etc… as the estimates are based on real market pricing.

According to the Ministerial budgetary allocation for the department of veterinary services provided during the mission, the current level of funding is believed to be situated between USD 200,000 (2010/2011 budget) and USD 550,000 (2011/2012 budget proposal, not yet approved).

The financial resources identified during the PVS Gap Analysis mission are based on a 40 % financial increase in "diagnostic performance" by year 5. Hence, table 26 presents an amount of USD 750,000 per annum for the technical services of the laboratories. Including renovation of premises, salaries, training and general operating expenses, the estimated annual budget for the laboratory services is estimated at USD 2.3 million per annum. In addition, an investment budget of USD 860,000 or KSH 77 million is earmarked for renovations, means of transport and training abroad.

The cost of the to-be-established quality assurance management (and manager) is grossly estimated at 6% of the laboratory consumables budget, as estimated in the *Cost Estimation Card* Lab II.1. and represents an amount of USD 65,000 per annum.

Table 25. Estimates of costs of diagnostic tests conducted annually for different diseases and purposes.

Type of analyses	Value	Programmes									
		Animal Health							VPH		
		FMD	CBPP	RVF	VBM	NCD/NAI	PPR+CCPP	PASSIVE	BRUCELLOSIS	Milk (Brucellosis-Tuberculosis)	Salmonella
Immunological tests											
Agglutination or HA	8680	0	0	0	0	0	0	0	8400	280	0
IHA	2100	0	0	0	0	2100	0	0	0	0	0
Complement fixation	25200	0	8400	0	0	0	0	0	16800	0	0
ELISA / ELISA-based assays	320100	66000	6600	39600	0	13200	79200	115500	0	0	0
Immunofluorescence (dir./indir.)	340	0	0	340	0	0	0	0	0	0	0
Serum neutralisation	765	0	0	0	0	0	765	0	0	0	0
Gene sequencing											
PCR	13440	0	0	1120	1120	11200	0	0	0	0	0
Anatomical pathology											
Post mortem: large animals	4700	0	0	0	0	0	0	4700	0	0	0
Post mortem: medium animals	3540	0	0	0	0	0	0	3540	0	0	0
Post mortem: poultry	5900	0	0	0	0	0	0	5900	0	0	0
Histological diagnosis	0	0	0	0	0	0	0	0	0	0	0
Parasitology											
Direct microscopic examin.	7280	0	0	0	280	0	0	7000	0	0	0
Blood test	0	0	0	0	0	0	0	0	0	0	0
Medical microbiology											
Culture/isolation	47554	0	0	0	354	0	35400	11800	0	0	0
Biochimemical identfication	17700	0	0	0	0	0	0	17700	0	0	0
Immunological identification	4700	0	0	0	0	0	0	4700	0	0	0
Virus culture	40131	8820	0	441	0	14700	1470	14700	0	0	0
Food microbiology											
Standard 5 bacteria	28200	0	0	0	0	0	0	0	0	0	28200
Specific bacteria (List, Salm...)	14160	0	0	0	0	0	0	0	0	0	14160
Chemistry (residues)											
Total by programme		**74,820**	**15,000**	**41,501**	**17,54**	**41,200**	**116,835**	**185,540**	**25,200**	**280**	**42,360**

Grand total (USD)	**544,490**

Table 26. Sub-Total for strengthening competencies for veterinary laboratory

SUB-TOTAL VETERINARY LABORATORIES						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		7.000				
Existing building to be maintained (m²)	-	-	23	1		
Existing building to be renovated (m²)	-	7.000	215	10	150.578	752.889
Building to be built (m²)		-	463	20		
Transport						
Number of motorbikes	-	-	4.000	3		
Number of cars	-	-	25.000	8		
Number of 4x4 vehicles	-	10	40.000	6	66.667	66.667
	-	-				
	-	-				
Telecommunication equipment set	-	7	200	3	467	
Office equipment set	-	14	1.000	3	4.667	
Other specific equipment						
Other equipment for Vet. laboratories (1)					15.000	
Other equipment for Vet. laboratories (2)						
Sub-total Material investments					**237.378**	**819.556**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)	-	12,0	3.400			40.800
Continuing education (man-days / year)	-	390,0	127		49.400	
National expertise (days/5 years)		-	450			
International expertise (weeks/5 years)		-	7.800			
Special funds (/5 years)						
Sub-total non material expenditure					**49.400**	**40.800**
Salaries / year						
Veterinarians	46,0	46,0	11.500		529.000	
Other university degree	2,0	2,0	10.500		21.000	
Veterinary para-professionals	82,0	82,0	5.300		434.600	
Support staff	-	-	3.300			
Sub-total Salaries					**984.600**	
Consumable resources / year						
Administration			20%		196.920	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3.600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		240.000	0,36		87.360	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication	-	-				
Consultation (number of 1 day meetings)	-	-				
Kits / reagents / vaccines	-	1			750.000	
Other costs for Vet. laboratories (1)					65.000	
Other costs for Vet. laboratories (2)						
Sub-total Consumable resources					**1.099.280**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***2.370.658***	***860.356***
Total in	***KSH***				***213.359.200***	***77.432.000***

V Strengthening competencies for general management and regulatory services

In this section, reference should be made to the 18 Critical Competency Cards I.2, I.3, I.4, I.5, I.6, I.11, II.3, II.11, II.12, III.1, III.2, III.3, III.4, III.5, III.6, IV.1, IV.2 and IV.3. These cover the following 12 areas:

General organisation of the Veterinary Services :

- Technical independence
- Coordination
- Veterinary practice organisation and policy
- Official delegation

Cross-cutting competencies of the Veterinary Services :

- Initial training
- Continuing education
- Management of operation and resources
- Communication
- Consultation with stakeholders
- Official representation
- Joint programme
- Legislation

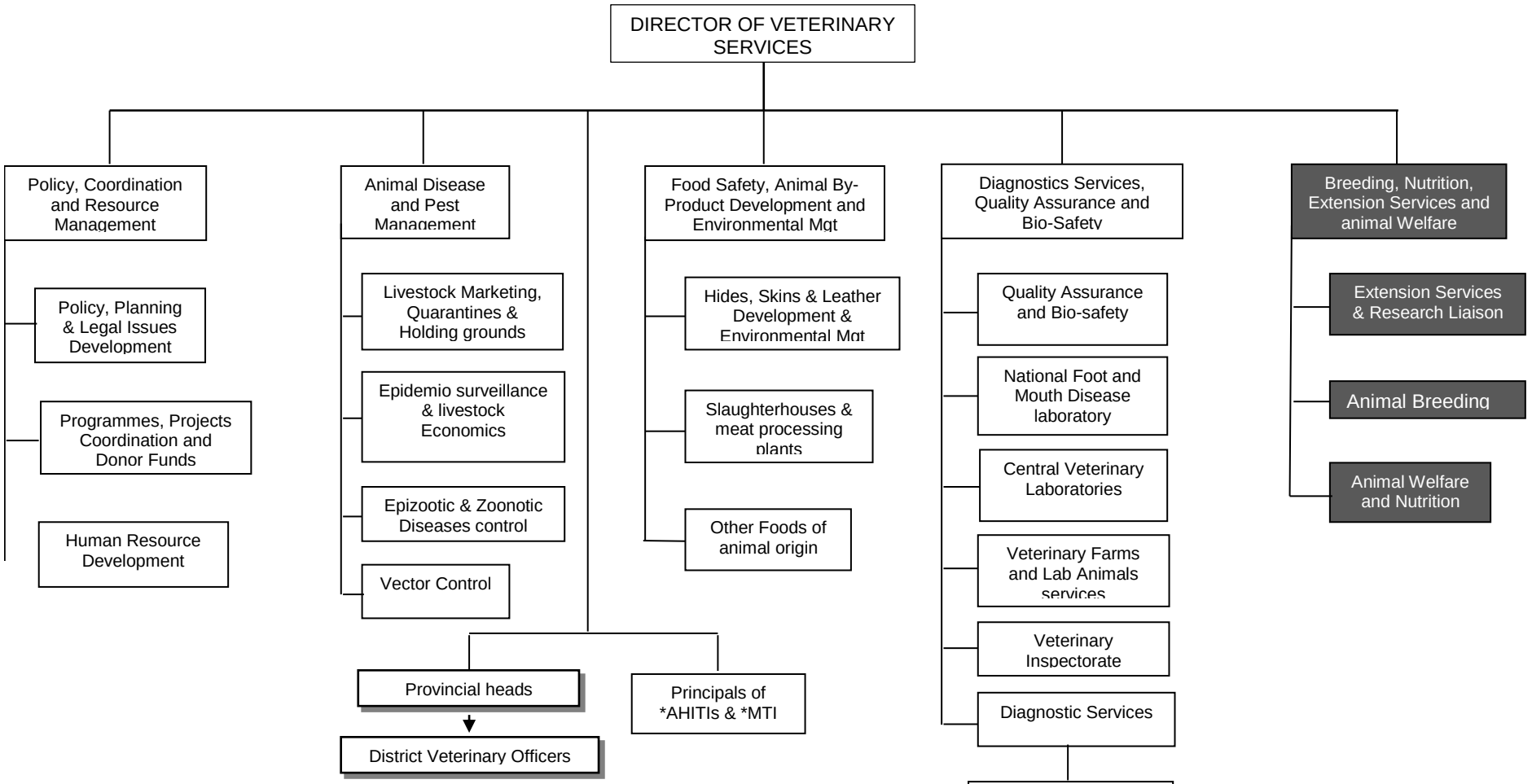
V.1 General organisation of the Veterinary Services

The current general organisation of the Veterinary Services is by all standards comprehensive. With the rare exception of not having a dedicated risk analysis or import/export desk officer/unit, the flow chart of the Department seems to tick all the boxes and requires little or no alteration.

However, the definition and scope of the Veterinary Services, as the OIE understands it, does not usually include such components as artificial insemination and genetic or breed improvement, applied research, animal nutrition, the operation/funding of training centres for animal health assistants or meat inspectors, or the management/operation of government-owned farms/ranches. Most of these aspects are covered under the *Division for Breeding, Nutrition, Extension Services and Animal Welfare* (in greyed boxes on the flowchart on the next page).

Notwithstanding these comments, and for the sake of generating financial estimates which include the broader scope of activities of the Kenya DVS, and are therefore useful for the MoLD, the PVS Gap Analysis model has taken the expenditures/budgets related to these “satellite” operations into account, on a *status quo* basis (no expected changes in the next five years). In the 2010/2011 they accounted for approximately KSH 155 million per annum or USD 1.7 million (4% of the current, overall budget).

ORGANOGRAMME OF THE VS



MTI : Meat Training Institute AHITI : Animal Health & Industry Training

The veterinary field network, as fully addressed under C.C. II.5.A, is based on the current set-up with 284 district offices (DVO) and 8 provincial offices (PVO). Again, these numbers are not based on a needs assessment, but on the political and administrative breakdown of government structures. Allegedly, staff numbers within DVOs, rather than the number of DVOs, reflect the needs in terms of veterinary services.

How these offices stand to survive the on-going constitutional reform and delegation of powers to counties, remains unclear and is not considered in this model. Nevertheless, a simulation, based on 284 district offices and 47 county offices is presented in **appendix 2** (also refer to section V.3. on *Human Resources*).

V.1.A Technical independence

The technical independence of the veterinary authority, *at present,* is deemed satisfactory and this is confirmed by the PVS evaluation mission of March 2011: "*The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations."*

The challenge does not consist in improving this level of advance but ***not*** to decrease it as a result of the on-going institutional reform process in which a number of mandates and authorities are said to be devolved to the new county-administrations. This same principle applies to the critical competencies I.5. (*Stability of structures and sustainability of policies*) and I.6.A. (*Internal coordination and chain of command*).

V.1.B Coordination

Internal coordination

As mentioned in the previous paragraph, the challenge is not to improve the current level of advancement, but to maintain it in the light of the on-going institutional/constitutional reform process.

The current administrative reporting system, deemed too bureaucratic and impossible to apply for policy decisions or auditing purposes, needs streamlining and simplifying. Instances of non-compliance with administrative reporting regulations by district / county / provincial staff should receive due consideration, which is not the case at present.

External coordination.

This aspect will require dramatic improvements if the ambition of achieving level 4 is to be reached by year 5. The good news is that it doesn't require extra-ordinary funding or extra-ordinary efforts as the basis for external coordination and networking is already there, it is just not tangible, i.e. formalised through e.g. joint programmes, memoranda of understanding, joint reporting formats, secondments or other coordination mechanisms. The priority will consist in giving a sound legal (formal) basis to existing opportunistic (informal) coordination with institutional partners such as the Kenya Wildlife Services, Kenya Police, Kenya Customs and Excise, Kenya Immigration, Ministry of Fisheries, Ministry of Health and the National Disaster Operations' Centre.

Some of these aspects are catered for under other relevant critical competencies (e.g. border security and quarantine, or emergency funding).

V.1.C Veterinary practice organisation and policy

This section will deal with the overall operation of the veterinary authority and its relationship with the veterinary statutory body (III.5.). It will deal with issues of professional competencies (I.2.), the stability of structures and the sustainability of

policies (I.5.), risk analysis (II.3.), emerging issues (II.11.) and technical innovation (II.12.).

Table 27. Levels of advancement

Critical competencies	Level of advancement	
	Current	Expected
I.2.A. Professional competencies of veterinarians	4	5
I.2.B. Competencies of veterinary para-professionals	4	5
I.5. Stability of structures and sustainability of policies	3	4
II.3 Risk analysis	2	3
II.11 Emerging issues	1	3
II.12 Technical innovation	3	4
II.5.A. VSB authority	2	5
II.5.B. VSB capacity	2	4
IV.3 International harmonisation	3	4

The main improvements are expected in risk analysis and the management of emerging issues, as well as in the establishment and operation of the *Kenya Veterinary Board.*

The latter will have a pivotal role to play in the improvement of performances in these and other critical competencies. The current veterinary statutory body was established by the 1993 Veterinary Surgeons Act. Cap.366. The KVB registers all veterinarians, however only licenses veterinarians in private practice.

At present, under the current Cap 366, the KVB has no authority over veterinary para-professionals. Hence, a lot is expected from the new Veterinary Surgeons and Veterinary Para-professionals Bill which meets OIE Code requirements as contained in Section 3: Quality of Veterinary Services; article 3.2.12.[23]

Given the expected curtailing of (acquired) rights of non-veterinary professionals and veterinary para-professionals, especially in the handling of veterinary products, should the Bill be approved and enacted, it will not come as a surprise that the approval process at present is far from diligent. Although the Bill is said to be in an advanced stage of approval, it is not excluded that it may be severely altered or rejected altogether.

The proposed action plan is based on the approval and enactment (eventually) of this *Veterinary Surgeons and Veterinary Para-professionals Bill*, without which only few any of the activities can be implemented. Reaching the expected resultsfor the relevant critical competency III.5 will depend to a large extent on the approval of this Bill.

Should the Bill be approved, the Team leader recommends that the KVB –as a symbolic gesture- be installed in independent and neutral premises, away from the current location within the Kabete campus, giving the impression that the KVB is part of the government veterinary services, which it isn't or shouldn't be. The proposed investment budget will enable the DVS to assist in setting up this "new-style" KVB, with the necessary conducive office environment.

Professional competencies of veterinary professionals and veterinary para-professionals are deemed to be of an already very acceptable level and will be further strengthened through updating, international harmonisation and or evaluation. This, to a large extent, will be the task of the "new-style" KVB, which will have to ensure a close relationship with the relevant veterinary educational establishments in Kenya

[23] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)

(universities, MTIs and AHITIs), but also abroad. Please also refer to the next section V.2.

Acquiring a minimum number of CPD points per annum, as discussed in section V.2.B., would be a good start in (softly) encouraging regular updating of skills and knowledge by both private and public veterinary professionals, before moving to somewhat (harder) restrictive measures to ensure that professional standards are maintained or attained. With respect to veterinary para-professionals, the main challenge will consist in achieving a true coverage and registration of all veterinary para-professionals currently operating in Kenya on a public or private/independent basis.

Whether the veterinary authority represented by the *Director of Veterinary Services* and the relevant *Department* (DVS) will indeed remain stable enough to enable long term sustainable policies, as foreseen in the PVS Gap Analysis, will depend on the outcomes of the institutional reform process. Rumours about the expected powers of the to-be-established county authorities and the possible abolishment / merger of the current Ministry of Livestock Development into a broader line Ministry do not point into the right direction. One of the main tasks of the DVS, once the full extent of the new Constitution will have been clarified, will have to be to assess how its core duties can be maintained and its core services delivered within this new Constitutional framework, and without abandoning general principles of good veterinary governance, as laid down in the OIE Code.

To improve performance in terms of risk analysis and the management/monitoring of emerging issues, it is felt that a dedicated *Risk Analysis Unit,* to be established within the Division of *Epidemio Surveillance & Livestock Economics,* would best serve the purpose of these particular "gaps". Given the apparent plethora of staff within this Division, it is also felt that the Unit best be manned by redeployment of existing (epidemiological) staff, rather than by new recruitments. The procurement of an international consultant will assist in rendering this Unit operational and produce the deliverables that will enable the veterinary services to meet the requirements in year 5. In this respect, the Unit should not only focus on traditional risks and commodities such as beef and dairy, but also target no less (from a zoonotic or trade perspective) important animal species, commodities or production systems such as apiculture, wildlife farming and products and emerging diseases from non-traditional farmed species such as rabbits, snails, tortoises etc…

In order to *"…incorporate technical innovations and international standards into selected policies and procedures, in collaboration with stakeholders"*, the DVS will have to identify the relevant policies and procedures to incorporate technical innovations e.g. "digital pen" type mobile technology, "cellphone SMS reporting" and "web based data base animal resource management"; will have to participate in the *Livestock Disease Surveillance and Reporting Working Group* [LSRWG] activities, piloting a pilot *livestock disease surveillance, e-reporting and information management* [LSRIM] programme (see CC II.5 A), involve the relevant stakeholders and only implement (on a regional or national scale) those technical innovations where evaluations indicated usefulness, based on cost-benefit analysis, and appropriateness. The Team felt that this type of operation best be handled (coordinated) within the Division of *Epidemio Surveillance & Livestock Economics.*

V.1.D Official delegation

Official delegation of powers from the public veterinary authority to private operators, i.e. private veterinarians, is still embryonic, except in some specific sectors, as observed by the PVS evaluation of March 2011: *"The Team confirms the level of advancement of the 2007 OIE-PVS; all ante and post-mortem meat inspections are the sole responsibility of the veterinary services and [there is] no delegation to the*

private veterinary sector. The MoU between the DVS and KVA enables the DVS to delegate the routine vaccinations of livestock to the KVA members. (…) Activities currently being delegated are directed to undertake specific actions or short term plans (i.e. vaccination campaigns) but there are no formal procedures for permanent delegation."

The target is to increase the current level of advancement by broadening the scope and number of delegated activities, and reviewing the outcomes on a regular basis. The team encourages the veterinary authority to consider meat inspection, the dairy and the poultry sectors as possible avenues for extended delegation of powers to the private sector.

V.2 Cross-cutting competencies of the VS

V.2.A Initial training

Initial training relates in 90% of cases to the delivery of veterinary professionals from the (public) University of Nairobi and of veterinary para-professionals from either the (public) AHITIs or the MTI. Looking at the plethora of staff within government service, there seems to be no need to increase the output of any of these institutions. In terms of quality however, there seems to be challenges at the horizon, i.e. the establishment and multiplication of private veterinary educational establishments (VEE). A phenomenon observed in numerous (developing and developed) countries, this 'privatisation' of education systems requires, as far as the veterinary profession is concerned, an accreditation system for/of which the veterinary statutory body is the custodian. Hence, the KVB, especially when the new Veterinary Surgeons and Veterinary Para-professionals Bill will have been approved, will be expected to :

- Develop and implement an evaluation programme for veterinary professionals and paraprofessionals under their jurisdiction
- Strengthen collaboration with the respective veterinary educational establishments in Kenya, subject to legal provisions, regarding uniform training standards and general curriculum development, and in the case of veterinary professionals, required day-1-competencies.

V.2.B Continuing education

Continuing education is going to be pivotal in achieving a large number of targets as it was withheld as the mechanism of choice to increase capacity by current and future staff to address the weaknesses observed in the previous PVS report. Institutionally, this continuing education system, or *continuous professional development* (CPD) programme, is largely unavailable at present and needs to be developed, not only by the veterinary authority (DVS), but also by the veterinary statutory body (KVB) and the veterinary association (KVA) if one wishes to ensure that within year 5: *"The VS have access to CE that is reviewed annually and updated as necessary, and it is implemented for all categories of the relevant personnel.".* Continuing education efforts will be required on:

- Quarantine and border security (General refresher training): 2 days / year / staff;
- Animal identification and movement control (Implementation of the DFZ): 2 days / 2 years for 300 veterinarians and 600 veterinary para-professionals;
- ID and traceability of animal products (Traceability of milk, meat and honey): 2 days / year for all the staff based at central level;
- Passive epidemiological surveillance (notifiable diseases, procedures to follow in case of suspicion, etc.): 3 days / year for all the technical field network;
- Active epidemiological surveillance (animal health programmes, surveillance

for brucellosis / Bovine Tuberculosis, CBPP, FMD, PPR, RVF, wildlife diseases): 2 days /year for the programme designers based at central level;
- Disease prevention, control and eradication (post-vaccination efficacy evaluations): 2 days / year for the veterinarians in charge of the definition of the disease control programmes;
- Ante and post-mortem inspection at abattoirs (Integrated Disease Reporting System and enactment of legislation in respect of cutting (de-boning), processing and cold store facilities): 2 days / year for the veterinarians based at slaughterhouses level;
- Veterinary laboratory diagnosis (laboratory techniques): 3 days / year for the staff based at CVL level.

The evaluation programme for veterinary professionals and para-professionals mentioned under "initial training" and also under section V.1.C., could be in part based on attaining a threshold level of CPD "points", acquired through KVB accredited CE training sessions.

In this respect, it is very important that the DVS keeps abreast of the on-going activities of the southern African working group of veterinary educational establishments (SADCAVEE), of which the University of Nairobi is part.

V.2.C Management of operation and resources

Major improvements are to be made in terms of management of operations and resources if the overall investment plan is to succeed. The DVS's management capacity at present is at best bureaucratic, if not weak, and requires a comprehensive overhaul. The March 2011 PVS evaluation noted that : *"…financial resources are limited, but no analysis about the efficiency or efficacy of it utilization was provided to the Team. A routinely and well documented reporting practice between all the organisational levels of the DVS, following a defined chain of command, has been noted. However, the Team has not been informed on any actions pertaining to feedback to the lower levels or any evaluation of the results. All levels of the DVS are highly focused in administrative tasks, which leave little room for direct veterinary professional activities. There is no evidence of actions following the great volume of information obtained from meat inspection and animal disease surveillance. Presently, most of the VS actions are conducted following external initiatives (ie.: KVA, NGOs) and not based on the analysis of the results of previous actions..."*

The often mentioned *"Performance Appraisal System"* (PAS) is implemented at various levels of staff categories within the Public Service of Kenya, but is not targeted towards veterinary performance, but a component of the overall human resource management function of the public Service (GP 247).

The PVS Gap Analysis therefore recommends to strengthen the *"Policy, Coordination and Resource Management Unit"* with necessary administrative and financial capacity, tasked with the following objectives, to be implemented throughout the public veterinary services:

- Describe and detail comprehensive record, documentation and management systems
- Provide SOPs for all relevant systems
- Apply and ensure compliance with governmental financial requirements (treasury instructions and tender requirements)
- Maintain detailed records of operational accounts, district treasury records (monthly financial statements) and disbursements (as provided for in Treasury Instructions)
- Provide training for the implementation at all administrative units (down to

DVO level)
- Ensure the timely maintenance of all infrastructural facilities throughout the VS
- Control physical resources and maintain a regularly updated database of resources
- Provide overall necessary logistical support and skills capacity
- Analyse and improve efficiency and effectiveness

As can be seen from the budget in section V.3., these "central services" already represent a salaries' mass of 206 veterinary professionals, 89 other professionals, 179 veterinary para-professionals and 419 support staff.

The overhaul mentioned above is to be guided by a national management consultancy, the likes of KPMG or PWC, for which USD 40,000 have been earmarked (see section V.4 , first paragraph, on page 61).

This will enable the DVS to improve its current performance from : *"… routinely using records and/or documented procedures in the management of resources and some operations, but these do not provide for adequate management, analysis, control or planning…"* to *: "…having adequate management skills, including the capacity to analyse and improve efficiency and effectiveness…."*.

V.2.D Communication

The communication-capacity of the DVS was rated relatively high by the PVS evaluation in March 2011. The aim is to increase performance to level 5, that is: *"…. that the VS have a well-developed communication plan, and actively and regularly communicate information to stakeholders…."*.

The Communication Unit head is also the OIE focal point for veterinary communication.

What is missing at present is the afore-mentioned communication plan. Indeed, communication is currently mostly donor-driven (project-based) and an overall needs-assessment based communication policy is to be developed. Furthermore, the Communication Unit is manned by veterinary staff only, some of which have arguably been trained in communication techniques.

In addition, institutional communication channels such as a DVS official website and an institutional e-mail domain with dedicated (institutional and personal) e-mail addresses, are missing and will have to be addressed to achieve the above-mentioned level 5 in the course of the next years.

In addition to the recruitment of 2 specialised staff (desk-top publishers or communication experts), procurement of hard and software, and training of existing (veterinary) staff, USD 60,000 per annum has been earmarked for communication activities, including USD 30,000 specifically devoted to communication related to legislation and regulation.

It is the Team's expressed hope that, within the framework of the Communication Plan, funds will be used to establish a **corporate image** of the Department of Veterinary Services that farmers and other stakeholders can identify with. "Branding" of public institutions such as the veterinary services is now commonplace in the developing and developed world and can go a long way in achieving technical results and gaining public support.

V.2.E Consultation with stakeholders

Despite the Team's insistence on the fact that stakeholders were welcome to attend the various thematic meetings, scheduled in the PVS Gap Analysis exercise, no

stakeholders were met (invited) in the course of the mission. Nevertheless, the non-stakeholders, the DVS, aim to increase their level of performance from 4 to 5, i.e. : *"…to actively consult with and solicit feedback from stakeholders regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities…."*.

V.2.F Official representation

Official representation, already regarded as quite satisfactory as the DVS *"…actively participates in the majority of relevant meetings"* (level 3), will be further enhanced by allowing stakeholders, such as the KVB, KVA, the farmers and the industry to get involved, not only by benefiting from comprehensive and timely feedback from meetings and events attended, but also by allowing their representatives to join in official delegations to those meetings and events, such as e.g. the OIE General Sessions and the Conferences of the OIE Regional Commission for Africa.

USD 43,000 per annum are earmarked for attendance at these meetings and events, representing 6 missions by DVS staff along with 6 stakeholders.

V.2.G Joint programmes

In order to attain the level of advancement 3, the DVS will have to enable the training of producers and stakeholders to participate in programmes and advise on needed improvements and participate in early disease detection activities. In essence, the PVS Gap Analysis therefore suggests to:

- Identify joint programmes between VS and producers and other stakeholders
- Design training for joint programmes for producers and other identified stakeholders (KVA etc) in collaboration with producer organizations (e.g Kenya Livestock Breeders Organisation; Kenya Poultry Association etc.) and other stakeholder representatives (KVA etc.)
- Provide training programmes for dedicated joint programmes for the early detection of diseases (e.g awareness and sensitization for specific diseases, as well as e.g focus on antimicrobial and pesticide residues)

V.2.H Legislation

Legislation issues, both in terms of preparation and of enforcement, have been discussed and addressed in numerous critical competency cards, in particular (alphabetically):

- Accreditation / authorisation / delegation
- Food safety at slaughter
- Identification and traceability
- Initial training
- International certification
- International harmonisation
- Veterinary products
- Veterinary Statutory Body

The overall objective for the VS is to: *"…. have the authority and the capability to participate in the preparation of national legislation and regulations with a relevant formal methodology to ensure adequate internal and external quality, involving stakeholder participation in most fields of activity…",* and for : *"…veterinary legislation to be implemented in all domains of veterinary competence and to work with stakeholders to minimise instances of non-compliance."*

Irrespective of where the on-going Constitutional reform process will lead the veterinary services, it is recommended that this same veterinary authority be given the authority and capability to participate in the (future) preparation of national legislation and regulations, adopting a formal methodology which is in line with Kenya Government policies and legal provisions, and ensuring adequate internal and external quality, the latter through stakeholder consultations, amongst others.

Furthermore the veterinary authority will have to truly implement veterinary legislation in all domains of their competence and work actively with stakeholders to enable law enforcement.

Finally, international harmonisation is to improve within a few years, leading to a situation where the veterinary services *"…. are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations".* A lot of work in this respect has already been undertaken within an African Union context, such as e.g. the PAN-SPSO project of AU-IBAR. Unfortunately, these projects come to an end (as it did with PAN-SPSO) and the long-term mind set change that was intended will only become apparent in a few months' or years' time. The Team encourages the DVS to appoint and support OIE subject matter focal points in all 7 disciplines (*animal disease reporting, wildlife, aquatic animals, animal welfare, veterinary products, animal production food safety* and *veterinary communication*) and to participate actively in international (WTO, Codex, OIE), regional (AU) and REC-based (COMESA, EAC) organisations. The latter, in the Team's opinion, requires the most attention.

The PVS Gap Analysis framework recommends the following to achieve this:

- Establish and operationalize the planned *"Policy, Planning and Legal Development Unit"* (PPLDU).
- Organise consultation meetings with stakeholders (see CC III.2) and enlist stakeholders' participation to minimize non-compliance by public awareness campaigns.
- Establish a compendium of veterinary legislation for all VS domains
- Review and update existing legislation (see CC.IV.1)
- Detail the required actions to be undertaken through standardized SOP´s (down to DVO level)
- Organise training for law enforcement and prosecution procedures for DVO´s
- Collaborate with county / district government law enforcement institutions
- Take documented legal actions by initiating prosecutions and recording prosecution results

The OIE currently provides training and support on the development of veterinary legislation and it is recommended that the Kenya DVS take full advantage of this opportunity in the near future.

V.3 Human resources

The critical competency *Management of resources and operations* (I.11), lists all central and provincial staff resources. There are currently 8 provincial offices. The central services, including the Director of Veterinary Services and his supporting staff (in essence the *Policy, Coordination and Resource Management Division*), and the provincial staff represent a contingent of no less than 206 veterinarians, 89 non veterinary university-level graduates, 179 veterinary para-professionals and technicians and 419 support staff.

These figures exclude the staff of the various technical Divisions, accounted for elsewhere, usually under the relevant technical critical competencies.

In addition, the communication unit (under the *Extension Services & Research Liaison Section*), currently understaffed, under-qualified and under-funded, will account for 6 veterinarians, 2 communication experts, 1 technician and 3 support staff.

Finally, it is suggested to formalise the secondment of one (1) veterinarian to the Ministry of Disaster Management, in order to ensure that animal health disasters are eligible for emergency funding and can be mobilised in time to be useful. This human resource is listed under critical competency I.6. (external coordination).

The 8 provincial veterinary offices (PVOs) account for 45 veterinarians (21%), 23 veterinary para-professionals (13%) and 95 support staff (22%). The prospects for the maintenance of these offices under the new constitution are about as clear as mud and conflicting statements were made in the press during the stay of the Team.

The report presents in **appendix 2** a simulation of what a financial status quo would signify if it were to cover 47 county offices instead of 8 provinces. The option that provincial offices would continue to operate in addition to the creation of county office was not withheld as a realistic option by the Team.

V.4 Physical resources

Physical resources include (mainly) the renovation of 1,400 m² of central services in Kabete, along with the procurement of managerial consulting services at national level, to assist with the development and implementation of an administrative and financial management system, with due attention to the recurrent problem of maintenance (vehicles, premises, office supplies, cleaning products etc…). It is believed that local branches of companies like KPMG or PWC could be appropriate to assist in this endeavour.

Specialised international expertise (2 months) is also foreseen to strengthen the methodology to conduct risk analysis and related risk communication.

USD 30,000 are earmarked annually to conduct communication activities (for the benefit of the veterinary services in general, in addition to project-related communication activities).

V.5 Financial resources

The financial resources are calculated through 21 *Cost Estimation Cards,* covering the 18 critical competencies and 12 technical areas. Given the complexity and the variability of the competencies, the financial estimates are presented for the 21 *Cost Estimation Cards* in table 28. This table demonstrates that the bulk of the USD 36.5 million required over the 5 year span are listed under *Management of resources and operations* (I.11). More specifically, out of the USD 6.9 million, around USD 5.6 million are earmarked for the payment of salaries for the 206 veterinarians, 89 non veterinary university-level graduates, 179 veterinary para-professionals and technicians and 419 support staff (see above).

Table 28. Overview of cost-estimates for the various critical competencies, clustered under the "management" pillar

	CC	Cross-cutting	USD Annual budget (a)	Investment budget (b)	USD Total 5 year budget (=5a+b)
Professional competencies of veterinarians	I.2.A	●			
Professional competencies of vet. para-prof.	I.2.B	●			
Continuing education (CPD)	I.3				
Technical independence	I.4				
Stability of structures, sustainability of policies	I.5				
Internal coordination, chain of command	I.6.A				
External coordination	I.6.B		13,000		65,000
Management of resources and operations	I.11	●	6,920,996	191,078	34,796,058
Risk analysis	II.3			62,400	62,400
Emerging issues	II.11				
Technical innovation	II.12				
Communications	III.1	●	163,040	20,400	835,600
Consultation with stakeholders	III.2	●			
Official representation	III.3	●			
Accreditation, authorisation, delegation	III.4				
Veterinary Statutory Body : authority	III.5.A				
Veterinary Statutory Body : capacity	III.5.B		22,669	9,680	123,025
Participation of stakeholders in joint programmes	III.6	●		4,500	4,500
Preparation of legislation and regulations	IV.1	●	13,800		69,000
Implementation of legislation and regulations	IV.2	●	112,973		564,865
International harmonisation	IV.3				
Total			**7,246,478**	**288,058**	**36,520,448**

Table 29. Sub-Total for strengthening general management and regulatory services

SUB-TOTAL MANAGEMENT OF VETERINARY SERVICES						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		1 490				
Existing building to be maintained (m²)	-	-	23	1		
Existing building to be renovated (m²)	-	1 490	215	10	32 052	160 258
Building to be built (m²)		-	463	20		
Transport						
Number of motorbikes	-	-	4 000	3		
Number of cars	-	-	25 000	8		
Number of 4x4 vehicles	-	-	40 000	6		
	-	-				
	-	-				
Telecommunication equipment set	-	3	200	3	200	
Office equipment set	-	7	1 000	3	2 333	
Other specific equipment						
Other equipment for management of VS (1)					5 000	
Other equipment for management of VS (2)						
Sub-total Material investments					**39 585**	**160 258**
Non material expenditure						
Training						
Initial training						
Specialised training (man-months / 5 years)	-	6,0	3 400			20 400
Continuing education (man-days / year)	-	284,0	127		35 973	
National expertise (days/5 years)		100,0	450			45 000
International expertise (weeks/5 years)		8,0	7 800			62 400
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**35 973**	**127 800**
Salaries / year						
Veterinarians	-	214,0	11 500		2 461 000	
Other university degree	-	91,0	10 500		955 500	
Veterinary para-professionals	-	180,0	5 300		954 000	
Support staff	-	422,0	3 300		1 392 600	
Sub-total Salaries					**5 763 100**	
Consumable resources / year						
Administration			20%		1 152 620	
Travel allowances						
staff within the country (man-days) / year	-	1 200	90		108 000	
drivers within the country (man-days) / year	-	600	35		21 000	
staff abroad (man-weeks) / year	-	12	3 600		43 200	
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication	-	2			60 000	
Consultation (number of 1 day meetings)	-	47			47 000	
Kits / reagents / vaccines	-	-				
Other costs for VS management (1)					20 000	
Other costs for VS management (2)						
Sub-total Consumable resources					**1 451 820**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***7 290 478***	***288 058***
Total in	***KSH***				***656 143 040***	***25 925 200***

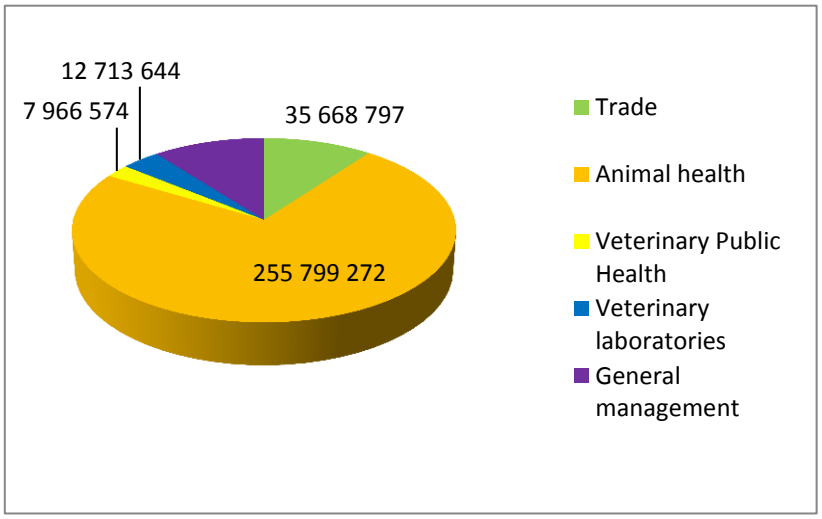
VI Global budget analysis

The total financial requirements for a five-year long investment programme for the Kenya veterinary services is estimated at almost USD 350 million, constituted of a once-off capital investment budget of USD 8.6 million and 5 consecutive annual budgets of USD 68 million. In KSH, this represents a total amount of KSH 31,5 billion, of which 0.775 billion are earmarked for capital investments.

Most of the funds required are earmarked for the "animal health" pillar, but as highlighted in the relevant sections, some of the expenditures under this pillar cover the field veterinary network at district level and hence, also trade and veterinary public health related human, physical and financial resources. The "Animal Health" pillar represents an amount of USD 256 million or KSH 23 billion or 73% of the overall budget.

Table 30. Total budget over 5 years, including the exceptional (investment) budget.

TOTAL BUDGET (5 annual budgets + exceptional budget) PER PILLAR						
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	General management	**Total**
Material investments						
Sub-total Material investments	2 240 920	31 590 406	749 600	2006444	358 182	36 945 553
%	*6%*	*86%*	*2%*	*5%*	*1%*	*100%*
Non material expenditure						
Sub-total non material expenditure	1 144 467	4 983 467	120 133	287800	307 667	6 843 533
%	*17%*	*73%*	*2%*	*4%*	*4%*	*100%*
Salaries / year						
Sub-total salaries	12 403 500	97 393 000	4 819 500	4923000	28 815 500	148 354 500
%	*8%*	*66%*	*3%*	*3%*	*19%*	*100%*
Consumable resources / year						
Sub-total Consumable resources	19 879 910	121 832 400	2 277 340	5496400	7 259 100	156 745 150
%	*13%*	*78%*	*1%*	*4%*	*5%*	*100%*
Delegated activities / year						
Sub-total Delegated activities						
%						
Total in USD	**35 668 797**	**255 799 272**	**7 966 574**	**12 713 644**	**36 740 449**	**348 888 736**
%	*10%*	*73%*	*2%*	*4%*	*11%*	*100%*
Total in KSH	**3 210 191 700**	**23 021 934 500**	**716 991 640**	**1 144 228 000**	**3 306 640 400**	**31 399 986 240**



Graph 1. Pie chart representing the absolute contribution of the 5 pillars to the overall budget of USD 352 million.

VI.1 Capital investment

The capital investments are fairly limited and represent a mere USD 8.6 million or 2% of the overall budget. Most of the expenditures are foreseen for the rehabilitation/renovation of 48,000 m² of existing premises (buildings, holding pens, laboratories, etc.…) for an amount of USD 5.1 million. Another important target of capital investments is the procurement of around 50 out of the estimated 315 four-wheel drive vehicles, for an amount of USD 2.1 million, the remainder of which (approximately 250 vehicles or 1/6th) are covered under the recurrent budget at USD 2.1 million per annum.

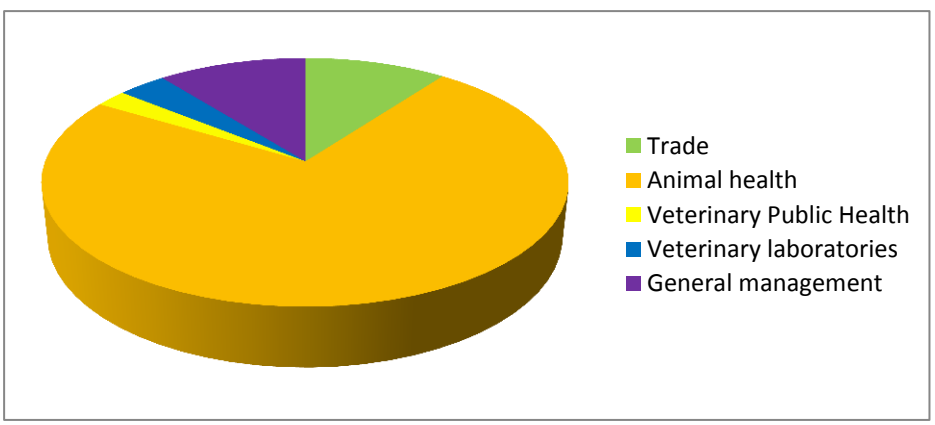
It has to be noted that some vehicles have been budgeted as incentive for specific positions (slaughterhouses, BIPs, etc.). Within the PVS Gap Analysis tool, this leads to the automatic calculation of a budget of USD 8.8 million of transport fees (13% of the annual budget). A thorough cost – benefit analysis could be done in order to identify the most efficient way to manage the physical resources of the VS.

VI.2 Operational funding

The operational (recurrent) funding, as generated by the PVS Gap Analysis model, amounts to USD 68 million per annum or KSH 6.1 billion per annum. Compared to the current annual recurrent budget, this signifies a considerable increase from USD 24 to USD 69 million or 190 % over five years, or 23 % per annum.

Table 31. Annual recurrent budget, generated by the PVS Gap Analysis, per pillar.

TOTAL BUDGET (5 annual budgets + exceptional budget) PER PILLAR						
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	General management	**Total**
Material investments						
Sub-total Material investments	2 240 920	31 590 406	749 600	2006444	358 182	36 945 553
%	*6%*	*86%*	*2%*	*5%*	*1%*	*100%*
Non material expenditure						
Sub-total non material expenditure	1 144 467	4 983 467	120 133	287800	307 667	6 843 533
%	*17%*	*73%*	*2%*	*4%*	*4%*	*100%*
Salaries / year						
Sub-total salaries	12 403 500	97 393 000	4 819 500	4923000	28 815 500	148 354 500
%	*8%*	*66%*	*3%*	*3%*	*19%*	*100%*
Consumable resources / year						
Sub-total Consumable resources	19 879 910	121 832 400	2 277 340	5496400	7 259 100	156 745 150
%	*13%*	*78%*	*1%*	*4%*	*5%*	*100%*
Delegated activities / year						
Sub-total Delegated activities						
%						
Total in USD	**35 668 797**	**255 799 272**	**7 966 574**	**12 713 644**	**36 740 449**	**348 888 736**
%	*10%*	*73%*	*2%*	*4%*	*11%*	*100%*
Total in KSH	**3 210 191 700**	**23 021 934 500**	**716 991 640**	**1 144 228 000**	**3 306 640 400**	**31 399 986 240**



Graph 2. Pie chart representing the relative contribution of the 5 pillars to the annual budget of USD 69 million.

However when including the present *development budget* which is *de facto* a recurrent budget under the Kenyan financing system, the genuine increase is from USD 43 to USD 69 million or 60 % over five years, or 10 % per annum.

Again, most of the expenditures are foreseen for the "Animal Health" pillar (73%). However, this has to be related to the important share of the budget devoted to consumables (small equipment for the Field Veterinary Posts and vaccines), which represents USD 31.5 (45%) million.

"Trade" and "General Management" account for 10 and 11% respectively, while "Veterinary Public Health" and "Veterinary Laboratories" account for 2% and 4% respectively.

VI.3 Emergency funding

As concluded by the two consecutive PVS evaluations of 2007 and 2011, *"…the DVS currently does not have contingency funds for emergency situations. In case of emergencies the department should apply to the Government Treasury for funds for response. The KEVEVAPI unit manages and funds an emergency stock of (…) vaccines…"*[24].

As part of the strengthening of external coordination, it is recommended to formulate formal external coordination procedures and agreements with (amongst others) the National Disaster Operational Centre. It is further recommended to formalise the secondment of one (1) veterinarian to the Ministry of Disaster Management, in order to ensure that animal health disasters are eligible for emergency funding and can be mobilised in time to be useful. This human resource is also listed under critical competency I.6. (external coordination).

No in-house funds (within the DVS or the MoLD) are foreseen or deemed useful at this stage.

VI.4 Profitability and sustainability

There is no doubt that the current level of funding of the Veterinary Services, while inadequate in numerous fields, forms a sound and sustainable basis for the further development of the Veterinary Services. Donor funded activities are relatively modest in comparison to the activities, funded through the Kenyan recurrent and development budgets. The existence of a dedicated Ministry of Livestock Development reflects the commitment of past and current Governments to support this sector, which not only represents an important economic activity, but is at the heart of social, religious and cultural life in Kenya. In this sense, and within a democratic framework, it will always represent a key feature of (rural) development.

The main challenge today resides in the disproportionate weight of salary costs, which are not commensurate with operational costs. The present investment plan proposes to address this problem within certain politically acceptable boundaries, whist simultaneously boosting the financial resources of the veterinary services to meet international standards.

VI.4.A Analysis related to national economy and budget

A traditionally livestock – oriented society and economy since ancient times, the livestock sector today, despite a boost in the secondary (manufacturing) and tertiary (services) sectors, remains important and represents 4% of the national GDP.

The proposal presented in this report will increase the relative annual cost of the Veterinary Services, compared to the value of livestock production from 3% to 5% and will increase the annual cost of the Veterinary Services per veterinary livestock unit (VLU, or say : one head of cattle) from USD 1.8 to 2.9.

[24] Schneider H., D'Alessio F. & Maillard A. (2011) OIE PVS Evaluation Report - Kenya (March 2011)

Assuming a constant Ministerial budget over the next 5 years (which is unlikely), the ratio of the Veterinary Services budget, compared to the Ministerial budget would increase from 13% to 20%.

Table 32. Comparison between current annual and future estimated annual budget.

	Current budget of the VS (ref. currency)	*Annual budget of the Gap analysis (ref. currency)*
Annual amount	43 348 822	68 056 825
Budget of VS / Livestock GDP	3,12%	5%
Budget of VS / VLU	1,82	2,86
Budget of VS / Ministry of Agriculture (current)	12,86%	20%
Budget of VS / National budget (current)		

Livestock GDP / National GDP	4%

VI.4.B Analysis of human and physical resources requirements

Despite the Team's expressed approach to re-allocate existing human resources, rather than to foresee new employment, the overall net result of the PVS Gap Analysis represents an increase in the overall staff requirement, most of all non-veterinary degree holders, and least of all in terms of veterinary graduates. This is illustrative of a past sustained policy to favour graduate veterinarians in all positions, even those for which more and better qualified profiles were available (such as e.g. animal scientists, social scientists, biologists, economists, etc…).

The present proposal represents a shift to a more diversified staffing profile.

The increase in human resources is as follows:

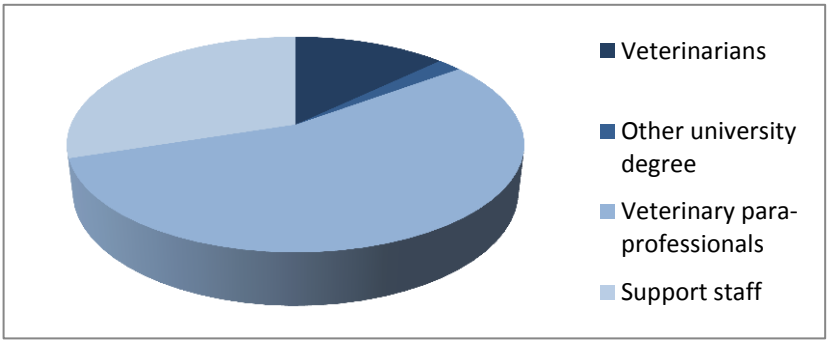
- Veterinary degree holders: from 592 to 682 in year 5 (+ 15 %)
- Non-veterinary degree holders: 28 to 108 in year 5 (+ 280 %)
- Technicians and veterinary para-professionals : from 2,465 to 2,917 in year 5 (+ 18 %)
- Support staff: from 957 to 1,586 in year 5 (+ 65 %)

Also in terms of geographical distribution, it is recommended to foresee a horizontal shift in staffing as it would seem (from the simulations) that some provinces are overstaffed (when compared to the livestock numbers) and others are understaffed.

- North East province : 200,000 VLU per DVO (understaffed)
- Rift Valley province : 150,000 VLU per DVO (understaffed)
- Nairobi province: 9,000 VLU per DVO (over-staffed)

Table 33. Human resources requirements, generated by the PVS Gap Analysis, per pillar

Total estimation of the staffing required for the Veterinary Services							
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	Delegated activities	General management	**Total**
Veterinarians	82	308	32	46		214	682
Other university degree	5	7	3	2		91	108
Veterinary para-professionals	274	2 277	104	82		180	2 917
Support staff	10	1 150	4			422	1 586



Graph 3. Pie chart representing the relative contribution of the various professional categories to the staff complement.

Table 34. Physical resources requirements, generated by the PVS Gap Analysis, per pillar

Total estimation of physical resources required for the Veterinary Services						
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	General management	**Total**
Buildings (m²)	**1 980**	**37 280**	**340**	**7 000**	**1 490**	**48 090**
Existing building to be maintained (m²)	-	100				100
Existing building to be renovated (m²)	1 980	37 180	10	7000	1 490	47 660
Building to be built (m²)	-		330			330
Transport						
Number of motorbikes	34	1 136	8			1 178
Number of cars	12		15			27
Number of 4x4 vehicles	10	293	2	10		315
	-					
	-					
Telecommunication equipment set	80	2 850	39	7	3	2 979
Office equipment set	67	1 714	44	14	7	1 846
Other specific equipment in ref. currency	94 000	53 600		15 000	5 000	167 600

The “other specific equipment requirements in the above table are :

- For trade : processing channels for animal (products) at quarantine/border inspection posts, an incinerator for the Mombasa port and the equipment required for the livestock identification and traceability system (LITS).
- For animal health: the equipment required for the integrated animal disease reporting system, cold chain equipment and GIS software.
- For veterinary laboratories: cold chain equipment for the 6 major border inspection posts.
- For general management: communication equipment (graphic design).

Table 35. Total budget over 5 years, including the exceptional (investment) budget.

TOTAL BUDGET									
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**	**Total budget for 5 years**	**% annual budget**	**% total budget for 5 years**
Material investments									
Buildings (m²)	-	48 090							
Existing building to be maintained (m²)	-	100	23	1	2 315		11 574	0%	
Existing building to be renovated (m²)	-	47 660	215	10	1 025 220	5 126 098	10 252 196	2%	60%
Building to be built (m²)		330	463	20	7 639	114 587	152 783	0%	1%
Transport									
Number of motorbikes	1	1 178	4 000	3	1 570 667		7 853 333	2%	
Number of cars	-	27	25 000	8	84 375	253 125	675 000	0%	3%
Number of 4x4 vehicles	-	315	40 000	6	2 100 000	2 100 000	12 600 000	3%	24%
	-	-							
	-	-							
Telecommunication equipment set	1	2 979	200	3	198 600		993 000	0%	
Office equipment set	1	1 846	1 000	3	615 333		3 076 667	1%	
Other specific equipment									
Other equipment					97 000		485 000	0%	
Other equipment					70 600	493 000	846 000	0%	6%
Sub-total Material investments					**5 771 749**	**8 086 810**	**36 945 553**	**8%**	**94%**
Non material expenditure									
Training									
Initial training									
Specialised training (man-months / 5 years)	-	81,0	3 400			275 400	275 400		3%
Continuing education (man-days / year)	-	9 988,0	127		1 265 147		6 325 733	2%	
National expertise (days/5 years)		200,0	450			90 000	90 000		1%
International expertise (weeks/5 years)		18,0	7 800			140 400	140 400		2%
Special funds						12 000	12 000		0%
Sub-total non material expenditure					**1 265 147**	**517 800**	**6 843 533**	**2%**	**6%**
Salaries / year									
Veterinarians	64,0	682,0	11 500		7 843 000		39 215 000	12%	
Other university degree	2,0	108,0	10 500		1 134 000		5 670 000	2%	
Veterinary para-professionals	118,0	2 917,0	5 300		15 460 100		77 300 500	23%	
Support staff	3,0	1 586,0	3 300		5 233 800		26 169 000	8%	
Sub-total Salaries					**29 670 900**		**148 354 500**	44%	
Consumable resources / year									
Administration			20%		5 934 180		29 670 900	9%	
Travel allowances									
staff within the country (man-days) / year	-	1 810	90		162 900		814 500	0%	
drivers within the country (man-days) / year	-	1 090	35		38 150		190 750	0%	
staff abroad (man-weeks) / year	-	14	3 600		50 400		252 000	0%	
Transport fees									
Km or miles Motorbikes / year	48 000	56 544 000	0,10		5 880 576		29 402 880	9%	
Km or miles cars / year		648 000	0,21		134 784		673 920	0%	
Km or miles 4x4 vehicle / year		7 560 000	0,36		2 751 840		13 759 200	4%	
km or miles / year									
km or miles / year									
Specific costs									
Targeted specific communication	-	2			60 000		300 000	0%	
Consultation (number of 1 day meetings)	-	179			179 000		895 000	0%	
Kits / reagents / vaccines	-	1			12 350 000		61 750 000	18%	
Other costs					3 807 200		19 036 000	6%	
Other costs									
Sub-total Consumable resources					**31 349 030**		**156 745 150**	46%	
Delegated activities / year									
Specific delegated activities									
Other activities or global estimation									
Sub-total Delegated activities									
Total in	***USD***				***68 056 825***	***8 604 610***	***348 888 736***	***100%***	***100%***
Total in	***KSH***				***6 125 114 272***	***774 414 880***			

CONCLUSION

A PVS Gap Analysis was undertaken in July 2011, primarily based on the outcomes of a PVS follow-up evaluation conducted in March 2011 and to a lesser extent, based on the first PVS evaluation conducted in 2007.

Given the fact that the country is going through a profound political and institutional reform process which is to date, insufficiently defined in its operational details, one could argue that this PVS Gap Analysis exercise came too early; indeed the consequences of this post-conflict institutional reform process for the veterinary services of Kenya, and indeed – the Ministry of Livestock Development in general - is at present unpredictable.

In addition, and possibly concurrent with the abovementioned reform process, the abolishment of a staff recruitment freeze as part of a strict structural adjustment plan, has led to a proliferation of staff in government services, some say, with the aim to balance ethnic representation in government services. In the case of the veterinary services, this strengthening (in staff numbers) impacts on the prospects for delegation of tasks from the public veterinary services to the private sector in the next 5 years.

The proposed PVS Gap Analysis based investment programme:

- takes stock of these situations and policies and builds on the existing staff structure and VS mandates, i.e. at three levels : national, province and district;
- aims to operationalize much of the veterinary services' components, which are well-staffed, but underfunded and poorly trained and therefore do not perform to satisfaction;
- takes cognisance of the proposed deployment of disease-free zones for bovine diseases (FMD and CBPP) and suggests to provide specialised consultancies to assist in these matters.

Given the lack of formal disease control programmes, strategies and policies, the proposed PVS Gap Analysis based investment programme is based on assumptions about the possible technical orientations towards the main priority diseases; any planning undertaken under this or other programmes should be preceded by the development of disease control strategies, with identifiable targets and realistic outcomes.

As far as the identification and traceability system (zoning), active surveillance and risk management, as well as the investments in laboratory services are concerned, the Team recommends further advisory services from recognized international or regional experts. For the latter, a PVS-based specific laboratory assessment mission is recommended.

Existing working agreements and collaborations with institutional stakeholders and the private sector need to be formalised (MoU). This applies to the MoH, MoF, KWS, but in particular to the development of the very important dairy sector, which is insufficiently understood and supported by the DVS and its decentralised DVOs.

The budget for the next five years is estimated at USD 349 million or KSH 31.5 billion, and is constituted of 5 annual budgets of USD 68 million each and one investment budget of USD 8.6 million, arguably to be mobilised in year 1 of the programme.

The current funding arrangement consists of an annual recurrent budget and a "development budget" which is *de facto* to be regarded as another recurrent budget as it covers quite a number of salary and operational expenditures, allocated through recurrent programmes, such as the funding of the AHITIs, the MTI's, the Central Veterinary Laboratory (CVL), the experimental farms, the subsidies to the KVB, etc…

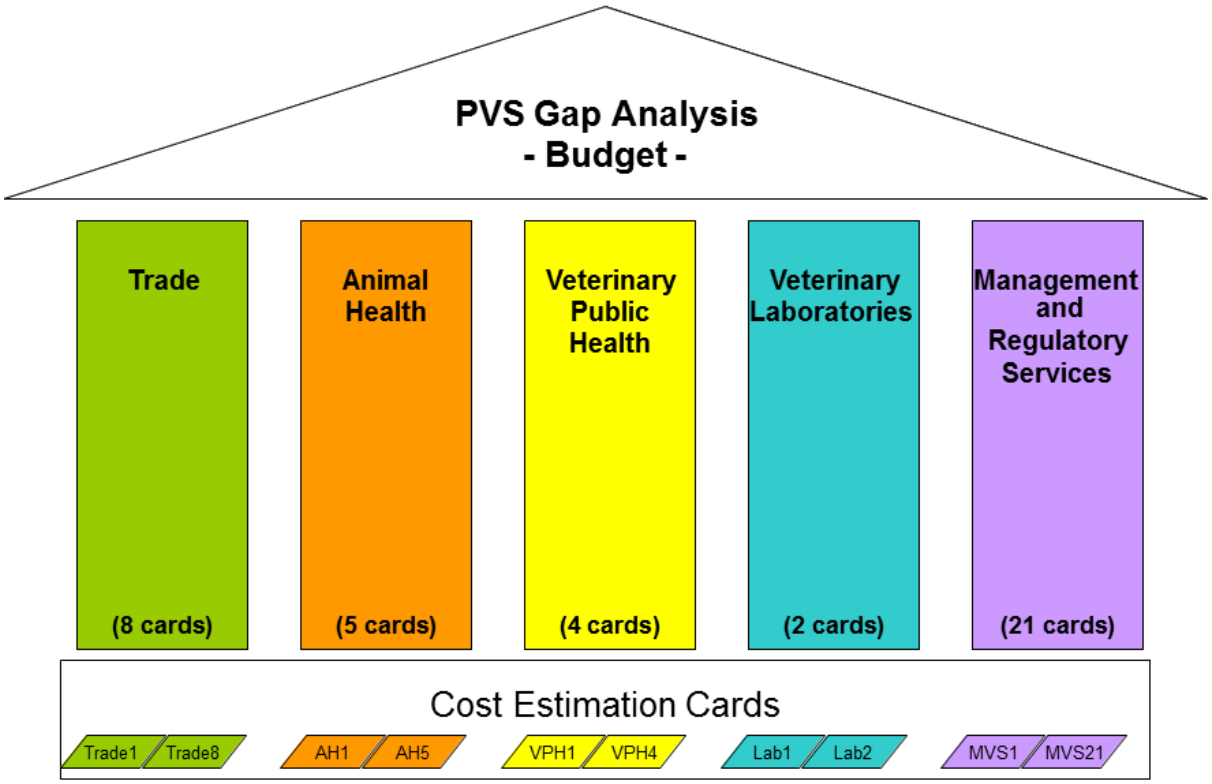
When comparing the current recurrent budget and the development budget with the projected recurrent budget by 2015, the budget increases from USD 43 to USD 69 million or 60 % over five years, or 10 % per annum.

The funding gap over the five year period, as compared to a status quo situation, is therefore USD 137 million, or approximately USD 26 million per annum. This target could be met in part by the Government of Kenya (as part of the funding of its decentralisation process) and by the international donor community. For the latter to materialise, the Team recommends that –subject to formal endorsement of the PVS Pathway Follow-Up report and the PVS Gap Analysis reports by the MoLD- a donor round table be organised in 2012, with the support of the OIE Sub-Regional Representation for Eastern Africa, also based in Nairobi.

In conclusion, only time will tell whether this exercise has been useful for the veterinary services as they exist today or whether the exercise will have to be repeated (shortly) to take account of the devolution of responsibilities and duties to the counties. Whatever the case may be, the Team acknowledges the active participation of central and provincial staff in this exercise and believes that its outcomes are fully understood and supported by the veterinary administration. It nevertheless regrets the limited participation of private stakeholders in this exercise.

APPENDICES

Appendix 1: Critical Competency Cards and corresponding Cost Estimation Cards (listed according to the pillars)[25]



[25] Only *Cost Estimation Cards* containing costs were included in the report

Trade

Trade 1 - II.4. Quarantine and border security

1. Specific objective (Critical Competency)

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

2. Result (Expected level of advancement)

1. The VS cannot apply any type of quarantine or border security procedures for animals or animal products with their neighbouring countries or trading partners.

2. The VS can establish and apply quarantine and border security procedures; however, these are generally based neither on international standards nor on a risk analysis.

3. The VS can establish and apply quarantine and border security procedures based on international standards, but the procedures do not systematically address illegal activities[26] relating to the import of animals and animal products.

4. The VS can establish and apply quarantine and border security procedures which systematically address legal pathways and illegal activities.

5. The VS work with their neighbouring countries and trading partners to establish, apply and audit quarantine and border security procedures which systematically address all risks identified.

3. Description of the activity

Strategy	Strenghen veterinary border security procedures by ensuring adequate staff and resources for Border Inspection Posts (BIPs) according to clear priorities following the effective workload and the type of inspection performed. Priorities are identified as follows: **a) Main priority BIP´s (7) to be updated**: JKIA (2), Mombasa Harbour, Namanga, Lunga-Lunga, Embakasi Inland Container Depot and Wilson Airport; **b) Priority BIP´s (3)** to be establish in addition at Busia, Kisumu Pier, and Isebania staffed by the VS; **c) Not priority BIP´s** will remain solely under the control of Immigration and Customs personnel, with Veterinary services provided by DVO staff upon demand. Taveta, Kopanga, Nyamutiru, Muhuru bay, Usenge, Sio Port, Malaba, Lokichogio, Moyale, Mandera, Shimoni, Lamu, Lwakhakha, Suam, Kisumu Inland Container Depot, El Doret International Airport, Liboi, Kiunga, Oloitoktok, and others. Placing of permanent VS personnel is envisaged for future depending on developing needs. •
Description of the tasks (chronological)	• Organize a training visit to a country with recognized level of veterinary border security procedures (1 staff /1 week) • Develop veterinary border security procedures for all different BIPs categories and issue written SOPs • Strengthen Immigration /Customs Departments information sharing and coordination of activities (no special cost) • Maintain / refurbish office facilities at all designated BIP´s (n=40) (Average 45 m² facilities provided by other Government institutions). • Assign the required staff (see details in Table 14) • Install one incinerator and build a new quarantine station at Mombasa Port. • Establish at the other six priority BIP´s separate processing channels for people, animals and products, including disinfection strategies and holding facilities (USD 50,000)y • Provide resources for on-site complementary diagnosis and sampling. • Develop laboratory support – (see C.C. II.1 for details and budget).
Objectively verifiable indicators	Number of BIP's and facilities available, Veterinary border security procedures, Reports from veterinary border security actions

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	Provide training for existing as well as newly appointed personnel (2 days / staff / year)
Legislation (IV.1, 2, 3)	Develop the necessary legislative framework
Communication (III.1)	Information coordination with Immigration and Customs
Consultation (III.2)	Information coordination with Immigration and Customs

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

Official representation (III.3)	Coordination with Immigration and Customs

TRADE - 1 / CC: II.4. Quarantine and border security						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		1 800				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		1 800	215	10	38 720	193 600
Building to be built (m²)			463	20		
Transport						
Number of motorbikes	1	34	4 000	3	45 333	
Number of cars		2	25 000	8	6 250	18 750
Number of 4x4 vehicles		4	40 000	6	26 667	26 667
Telecommunication equipment set		63	200	3	4 200	
Office equipment set		42	1 000	3	14 000	
Other specific equipment						
Processing channels for animal (products)		6	50 000	5	60 000	
Mombasa incinerator and quarantine		1	420 000	15	28 000	280 000
Sub-total Material investments					**223 170**	**519 017**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)		620,0	127		78 533	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**78 533**	
Salaries / year						
Veterinarians	10,0	64,0	11 500		736 000	
Other university degree			10 500			
Veterinary para-professionals	30,0	246,0	5 300		1 303 800	
Support staff			3 300			
Sub-total Salaries					**2 039 800**	
Consumable resources / year						
Administration			20%		407 960	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year		1	3 600		3 600	
Transport fees						
Km or miles Motorbikes / year	48 000	1 632 000	0,10		169 728	
Km or miles cars / year		48 000	0,21		9 984	
Km or miles 4x4 vehicle / year		96 000	0,36		34 944	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Lab Consumables/Diagnostic kits		6	20 000,00		120 000	
Sub-total Consumable resources					**746 216**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***3 087 719***	***519 017***
Total in	***KSH***				***277 894 740***	***46 711 500***

Trade 2 - II.13. Identification and traceability

II.13.A. Animal identification and movement control

1. Specific objective (Critical Competency)	
The authority and capability of the VS, normally in coordination with stakeholders, to identify animals under their mandate and trace their history, location and distribution for the purpose of animals disease control, food safety, or trade or any other legal requirements under the VS/OIE mandate.	
2. Result (Expected level of advancement)	
1. The VS do not have the authority or the capability to identify animals or control their movements.	
2. The VS can identify some animals and control some movements, using traditional methods and/or actions designed and implemented to deal with a specific problem (e.g. to prevent robbery).	
3. The VS implement procedures for animal identification and movement control for specific animal subpopulations as required for disease control, in accordance with relevant international standards.	
4. The VS implement all relevant animal identification and movement control procedures, in accordance with relevant international standards.	
5. The VS carry out periodic audits of the effectiveness of their identification and movement control system.	
3. Description of the activity	
Strategy	Develop procedures for permanent animal identification for bovines as well as movement control for cloven-hoofed animals in the to-be-established *DFZ (Disease free zone),* including animal ID in specific identified areas (rustling areas) (target 1 000 000 cattle). This Pilot system is to be handled by the Central Information Management Unit
Description of the tasks (chronological)	• Identify the team in charge to manage the programme within the Epidemio surveillance & livestock Economics (Central Information Management Unit - CIMU) (3 Veterinarians + 1 Vet Para-professional) • Organise one-week induction visit to Namibias Livestock identification & Traceability System (LITS) for one staff. • Upgrade the national database of animal ID for RFID • Establish SOP and register for animal brands applied • Procure LITS equipment (USD 30000) and devices (1 000 000 x 3 USD) • Organise 2 months specialised training for 2 veterinarians of the CIMU on livestock identification and traceability • Implement animal ID in other areas identified, such as rustling-prone areas • Implement and monitor the programme (4 central staff + 1 Driver, 5 days, 4 times per year)
Objectively verifiable indicators	Number of animals with permanent identification
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Train the DVO staff in the new LITS (Estimated at 2 days / 2 year for 300 veterinarians + 600 Veterinary para-professionals)
Legislation (IV.1, 2, 3)	Finalize legal instrument for identification and traceability
Communication (III.1)	Provide information materials, video, TV, radio etc. to targeted stakeholder populations (herders)
Consultation (III.2)	Progressively discuss with all relevant stakeholders the implementation of identification systems and movement control in other areas (budgeted together with II.13.B
Official representation (III.3)	
Management of resources and operations (I.11)	

TRADE - 2 / CC: II.13. Identification and traceability
A. Animal identification and movement control

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)		90				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		90	215	10	1 936	9 680
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles		2	40 000	6	13 333	13 333
Telecommunication equipment set		2	200	3	133	
Office equipment set		10	1 000	3	3 333	
Other specific equipment						
LITS equipement		1	30 000	5	6 000	
Sub-total Material investments					**24 736**	**23 013**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		4,0	3 400			13 600
Continuing education (man-days / year)		900,0	127		114 000	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**114 000**	**13 600**
Salaries / year						
Veterinarians		3,0	11 500		34 500	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff		5,0	3 300		16 500	
Sub-total Salaries					**51 000**	
Consumable resources / year						
Administration			20%		10 200	
Travel allowances						
staff within the country (man-days) / year		80	90		7 200	
drivers within the country (man-days) / year		20	35		700	
staff abroad (man-weeks) / year		1	3 600		3 600	
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		48 000	0,36		17 472	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Identification devices		1 000 000	3,00		3 000 000	
Sub-total Consumable resources					**3 039 172**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***3 228 908***	***36 613***
Total in	***KSH***				***290 601 720***	***3 295 200***

Trade 3 - II.13. Identification and traceability

II.13.B. Identification and traceability of products of animal origin

1. Specific objective (Critical Competency)
The authority and capability of the VS, normally in coordination with stakeholders, to identify and trace products of animal origin for the purpose of food safety, animal health or trade.
2. Result (Expected level of advancement)
1. The VS do not have the authority or the capability to identify or trace products of animal origin.
2. The VS can identify and trace some products of animal origin to deal with a specific problem (e.g. products originating from farms affected by a disease outbreak).
3. The VS have implemented procedures to identify and trace some products of animal origin for food safety, animal health or trade purposes, in accordance with relevant international standards.
4. The VS have implemented national programmes enabling them the identification and tracing of all products of animal origin, in accordance with relevant international standards.
5. The VS periodically audit the effectiveness of their identification and traceability procedures.

3. Description of the activity	
Strategy	Identify animal products for future product traceability to the place of origin and initiate initial application of selected products of animal origin for food safety, animal health or trade, in accordance with relevant international standards
Description of the tasks (chronological)	• Initiate meat and dairy product tracing destined for trade (export) • Develop SOPs and registers • Appoint DVS personnel (10 veterinarians + 20 veterinary para-professionals) to visit and inspect dairy (10 units) and other targeted product processors (at abattoir see II.8) • Provide transport resources. • Organised 2 weeks specialised training on auditing techniques for the 10 veterinarians and 20 veterinary para-professionals working in the dairy product processors • Organise one week study tour in New-Zealand for 2 staff at central level
Objectively verifiable indicators	Animal products carrying product tracing data

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	2 days of continuing education for the veterinarians and veterinary para-professionals based at central level
Legislation (IV.1, 2, 3)	Finalize legal instruments for animal product traceability
Communication (III.1)	With private sector as applicable
Consultation (III.2)	8 days per year of consultation with relevant stakeholders
Official representation (III.3)	
Management of resources and operations (I.11)	

TRADE - 3 / CC: II.13. Identification and traceability
B. Identification and traceability of products of animal origin

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars		10	25 000	8	31 250	93 750
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		10	200	3	667	
Office equipment set		10	1 000	3	3 333	
Other specific equipment						
Sub-total Material investments					**35 250**	**93 750**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		15,0	3 400			51 000
Continuing education (man-days / year)		60,0	127		7 600	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off		2	6 000			12 000
Sub-total non material expenditure					**7 600**	**63 000**
Salaries / year						
Veterinarians		10,0	11 500		115 000	
Other university degree			10 500			
Veterinary para-professionals		20,0	5 300		106 000	
Support staff			3 300			
Sub-total Salaries					**221 000**	
Consumable resources / year						
Administration			20%		44 200	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year		240 000	0,21		49 920	
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		8	1 000,00		8 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**102 120**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***365 970***	***156 750***
Total in	***KSH***				***32 937 300***	***14 107 500***

Trade 4 - IV.4. International certification[27]

1. Specific objective (Critical Competency)	
The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations, and international standards.	
2. Result (Expected level of advancement)	
1. The VS have neither the authority nor the capability to certify animals, animal products, services or processes.	
2. The VS have the authority to certify certain animals, animal products, services and processes, but are not always in compliance with the national legislation and regulations and international standards.	
3. The VS develop and carry out certification programmes for certain animals, animal products, services and processes under their mandate in compliance with international standards.	
4. The VS develop and carry out all relevant certification programmes for any animals, animal products, services and processes under their mandate in compliance with international standards.	
5. The VS carry out audits of their certification programmes, in order to maintain national and international confidence in their system.	
3. Description of the activity	
Strategy	Carry out international animal health certification for certain animals and animal products, services and processes under their mandate (including import certification) , in compliance with international standards
Description of the tasks (chronological)	• See actions under related CC.s such as Risk Analysis (Import certification) • Assign one veterinarian at DVS in charge of coordination and supervision of international certification and provide him with required office and communication equipment.
Objectively verifiable indicators	Records of certificates issued
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

[27] Certification procedures should be based on relevant OIE and Codex Alimentarius standards.

TRADE - 4 / CC: IV.4. International certification

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set	1	1	200	3	67	
Office equipment set	1	1	1 000	3	333	
Other specific equipment						
Sub-total Material investments					**400**	
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians	1,0	1,0	11 500		11 500	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries					**11 500**	
Consumable resources / year						
Administration			20%		2 300	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**2 300**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***14 200***	
Total in	***KSH***				***1 278 000***	

Trade 5 - IV.5. Equivalence and other types of sanitary agreements

1. Specific objective (Critical Competency)	
The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.	
2. Result (Expected level of advancement)	
1. The VS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries.	
2. The VS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented.	
3. The VS have implemented equivalence and other types of sanitary agreements with trading partners on selected animals, animal products and processes.	
4. The VS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to animals, animal products and processes under their mandate.	
5. The VS actively work with stakeholders and take account of developments in international standards, in pursuing equivalence and other types of sanitary agreements with trading partners.	
3. Description of the activity	
Strategy	Widen scope of sanitary agreements based on present and anticipated future trade needs, with special attention to ongoing regional integration processes.
Description of the tasks (chronological)	• Identify and record present equivalence and other types of sanitary agreements with trading partners and to which animals / products / processes they apply • Detail applicable risk analyses processes on which these agreements are based • Actively pursue the identification of all matters relevant to animals, animal products and processes under their mandate for the purpose of development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners • Base all decisions on documented, structured and transparent risk analyses procedures • Consult and collaborate with relevant stakeholders • Record and maintain database for all equivalence & sanitary agreements entered into. • Publish in the public domain equivalence and other types of sanitary agreements entered into • Periodically review and update existing equivalence and other types of sanitary agreements
Objectively verifiable indicators	Documented agreements
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	

Trade 6 - IV.6. Transparency

1. Specific objective (Critical Competency)	
The authority and capability of the VS to notify the OIE of their sanitary status and other relevant matters (and to notify the WTO SPS Committee where applicable), in accordance with established procedures.	
2. Result (Expected level of advancement)	
1. The VS do not notify.	
2. The VS occasionally notify.	
3. The VS notify in compliance with the procedures established by these organisations.	
4. The VS regularly inform stakeholders of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, and of changes in the regulations and sanitary status of other countries.	
5. The VS, in cooperation with their stakeholders, carry out audits of their transparency procedures.	
3. Description of the activity	
Strategy	Continue to maintain notification compliance with OIE and other relevant international organisations based on the relevant established procedures.
Description of the tasks (chronological)	• See relevant CC I.6; CC II.3; CC II.5, CC IV.5 • Notify in a timely manner, based on laid-down procedures • Record and maintain database on all notifications • Establish and maintain OIE Focal points
Objectively verifiable indicators	Notifications made and database details
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

Trade 7 - IV.7. Zoning

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

3. Description of the activity	
Strategy	Based on and in terms of Kenya Vision 2030 a certain number of Disease Free Zones should be established for cattle, sheep and goats and their products.
Description of the tasks (chronological)	• For the purpose of the proposed strategy, the engagement of an international *« Animal Disease Free Zone »* expert is considered essential • Review the identified animal sub-populations with distinct health status suitable for zoning. • Implement biosecurity measures that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary • VS collaborate with their stakeholders to define responsibilities and execute actions that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary • Institute all relevant activities in terms of the *Coastal Zoning* Document as drafted as per 26th October 2010 : - Consolidate the Programme Coordination Unit (PCU) - Engage a specialist consultant to assist with the design and implementation of the envisaged zone by working with the PCU. ToR would highlight *inter alia* feasibility, cost effectiveness and trade possibilities in respect to the planned *"Coastal Disease Free Zone"* - Veterinary capacity building activities, specifically training - Stakeholder engagement and consultation - Establish dedicated internal quarantine holding facilities (4) - Design and erected disease control fences based on EIA,s and other stakeholder compliances - Annual evaluation of all measures implemented in the *Coastal DFZ*
Objectively verifiable indicators	Records of consultative and implementation meetings – infrastructure, including fences, erected - evaluation reports

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

TRADE - 7 / CC: IV.7. Zoning						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		90				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		90	215	10	1 936	9 680
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles		4	40 000	6	26 667	26 667
Telecommunication equipment set		4	200	3	267	
Office equipment set		4	1 000	3	1 333	
Other specific equipment						
Sub-total Material investments					**30 203**	**36 347**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		6,0	3 400			20 400
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)		6,0	7 800			46 800
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**67 200**
Salaries / year						
Veterinarians		4,0	11 500		46 000	
Other university degree		5,0	10 500		52 500	
Veterinary para-professionals		8,0	5 300		42 400	
Support staff		5,0	3 300		16 500	
Sub-total Salaries					**157 400**	
Consumable resources / year						
Administration			20%		31 480	
Travel allowances						
staff within the country (man-days) / year		30	90		2 700	
drivers within the country (man-days) / year		30	35		1 050	
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		96 000	0,36		34 944	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		16	1 000,00		16 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**86 174**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***273 777***	***103 547***
Total in	***KSH***				***24 639 900***	***9 319 200***

Trade 8 - IV.8. Compartmentalisation

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

3. Description of the activity	
Strategy	Identify animal sub-populations with potential distinct health status suitable for compartmentalisation. Design and implement the required biosecurity measures aiming at establishing and maintaining disease free compartments.
Description of the tasks (chronological)	• Establish a collaborative forum with relevant stakeholders for selected animals (e.g dairy cattle, stud bovine animals, poultry, pigs, wildlife etc) to establish and maintain disease free compartments • Develop a mechanism to manage the official recognition of compartments based on the provisions of the OIE Code
Objectively verifiable indicators	Register and database on compartments

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Develop the appropriate legislative framework to implement the designed programme
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

Animal Health

AH 1 - II.5. Epidemiological surveillance

II.5.A. Passive epidemiological surveillance

1. Specific objective (Critical Competency)	
The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations under their mandate.	
2. Result (Expected level of advancement)	
1. The VS have no passive surveillance programme.	
2. The VS conduct passive surveillance for some relevant diseases and have the capacity to produce national reports on some diseases.	
3. The VS conduct passive surveillance in compliance with OIE standards for some relevant diseases at the national level through appropriate networks in the field, whereby samples from suspect cases are collected and sent for laboratory diagnosis with evidence of correct results obtained. The VS have a basic national disease reporting system.	
4. The VS conduct passive surveillance and report at the national level in compliance with OIE standards for most relevant diseases. Appropriate field networks are established for the collection of samples and submission for laboratory diagnosis of suspect cases with evidence of correct results obtained. Stakeholders are aware of and comply with their obligation to report the suspicion and occurrence of notifiable diseases to the VS.	
5. The VS regularly report to stakeholders and the international community (where applicable) on the findings of passive surveillance programmes.	
3. Description of the activity	
Strategy	Improve surveillance activity at DVO level by providing the required physical resources and ensure efficiency and capacity of laboratory services. Strengthen network of stakeholders, with particular attention to private veterinary sector, for disease reporting, sample collection and submission.
Description of the tasks (chronological)	• Build passive surveillance capacity at DVO level for relevant diseases and provide dedicated position at DVO level for surveillance activities • Participate in the *Livestock Disease Surveillance and Reporting Working Group* [LSRWG] activities, piloting a *livestock disease surveillance, e-reporting and information management* [LSRIM] programme • Based on results obtained under the LSRIM programme establish an **Integrated Disease Reporting System**, using mobile internet technology, including "digital pen" methodology • Improve stakeholder awareness regarding anticipated surveillance actions and responsibilities • Increase activities in respect to pigs, poultry, aquaculture and honey bee farming • Intensify stakeholder collaboration through information and training seminars • Improve public and private veterinary collaboration, with particular attention to compliance with KVB mandatory regulatory directives • Establish effective channels for laboratory feedback to relevant stakeholders • Provide all necessary sampling and diagnostic equipment to facilitate surveillance activities at local, regional (country) levels. • Address efficacy of timely reporting of surveillance activities at laid down intervals
Objectively verifiable indicators	Animal disease reports / training documents / training session reports and list of participants
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	3 days extension courses on animal diseases for veterinarians and veterinary para-professionals of the field veterinary network
Legislation (IV.1, 2, 3)	
Communication (III.1)	Raise awareness regarding compliance with notifiable disease reporting. Organise extension courses on animal diseases for livestock owners, herders, CBAHWs
Consultation (III.2)	
Official representation (III.3)	

ANIMAL HEALTH - 1 / CC: II.5.A. Passive epidemiological surveillance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		36 920				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		36 920	215	10	794 190	3 970 951
Building to be built (m²)			463	20		
Transport						
Number of motorbikes		1 136	4 000	3	1 514 667	
Number of cars			25 000	8		
Number of 4x4 vehicles		284	40 000	6	1 893 333	1 893 333
Telecommunication equipment set		2 840	200	3	189 333	
Office equipment set		1 704	1 000	3	568 000	
Other specific equipment						
Integrated disease reporting system		1	50 000	5	10 000	
Fridge		284	1 500	10	42 600	213 000
Sub-total Material investments					**5 012 124**	**6 077 284**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)		7 668,0	127		971 280	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**971 280**	
Salaries / year						
Veterinarians		284,0	11 500		3 266 000	
Other university degree			10 500			
Veterinary para-professionals		2 272,0	5 300		12 041 600	
Support staff		1 136,0	3 300		3 748 800	
Sub-total Salaries					**19 056 400**	
Consumable resources / year						
Administration			20%		3 811 280	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year		54 528 000	0,10		5 670 912	
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		6 816 000	0,36		2 481 024	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		100	1 000,00		100 000	
Kits / reagents / vaccines						
Small technical equipement for field vets		1 136	200,00		227 200	
Sub-total Consumable resources					**12 290 416**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***37 330 220***	***6 077 284***
Total in	***KSH***				***3 359 719 760***	***546 955 600***

AH 2 - II.5. Epidemiological surveillance
II.5.B. Active epidemiological surveillance

1. Specific objective (Critical Competency)	
The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations under their mandate.	
2. Result (Expected level of advancement)	
1. The VS have no active surveillance programme.	
2. The VS conduct active surveillance for some relevant diseases (of economic and zoonotic importance) but apply it only in a part of susceptible populations and/or do not update it regularly.	
3. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases and apply it to all susceptible populations but do not update it regularly.	
4. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases, apply it to all susceptible populations, update it regularly and report the results systematically.	
5. The VS conduct active surveillance for most or all relevant diseases and apply it to all susceptible populations. The surveillance programmes are evaluated and meet the country's OIE obligations.	
3. Description of the activity	
Strategy	Establish active surveillance at all districts for all relevant diseases according to the national priority for all susceptible populations (see table 16), which are regularly updated and reported in a systematic manner
Description of the tasks (chronological)	• Identify the priority diseases in dairy sector (e.g tuberculosis and brucellosis), protection zones (e.g FMD, CBPP) and at border inspection points for NAI and emerging exotic diseases • Improve active surveillance for diseases of economic importance (e.g PPR) and zoonoses (e. g. RVF) • Provide detailed SOPs for active surveillance (based on OIE Standards) to be implemented, including detailed laboratory procedures and methodology for result interpretation • Provide all necessary physical resources (transport) and diagnostic equipment (incl. cold chain apparatus) at identified DVO offices, based on activity required for identified sub populations • Provide dedicated training (including manuals and directives) for activity execution at all relevant VS levels • Formalize and intensify collaboration with other relevant government organizations (e. g. KWS) and NGO´s involved in animal disease surveillance activities (e.g investigations for zoonotic diseases)
Objectively verifiable indicators	Surveillance and laboratory reports
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Estimated as 2 days per year for veterinarians and other degree holders.
Legislation (IV.1, 2, 3)	
Communication (III.1)	Improve feedback on surveillance information to all relevant stakeholders
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

ANIMAL HEALTH - 2 / CC: II.5.B. Active epidemiological surveillance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		160				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		160	215	10	3 442	17 209
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles		4	40 000	6	26 667	26 667
Telecommunication equipment set		8	200	3	533	
Office equipment set		8	1 000	3	2 667	
Other specific equipment						
GIS Software (training)		1	5 000	5	1 000	
Sub-total Material investments					**34 308**	**43 876**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		10,0	3 400			34 000
Continuing education (man-days / year)		22,0	127		2 787	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)		4,0	7 800			31 200
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**2 787**	**65 200**
Salaries / year						
Veterinarians		8,0	11 500		92 000	
Other university degree		3,0	10 500		31 500	
Veterinary para-professionals		1,0	5 300		5 300	
Support staff		2,0	3 300		6 600	
Sub-total Salaries					**135 400**	
Consumable resources / year						
Administration			20%		27 080	
Travel allowances						
staff within the country (man-days) / year		200	90		18 000	
drivers within the country (man-days) / year		200	35		7 000	
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		96 000	0,36		34 944	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**87 024**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***259 519***	***109 076***
Total in	***KSH***				***23 356 720***	***9 816 800***

AH 3 - II.6. Early detection and emergency response

1. Specific objective (Critical Competency)	
The authority and capability of the VS to detect and respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).	
2. Result (Expected level of advancement)	
1. The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately.	
2. The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately.	
3. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command.	
4. The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases.	
5. The VS have national contingency plans for all diseases of concern through coordinated actions with all stakeholders through a chain of command.	
3. Description of the activity	
Strategy	Establish procedures, based on OIE Standards, for timely decision taking in respect of identified sanitary emergencies and provide national contingency plans for identified epizootic diseases.
Description of the tasks (chronological)	• Provide SOP´s for timely decision taking processes for identified sanitary emergencies • Complete and make available to all implementing personnel national contingency plans for identified epizootic diseases (e. g. NAI)Improve timely disease and incident reporting activities and provide necessary communication facilities (e.g. internet, mobile or fixed telecommunication)
Objectively verifiable indicators	National contingency plans – SOP´s for decision taking processes – applicable legal instruments
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Strengthen legal requirements where deficient (e. g. wildlife, aquatic animals) and improve law enforcement activities
Communication (III.1)	Sensitization of all stakeholders regarding procedures and implementation of emergency response activities
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

ANIMAL HEALTH - 3 / CC: II.6. Early detection and emergency response						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		2	200	3	133	
Office equipment set		2	1 000	3	667	
Other specific equipment						
Sub-total Material investments					**800**	
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		2,0	11 500		23 000	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries					**23 000**	
Consumable resources / year						
Administration			20%		4 600	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**4 600**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***28 400***	
Total in	***KSH***				***2 556 000***	

H 4 - II.7. Disease prevention, control and eradication

1. Specific objective (Critical Competency)	
The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases.	
2. Result (Expected level of advancement)	
1. The VS have no authority or capability to prevent, control or eradicate animal diseases.	
2. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with little or no scientific evaluation of their efficacy and efficiency.	
3. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with scientific evaluation of their efficacy and efficiency.	
4. The VS implement prevention, control and eradication programmes for all relevant diseases but with scientific evaluation of their efficacy and efficiency of some programmes.	
5. The VS implement prevention, control and eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency consistent with relevant OIE international standards.	
3. Description of the activity	
Strategy	Establish and institute procedures for the scientific evaluation of the efficacy and efficiency of disease prevention, control and eradication programmes
Description of the tasks (chronological)	• Provide SOP´s, based on OIE Standards, for disease prevention, control and eradication interventions, including establishment and maintenance of FMD and CBPP free zones • Enforce intervention procedures (e.g movement control, compulsory vaccinations, quarantine, culling, acaricide resistance determinations) • Compile detailed and documented priority disease control strategies in accordance with OIE standards • Ensure quality assurance for vaccines used • Institute post-vaccination efficacy evaluations (e. g. FMD) • Establish and provide legal provisions for compensatory payments (e.g culling for disease control)
Objectively verifiable indicators	SOP´s – vaccination reports – disease control activities
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	2 days per year on post-vaccination efficacy evaluations
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

ANIMAL HEALTH - 4 / CC: II.7. Disease prevention, control and eradication

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)		200				
Existing building to be maintained (m²)		100	23	1	2 315	
Existing building to be renovated (m²)		100	215	10	2 151	10 756
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles		5	40 000	6	33 333	33 333
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments					**37 799**	**44 089**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		10,0	3 400			34 000
Continuing education (man-days / year)		22,0	127		2 787	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**2 787**	**34 000**
Salaries / year						
Veterinarians		11,0	11 500		126 500	
Other university degree		4,0	10 500		42 000	
Veterinary para-professionals		4,0	5 300		21 200	
Support staff		10,0	3 300		33 000	
Sub-total Salaries					**222 700**	
Consumable resources / year						
Administration			20%		44 540	
Travel allowances						
staff within the country (man-days) / year		200	90		18 000	
drivers within the country (man-days) / year		200	35		7 000	
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		120 000	0,36		43 680	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines		23 200 000	0,50		11 600 000	
Backyard Poultry vaccines		25 000 000	0,01		250 000	
Sub-total Consumable resources					**11 963 220**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***12 226 506***	***78 089***
Total in	***KSH***				***1 100 385 540***	***7 028 000***

AH 5 - II.14. Animal welfare

1. Specific objective (Critical Competency)
The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Code.
2. Result (Expected level of advancement)
1. OIE standards are generally not implemented.
2. Some of OIE standards are implemented, e.g. primarily for the export sector.
3. All of OIE standards are implemented but this is primarily for the export sector.
4. All of OIE standards are implemented for the export and the domestic sector.
5. OIE standards are implemented and implementation is periodically subject to independent external evaluation.

3. Description of the activity	
Strategy	Implement all relevant OIE Standards regarding animals destined for export
Description of the tasks (chronological)	• Task the OIE Focal Point for Animal Welfare to compile a Manual and SOP,s for implementation in animals destined for export • Strengthening the Animal Welfare Unit (incorporating the OIE Focal Point) • Inspect and audit compliance with applicable OIE Standards • Institute corrective (and punitive) measures when and where necessary
Objectively verifiable indicators	Number of animal welfare personnel – records of inspections, audits and corrective actions
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Include animal welfare sensitization in the continuing education programmes budgeted for the field veterinary and veterinary para-professional network
Legislation (IV.1, 2, 3)	
Communication (III.1)	Stakeholder communication activities
Consultation (III.2)	Stakeholder consultation and engagement in the implementation of the required standards
Official representation (III.3)	
Management of resources and operations (I.11)	

ANIMAL HEALTH - 5 / CC: II.14. Animal Welfare

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		3,0	11 500		34 500	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff		2,0	3 300		6 600	
Sub-total Salaries					**41 100**	
Consumable resources / year						
Administration			20%		8 220	
Travel allowances						
staff within the country (man-days) / year		40	90		3 600	
drivers within the country (man-days) / year		40	35		1 400	
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		8	1 000,00		8 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**21 220**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***62 320***	
Total in	***KSH***				***5 608 800***	

Veterinary Public Health

VPH 1 - II.8. Food safety

II.8.A. Ante and post mortem inspection at abattoirs and associated premises (e.g. meat boning / cutting establishments and rendering plants)

1. Specific objective (Critical Competency)	
The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at abattoirs and associated premises, including for assuring meat hygiene and for the collection of information relevant to livestock diseases and zoonoses. This competency also covers coordination with other authorities where there is shared responsibility for the functions.	
2. Result (Expected level of advancement)	
1. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are generally not undertaken in conformity with international standards.	
2. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards only at export premises.	
3. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for major abattoirs producing meat for distribution throughout the national market.	
4. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for all abattoirs producing meat for distribution in the national and local markets.	
5. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards at all premises (including family and on farm slaughtering) and are subject to periodic audit of effectiveness.	
3. Description of the activity	
Strategy	Upgrade the quality of *ante*- and *post mortem* inspection by assuring appropriate staff and resources. Export approved abattoirs will be under direct national VS authority and should fully comply with international standards, with all other abattoirs being under DVO authority. Transfer major abattoirs, which are at present in areas falling under the authority of the Ministry of Health, to Veterinary Services (Dadaab, Kakuma, North Horr)
Description of the tasks (chronological)	• Adapt national meat inspection regulations to meet international standards (CODEX) • Execute *ante* and *post mortem* inspection at export and major national abattoirs according to international standards. Appoint staff in order to assure that one veterinarian is present at all working time supported by the reauired veterinary para professionals. • Provide transport resources for the VS staff to reach remote locations. • Offices are provided by the abattoirs. DVS will provide office and telecommunication equipment, as well as small inspection and sampling equipment. • Assure the link of existing laboratories at export abattoirs to national laboratories • *Ante* and *post mortem* inspection in slaughter slabs will be conducted by DVOs. • Link and integrate abattoir disease surveillance data to the VS “Integrated Disease Reporting System” (e.g. CBPP, tuberculosis etc data)
Objectively verifiable indicators	Meat inspection records – surveillance data
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Finalize enactment of legislation in respect of cutting (de-boning), processing and cold store facilities
Communication (III.1)	Stakeholder consultations regarding new legislation in respect of categorization of national abattoirs
Consultation (III.2)	Applicable

VETERINARY PUBLIC HEALTH - 1 / CC: II.8. Food safety:
A. Ante and post mortem inspection at abattoirs and associated premises

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes		7	4 000	3	9 333	
Number of cars		3	25 000	8	9 375	28 125
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		8	200	3	533	
Office equipment set		8	1 000	3	2 667	
Other specific equipment						
Sub-total Material investments					**21 908**	**28 125**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)		22,0	127		2 787	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**2 787**	
Salaries / year						
Veterinarians		11,0	11 500		126 500	
Other university degree			10 500			
Veterinary para-professionals		80,0	5 300		424 000	
Support staff			3 300			
Sub-total Salaries					**550 500**	
Consumable resources / year						
Administration			20%		110 100	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year		336 000	0,10		34 944	
Km or miles cars / year		72 000	0,21		14 976	
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Inspection and sampling equipment		1	5 000,00		5 000	
Sub-total Consumable resources					**165 020**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***740 215***	***28 125***
Total in	***KSH***				***66 619 350***	***2 531 250***

VPH 2 - II.8. Food safety

II.8.B. Inspection of collection, processing and distribution of products of animal origin

1. Specific objective (Critical Competency)	
The authority and capability of the VS to implement manage and coordinate food safety measures on collection, processing and distribution of products of animals, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes. This competency also covers coordination with other authorities where there is shared responsibility for the functions.	
2. Result (Expected level of advancement)	
1. Implementation, management and coordination (as appropriate) are generally not undertaken in conformity with international standards.	
2. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes.	
3. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes and for products that are distributed throughout the national market.	
4. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes and for products that are distributed throughout the national and local markets.	
5. Implementation, management and coordination (as appropriate) are undertaken in full conformity with international standards for products at all levels of distribution (including on farm processing and farm gate sale)	
3. Description of the activity	
Strategy	Expand the DVS Veterinary public health responsibilities by covering fisheries products and strengthen the inspection of large milk processors and honey production
Description of the tasks (chronological)	• Execute food safety measures on collection, processing and distribution of dairy products, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes (e.g bovine tuberculosis, bovine brucellosis). • Appoint 1 veterinarian and 1 veterinary para-professional at provincial level and 3 veterinarians at central level to handle the inspections and coordination respectively. Provide them with the necessary physical resources. • Implement food safety measures in honey production units destined for export (also refer to CC II.10) • Develop responsibilities for the application of food safety measures in egg producing units are at DVO level.
Objectively verifiable indicators	Inspection records - training records
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Once fish inspection is fully and actively under DVS authority, Institute training required to fulfil the expected functions in the fisheries sector (not forseen but for the end of next five years, thus not budgeted)
Legislation (IV.1, 2, 3)	Finalize enactment of legislation in respect of transferring the inspection authority to the VS.
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

VETERINARY PUBLIC HEALTH - 2 / CC: II.8. Food safety: B. Inspection of collection, processing						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars		11	25 000	8	34 375	103 125
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		11	200	3	733	
Office equipment set		11	1 000	3	3 667	
Other specific equipment						
Sub-total Material investments					**38 775**	**103 125**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		12,0	11 500		138 000	
Other university degree			10 500			
Veterinary para-professionals		8,0	5 300		42 400	
Support staff			3 300			
Sub-total Salaries					**180 400**	
Consumable resources / year						
Administration			20%		36 080	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year		264 000	0,21		54 912	
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**90 992**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***310 167***	***103 125***
Total in	***KSH***				***27 915 030***	***9 281 250***

VPH 3 - II.9. Veterinary medicines and biologicals

1. Specific objective (Critical Competency)

The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, i.e. the authorisation, registration, import, production, labelling, distribution, sale and use of these products.

2. Result (Expected level of advancement)

1. The VS cannot regulate veterinary medicines and veterinary biologicals.

2. The VS have some capability to exercise administrative control over veterinary medicines and veterinary biologicals.

3. The VS exercise effective administrative control and implement quality standards for most aspects of the regulation of veterinary medicines and veterinary biologicals.

4. The VS exercise comprehensive and effective regulatory control of veterinary medicines and veterinary biologicals.

5. In addition to complete regulatory control, the VS systematically monitor for adverse reaction (pharmacovigilance) and take appropriate corrective steps. The control systems are subjected to periodic audit of effectiveness.

3. Description of the activity

Strategy	Once the new Act is put into practice, transfer the functions currently exercised by the Pharmacy and Poisons Board of the Ministry of Health to the VS to a new autonomous Veterinary Medicinal Product Regulatory Authority
Description of the tasks (chronological)	• Provide for transitional procedures and actions until the envisaged autonomous Veterinary Medicinal Product Regulatory Authority *(Veterinary Medicines Directorate)* (parastatal) is functional. • DVS will promote and fund the initial settlement of the new *Veterinary Medicines Directorate* in terms of the provisions of the new Act • Provide dedicated offices, staff and equipment for the *Veterinary Medicines Directorate*. Staff is estimated at 2 veterinarians (Registration and inspection), 6 Veterinary para-professionals (Registration and inspection), 1 administration professional (University degree), and 1 support staff. • Provide training for VMP capacity building. 1 semester of specialized training (medicines and biologicals regulation) abroad for 1 veterinarian. • Coordinate with other institutions having the required technical capacity for testing on quality and safety of veterinary medicines and biologicals, including pesticides, acaricides etc • Enhance the capacity to ensure quality, safety and efficacy of locally produced veterinary biologicals • Enhance inspection procedures regarding compliance with regulations in respect of Veterinary Medicinal Product (sale, storage etc) • Employ risk analysis procedures as applicable • Assign inspection (compliance) responsibilities to DVO.s where applicable (60 days of travel allowance per year to visit the facilities)
Objectively verifiable indicators	Veterinary Medicinal Product Register – inspection reports

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	Applicable
Legislation (IV.1, 2, 3)	New legislation to be enacted
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

VETERINARY PUBLIC HEALTH - 3 / CC: II.9. Veterinary medicines and biologicals						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		180				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)		180	463	20	4 167	62 502
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		10	200	3	667	
Office equipment set		10	1 000	3	3 333	
Other specific equipment						
Sub-total Material investments					**8 167**	**62 502**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		6,0	3 400			20 400
Continuing education (man-days / year)			127			
National expertise (days/5 years)		100,0	450			45 000
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**65 400**
Salaries / year						
Veterinarians		2,0	11 500		23 000	
Other university degree		1,0	10 500		10 500	
Veterinary para-professionals		6,0	5 300		31 800	
Support staff		1,0	3 300		3 300	
Sub-total Salaries					**68 600**	
Consumable resources / year						
Administration			20%		13 720	
Travel allowances						
staff within the country (man-days) / year		60	90		5 400	
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**19 120**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***95 887***	***127 902***
Total in	***KSH***				***8 629 812***	***11 511 180***

VPH 4 - II.10. Residue testing

1. Specific objective (Critical Competency)

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

2. Result (Expected level of advancement)

1. No residue testing programme for animal products exists in the country.

2. Some residue testing programme is performed but only for selected animal products for export.

3. A comprehensive residue testing programme is performed for all animal products for export and some for domestic use.

4. A comprehensive residue testing programme is performed for all animal products for export and/or internal consumption.

5. The residue testing programme is subject to routine quality assurance and regular evaluation.

3. Description of the activity

Strategy of the activity	Design and institute a comprehensive residue testing programme for all animal products for export and defined products for the domestic market
Description of the tasks (chronological)	• Design and implement residue testing programmes for animal products destined for export, based on the respective requirements laid down by the importing country • Design and Implement residue testing programme for the domestic market with reference to - antimicrobials in honey and milk - trypanocides in red meat products - growth promoters in pig and poultry products - heavy metals in fisheries products - Residue testing programme for the domestic market to be funded by DVS (estimated at USD 6000 / year) • Reinforce the capacity of CVL in order to be able to support the new programmes as CVL will conduct the sampling and testing (office, equipment and mobility). Assign the required staff (estimated at 7 veterinarians, 2 biochemists, 10 veterinary para-professionals and 3 support staff). • Provide one semester specialized training for 2 CVL veterinarians in residue testing techniques.
Objectively verifiable indicators	Residue testing results – test programmes

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

VETERINARY PUBLIC HEALTH - 4 / CC: II.10. Residue testing						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		160				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		10	215	10	215	1 076
Building to be built (m²)		150	463	20	3 472	52 085
Transport						
Number of motorbikes		1	4 000	3	1 333	
Number of cars		1	25 000	8	3 125	9 375
Number of 4x4 vehicles		2	40 000	6	13 333	13 333
Telecommunication equipment set		10	200	3	667	
Office equipment set		15	1 000	3	5 000	
Other specific equipment						
Sub-total Material investments					**27 146**	**75 869**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		12,0	3 400			40 800
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**40 800**
Salaries / year						
Veterinarians	7,0	7,0	11 500		80 500	
Other university degree		2,0	10 500		21 000	
Veterinary para-professionals	6,0	10,0	5 300		53 000	
Support staff	3,0	3,0	3 300		9 900	
Sub-total Salaries					**164 400**	
Consumable resources / year						
Administration			20%		32 880	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year		48 000	0,10		4 992	
Km or miles cars / year		24 000	0,21		4 992	
Km or miles 4x4 vehicle / year		48 000	0,36		17 472	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Residue testing (national level)		6 000	20,00		120 000	
Sub-total Consumable resources					**180 336**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***371 882***	***116 669***
Total in	***KSH***				***33 469 360***	***10 500 200***

Veterinary Laboratories

LAB 1 - II.1. Veterinary laboratory diagnosis

1. Specific objective (Critical Competency)	
The authority and capability of the VS to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products.	
2. Result (Expected level of advancement)	
1. Disease diagnosis is almost always conducted by clinical means only, with laboratory diagnostic capability being generally unavailable.	
2. For major zoonoses and diseases of national economic importance, the VS have access to and use a laboratory to obtain a correct diagnosis.	
3. For other zoonoses and diseases present in the country, the VS have access to and use a laboratory to obtain a correct diagnosis.	
4. For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/or that could enter the country, the VS have access to and use a laboratory to obtain a correct diagnosis.	
5. In the case of new and emerging diseases in the region or world, the VS have access to and use a network of national or international reference laboratories (e.g. an OIE Reference Laboratory) to obtain a correct diagnosis.	
3. Description of the activity	
Strategy	Capacity of the DVS laboratory network (CVL and regional laboratories) should be carefully reviewed and strengthened in order to be able to provide diagnostic services to support defined animal health and veterinary health programmes as well as for other identified priority diseases. Identify relevant animal diseases and zoonoses at present not occurring in Kenya but posing a threat (classical swine fever, West Nile fever)
Description of the tasks (chronological)	• Participate in the development of comprehensive surveillance programmes for identified priority diseases and zoonoses • Enlist a laboratory specialist consultancy – with special reference to the *OIE Veterinary Laboratory Support Programme* - to define the required public VS laboratory network (master plan) in collaboration with all relevant stakeholders, based on national and regional needs • Rehabilitate, upgrade where necessary, existing physical infrastructure • Determine and provide the required diagnostic equipment and material • Provide specialized staff to perform designated tasks in order to update and reinforce the technical staff capacities to fulfil the needs of the new animal health and veterinary health programmes. • Provide funding for reagents, consumables, diagnostic kits (estimated at USD 750 000 / year, to be reviewed according to the new programmes)
Objectively verifiable indicators	Record of laboratory analyses – Laboratory tests available
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Organize training for the CVL staff on the newly developed animal health and veterinary health programmes (estimated at 3 days per staff per year)
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

VETERINARY LABORATORIES - 1 / CC: II.1. Veterinary laboratory diagnosis						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		7 000				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		7 000	215	10	150 578	752 889
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles		10	40 000	6	66 667	66 667
Telecommunication equipment set		7	200	3	467	
Office equipment set		14	1 000	3	4 667	
Other specific equipment						
uipment for the 6 major BIPs (fridge etc…)		6	10 000	4	15 000	
Sub-total Material investments					**237 378**	**819 556**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		12,0	3 400			40 800
Continuing education (man-days / year)		390,0	127		49 400	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**49 400**	**40 800**
Salaries / year						
Veterinarians	46,0	46,0	11 500		529 000	
Other university degree	2,0	2,0	10 500		21 000	
Veterinary para-professionals	82,0	82,0	5 300		434 600	
Support staff			3 300			
Sub-total Salaries					**984 600**	
Consumable resources / year						
Administration			20%		196 920	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year		240 000	0,36		87 360	
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines		1	750 000,00		750 000	
Sub-total Consumable resources					**1 034 280**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***2 305 658***	***860 356***
Total in	***KSH***				***207 509 200***	***77 432 000***

LAB 2 - II.2. Laboratory quality assurance

1. Specific objective (Critical Competency)

The quality of laboratories (that conduct diagnosis testing and analysis for chemical residues, antimicrobial residues, toxins, or tests for biological efficacy, etc.) as measured by the use of formal QA systems and participation in relevant proficiency testing programmes.

2. Result (Expected level of advancement)

1. No laboratories used by the public sector VS are using formal quality assurance systems.

2. Some laboratories used by the public sector VS are using formal quality assurance systems.

3. All laboratories used by the public sector VS are using formal quality assurance systems.

4. All the laboratories used by the public sector VS and most or all private laboratories are using formal quality assurance systems.

5. All the laboratories used by the public sector VS and most or all private laboratories are using formal quality assurance programmes that meet OIE, ISO 17025, or equivalent QA standard guidelines.

3. Description of the activity

Strategy	Design and implement the Quality Assurance System (QAS) in selected VS laboratories
Description of the tasks (chronological)	• Under the laboratory specialist consultancy budgeted in LAB 1 – II.1, define the required quality assurance system (QAS) • Develop the to-be implemented QAS • Implement the QAS Note: Cost of QA system is estimated as 6% of the estimated consumables costs of the laboratory (USD 65 000)
Objectively verifiable indicators	QAS documentation

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

VETERINARY LABORATORIES - 2 / CC: II.2. Laboratory quality assurance

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
QA		1	65 000,00		65 000	
Sub-total Consumable resources					**65 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***65 000***	
Total in	***KSH***				***5 850 000***	

Management & Regulatory Services

MVS 1 – I.2. Competencies of veterinarians and veterinary para-professionals

I.2.A. Professional competencies of veterinarians

1. Specific objective (Critical Competency)	
The capability of the VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.	
2. Result (Expected level of advancement)	
1. The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.	
2. The veterinarians' practices, knowledge and attitudes are of a uniform standard that usually allow for accurate and appropriate clinical and administrative activities of the VS.	
3. The veterinarians' practices, knowledge and attitudes usually allow undertaking all professional/technical activities of the VS (e.g. epidemiological surveillance, early warning, public health, etc.).	
4. The veterinarians' practices, knowledge and attitudes usually allow undertaking specialized activities as may be needed by the VS.	
5. The veterinarians' practices, knowledge and attitudes are subject to regular updating, or international harmonisation, or evaluation.	
3. Description of the activity	
Strategy	Veterinarians will be subjected to professional competency evaluations, while their practices, knowledge and attitudes will be kept up to date through regular and established CE programmes. Kenya Veterinary Board (KVB) will have a major role on this regard.
Description of the tasks (chronological)	• Kenya Veterinary Board (KVB) to develop and implement a compulsory CE programme for all veterinarians under their jurisdiction • Kenya Veterinary Board to develop and implement an evaluation programme for all veterinarians under their jurisdiction • Strengthen collaboration between KVB and the respective veterinary schools in Kenya, subject to legal provisions, regarding "Day-one competency" and general curriculum development
Objectively verifiable indicators	Documented CE and Evaluation programmes – records of evaluation
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Continuing education programmes have been budgeted in the different CC
Legislation (IV.1, 2, 3)	Finalize the required legal framework regarding the KVB´s authority and capabilities
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MVS 2 - I.2. Competencies of veterinarians and veterinary para-professionals

I.2.B. Competencies of veterinary para-professionals

1. Specific objective (Critical Competency)
The capability of VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.
2. Result (Expected level of advancement)
1. The majority of veterinary para-professionals have no formal entry-level training.
2. The training of veterinary para-professionals is of a very variable standard and allows the development of only limited animal health competencies.
3. The training of veterinary para-professionals is of a uniform standard that allows the development of only basic animal health competencies.
4. The training of veterinary para-professionals is of a uniform standard that allows the development of some specialist animal health competencies (e.g. meat inspection).
5. The training of veterinary para-professionals is of a uniform standard and is subject to regular evaluation and/or updating.

3. Description of the activity	
Strategy	Develop and institute a uniform training standard and progressively apply regular evaluation of competencies and updating through CE
Description of the tasks (chronological)	• All relevant stakeholders to implement all necessary sensitization and awareness activities to implement and enforce to-be legal provisions (see III.5.B) • Kenya Veterinary Board (KVB) to develop and implement a compulsory CE programme for all veterinary paraprofessionals under their jurisdiction • Kenya Veterinary Board to develop and implement an evaluation programme for veterinary paraprofessionals under their jurisdiction • Strengthen collaboration between KVB and the respective training schools in Kenya, subject to legal provisions, regarding uniform training standards" and general curriculum development
Objectively verifiable indicators	Documented CE and Evaluation programmes – records of evaluation
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Continuing education programmes have been budgeted in the different CC
Legislation (IV.1, 2, 3)	Finalize the required legal framework regarding the KVB´s authority and capabilities in respect of veterinary paraprofessionals
Communication (III.1)	Applicable
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MVS 3 - I.3. Continuing education

1. Specific objective (Critical Competency)

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

2. Result (Expected level of advancement)

1. The VS have no access to continuing veterinary, professional or technical continuing education.

2. The VS have access to continuing education (internal and/or external programmes) on an irregular basis but it does not take into account needs, or new information or understanding.

3. The VS have access to continuing education that is reviewed annually and updated as necessary, but it is implemented only for some categories of the relevant personnel.

4. The VS have access to continuing education that is reviewed annually and updated as necessary, and it is implemented for all categories of the relevant personnel.

5. The VS have up-to-date continuing education that is implemented for all relevant personnel and is submitted to periodic evaluation of effectiveness.

3. Description of the activity

Strategy	Provide regular and structured CE for all relevant personnel of the VS, with regular evaluation procedures
Description of the tasks (chronological)	• Strengthen the existing dedicated Training & CE unit for the public VS • Implement CE as described under the respective CC´s • *Information, Communication, Technology* (ICT) training to be enhanced and implemented where relevant • Kenya Veterinary Board (KVB) to develop and implement a compulsory CE programme for all veterinarians and veterinary paraprofessionals under their jurisdiction. This programmed should be linked with the professional/para-professional evaluation programme (see I.2.A and B).
Objectively verifiable indicators	CE programmes – participation records

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	Continuing education programmes have been budgeted in the different CC
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

MVS 4 - I.4. Technical independence

1. Specific objective (Critical Competency)
The capability of the VS to carry out their duties with autonomy and free from commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the OIE (and of the WTO SPS Agreement where applicable).
2. Result (Expected level of advancement)
1. The technical decisions made by the VS are generally not based on scientific considerations.
2. The technical decisions take into account the scientific evidence, but are routinely modified to conform to non-scientific considerations.
3. The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
4. The technical decisions are based only on scientific evidence and are not changed to meet non-scientific considerations.
5. The technical decisions are made and implemented in full accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations where applicable).

3. Description of the activity	
Strategy	In view of the anticipated devolvement of authority under new constitution it is of importance to secure and maintain the present level of advancement
Description of the tasks (chronological)	
Objectively verifiable indicators	Records of non-scientific interventions and policy amendments
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Constitutional changes
Communication (III.1)	Applicable
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable – implementation of the devolvement of authority (decentralization) in terms of the new Constitution

MVS 5 - I.5. Stability of structures and sustainability of policies

1. Specific objective (Critical Competency)	
The capability of the VS structure and/or leadership to implement and sustain policies over time.	
2. Result (Expected level of advancement)	
1. Substantial changes to the organisational structure and/or leadership of the public sector of the VS frequently occur (e.g. annually) resulting in lack of sustainability of policies.	
2. The organisational structure and/or leadership of the public sector of the VS is substantially changed each time there is a change in the political leadership and this has negative effects on sustainability of policies.	
3. Significant changes to the organisational structure and/or leadership of the public sector of the VS occur rarely, but this stability does not have a positive impact on the sustainability of policies.	
4. Some changes occur in the organisational structure and/or leadership of the public sector of the VS following a change in the political leadership, but these have little or no negative effect on sustainability of policies.	
5. The organisational structure and leadership of the public sector of the VS are generally stable. Modifications are based on an evaluation process, with positive effect on the sustainability of policies.	
3. Description of the activity	
Strategy	Major changes are to be expected with the implementation of the Kenya Constitution within the next 12 to 18 months. **The impact by the new constitution on the present VS stability cannot be assessed at this stage**
Description of the tasks (chronological)	• Once the New Constitution has been implemented, assess the impact of the changes • Stability of VS structures to be ensured, based on OIE Code
Objectively verifiable indicators	Personnel and VS organogramme – policy documents
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	New Constitution
Communication (III.1)	
Consultation (III.2)	Applicable
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable – Devolution of Government authority and functions

MVS 6 - I.6. Coordination capability of the Veterinary Services

I.6.A. Internal coordination (chain of command)

1. Specific objective (Critical Competency)	
The capability of the VS to coordinate its resources and activities (public and private sectors) with a clear chain of command, from the central level (the Chief Veterinary Officer) to the field level of the VS in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).	
2. Result (Expected level of advancement)	
1. There is no formal internal coordination and the chain of command is not clear.	
2. There are internal coordination mechanisms for some activities but the chain of command is not clear.	
3. There are internal coordination mechanisms and a clear and effective chain of command for some activities.	
4. There are internal coordination mechanisms and a clear and effective chain of command at the national level for most activities.	
5. There are internal coordination mechanisms and a clear and effective chain of command for all activities and these are periodically reviewed / audited and updated.	
3. Description of the activity	
Strategy	Maintain (with due regard to the anticipated devolution of powers under the New Constitution) documented and structured internal coordination mechanisms, including a clear chain of command at national level for most activities
Description of the tasks (chronological)	• Establish and maintain internal coordination procedures at national level for most activities, including a clear chain of command (with due regard to the forthcoming constitutional requirements) • Streamline and enhance the current internal administrative reporting system • Timely and comprehensive submission of comprehensive disease surveillance and incident data from DVO level to DVS (see CC II.5)
Objectively verifiable indicators	Documented chain of command
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	New Constitution
Communication (III.1)	Applicable
Consultation (III.2)	Applicable – County VS which will be established
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

MVS 7 - I.6. Coordination capability of the Veterinary Services

I.6.B. External coordination

1. Specific objective (Critical Competency)
The capability of the VS to coordinate its resources and activities (public and private sectors) at all levels with other relevant authorities as appropriate, in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes). Relevant authorities include other ministries and competent authorities, national agencies and decentralised institutions.

2. Result (Expected level of advancement)
1. There is no external coordination.
2. There are informal external coordination mechanisms for some activities, but the procedures are not clear and/or external coordination occurs irregularly.
3. There are formal external coordination mechanisms with clearly described procedures or agreements for some activities and/or sectors
4. There are formal external coordination mechanisms with clearly described procedures or agreements at the national level for most activities, and these are uniformly implemented throughout the country.
5. There are national external coordination mechanisms for all activities and these are periodically reviewed and updated.

3. Description of the activity	
Strategy	Formalize existing informal coordination mechanisms, with clearly described procedures or agreements, uniformly implemented throughout Kenya
Description of the tasks (chronological)	• Establish and document veterinary policy authority as provided for in terms of the new Constitutional provisions • Formulate formal external coordination procedures and agreements with respective institutional partners e. g Kenya Police; Kenya Customs and Immigration Service; Kenya Wildlife Service; Ministry of Fisheries; Ministry of Health; National Disaster Operational Centre • Implement procedures and agreements uniformly throughout Kenya • Maintain records of implementation activities and ensure timely availability to all relevant stakeholders • Appoint one veterinarian (DVS funded) to the Ministry for Disaster Management and Food Security, in order to secure and strengthen the collaboration.
Objectively verifiable indicators	Documented National VS policies, Documented procedures, Agreements entered into

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	Applicable
Official representation (III.3)	
Management of resources and operations (I.11)	National VS Policy Framework

MANAGEMENT OF VETERINARY SERVICES - 7 / I-6.B. Coordination capability of the Veterinary Services: External coordination						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		1,0	11 500		11 500	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries					**11 500**	
Consumable resources / year						
Administration			20%		2 300	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**2 300**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***13 800***	
Total in	***KSH***				***1 242 000***	

MVS 8 - I.11. Management of resources and operations

1. Specific objective (Critical Competency)	
The capability of the VS to document and manage their resources and operations in order to analyze, plan and improve both efficiency and effectiveness.	
2. Result (Expected level of advancement)	
1. The VS have some records or documented procedures, but these do not provide for adequate management of resources and operations.	
2. The VS routinely use records and/or documented procedures in the management of resources and some operations, but these do not provide for adequate management, analysis, control or planning.	
3. The VS have comprehensive records, documentation, and management systems and they regularly use records and documented procedures in the management of resources and operations, providing for the control of effectiveness and the conduct of analysis and planning.	
4. The VS have adequate management skills, including the capacity to analyse and improve efficiency and effectiveness.	
5. The VS have fully effective management systems, which are regularly audited and permit a proactive continuous improvement of efficiency and effectiveness.	
3. Description of the activity	
Strategy	Regularly use records and documented procedures in the management of resources and operations, providing for the control of effectiveness and conduct of analysis and planning. Provide for adequate management skills, including the capacity to analyse and improve efficiency and effectiveness
Description of the tasks (chronological)	Strengthen the *"Policy, Coordination and Resource Management Unit"* with necessary administrative and financial capacity, tasked with the following objectives, to be implemented throughout the VS: • Review the present management procedures and develop streamlined detailed and comprehensive record, documentation and management systems with the support of a National consultancy (Estimated at 3 months) • Provide SOP,s for all relevant systems • Apply and ensure compliance with governmental financial requirements (treasury instructions and tender requirements) • Maintain detailed records of operational accounts, district treasury records (monthly financial statements) and disbursements (as provided for in Treasury Instructions) • Ensure the timely maintenance of all infrastructural facilities throughout the VS • Control physical resources and maintain a regularly updated database of resources • Provide overall necessary logistical support and skills capacity • Analyse and improve efficiency and effectiveness Note: Budget includes staff corresponding to the central Policy, Coordination and Resource Management Unit, as well as other DVS and provincial level management and administrative staff; as well as the travelling expenses for central staffs auditing provinces and districts.
Objectively verifiable indicators	Records of and documented procedures, Management systems, Account records Audit reports
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Provide training for the implementation of the new management system at all administrative units (down to DVO level). To be done internally, not special budget required
Communication (III.1)	Applicable
Consultation (III.2)	Applicable

MANAGEMENT OF VETERINARY SERVICES - 8 / I-11. Management of resources and operations						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		1 400				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		1 400	215	10	30 116	150 578
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments					**30 116**	**150 578**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)		90,0	450			40 500
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**40 500**
Salaries / year						
Veterinarians		206,0	11 500		2 369 000	
Other university degree		89,0	10 500		934 500	
Veterinary para-professionals		179,0	5 300		948 700	
Support staff		419,0	3 300		1 382 700	
Sub-total Salaries					**5 634 900**	
Consumable resources / year						
Administration			20%		1 126 980	
Travel allowances						
staff within the country (man-days) / year		1 200	90		108 000	
drivers within the country (man-days) / year		600	35		21 000	
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**1 255 980**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***6 920 996***	***191 078***
Total in	***KSH***				***622 889 600***	***17 197 000***

MVS 9 - II.3. Risk analysis

1. Specific objective (Critical Competency)

The authority and capability of the VS to base its risk management decisions on a scientific assessment of the risks.

2. Result (Expected level of advancement)

1. Risk management decisions are not usually supported by scientific risk assessment.

2. The VS compile and maintain data but do not have the capability to systematically assess risks. Some risk management decisions are based on scientific risk assessment.

3. The VS can systematically compile and maintain relevant data and carry out risk assessment. Scientific principles and evidence, including risk assessment, generally provide the basis for risk management decisions.

4. The VS systematically conduct risk assessments in compliance with relevant OIE standards, and base their risk management decisions on the outcomes of these risk assessments.

5. The VS are consistent in basing sanitary decisions on risk analysis, and in communicating their procedures and outcomes internationally, meeting all their OIE obligations (including WTO SPS Agreement obligations where applicable).

3. Description of the activity

Strategy	Implement risk assessment by systematic compilation of all relevant data and base risk management decisions on the outcome of such risk analysis
Description of the tasks (chronological)	• Establish a dedicated risk analysis unit within the *Veterinary Epidemiology and Economics Unit* (budgeted under AH2 - II.5.B) by deploying existing capacity • Subject all import risk analyses decisions to the required scientific risk management procedures • Provide information (risk assessment reports) to decision makers and interested parties in the importing and exporting countries at regular intervals for use in risk communication and risk management (OIE Code Chapter 2.2.7) • Appoint risk management consultant to establish the required administrative systems and provide necessary specialist training (Estimated as 8 weeks of international consultancy for the 5 year period)
Objectively verifiable indicators	VEEU tasks - Records of risk management decisions – risk management reports

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	Applicable
Consultation (III.2)	Applicable
Official representation (III.3)	
Management of resources and operations (I.11)	VEEU – task definitions and job descriptions

MANAGEMENT OF VETERINARY SERVICES - 9 / II-3. Risk analysis						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)		8,0	7 800			62 400
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**62 400**
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					***62 400***
Total in	***KSH***					***5 616 000***

MVS 10 - II.11. Emerging issues

1. Specific objective (Critical Competency)

The authority and capability of the VS to identify in advance, and take appropriate action in response to likely emerging issues under their mandate relating to the sanitary status of the country, public health, the environment, or trade in animals and animal products.

2. Result (Expected level of advancement)

1. The VS do not have procedures to identify in advance likely emerging issues.

2. The VS monitor and review developments at national and international levels relating to emerging issues.

3. The VS assess the risks, costs and/or opportunities of the identified emerging issues, including preparation of appropriate national preparedness plans. The VS have some collaboration with other agencies (e.g. human health, wildlife, and environment) and with stakeholders on emerging issues.

4. The VS implement, in coordination with stakeholders, prevention or control actions due to an adverse emerging issue, or beneficial actions from a positive emerging issue. The VS have well-developed formal collaboration with other agencies (e.g. human health, wildlife and environment) and with stakeholders on emerging issues.

5. The VS coordinate actions with neighbouring countries and trading partners to respond to emerging issues, including audits of each other's ability to detect and address emerging issues in their early stages.

3. Description of the activity

Strategy	Assess risks, costs and/ or opportunities for identified emerging issues (eg. emerging epidemic threats from wildlife, peri-livestock (eg rabbits, tortoises etc) global warming etc) and prepare appropriate national preparedness plans Collaborate with other relevant agencies and stakeholders
Description of the tasks (chronological)	• Task the Risk Analysis Unit with the required actions • Refer to necessary actions under CC I.6 • Coordination with the National Disaster Operations Centre
Objectively verifiable indicators	Identified emerging issues – records of preparedness plans

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	Applicable
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

MVS 11 - II.12. Technical innovation

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

3. Description of the activity	
Strategy	Actively identify relevant technical innovations and international standards and incorporate them into selected policies and procedures, in collaboration with stakeholders
Description of the tasks (chronological)	• Identify policies and procedures to incorporate technical innovations eg. “digital pen technology“; Mobile technology and “cellphone SMS reporting” , “web based data base animal resource management” • Participate in the *Livestock Disease Surveillance and Reporting Working Group* [LSRWG] activities, piloting a pilot *livestock disease surveillance, e-reporting and information management* [LSRIM] programme (see CC II.5 A) • Involve relevant stakeholders • Implement technical innovations where evaluations indicated usefulness, based on cost-benefit and appropriateness
Objectively verifiable indicators	Records of investigations – implementation results

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Stakeholders
Legislation (IV.1, 2, 3)	
Communication (III.1)	Applicable
Consultation (III.2)	Applicable
Official representation (III.3)	
Management of resources and operations (I.11)	VEEU involvement

MVS 12 - III.1. Communications

1. Specific objective (Critical Competency)	
The capability of the VS to keep stakeholders informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety.	
2. Result (Expected level of advancement)	
1. The VS have no mechanism in place to inform stakeholders of VS activities and programmes.	
2. The VS have informal communication mechanisms.	
3. The VS maintain an official contact point for communications but it is not always up-to-date in providing information.	
4. The VS contact point for communications provides up-to-date information, accessible via the Internet and other appropriate channels, on activities and programmes.	
5. The VS have a well developed communication plan, and actively and regularly circulate information to stakeholders.	
3. Description of the activity	
Strategy	Consolidate the activities of the VS "Communication Unit", and develop communication plan and actively and regularly circulate information to stakeholders
Description of the tasks (chronological)	• Develop communication master plan • DVS Communication Unit to coordinate and collaborate with existing communication entities • Enhance capacity of the DVS Communication Unit by employing communication professionals based on need (2 fulltime positions) • Develop dedicated VS website • Provide and maintain dedicated official VS email addresses • Short term specialised training for communication and information methodology (one semester for one staff)
Objectively verifiable indicators	Communication plan – records of stakeholder information documents
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	Applicable
Legislation (IV.1, 2, 3)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

MANAGEMENT OF VETERINARY SERVICES - 12 / III-1. Communications

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		2	200	3	133	
Office equipment set		5	1 000	3	1 667	
Other specific equipment						
Graphics equipment		1	10 000	2	5 000	
Sub-total Material investments					**6 800**	
Non material expenditure						
Training						
Specialised training (man-months / 5 years)		6,0	3 400			20 400
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**20 400**
Salaries / year						
Veterinarians		6,0	11 500		69 000	
Other university degree		2,0	10 500		21 000	
Veterinary para-professionals		1,0	5 300		5 300	
Support staff		3,0	3 300		9 900	
Sub-total Salaries					**105 200**	
Consumable resources / year						
Administration			20%		21 040	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
General communication		1	30 000,00		30 000	
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**51 040**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***163 040***	***20 400***
Total in	***KSH***				***14 673 600***	***1 836 000***

MVS 13 - III.2. Consultation with stakeholders

1. Specific objective (Critical Competency)	
The capability of the VS to consult effectively with stakeholders on VS activities and programmes, and on developments in animal health and food safety.	
2. Result (Expected level of advancement)	
1. The VS have no mechanisms for consultation with stakeholders.	
2. The VS maintain informal channels of consultation with stakeholders.	
3. The VS maintain a formal consultation mechanism with stakeholders.	
4. The VS regularly hold workshops and meetings with stakeholders.	
5. The VS actively consult with and solicit feedback from stakeholders regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities.	
3. Description of the activity	
Strategy	Actively consult and solicit feedback from all relevant stakeholders regarding proposed and current activities and programmes in animal health and food safety and interventions at the OIE (*Codex Alimentarius Commission* and WTO SPS Committee where applicable)
Description of the tasks (chronological)	• VS to establish half-yearly meetings with stakeholders in the different sectors (one meeting each for animal health, veterinary public health and food safety) to consult and solicit feedback regarding particular activities and programmes (planned or running) as well as for interventions at the OIE (CODEX ; WTO SPS when applicable) • Document feedback obtained, advise on actions taken and provide feedback on outcomes of activities, programmes and/or interventions under discussion
Objectively verifiable indicators	Records of meetings – participants register – interventions made
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MVS 14 - III.3. Official representation

1. Specific objective (Critical Competency)	
The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisations including the OIE (and Codex Alimentarius Commission and WTO SPS Committee where applicable).	
2. Result (Expected level of advancement)	
1. The VS do not participate in or follow up on relevant meetings of regional or international organisations.	
2. The VS sporadically participate in relevant meetings and/or make limited contribution.	
3. The VS actively participate in the majority of relevant meetings.	
4. The VS consult with stakeholders and take into consideration their opinions in providing papers and making interventions in relevant meetings.	
5. The VS consult with stakeholders to ensure that strategic issues are identified, to provide leadership and to ensure coordination among national delegations as part of their participation in relevant meetings.	
3. Description of the activity	
Strategy	The VS consults with stakeholders, taking into consideration their opinions in providing papers and making interventions in relevant meetings
Description of the tasks (chronological)	• VS consults with stakeholders and records and takes into consideration their opinions in providing papers in relevant meetings. • The VS enables stakeholders,to make interventions at relevant meetings. • Records are maintained of consultative meetings and made available in a timely manner to all stakeholders • VS to include stakeholders in official delegations of Kenya at relevant international meetings (e.g. OIE General Assembly, OIE Regional Commisions)
Objectively verifiable indicators	Consultation records – participation records
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Management of resources and operations (I.11)	

MANAGEMENT OF VETERINARY SERVICES - 14 / III-3. Official representation

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year		12	3 600		43 200	
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**43 200**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***43 200***	
Total in	***KSH***				***3 888 000***	

MVS 15 - III.4. Accreditation / authorisation / delegation

1. Specific objective (Critical Competency)	
The authority and capability of the public sector of the VS to accredit / authorise / delegate the private sector (e.g. private veterinarians and laboratories), to carry out official tasks on its behalf.	
2. Result (Expected level of advancement)	
1. The public sector of the VS has neither the authority nor the capability to accredit / authorise / delegate the private sector to carry out official tasks.	
2. The public sector of the VS has the authority and capability to accredit / authorise / delegate to the private sector, but there are no current accreditation / authorisation / delegation activities.	
3. The public sector of the VS develops accreditation / authorisation / delegation programmes for certain tasks, but these are not routinely reviewed.	
4. The public sector of the VS develops and implements accreditation / authorisation / delegation programmes, and these are routinely reviewed.	
5. The public sector of the VS carries out audits of its accreditation / authorisation / delegation programmes, in order to maintain the trust of their trading partners and stakeholders.	
3. Description of the activity	
Strategy	Accreditation/authorisation/delegation programmes are developed by the public VS and these programmes are routinely reviewed
Description of the tasks (chronological)	• Identify programmes for delegation of authority to perform veterinary services on behalf of the official VS (Permanent / temporary delegations – specific task delegations such as vaccinations – general delegations such as surveillance, meat inspection • Identify legal frame work for intended delegations and implement • Provide specific authorization and documentation procedures, including of scope, sector (e.g dairy and poultry) and responsibilities, as well as time frame (including regular review) • Issue accreditation/authorisation/delegation document, containing information such as name, personal identification number, purpose and scope of tasks, date issued and date of expiry (validity)
Objectively verifiable indicators	Delegated programmes
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Empowering legislation for delegation of official functions and responsibilities
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MVS 16 - III.5. Veterinary Statutory Body (VSB)

III.5.A. VSB authority

1. Specific objective (Critical Competency)	
The VSB is an autonomous authority responsible for the regulation of the veterinarians and veterinary para-professionals. Its role is defined in the Terrestrial Code.	
2. Result (Expected level of advancement)	
1. There is no legislation establishing a Veterinary Statutory Body.	
2. The VSB regulates veterinarians only within certain sectors of the veterinary profession and/or does not systematically apply disciplinary measures.	
3. The VSB regulates veterinarians in all relevant sectors of the veterinary profession and applies disciplinary measures.	
4. The VSB regulates functions and competencies of veterinarians in all relevant sectors and veterinary para-professionals according to needs	
5. The VSB regulates and applies disciplinary measures to veterinarians and veterinary para-professionals in all sectors throughout the country.	
3. Description of the activity	
Strategy	VSB to be given the legal authority to regulate functions and competencies, including the application of disciplinary measures, applicable to all veterinarians as well as veterinary paraprofessionals (as identified according to need)
Description of the tasks (chronological)	
Objectively verifiable indicators	Enabling legislation
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Enact legislation empowering the VSB to exercise the authority and perform the required responsibilities and actions, including disciplinary measures
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MVS 17 - III.5. Veterinary Statutory Body (VSB)

III.5.B. VSB capacity

1. Specific objective (Critical Competency)	
The capacity of the VSB to implement its functions and objectives in conformity with OIE standards.	
2. Result (Expected level of advancement)	
1. The VSB has no capacity to implement its functions and objectives.	
2. The VSB has the functional capacity to implement its main objectives.	
3. The VSB is an independent representative organisation with the functional capacity to implement all of its objectives.	
4. The VSB has a transparent process of decision making and conforms to OIE standards.	
5. The financial and institutional management of the VSB is submitted to external auditing.	
3. Description of the activity	
Strategy	Improve the VSB capacity in respect to the implementation of transparent decision making processes, confirming to OIE Standards
Description of the tasks (chronological)	• Provide documented and structured SOP for functions executed, including provisions to ensure transparency of decision making. • Participate in relevant OIE VSB capacity building activities • DVS will financially support the reestablishment of the KVB according to the new law conditions during the upcoming five years and until it would be working autonomously (estimated at USD 20 000 / year for staff, equipment , separated office and others)
Objectively verifiable indicators	SOP´s – register of decisions
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MANAGEMENT OF VETERINARY SERVICES - 17 / III-5. Veterinary Statutory Body B. VSB capacity						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)		90				
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)		90	215	10	1 936	9 680
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set		1	200	3	67	
Office equipment set		2	1 000	3	667	
Other specific equipment						
Sub-total Material investments					**2 669**	**9 680**
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Fund for implementation of the new law		1	20 000,00		20 000	
Sub-total Consumable resources					**20 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***22 669***	***9 680***
Total in	***KSH***				***2 040 240***	***871 200***

MVS 18 - III.6. Participation of producers and other stakeholders in joint programmes

1. Specific objective (Critical Competency)

The capability of the VS and stakeholders to formulate and implement joint programmes in regard to animal health and food safety.

2. Result (Expected level of advancement)

1. Producers and other stakeholders only comply and do not actively participate in programmes.

2. Producers and other stakeholders are informed of programmes and assist the VS to deliver the programmes in the field.

3. Producers and other stakeholders are trained to participate in programmes and advise of needed improvements, and participate in early detection of diseases.

4. Representatives of producers and other stakeholders negotiate with the VS on the organisation and delivery of programmes.

5. Producers and other stakeholders are formally organised to participate in developing programmes in close collaboration with the VS.

3. Description of the activity

Strategy	Training of producers and stakeholders to participate in programmes and advise on needed improvements and participate in early disease detection activities
Description of the tasks (chronological)	• Identify joint programmes between VS and producers and other stakeholders • Design training for joint programmes for producers and other identified stakeholders (KVA etc) in collaboration with producer organizations (e.g *Kenya Livestock Breeders Organisation; Kenya Poultry Association* etc.) and other stakeholder representatives (KVA etc.) • Provide training programmes for dedicated joint programmes for the early detection of diseases (e.g awareness and sensitization for specific diseases, as well as e.g focus on antimicrobial and pesticide residues)
Objectively verifiable indicators	Joint programmes – training schedules - attendance registers

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MANAGEMENT OF VETERINARY SERVICES - 18 / III-6. Participation of producers and other stakeholders in joint programmes						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)		10,0	450			4 500
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						**4 500**
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					***4 500***
Total in	***KSH***					***405 000***

MVS 19 - IV.1. Preparation of legislation and regulations

1. Specific objective (Critical Competency)

The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in domains that are under their mandate, in order to warranty its quality with respect to principles of legal drafting and legal issues (internal quality) and its accessibility, acceptability, and technical, social and economical applicability (external quality)

2. Result (Expected level of advancement)

1. The VS have neither the authority nor the capability to participate in the preparation of national legislation and regulations, which result in legislation that is lacking or is outdated or of poor quality in most fields of VS activity.

2. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, and can largely ensure their internal quality, but the legislation and regulations are often lacking in external quality.

3. The VS have the authority and the capability to participate in the preparation of national legislation and regulations with adequate internal and external quality in some fields of activity, but lack formal methodology to develop adequate national legislation and regulations regularly in all domains.

4. The VS have the authority and the capability to participate in the preparation of national legislation and regulations with a relevant formal methodology to ensure adequate internal and external quality, involving stakeholder participation in most fields of activity.

5. The VS regularly evaluate and update their legislation and regulations to maintain relevance to evolving national and international contexts.

3. Description of the activity

Strategy	Exercise authority and capability to participate in the preparation of national legislation and regulations with formal methodology according to Kenya Government policies and legal provisions, ensuring adequate internal and external quality Involve stakeholder participation
Description of the tasks (chronological)	• Establish and operationalize the planned *"Policy, Planning and Legal Development Unit"* (PPLDU) • Consultation meetings with stakeholders (see CC III.2) • OIE provides training and support on the development of veterinary legislation
Objectively verifiable indicators	PPLDU task description – legislation drafts

4. Possible link with cross-cutting competencies

Continuing Education (I.3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

MANAGEMENT OF VETERINARY SERVICES - 19 / CC: IV.1. Preparation of legislation and regulations						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)			127			
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		1,0	11 500		11 500	
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries					**11 500**	
Consumable resources / year						
Administration			20%		2 300	
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**2 300**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***13 800***	
Total in	***KSH***				***1 242 000***	

MVS 20 - IV.2. Implementation of legislation and regulations and stakeholder compliance

1. Specific objective (Critical Competency)
The authority and capability of the VS to ensure that stakeholders are in compliance with legislation and regulations under the VS mandate.
2. Result (Expected level of advancement)
1. The VS have no or very limited programmes or activities to ensure stakeholder compliance with relevant legislation and regulations.
2. The VS implement a programme or activities comprising inspection and verification of compliance with legislation and regulations and recording instances of non-compliance, but generally cannot or do not take further action in most relevant fields of activity.
3. Veterinary legislation is generally implemented. As required, the VS have a power to tale legal action / initiate prosecution in instance of non-compliance in most relevant fields of activity.
4. Veterinary legislation is implemented in all domains of veterinary competence and the VS work with stakeholders to minimise instances of non-compliance.
5. The compliance programme is regularly subjected to audit by the VS or external agencies.

3. Description of the activity	
Strategy	Implement veterinary legislation in all domains of veterinary competence, and work with stakeholders to minimise non-compliance
Description of the tasks (chronological)	• Review and update existing legislation (see CC.IV.1) • Establish compendium of veterinary legislation for all VS domains • Detail required actions to be undertaken through standardized SOP´s (down to DVO level) • Training for law enforcement and prosecution procedures for DVO´s • VS to collaborate with county / district government law enforcement institutions • Take documented legal actions by initiating prosecutions and recording prosecution results • Enlist stakeholders participation to minimize non-compliance by public awareness campaigns
Objectively verifiable indicators	Legislation compendium – training records – prosecution records

4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Communication III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	Applicable

MANAGEMENT OF VETERINARY SERVICES-20/CC: IV-2. Implementation of legislation and regulations and stakeholder compliance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m²)						
Existing building to be maintained (m²)			23	1		
Existing building to be renovated (m²)			215	10		
Building to be built (m²)			463	20		
Transport						
Number of motorbikes			4 000	3		
Number of cars			25 000	8		
Number of 4x4 vehicles			40 000	6		
Telecommunication equipment set			200	3		
Office equipment set			1 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 years)			3 400			
Continuing education (man-days / year)		284,0	127		35 973	
National expertise (days/5 years)			450			
International expertise (weeks/5 years)			7 800			
Special funds (/5 years) for training new off						
Sub-total non material expenditure					**35 973**	
Salaries / year						
Veterinarians			11 500			
Other university degree			10 500			
Veterinary para-professionals			5 300			
Support staff			3 300			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			90			
drivers within the country (man-days) / year			35			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,10			
Km or miles cars / year			0,21			
Km or miles 4x4 vehicle / year			0,36			
km or miles / year						
km or miles / year						
Specific costs						
Targeted specific communication		1	30 000,00		30 000	
Consultation (number of 1 day meetings)		47	1 000,00		47 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**77 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***112 973***	
Total in	***KSH***				***10 167 600***	

MVS 21 - IV.3. International harmonisation

1. Specific objective (Critical Competency)	
The authority and capability of the VS to be active in the international harmonisation of regulations and sanitary measures and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate.	
2. Result (Expected level of advancement)	
1. National legislation, regulations and sanitary measures under the mandate of the VS do not take account of international standards.	
2. The VS are aware of gaps, inconsistencies or non-conformities in national legislation, regulations and sanitary measures as compared to international standards, but do not have the capability or authority to rectify the problems.	
3. The VS monitor the establishment of new and revised international standards, and periodically review national legislation, regulations and sanitary measures with the aim of harmonising them, as appropriate, with international standards, but do not actively comment on the draft standards of relevant intergovernmental organisations.	
4. The VS are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations.	
5. The VS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards[28], and use the standards to harmonise national legislation, regulations and sanitary measures.	
3. Description of the activity	
Strategy	Counting with properly trained staff working in clearly defined programmes, revising and inacting national legislation and applying international standards in close consultation with the relevant stake holders will allow Kenya VS to have a clear national perspective to actively participate in the International harmonisation processes.
Description of the tasks (chronological)	• Nominate OIE Focal Point (as per respective subject matter) to ensure compliance with OIE Standards • OIE delegate to solicit and consult relevant stakeholders regarding establishment of new and revised international standards • VS reviews periodically national legislation (acts and regulations) and sanitary measures to harmonize them, when applicable, with international standards • VS establishes structured collaboration with relevant intergovernmental organizations (e.g OIE, AU, East-African Community, COMESA) to actively review and comment on draft standards of these organizations. • Participate in regional and sub-regional meetings by relevant organizations to harmonize interventions in international standard setting organizations • Record and communicate the results of such interventions to the relevant VS stakeholders
Objectively verifiable indicators	OIE Focal Point activity reports – legislation reviews – meeting records
4. Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Management of resources and operations (I.11)	

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

Appendix 2: Simulation of the annual budget available to a future county-based VS (47 counties)

		Number per DVO	Annual cost per DVO	Total for field network (284 DVO)	Total resources per county (47 Counties)
Human resources (Full Time Equivalent)			67100		
		Number of staff	USD	Number of staff	
Veterinarian		1	11 500	284	6
Vet. para-professional		8	42 400	2 272	48
Support staff		4	13 200	1 136	24
Physical resources			76 400		
		Number of units		Number of units	
Buildings	m^2 to maintain	130	27 950	36 920	786
Transport	motorcycles	4	5 333	1 136	24
	4-wheel drive vehicles	1	40 000	284	6
Telecommunication set	mobile phones	10	167	2 840	60
Office set		6	2 000	1 704	36
Cold chain	gas-fuelled fridges	1	150	284	6
Other Equipment	small technical equipment	4	800	1 136	24
Operation			12 438		
Transport fees	km (motorcycle)	27 038	2 704	767 885	16 338
	km (4-wheel drive)	27 038	9 734	2 764 385	58 817
Administrative overhead					
20%			31 188		
TOTAL					

Annual cost of a District Vet Office	187 125
Annual cost for the whole Field Veterinary Network	53 143 524
Annual cost per County	1 130 713

Appendix 3 : Conduct of the mission

Day and date (July)	Designation
Monday 11	Briefing with the Director of Veterinary Services Session 1 : presentation of the gap-analysis methodology and provisional agenda Session 2 : establishment of a list of policy priorities Session 3 : assessment of the improvements in the level of advancement for the 46 critical competencies
Tuesday 12	Session 4 : critical competencies and cost estimates on trade
Wednesday 13	Session 5 : critical competencies and cost estimates on animal health
Thursday 14	Session 4 : critical competencies and cost estimates on veterinary public health Session 4 : critical competencies and cost estimates on veterinary laboratories
Friday 15	Session 5 : critical competencies and cost estimates on management and regulatory services
Monday 18	Session 6 : critical competencies and cost estimates on management and regulatory services (continued) Session 7 : review of a selection of critical competencies and cost estimates
Tuesday 19	Preparation of the de-briefing session by the Team (OIE office) Session 8 : concise presentation of the gap-analysis and preliminary outcomes Debriefing with the Director of Veterinary Services
Wednesday 20	Finalisation of the critical competency cards and cost estimates Report writing (OIE office)
Thursday 21	Report writing (OIE office)

Appendix 4 : Participants in the various sessions (per pillar)

Name	Position	Opening	Trade	AH	VPH	Lab	Mgmt	Closing
Margaret Wanasisa	Assistant Coordinator - Avian coordination units	x						
Dr D.K. Karugu	Assistant DVS					x		
Dr K.L. Karugu	Assistant DVS - Disease Free Zoning Coordinator	x	x				x	x
Dr C.N. Nanyo	Assistant DVS - Extension	x					x	x
Dr Jane Githinji	Assistant DVS - Labs					x		
Dr Njohu G.N.	Assistant DVS - VEEU			x		x		x
S.K. Kamau	CPZ - Zoology	x						x
Dr S.K. Mavuti	CVO - Tick Control	x						
Dr L.M. Njagi	CVO - VEEU			x				x
Dr David Ojego	CVO - VEEU			x				
Murithi Muhari	Deputy Director of VS - Training		x	x	x			x
M Jalanai	Deputy Director of VS. - Administration							x
Dr Lucy W. Mirthw	Deputy Director of VS. - Administration	x					x	
D. Wekesa Nyongesa	Deputy Director of VS. - Breeding							x
Dr B.O. Moenea	Deputy Director of VS. - CVFO	x		x				
Dr Joseph M. Macharia	Deputy Director of VS. - CVL Kabete	x				x		
Dr Murithi R. Mbabu	Deputy Director of VS. - Epidemiology and Economics	x		x			x	x
Dr Charles Ochodo	Deputy Director of VS. - Extension	x						
Mari K. Alburi	Deputy Director of VS. - Head of PMSU		x					
Dr Teresa Gichane	Deputy Director of VS. - Inspectorate Services	x	x	x			x	x
Dr Mwekefu W.K.	Deputy Director of VS. - Inspectorate Unit							
Dr Esther Ngethe	Deputy Director of VS. - Tick Control	x	x	x			x	x
Dr Wangwe	Deputy Director of VS. - VPH	x						
Dr Salome W. Kairu-Wanyoike	Deputy Head of Epidemiology and Economics	x					x	x

Name	Position	Opening	Trade	AH	VPH	Lab	Mgmt	Closing
Dr Peter Ithondeka	Director of Veterinary Services	x						
William K. Maritin	Disease Control-LITS		x				x	x
Dr H.R. Kirigia	E.O. Kenya Veterinary Board	x					x	
Dr Orot S.O.	Extension-Communication	x						
S.N. Sanduki	HRMOI-Human Resources section							x
Odhiambo Godia	Kenya Veterinary Board		x	x	x			
Jane w. Chege	Lab Technologist					x		x
Amhed A Hassan	Leather Products Division	x		x				
Adul B.O.	PALHO-Avian Influenza							x
Dr Ohieno Joseph	PATTEC Project	x						x
Dr B.M. Mugenyo	PDVS - Eastern Province			x		x		x
Dr Lukhale Gregory	PDVS - Western Province	x	x	x	x			
Patrick M. Mwanyumba	Senior Assistant DVS	x						
Dr Akwimbi A.W.	Senior Assistant DVS – Administration and budget section	x					x	
Dr. J.T. Kariuki	Senior Assistant DVS - Animal Welfare	x		x				x
Dr N.L. Ombwayo	Senior Assistant DVS - Budget Section	x						x
Dr H.L. Awando	Senior Assistant DVS - CVFO - Disease control	x	x	x	x	x	x	x
Dr Tomi Ongwemyi	Senior Assistant DVS - Extension	x					x	
Stepehen Orot	Senior Assistant DVS - Extension		x					
Dr Purity Nguhio	Senior Assistant DVS - Hygiene	x						
Dr Joseph M. Masahi	Senior Assistant DVS - Labs	x					x	x
Dr David M. Mwangangi	Senior Assistant DVS - Labs					x	x	x
Dr P.M. Mbaltha	Senior Assistant DVS - Labs					x		
Paul Marigi	Senior Assistant DVS - PMSU		x					x

Name	Position	Opening	Trade	AH	VPH	Lab	Mgmt	Closing
Dr Hany Oya	Senior Assistant DVS - VEEU			x				
Peter M. Kioko	Senior Assistant DVS - VPH		x	x	x		x	
Dr P.N. Nauhiu	Senior Assistant DVS - VPH		x	x	x	x	x	x
Dr Azegete Allan	Senior Assistant DVS - VPH							x
Bilha Muna	SLHA-VEEU			x				x
Dr Mwanzi Kiar	VO - Administration	x						
Mwangi Kiai	VO - Administration		x	x				
Dr Kahariri Samuel	VO-VEEU			x			x	x
Dr Sirma Anima	VO-VEEU			x			x	x
Dr Agnes Maina	VPH				x			
Dr Nochholas D. Ayere	VPH				x			
Dr Dennis Onkundi	VSDF Manager	x						
Dr Jean Mageno	VSDF Assistant Manager							x
John Muigai	Workshop Foreman			x				
	Number of participants	**30**	**14**	**22**	**8**	**10**	**18**	**30**

Appendix 5 : Glossary of terms (as per OIE Terrestrial Code)

Border post

means any airport, or any port, railway station or road check-point open to international trade of commodities, where import veterinary inspections can be performed.

Compartment

means an animal subpopulation contained in one or more establishments under a common biosecurity management system with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and biosecurity measures have been applied for the purposes of international trade.

Competent Authority

means the Veterinary Authority or other Governmental Authority of a Member, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code and the Aquatic Animal Health Code in the whole territory.

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 unrecognized pathogenic agent or disease diagnosed for the first time and which has a significant impact on animal or public health.

Equivalence of sanitary measures

means the state wherein the sanitary measure(s) proposed by the exporting country as an alternative to those of the importing country, achieve(s) the same level of protection.

International veterinary certificate

means a certificate, issued in conformity with the provisions of Chapter 5.2., describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

Laboratory

means a properly equipped institution staffed by technically competent personnel under the control of a specialist in veterinary diagnostic methods, who is responsible for the validity of the results. The Veterinary Authority approves and monitors such laboratories with regard to the diagnostic tests required for international trade.

Notifiable disease

means a disease listed by the Veterinary Authority, and that, as soon as detected or suspected, must be brought to the attention of this Authority, in accordance with national regulations.

Official control programme

means a programme which is approved, and managed or supervised by the Veterinary Authority of a country for the purpose of controlling a vector, pathogen or disease by specific measures applied throughout that country, or within a zone or compartment of that country.

Official Veterinarian

means a veterinarian authorised by the Veterinary Authority of the country to perform certain designated official tasks associated with animal health and/or public health and inspections of commodities and, when appropriate, to certify in conformity with the provisions of Chapters 5.1. and 5.2. of the Terrestrial Code.

Official veterinary control

means the operations whereby the Veterinary Services, knowing the location of the animals and after taking appropriate actions to identify their owner or responsible keeper, are able to apply appropriate animal health measures, as required. This does not exclude other responsibilities of the Veterinary Services e.g. food safety.

Risk analysis

means the process composed of hazard identification, risk assessment, risk management and risk communication.

Sanitary measure

means a measure, such as those described in various Chapters of the Terrestrial Code, destined to protect animal or human health or life within the territory of the OIE Member from risks arising from the entry, establishment and/or spread of a hazard.

Surveillance

means the systematic ongoing collection, collation, and analysis of information related to animal health and the timely dissemination of information to those who need to know so that action can be taken.

Terrestrial Code

means the OIE Terrestrial Animal Health Code.

Veterinarian

means a person registered or licensed by the relevant veterinary statutory body of a country to practice veterinary medicine/science in that country.

Veterinary Authority

means the Governmental Authority of an OIE Member, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code in the whole territory.

Veterinary para-professional

means a person who, for the purposes of the Terrestrial Code, is authorised by the veterinary statutory body to carry out certain designated tasks (dependent upon the category of veterinary para-professional) in a territory, and delegated to them under the responsibility and direction of a veterinarian. The tasks for each category of veterinary para-professional should be defined by the veterinary statutory body depending on qualifications and training, and according to need.

Veterinary Services

means the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the Terrestrial and Aquatic Codes in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organisations, veterinarians, veterinary paraprofessionals or aquatic animal health professionals are normally accredited or approved by the Veterinary Authority to deliver the delegated functions.

Veterinary statutory body

means an autonomous authority regulating veterinarians and veterinary para-professionals.

Appendix 6: Supporting documents

6.1. Ministerial budgetary allocation for the department of veterinary services

6.2. Official economic indicators (GDP)

6.3. Number of feed manufacturers, veterinary drug importers and veterinary drug manufacturers (per province)

6.4. Training institutions (AHITI and MTI)

6.5. Laboratory charges per sample, applied in the private sector

6.6. List of AI and Breeding selection centres

6.7. Training costs for various categories of DVS employees

6.8. Overview of human resources allocated to the DVS (national, provincial and district)

6.9. List of vaccine imports for the year 2009

6.10. List of imports and exports of live animals to and from Kenya