REPUBLIC OF KENYA

MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES

KENYA VETERINARY POLICY

APRIL 2015

FOREWORD

The Veterinary Policy is provided for in the Fourth Schedule of the Constitution of Kenya. It aligns developments in the animal resource industry to the Constitution as well as the Kenya Vision 2030 and the international animal health laws, treaties, agreements and conventions ratified by Kenya. The overarching treaty is the World Trade Organization agreement particularly the agreement on the Application of Sanitary and Phytosanitary measures which Kenya ratified on 23rd December 1994 and came into effect on 1st January 1995. The Policy recognizes that Kenya is a member of the Common Market for East and Southern Africa, the East African Community and the Inter-Governmental Authority on Development and therefore harmonizes with the relevant provisions of the constitutive treaties for these Regional Economic Communities.

Development and growth of the animal resource industry has hitherto relied on the National Livestock Policy, the Agricultural Sector Development Strategy, the Kenya Vision 2030 and commodity or issue-specific policies among others. However, animal resources by their nature are varied and their functions straddle different institutions and departments. Livestock, fisheries and wildlife constitute the three broad functional domains managed by different institutions; aspects of human, animal and environmental health require cooperation across departments. The Veterinary Policy creates operational linkages among these institutions while recognizing and preserving their functional specialties.

The Policy specifies key challenges facing the animal resource industry and provides direction in addressing each of them. It focuses on ten objectives leading to the realization of the goals in the animal resource industry. The Policy takes into account the constitutional obligations of each level of government, national and county, with regard to development of animal resources and outlines functional relationships between the two levels of government. It identifies major institutions in the animal resource industry as well as collaborating organizations and provides mechanisms of inter-linkages for efficient and effective delivery of services.

The Policy provides an enabling environment for safeguarding animal life, health and welfare as well as animal propagation and production for food security and economic development. It seeks to ensure that Kenyans benefit from proximate and quality health by guaranteeing animal health, welfare and production services. Its implementation will boost contribution of the animal component to food security and ensure that animal products that are consumed or marketed meet the highest safety and nutritional standards. It is expected to ensure that diseases, disease-causing and disease-carrying agents are not transmitted between animals and humans as Kenyans continue to live with, work with and trade in animals and animal products. It was formulated through extensive sector and countrywide consultations including a national stakeholders' forum. Its implementation is expected to contribute to better livelihoods and greater economic

development in Kenya.

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EXECUTIVE SUMMARY

The Veterinary Policy provides a definite roadmap for the development of animal resources in Kenya. It addresses animal health, production, welfare, food safety and trade among other concerns. Animal health services are integral to the prevention, control and eradication of animal diseases that occasion huge economic losses and adversely impact livelihoods. The health of animals is among the leading priorities in animal productivity and at all stages of production must be guaranteed. Due to inadequate focus on animal health, enterprises involving food animals have low returns on investment resulting in high poverty levels in animal producing areas.

Trade in animals and animal products require conformity to prescribed animal and public health standards and application of sanitary measures that follow a Farm-to-Fork continuum. Appropriate infrastructure is necessary for optimum animal production and trade. This includes suitable establishments, premises, animal inspection and disease management structures, laboratories, value addition and marketing facilities.

Provision of Animal Welfare is central to physical and psychological well-being of animals including animal health and production and manifests in better performance, improved market access, safe and mutually beneficial companionship. Animal health services are highly dependent on appropriate use of veterinary pharmaceuticals that require effective regulation to prevent misuse which poses a threat to humans and animals.

Veterinary Public Health is an essential part of public health that links people, animals and environment. Human health is closely interrelated to animal health; many diseases that affect human beings originate from animals. Optimal human health is one of the essential considerations for sustainable economic development. The "One Health" approach is based on the realization that diseases that adversely impact the health of humans, animals and the environment can be successfully addressed through collaboration across disciplines and institutions.

Animal research programmes embrace multi-disciplinary approaches and integrate education and extension. These programmes are continually changing to respond to emerging challenges and opportunities brought about by rapidly advancing technologies, evolving consumer demands and the need to make positive contributions to human, animal and environmental health. Efficient demand-driven animal research translates into affordable and high-quality food for the nation, better livelihoods and economic gain.

Animal resources include domestic animals, a wide variety of fishes, bees, farmed wildlife and wildlife. These resources provide household food and support livelihoods. In totality, the animal

resource industry in Kenya contributes 16% of the Gross Domestic Product but can perform even better. Some of the challenges that limit progress of this industry are: a weak animal disease management capacity, poor infrastructure for animal health and production, limited value addition before marketing, underdeveloped marketing systems, low compliance with sanitary measures, low animal productivity, effects of climate change, underfunding and understaffing of its institutions.

The Policy outlines practices, processes and guidelines to counteract these challenges and position the animal resource industry as one of the leading contributors to national wealth. It recognizes land as a critical factor in animal production and recommends appropriate land-use systems. It advocates for gender parity in accessing factors of animal production and aims at correcting the imbalance in provision of labour in the livestock sub-sector. It recommends training of the youth with a view to ensuring a seamless transition from ageing animal keepers.

The Policy identifies institutions that will act independently or collectively to deliver services in the animal resource industry. It provides a framework for linkages, collaboration and Public-Private-Partnerships that will enhance synergy among various actors in order to develop, protect and conserve animal resources for the benefit of human beings.

Veterinary Services are classified as a global public good for which the Veterinary Authority takes primary responsibility with regard to good governance and service delivery in accordance with national and international standards and public expectations. The governance must be within an effective, structured national legislative framework supported by appropriate financial and human resources.

The Veterinary Policy provides a basis for the review and consolidation of laws and enactment of new ones for the governance of the animal resource industry. Its funding shall be sourced from the national and county governments, the private sector and development partners. Its implementation shall be regularly monitored and evaluated. It will be reviewed periodically to take into consideration emerging trends in the animal resource industry.

ACRONYMS

AFC	Agricultural Finance Corporation
AHITI	Animal Health and Industry Training Institute
ASALs	Arid and Semi-Arid Lands
CAC	Codex Alimentarius Commission
Cap	Chapter (of Laws of Kenya)
CBO	Community-Based Organization
COMESA	Common Market for East and Southern Africa
DTI	Dairy Training Institute
EAC	East African Community
EAPCCO	Eastern African Police Chiefs Cooperation Organization
FMD	Foot and Mouth Disease
GDP	Gross Domestic Product
HACCP	Hazard Analysis Critical Control Points
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IGAD	Inter-Governmental Authority on Development
KAGRC	Kenya Animal Genetics Resource Centre
KALRO	Kenya Agricultural and Livestock Research Organization
KARI	Kenya Agricultural Research Institute
KEBS	Kenya Bureau of Standards
KenTTEC	Kenya Tsetse and Trypanosomiasis Eradication Council
KEPHIS	Kenya Plant Health Inspectorate Services
KETRI	Kenya Trypanosomiasis Research Institute
KEVEVAPI	Kenya Veterinary Vaccines Production Institute
KFS	Kenya Forestry Service
KMC	Kenya Meat Commission
KNEC	Kenya National Examination Council
KVB	Kenya Veterinary Board
KWS	Kenya Wildlife Service
M&E	Monitoring and Evaluation
MTI	Meat Training Institute
NEMA	National Environment Management Authority
NGO	Non-Governmental Organization
NVRC	National Veterinary Research Centre
OIE	World Organization for Animal Health
PPR	Peste des Petits Ruminants
PVS	Performance of Veterinary Services
SAPs	Structural Adjustment Programmes
SPS	Sanitary and Phyto-Sanitary

TADs	Trans-boundary Animal Diseases
WHO	World Health Organization
WTO	World Trade Organization

CHAPTER ONE

INTRODUCTION

1.1 Background

The Kenya Vision 2030 outlines several approaches which will be implemented to improve livestock productivity, including increasing the availability of animal feeds through targeted programmes such as seeding ranches and rangelands and enriched fodder, stemming the decline and re-energizing the use of artificial insemination services and purchasing breeding cattle for targeted parts of the country especially around the proposed Disease Free Zones. In order to realize the full potential of animal production in the ASALs, Vision 2030 aims at investing in targeted rangeland developments, such as water provision, infrastructure, pasture, fodder and veterinary services; establishing strategically-located Disease Free Zones to increase livestock productivity and quality; unifying the efforts of different ministries and other stakeholders for coordinated development of the region. It is against this background that the Ministry of Agriculture, Livestock and Fisheries seeks to put in place a policy framework to facilitate enhanced and sustainable development of the animal resources industry.

The Veterinary Policy provides synergy, rhythm and focus among the many players in the animal resource industry as they perform tasks for which they are professionally and legally best suited. The Policy builds linkages and provides mechanisms of liaison with organizations and institutions whose functions directly or indirectly impact the animal resource industry. Its existence does not obviate the need for commodity or discipline specific policies in the animal resource industry that will be formulated from time to time according to need. Further, the veterinary governance, which is a key factor in achieving the intended objectives, is addressed within this policy framework.

The heritage of Kenya is a landmass of 582,650 square kilometers. The Arid and Semi-Arid Lands constitute about 80% of the landmass and is unsuitable for rain-fed crop agriculture but can support many species and breeds of domestic animals and game. Approximately 30% of the Kenyan population lives in the ASALs and derive virtually all their livelihood from animal resources. The ASALs also support the majority of Kenya's National Parks and game reserves and hold game animals outside protected areas. The remaining 20% of Kenya's landmass is not only suitable for rain-fed crop agriculture but also holds the national herds of dairy cattle, dairy goats and wool sheep, pigs, poultry and rabbits in addition to a number of National Parks.

Kenya has several lakes and rivers as well as two hundred nautical miles of coastline that is suitable for aquatic animals. The country is endowed with abundant animal resources that are a source of livelihood, food, companionship, power for work, ornaments, tourism and are used in security services and sporting activities. Virtually every household in the rural areas rears an animal of one species or the other. Livestock are among the few assets owned by women and the

marginalized segments of the population.

Food animals include cattle, sheep, goats, pigs, poultry, rabbits, camels, donkeys, bees, fish, other aquatic animals and emerging livestock. They provide humankind with animal-derived proteins, carbohydrates, fats and minerals that are key requirements for nutrition and food security. Animal by-products provide dressing, manure, fertilizers, feedstuffs, ornaments, musical instruments, adhesives, beddings, medicines, perfumes and polish among others. Animal products are also marketed thus earning income and contributing to the national economy.

Working animals such as horses, donkeys, oxen and camels provide draught power for human movement and commerce in many areas of the country. The honey-bees produce honey for human food; honey is also a component in a number of medicines. Moreover, in the process of gathering nectar and pollen for their use, bees pollinate plants. This simple act is responsible for the propagation of virtually all plant species including forests and other vegetation.

Kenya is famous for her abundant game animals that attract tourists earning foreign exchange that runs other sectors of the economy. The wild animals and farmed wildlife are part of our biodiversity that constitute a significant component of research in animal and human health. Indeed, human life as we know it today may not be complete and neither would it exist without animals. It is the proper management and inter-relation with this biodiversity that assures humankind of longevity.

Kenya's heritage supports the livelihood and economy of the country and needs to be utilized and developed in a sustainable manner for the 42 million Kenyans and future generations. This requires a clear policy on animal resources, modern innovative technologies and sustainable development programmes which will improve livelihoods and the economy while maintaining biodiversity.

1.2 Veterinary Policy and the Constitution

The Constitution assures Kenyans of the right to "be free from hunger and to have adequate food of acceptable quality", protection for human health and attainment of the highest standard of health. It assures consumers of goods and services of reasonable quality and access to information necessary for them to gain full benefit for the necessary protection of their health, safety and economic interests. The Constitution devolves specified functions in the animal resource industry from the national government to the county governments and stipulates that the two levels of government shall conduct their mutual relations on the basis of consultation and cooperation.

The Constitution recognizes that Kenya is a member of the international community and plays

her rightful roles in international human, security and trade relations. It upholds the principle of international law and recognizes all the treaties, conventions, protocols and agreements ratified by Kenya as part of the laws of Kenya. Chief among such supranational laws are the Treaty for the Establishment of the East African Community, the Constitutive Act of the African Union, the United Nations Charter and the World Trade Organization agreements. Of particular relevance in animal health, welfare and production policies is the supranational law called the WTO Agreement on the Application of Sanitary and Phytosanitary measures which Kenya ratified in 1995 and which is the framework for the development and application of such policies within Kenya and the export trade in animals and animal products to other members of WTO.

1.3 Veterinary Policy and Vision 2030

Vision 2030 aims at transforming Kenya into "a newly industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment". To achieve this goal in regard to the animal resource industry, the Vision has identified five key strategic thrusts namely: transforming key institutions in livestock and wildlife among others to promote growth; increasing productivity of livestock, crops and forests through provision of widely-accessible inputs and services to farmers and pastoralists; transforming land use to ensure better utilization of high and medium potential lands; developing Arid and Semi-Arid Lands for crop and livestock production and increasing market access through value addition by processing, packaging and branding. The Vision identifies Disease Free Zones as part of its key flagship projects.

1.4 Situational analysis

The National census of 2009 established Kenya's animal resource base to be 17.5 million cattle, 27.7 million goats, 17 million sheep, 3 million camels, 31.8 million domestic birds, 1.8 million donkeys and an undetermined number of companion, game and aquatic animals. Animal resources provide livelihoods and wealth for Kenyans and significantly contribute to the national economy. In totality (livestock, wildlife, farmed wildlife, companion and aquatic animals), the animal resource industry contributes 16% of the Gross Domestic Product.

1.4.1 Meat production

Kenya's red meat producing farm-animal species include cattle, sheep, goats and camels and to a little extent farmed game. Beef earns the country more financial resources than any other single agricultural commodity. The beef cattle breeds comprise of Boran-40% and other Zebu-50%, the remaining 10% being other breeds such as Sahiwal, Hereford, Charolais, Simmental and Red Poll. The meat sheep breeds include Dorper, Blackhead Persian and Red Maasai and 10% wool-sheep breeds such as Merino, Romney Marsh and Corriedale. Meat goats mainly consist of the

Small East African breed-50% and Galla-20%. Two breeds of camels are reared: the Somali camel and the Samburu type. The bulk of meat supply comes from the ASALs but a small proportion of beef supply comes from dairy herds.

White meat, which includes poultry and pig meat, accounts for about 19% of the meat consumed in the country. The current per capita meat consumption is estimated at 10.8 kg of red meat and 1.1 kg of white meat. These estimates are expected to change in tandem with variation in the people's purchasing power.

1.4.2 Milk production

The major dairy cattle breeds include Friesian-60%, Ayrshire-20%, Guernsey-5% and Jersey-3%, the rest of the cattle population consists of cross and dual-purpose breeds. These breeds produce milk for local consumption and export, particularly to the Eastern and Central African region. The level of development of dairy goats and camel production is low hence there is need for intervention to increase their milk contribution to the economy. The main dairy goat breeds are Toggenburg, Saanen and German Alpine. The small-holder farmers account for 70% of the total milk production which was estimated at 4.0 billion litres in 2009 and is projected to reach 5 billion litres in 2014. Kenya has an average annual per capita milk consumption of 99 Kg in urban areas.

1.4.3 Fisheries

Freshwater fish accounts for close to 96% of Kenya’s total fish production with the marine sources and aquaculture contributing the rest. Lake Victoria, which in 2003 produced 106,000 MT or 71% of the country’s total catch, accounts for most of the fresh water fish. Fresh water fish production has risen in recent years; however marine production has largely stagnated. There is great potential for aquaculture which is still underdeveloped. Credit support to producers, provision of extension services and active disease and pest control interventions can spur growth of aquaculture. The fisheries sub-sector contributes about 0.5% of the country’s Gross Domestic Product. In 2004, the average producer value of fish reached Kshs 8 billion. Aquatic animal products are traded in the domestic markets and are also exported largely to the European Union and Israel.

1.4.4 Honey production

The honey sub-sector produces honey, propolis, beeswax and bee-pollen for utilization as food, industrial raw materials and for trade. Bees pollinate plants without which growth of crops and forests would be greatly hampered. Over 80% of honey producers use traditional log hives. The use of Kenya Top-Bar hives, Langstroth hives and other new technologies is on the rise.

Honey production is gradually on the rise particularly in the ASALs where pasture and water for herbivores are scarce. Bee keeping contributes to incomes as well as food security. It contributes an estimated Kshs 4.3 billion to the economy and employs over 90,000 farmers. Its potential is estimated to be 100,000 metric tonnes valued at Kshs 15-20 billion. This level of production is not met because of poor apiculture practices. Inadequate honey extraction and processing equipment that are usually expensive and inaccessible contribute to the production of poor quality honey.

1.4.5 Rabbits

Rabbit population in Kenya is estimated at 600,000 with higher populations in Central, Western and Rift Valley regions. Commercial rearing of rabbits is a relatively new industry in Kenya but various institutions are working towards development of the enterprise. Kenya has only recorded exports of rabbit meat to Sudan over the period 2000 – 2010 with the highest export value being Kshs 0.49 million in 2008.

1.4.6 Donkeys and horses

Donkeys provide transport for people and goods and are often used in small-scale agricultural systems for light tillage, seeding and weeding of crops. Despite their valuable contributions to human society, research and development into donkey use has been minimal. They have been given less consideration than other species of livestock and their welfare is often neglected. A number of factors explain why donkeys have low status. They are usually the cheapest, often the only affordable, work animals and therefore tend to be associated with the poor. In contrast to cattle and camels which are usually kept for their milk and meat as well as work, hides that are cured for leather, bride price and dung that has a number of uses; donkeys are mainly used for work even though, some communities consume their meat and milk and use their hides. They are mostly owned by men but usually used by women and the youth.

Horses can be used in transport; to draw farm implements for land preparation and harrowing and to drive water pumps for irrigation. In Kenya, horses are mainly used for horse-racing, polo-playing and show jumping. The monetary value of good sporting horses has no upper limit and breeding these types of horses is good business. Horses are also great family pets and can give their owners much pleasure with their gentle and trusting nature. Kept with cattle, horses keep the latter healthy as they eat all the grass left over by cattle, usually near piles of cow dung, which includes all internal parasite eggs and larvae deposited with the dung. Being a non-ruminant, most of these worms cannot develop in the horse' gut and therefore die. Conversely, cattle can eat grass near horse' droppings. Hence when kept together, horses and cattle reduce each other's parasite burden, need much less deworming and stay much healthier.

1.4.7 Companion animals

Companion animals or pets are usually kept for company rather than economic reasons. The most popular pets in Kenya are dogs and cats, but people also keep rodents such as gerbils, hamsters, chinchillas, fancy rats and guinea pigs; avian pets, such as canaries, parakeets and parrots; reptile pets, such as turtles, lizards and snakes; aquatic pets such as tropical fish and frogs and arthropod pets such as tarantulas and hermit crabs.

The keeping of animals as pets raises concerns in regard to animal welfare and transmission of zoonoses. In particular, confined housing, nutrition, health care and breeding may not be optimal. Poorly kept pets are a health risk to household members as they can harbour pests and diseases that can cross-over to them. If the pets get into contact with animals beyond the home as often happens in developing countries, the risks increase.

1.4.8 Emerging livestock

Emerging livestock include ostriches, crocodiles, quails, guinea fowls, snakes, ants, snails, frogs and chameleons. They are largely unexploited either due to inadequate information to support their production, lack of sufficient marketing channels, inadequate policy and legal framework or socio-cultural beliefs that hinder their utilization. Ostrich farming is a major enterprise in this sub-sector due to the current awareness of its immense potential in the global market. Ostriches number approximately 10,000 in Kenya and are mainly kept for meat, eggs, skins, feathers and eggshells that are valued at about Kshs 1 billion. Ostrich farmers are concentrated in the Arid and Semi-Arid Lands. Crocodiles are reared mainly for their skins and meat.

1.4.9 Wildlife

The country has 22 National Parks, 28 National Reserves, 6 Marine Parks and Reserves and 4 National Sanctuaries holding different species of wildlife including lions, elephants, turtles, giraffes, buffaloes, elands, wildebeests and zebras. These animals and other species in the wild support the tourism industry whose earnings rose from Kshs 38.5 billion in 2004 to Kshs 96 billion in 2012. Many species of wild animals are reservoirs for certain diseases that afflict farm animals, for this reason, they are significant to the Government's animal disease control programmes.

The contribution of wildlife to the country's meat supply is negligible, accounting for less than 1% of the total meat consumed. A few licensed dealers, particularly hotels and restaurants, supply game meat. Kenya restricts marketing and export of game meat due to fears that its full-scale promotion can encourage poaching

1.4.10 Disease control

Disease detection and reporting is the responsibility of all animal value chain actors, however, the Directorate of Veterinary Services has the mandate of confirmatory disease diagnosis, notification and management. In order to enhance reporting and control of animal diseases, the government has declared certain diseases as notifiable (ANNEXES 1 and 2) and enacted legislation, the Animal Diseases Act, Chapter 364, to regulate their management. Suspicion or confirmation of a notifiable disease has to be reported to the respective County Director of Veterinary Services and the Director of Veterinary Services who notify the public of the occurrence of the disease and the measures that need to be taken for its management. The Director of Veterinary Services must report the occurrence of the disease to the World Organization for Animal Health and trading partners at the earliest possible time.

Disease management measures that are provided for by legislation include investigation and diagnostic services, inspection of animals and approval of premises such as farms, hatcheries, breeding centres, quarantine stations, animal markets and sale yards; certification of animal products; approval of processing facilities and enforcement of control measures.

Priority diseases, many of which are notifiable include Foot and Mouth Disease (FMD), Contagious Bovine Pleuro-Pnemonia (CBPP), Peste des Petits Ruminants (PPR), Rift Valley Fever (RVF), Brucellosis, Sheep and Goat pox (SGP), Lumpy Skin Disease (LSD), Contagious Caprine Pleuro-Pnemonia (CCPP), Camel pox and Trypanosomiasis. These diseases have great adverse impact on livelihoods and trade and their management attracts international attention in terms of coordination, advocacy and formulation of control strategies.

In 2009, the country received certification for rinderpest freedom from the World Organization for Animal Health. This progress has encouraged the development of strategies and contingency plans to control and eventually eradicate the remaining priority diseases. In this regard, the FMD control strategy has been finalized, zonal freedom has been achieved for CBPP and control of tsetse flies has largely been successful in the Lake Victoria Basin and the Meru-Mwea belt. However, the coastal region is still heavily infested by these pests. An East Coast Fever vaccine was developed and approved for use in areas affected by the disease. Other tick-borne diseases are controlled by different tick-control measures including dips and spray pumps. Management diseases especially bovine mastitis, parasites, intestinal and lung infections are other conditions of significance.

1.4.11 Disease Free Zones

Disease Free Zones (DFZs) are flag ship projects under the Kenya Vision 2030 blue print. A zone is declared disease free following official recognition by the OIE of freedom from rinderpest, Foot and Mouth Disease, Bovine Spongiform Encephalitis and Contagious Bovine

Pleuro Pneumonia. While creating DFZs in Kenya, seven other trade sensitive diseases including CCPP, RVF and PPR are targeted for control or total eradication. The goal of DFZ programme is to contribute towards poverty reduction and food security. The overall objective is to improve livelihoods and increase the livestock sub-sector contribution to the national economy by promoting trade in livestock and livestock products through improvement of access to international markets.

The expected outputs of DFZs include: increased supply of quality meat, by 48,000 MT, for sell locally and export; creation of over 100,000 employment opportunities; reduction in human deaths arising from zoonoses; increased milk production for sale or household consumption by 5 million litres; increased hides and skins value and rangeland and environmental improvement of 2 million hectares per year. The value of benefits is estimated at Kshs 16.2 billion annually.

Direct beneficiaries are livestock owners (pastoralists, agro-pastoralists, ranchers, mixed farmers and zonal dairy farmers), livestock traders, associated operators and chambers of commerce, public and private sector animal health service providers and Community Based Organizations engaged in the livestock sub-sector. The first of the DFZs which is already under implementation is the Coast DFZ which covers the counties of Kilifi, Mombasa and parts of Taita-Taveta and Kwale. Vision 2030 envisages another four zones, to be completed by 2030, that will cover the whole country.

1.4.12 Breeding services

A number of breeding technologies are used in the country in addition to natural mating. Artificial Insemination (A.I.) is fairly advanced while Embryo Transfer and the use of Sexed Semen are new breeding technologies that are gradually gaining acceptance among farmers. Although A.I. services were negatively affected by privatization in the 1990s, currently many private service providers are successfully operating and 488,924 inseminations were accomplished from 2010 - 2012. During the same period, 1,773,723 doses of semen were produced by the Kenya Animal Genetics Resource Centre and another 692,150 doses and 460 embryos imported by 20 private companies and individual farmers.

1.4.13 Veterinary Public Health

The Veterinary Public Health Division is charged with the responsibility of inspection and certification of food of animal origin namely meat and meat products, milk, honey and eggs as well as animal feeds. It approves establishments for meat and meat products and milk processing plants for purposes of local and international trade. The Directorate of Veterinary Services (DVS) is in charge of meat inspection services in the country. Already, it has taken over these services in most counties. A few slaughterhouses in the ASAL areas are still under the State Department of Health but the DVS plans to take over their management in the near future.

The country had 1850 local and 8 export slaughterhouses in 2013, in the same year, the average annual kill was 2 million cattle, 800,000 Sheep, 700,000 goats and 3 million chickens producing 400,000 Metric Tonnes (MT) of beef, 81,000 MT of mutton and chevon and 22,000 MT of poultry meat. In 2013, camels and pigs produced 8,000 and 14,000 MT of meat respectively. Annually, 5000 MT of meat and meat products and 6,000 MT of milk and milk products are certified for export. About 2000 MT of meat and meat products and 15,000 MT of milk are certified for import. Most of the meat produced is destined for the domestic market with small quantities being exported to Tanzania, Uganda, Somalia, South Sudan and the United Arab Emirates.

1.4.14 Hides and skins production

Hides and skins are important products that arise from slaughter of animals. They are usually processed into leather and other products prior to export. The bulk of conventional leather production is accounted for by cattle hides (70%), sheep skins (20%) and goat skins (10%). Other less significant sources of leather include calf, lamb and kid skins, fish skins, buffalo hides, ostrich skins, crocodile and pig skins. On average, 26,400 metric tons of hides and 7 million pieces of skin are produced per year earning the country 3.8 billion shillings. Kenya has a thriving tanning industry with 14 functional tanneries bearing an installed capacity of tanning 3.3 million hides and 8.3 million skins. Products from the tanneries include wet blue and tanned leather. Kenya manufactures varied leather goods including footwear, handbags and belts. Most of these are exported to Uganda, Tanzania, COMESA, USA, and the European Union.

1.4.15 Policy situation

Development of the animal resource industry has hitherto been guided by several policies in the Agricultural Sector, human health and biodiversity policies as well as 26 Acts of Parliament. The Agricultural Sector Development Strategy (2010-2020) aims at ensuring food and nutritional security and transforming agriculture into a modern and commercially viable Sector. The target areas identified in the ASDS include reforming and streamlining research, extension and regulatory bodies to increase their efficiency; reducing food insecurity by 30% and reducing the number of people living below the absolute poverty line to less than 25%.

The National Livestock Policy addresses challenges in the livestock sub-sector with emphasis on livestock breeding, nutrition and feeding, disease control, marketing, research and extension. The Veterinary Policy covers these issues with a particular bearing on sanitary considerations and focuses on a wide-range of animals beyond the farm-food animals in the Livestock Policy. Since it addresses animals in totality, the Veterinary Policy has incorporated aquatic and wildlife health, animal resources' statistics and genetic engineering among other areas of growing concern in the animal resource industry.

The Health Policy, 2012-2030, recognizes the need for collaboration with other sectors whose functions impact human health. This is to be achieved by adopting a "Health in all Policies" approach. The Veterinary Policy expounds on the "One Health" approach that espouses inter-disciplinary cooperation for successful intervention in matters that affect human, animal and environmental health. In this regard, the Veterinary and Health Policies synergize in relation to human and animal health with a focus on zoonoses and food safety among other areas of mutual concern.

The Fisheries Policy recognizes the impact of sanitary and phytosanitary standards imposed by major export destinations. This limits Kenya's international trade in fish and fishery products. The Veterinary Authority is responsible for fish export or import certification and works in collaboration with the State Department of Fisheries to mainstream sanitary measures in the fish value chain. In addition, the Veterinary Policy elaborates on the health and safety issues of all other aquatic animals.

According to the Wildlife Policy, wildlife diseases and health are critical to wildlife conservation and rural livelihoods. This is so because most of Kenya's wildlife is found in rangelands that allow for interaction between pastoralism and wildlife. As a result, wildlife often interacts with livestock, exposing both to transmission of diseases. Disease transmission has implications for wildlife management, public health, food security, livestock development and rural livelihoods. Many animal diseases including zoonotic diseases affect both wildlife and livestock. Affected animals are a potential source of infection for people. This possibility calls for a collaborative mechanism between the wildlife and veterinary authorities.

The Forestry Policy identifies livestock keeping as the main economic activity of the ASALs. Due to population pressure in the high and medium potential areas, there is migration into the dry-land areas resulting in depletion of grazing lands; the forest resource and tree cover degradation. Forests are home to wildlife and insects, for this reason, they play a significant role in animal disease dynamics as some of the forest-based animals act as reservoirs for livestock diseases and certain insects are disease vectors. The Veterinary Policy provides for establishment of a collaboration framework to address these problems.

The National Environment Policy highlights the effects of overgrazing in the ASALs. In the rain-fed areas, especially where zero grazing is practiced, the main issue in livestock production is waste management including disposal that can result in environmental pollution. In urban areas, disposal of effluents from abattoirs, butcheries, tanneries and other establishments that process livestock products is a major problem. The Veterinary Policy assures collaboration between the environmental and animal resource agencies for the sustainable development of the animal resource industry.

The twenty-six Acts of Parliament that currently constitute the legal framework in the animal

resource industry are not based on any known Policy. Many of them contain obsolete provisions and require alignment with the Constitution as well as review to accord with current trends in Veterinary Services. To improve their applicability and effectiveness, there is need to consolidate them into a few specific laws targeting key areas in the animal resource industry.

1.5 Rationale of the policy

The Veterinary Policy aligns the animal resource industry in Kenya to the Constitution, the relevant provisions of the World Organization for Animal Health (OIE), the WTO Agreement on the Application of Sanitary and Phytosanitary measures, the Codex Alimentarius Commission and the EAC Treaty. The alignment aims at ensuring that Kenyans receive their constitutional guarantees in animal products while trading in high-value international markets to improve their incomes. This is to be accomplished through an innovative, commercially oriented farm animal industry while protecting the health and welfare of companion, wildlife and aquatic animals.

The WTO has mandated the World Organization for Animal Health (OIE) to set animal health standards. Consequently, the OIE has outlined guidelines for a veterinary legal framework that meet this demand. However in Kenya, Animal Health, Welfare and Production are governed by over 26 pieces of legislation which need to be reviewed. This policy will inform the review and consolidation of the veterinary sanitary laws in line with the International, Regional and National guidelines.

It is documented that about 75% of the pathogens that afflict human beings originate from animals, both wild and domesticated. The world is presently moving into the concept of "One-Health" where collaboration and strong partnerships between the animal and human sectors is now recognized as the key to success in achieving global health and food security goals. The Veterinary Policy has embedded the "One Health" approach for Kenya.

Climate change effects lead to spread of diseases and vectors beyond their traditional Agro-Ecological Zones and emergence of hitherto unknown or dormant diseases. These developments necessitate new policy approaches to the management of diseases. Innovative animal health, production and breeding technologies together with changing consumer preferences and elaborate requirements for international trade in animals and related products demand a review of the relevant legal framework that will be supported by the Veterinary Policy.

Animal production, health, welfare, marketing and trade are integral to the development of the animal resource industry that is afflicted by many challenges. This Policy provides a framework for the efficient exploitation of animal resources and the mainstreaming of agribusiness in different animal production systems. This will increase profitability and improve sustainability of the animal resource industry. In order to harness the inherent benefits of animals, focus will be enhanced on each animal species including emerging livestock.

The Veterinary Policy recognizes the important roles performed by the private sector in various aspects of the animal resource industry. These roles are bound to increase; the Policy therefore outlines mechanisms of linkages with different Non-State Actors including NGOs, CBOs and development partners to advance their participation in development of specified components of the animal resource industry.

1.6 The challenges

The country has not fully benefited from animal resources as a result of the following factors:

1. Inadequate policy direction on the management of animal diseases, food and feed safety, animal emergencies, animal welfare, marketing and trade in animals and products.
2. Low compliance with sanitary measures leading to access problems in domestic and high-value international markets.
3. Low animal productivity due to challenges such as poor genetics, inadequate uptake of modern breeding technologies, a weak infrastructure for animal production, animal diseases and inadequate extension services.
4. Poor infrastructure for marketing and trade in animals and animal products characterized by minimal processing and little value addition.
5. Low competitiveness of products in the local and international markets due to high cost of farm inputs and low adoption of economies of scale.
6. Poor regulation of Veterinary Pharmaceuticals. This regulatory role is under the Pharmacy and Poisons Board (PPB) that concentrates more on human rather than Veterinary Pharmaceuticals.
7. Inadequate capacity development, little research, underdevelopment of respective animal resources and weak research-extension linkages leading to challenges like outbreaks of animal diseases that cause market bans.
8. Poor governance and institutional structures which rate poorly in risk assessment for domestic and export trade. The Competent Authority faces shortages of human, physical and financial resources for the successful execution of its mandates.
9. Poor veterinary infrastructure that adversely affects delivery of services and quality assurance of inputs and animal products.
10. Effects of climate change, competition for land between animals and humans and other cross-cutting issues that curtail development of the animal resource industry.

1.7 Objectives of the policy

The broad objective of the policy is to professionally safeguard animal health and welfare, increase animal production and productivity and promote trade in animals and animal products for sustainable food security, food safety and economic prosperity. The policy is based on the following specific objectives:

1. To improve the management of animal diseases, food and feed safety, animal emergencies, animal welfare, marketing and trade in animals and animal products.
2. To ensure compliance with sanitary requirements along animal value chains.
3. To develop breeding programmes, conserve animal genetic resources, biological diversity and regulate biotechnology in the development of animal resources.
4. To develop marketing infrastructure for animal resources, enhance value addition and improve efficiency along the animal value chains.
5. To improve provision of safe and efficacious veterinary pharmaceuticals and biologicals.
6. To enhance research, training and capacity development in the animal resource industry.
7. To establish effective and efficient governance structures for the provision of veterinary services.
8. To provide for an efficient and effective veterinary infrastructure that will ensure internationally acceptable service delivery and quality assurance of inputs and animal products.
9. To enhance consultation and cooperation as the basis of mutual relations between national and county governments in the delivery of veterinary services.
10. To integrate environmental protection and climate change mitigation and other cross-cutting issues in veterinary services and provide a framework for disaster preparedness and response.

1.8 Principles of the Veterinary Policy

Animal resources in Kenya will be used sustainably for the benefit of humanity in accordance with the following principles:

1. A veterinary service that is compliant with international standards;
2. Protection of human health from animal-related hazards;
3. Observance of sanitary measures in animal value chains;
4. Investment in research and innovation in animal resources;
5. Conservation of animal genetic resources and
6. Enhancement of livelihoods and economic gains from animal resources.

CHAPTER TWO

THE POLICY STATEMENTS

2.1 Animal health

A major challenge in animal health is the inadequate policy direction on the management of animal diseases, food and feed safety, animal emergencies, animal welfare, marketing and trade in animals and animal products.

2.1.1 Terrestrial animal health

Animal health services are critical to the prevention, control and eradication of diseases that adversely impact the quality and marketability of animals, animal products and veterinary biologicals. Infectious and contagious diseases that spread fast while causing heavy economic losses require prompt attention. These diseases are notifiable and include Foot and Mouth Disease, Contagious Bovine Pleuro-Pneumonia, African Swine Fever, New Castle Disease and Peste des Petits Ruminants. Their transboundary nature necessitates cross-border cooperation for their effective control. Vectors transmit certain animal diseases. East Coast Fever, Trypanosomosis and Rift Valley Fever are some important vector-borne diseases that are transmitted by ticks, tsetse flies and mosquitoes respectively.

The Veterinary Authority uses modern geo-referencing, Information and Communication Technology when conducting disease surveillance in the country. Farmers' reports and clinical diagnosis constitute passive surveillance that supports planned disease investigation activities. Due to inadequacy of resources, the Veterinary Authority has only developed contingency plans and standardized manuals for a few diseases. Weaknesses in legislation also limit appropriate interventions.

The national government will:

1. *Support development of strategies, protocols and contingency plans for the eradication of animal diseases and pests, disease-free zoning and compartmentalization as advised by risk analysis, appropriate level of protection for domestic and export markets, Kenya Vision 2030 and other national and regional priorities;*
2. *Support collaborative cross border strategies for management of Trans-boundary Animal Diseases;*
3. *Prioritize improvement of official diagnostic, research and quality assurance laboratories for animal inputs and products;*
4. *Enhance accreditation of private animal-based laboratories.*

The county governments will:

1. *Provide for control of animal diseases and pests;*

2. *Prioritize regular and targeted surveillance for animal diseases and pests;*
3. *Support private sector animal health service providers through research agenda setting, technology transfer and disease control measures;*
4. *Enhance animal vaccination coverage to attain optimal levels and uphold effective control of livestock movement at all times.*

Both levels of government will:

Prioritize protection of public land set aside for establishment of quarantine stations, holding grounds, outspans, veterinary demonstration farms, Veterinary Investigation Laboratories (VILs), stock routes and other veterinary institutional lands.

2.1.2 Aquatic health

Aquatic animals and their products significantly contribute to food security while certain groups of fisher folk entirely depend on fishing for their economic prosperity and livelihood. The demand for animal proteins is constantly increasing in the face of shrinking land sizes thus proteins derived from aquaculture can provide an important alternative to those obtained from terrestrial animals. However, disease outbreaks in aquatic animals are rarely detected and can cause extensive losses.

Fish farming is increasingly gaining importance as a source of food and income but poor fish health constitutes one of the major constraints to its development. Science-based aquatic animal welfare practices in transport of live fish, fish killing for human consumption and sanitary killing of fish are rarely observed.

The national government will:

1. *Support development of standards for the improvement of aquatic animal health, welfare, public health and safe domestic and international trade in aquatic animals and animal products;*
2. *Uphold the responsibility for certification of aquatic animals and animal products;*
3. *Support measures to eliminate transfer of aquatic animal diseases via international trade while avoiding unjustified sanitary barriers to trade.*

The county governments will:

1. *Ensure adherence to standards for the improvement of aquatic animal health, welfare, public health and safe domestic and international trade in aquatic animals and animal products;*
2. *Promote early detection, reporting and control of pathogens of aquatic animals;*
3. *Promote periodic aquatic animals' disease diagnosis, surveillance and notification to ascertain health risks and device appropriate mitigation measures.*

4. *Uphold the responsibility for aquatic animal health services.*

2.1.3 Wildlife health

Wildlife resources are essential to the tourism industry in Kenya. They provide trophies, food, medicines and are used for research in animal health, breeding and production. Changes in land use including human expansion into new geographic areas and the intensification of production to meet increasing needs for animal proteins have altered the equilibrium between domestic animals and wildlife. These changes have affected public, wildlife and livestock health and their relationship with the environment. Close to 70% of pathogens of animal origin can be traced to wildlife. The global trade in wildlife resources provides disease transmission mechanisms that contribute to human disease outbreaks, threaten livestock production, safety of international trade, rural livelihoods, native wildlife populations and the health of ecosystems.

The national government will:

1. *Promote coordinated risk management approaches at the interface of wildlife, domestic animals and human ecosystems through enhanced cross-sector communication and cooperation among all parties involved including the Kenya Wildlife Service, Veterinary Services, tourism industry, fisheries and relevant Non-State Actors;*
2. *Support development of contingency plans to mitigate outbreaks of diseases that have wildlife reservoirs;*
3. *Provide for local and international health certification of wildlife and wildlife products.*

The county governments will:
Support wildlife development by reinforcing compliance with public and private components of wildlife health services based on international standards.

2.2 Veterinary Public Health

Veterinary Public Health (VPH) is an essential part of public health that provides a vital linkage in the people-animals-environment triad with its consequent interactions. Human health is inextricably linked to animal health and production. The link between human and animal populations, and with the environment, is particularly close in the developing countries where animals provide transport, draught power, fuel and clothing as well as proteins. In these countries, animal products like blood are used as symbols of dispute resolution and during rites of passage, often being consumed raw. This can lead to a serious risk to public health with severe economic consequences.

Veterinary Public Health concerns include diagnosis, surveillance, epidemiology, control, prevention and elimination of zoonoses; food protection; management of health aspects of

laboratory animal facilities and diagnostic laboratories; biomedical research; health education and extension, protection of the environment and production and control of biological products and medical devices. Other VPH concerns include management of domestic and wild animal populations, protection of drinking-water and management of public health emergencies.

2.2.1 Food safety

Food safety is a public health priority that involves handling, preparation and storage of food in a manner that prevents contamination by potentially harmful health hazards. Food can transmit diseases from animals to people, among people and serve as growth media for micro-organisms that cause food poisoning. Close to 75% of new infectious diseases affecting humans are caused by bacteria, viruses and other pathogens that originate from animals and animal products. Many of these diseases are frequently related to improper handling of infected domestic and wild animals during production, at slaughter premises and in food markets.

The national government will develop codes for inspection of food of animal origin.
The county governments will mainstream appropriate sanitary measures in the food animal value chains in order to eliminate food-borne illnesses in humans.

Globalization of food production and trade increase the likelihood of international incidents involving contaminated food. Disease-causing organisms in food are transmitted far and wide by the interconnected global food-chains. Rapid urbanization worldwide adds to this risk since urban dwellers eat more food prepared outside the home and which may not have been handled safely.

Key global food safety concerns include spread of microbiological hazards such as *Salmonella* and *Escherichia coli*; chemical food contaminants; drug residues in food; capacity to assess new food technologies such as genetically modified food and strong food safety systems in most countries to ensure a safe global food-chain.

The Codex Alimentarius Commission (CAC) develops food standards and reviews food-related risk analysis principles as guidelines for food safety. Reference made to Codex food safety standards in the World Trade Organizations' Agreement on Sanitary and Phytosanitary measures (SPS Agreement) underscores the importance of CAC in the resolution of food trade disputes. The lack of tracking of food from Farm to Fork to enable traceability and authentication of foodstuffs to reinforce consumer confidence and aid trade in food products has been a major challenge.

The national government will support the development of suitable protocols for Total Quality Assurance of all food types of animal origin.

The county governments will:
1. Ensure adherence to International Food Safety Standards;
2. Promote food traceability to boost consumer confidence

Food defense refers to activities that are associated with protecting food supplies from deliberate or intentional acts of contamination or tampering. Food originating from animals is especially vulnerable to tampering since its nature easily supports microbial growth. The Lack of capacity for establishments dealing in such foods to assess hazards posed by potential acts of sabotage or terrorism and institute proportional protective measures is a major challenge.

The national government will provide for the regulation of food safety and food defense.
The county governments will oversee the enforcement of laws governing food safety and food defense.

2.2.2 Zoonotic diseases

There has been no formal infrastructure for collaboration and regular information exchange between animal and human health sectors for management of zoonotic diseases and other animal-based threats to public health. A common approach of providing resources that enhance operational inter-sectoral public health plans for prevention, early detection and response to zoonotic disease events including surveillance, field and laboratory operations, communication, capacity building across ministries, disciplines and funding programs has been inadequate. This un-coordinated approach has resulted in inadequate preparedness in prevention, early detection and response to zoonotic diseases and other animal-based threats to public health. Consequently animal and human health, livelihoods and trade are compromised.

The "One Health" approach is based on the realization that diseases that adversely impact the health of humans, animals and the environment can only be solved through structured communication, cooperation and collaboration across disciplines and institutions. "One Health" promotes the idea that healthy productive animals lead to healthy people through provision of safe food, economic gain and companionship. While the world is converging towards the "one health" approach to management of diseases, Kenya lacks a formal collaborative framework between animal and human health practitioners that is necessary for the effective implementation of this concept.

Both levels of government will prioritize:
1. Establishment of "One Health" collaborative platforms, in partnership with stakeholders, for managing zoonotic disease events and other animal-based hazards to public health. The platforms will ensure that strategies are in place for early warning, preparedness and rapid response to zoonotic diseases and other animal-based threats;

2. Development of appropriate legislative frameworks for the "One-Health" approach.

2.3 Animal productivity

Major challenges to animal productivity are issues such as poor genetics, inadequate uptake of modern breeding technologies, a weak infrastructure for animal production, animal diseases and inadequate extension services.

The national government will:

1. *In partnership with stakeholders, support the development and review of breeding programmes for animals including cattle, sheep, goats, camels, poultry, bees, pigs, donkeys, aquatic animals and farmed wildlife;*
2. *Support health regulation of animal reproduction including the standardization, inspection and approval of hatcheries, breed multiplication farms, Artificial Insemination and other breeding technologies.*

The county governments will:

1. *Promote suitable breeding programmes for animals including cattle, sheep, goats, camels, poultry, bees, pigs, donkeys, aquatic animals and farmed wildlife;*
2. *Promote Artificial Insemination and other breeding technologies.*

Health of the animal is one of the most critical factors in animal productivity and at all stages of production this must be guaranteed. Enterprises involving food animals have low returns on investment resulting in high poverty levels in animal producing areas due to inadequate focus on animal health. Along the animal production value chains there are high farm inputs and energy costs, weak extension services and poor market organization. Hence the farmer is left with little resources to acquire inputs essential for optimum health of animals.

The national government will provide for the regulation of the quality and safety of feedstuffs, veterinary medicines and other animal farm inputs.

The county governments will:

1. *Promote the use of quality animal inputs including animal feeds;*
2. *Support the implementation of strategies for reduction of production costs including subsidies across the entire animal industry value chain.*

Both levels of government will support research and innovation to improve the quality of animals and animal products in order to enhance their competitiveness in the domestic, regional and international markets.

The animal resource industry experiences high neonatal mortalities, low growth rates of food animals and low mature weights compounded by diminishing farm sizes, inappropriate animal production systems, scarce and poor quality feeds and limited access to information. It is necessary to reverse this trend through use of modern technologies of production and organization of producers to take advantage of economies of scale. The country experiences a high prevalence of management and Trans-boundary Animal Diseases which cause massive losses to animal productivity.

To mitigate the effects of animal diseases on productivity:

1. *The national government will support the development of strategies for the eradication of animal diseases including disease-free zoning and compartmentalization in line with the Kenya Vision 2030 and other national and regional priorities;*
2. *The county governments will prioritize the eradication of animal diseases.*

2.4 Animal feeds

The quality of animal feeds is of great significance with regard to standards for production and composition, approval and registration of feed production establishments, provision of health requirements for all manufacturing premises and recall from the market of any product likely to present a hazard to human or animal health. Substandard feeds are a major constraint in the animal resource industry that lead to poor productivity.

The national government will provide for the regulation of production and composition of animal feeds and establishments for feed manufacture.

The county governments will:

1. *Enhance the inclusion of health requirements in the production and composition of animal feeds;*
2. *Ensure the approval and registration of establishments for feed manufacture to safeguard animal and human health;*
3. *In collaboration with Non-State Actors, provide for strategic animal feed and water reserves to mitigate losses in times of scarcity;*
4. *Support feed subsidies to increase marketability of animals and animal products.*

2.5 Animal Welfare

Animal Welfare is an integral part of animal health and production and manifests in physical and psychological wellbeing, better performance, improved market access, safe and mutually beneficial companionship. Animal welfare embraces five freedoms of animals namely; freedom from hunger, thirst and malnutrition; freedom from fear and distress; freedom from physical and

thermal discomfort; freedom from pain, injury and disease and freedom to express normal patterns of behaviour. Though communities in Kenya uphold the freedom from pain, injury and diseases of animals, there is a general low awareness, recognition and compliance with the other four freedoms, especially in the area of feeding, transportation and certain cultural sports.

The national government will provide for the regulation of Animal Welfare basing the measures on national guidelines and international standards to safeguard trade.

The county governments will promote Animal Welfare through creation of awareness, provision of appropriate legislation and animal control services including licensing of companion animals and facilities for the accommodation, care and proper disposal of animal carcasses.

2.6 Trade

Trade in animals and animal products should be conducted in conformity to prescribed animal and public health standards. Optimal human health is one of the essential considerations for sustainable economic development while trade and economic endeavours aim at raising standards of living. Local or international trade is favoured by stable and predictable socio-political conditions and serves to improve the national climate for investment, production and employment creation and therefore contributes to economic growth and development. In this regard, a multilateral trading system contributes to improved global welfare.

The WTO SPS Agreement recognizes the important linkage between health and international trade. WTO member states that include Kenya, need to protect their human, animal and plant lives from risks posed by entry of diseases and pests due to international trade that has grown in tandem with expanding international travel. The health aspects of the SPS Agreement apply measures to manage risks associated with imports. These Sanitary and Phytosanitary measures invariably take the form of quarantines or food safety requirements. The international trade aspects of the SPS Agreement cushion trade from arbitrary unscientific restrictions.

2.6.1 Sanitary measures

Low compliance with sanitary measures leading to access problems in domestic and high-value international markets has been a major challenge in the animal resource industry. The world has adopted harmonized measures for animal health, welfare and food safety whose attestation is a prerequisite for local consumption and international trade. Application of sanitary measures follows a Farm-to-Fork continuum from primary production through transportation, processing, value addition, marketing and trade.

Kenya’s animal industry players have low knowledge of, competence in and compliance with

sanitary measures which leads to safety concerns for meat, milk, eggs, honey and their products as well as access problems in domestic and export markets.

In order to attain national security in animal-derived food products and for easy access to domestic, regional and international markets, the value-chain players need to mainstream sanitary measures and implement Good Practices and applied regulations so that optimum health and safety status are achieved.

The national government will support capacity development for compliance with sanitary measures and quality assurance at all levels in animal value chains.

The county governments will:

1. *Enhance awareness of sanitary measures along animal value chains;*
2. *Promote development, institutionalization and enforcement of Good Practices in the animal resource industry;*
3. *Mainstream food defense and food safety measures for animal products including operationalization of the national residue monitoring plan.*

Both levels of government will provide for infrastructural development with in-built features for compliance with sanitary measures.

2.6.2 Animal identification and traceability

Animal registration, identification and product traceability is a critical tool in production, breeding and census planning, disease surveillance, food safety certification and food defense assurance, productivity improvement and facilitation of access to local and export markets. The World Organization for Animal Health (OIE) has standards on animal identification and traceability at individual animal and lot level. It involves collecting data for each animal throughout its entire life cycle so that individual characteristics and the history of the animal can be traced back. Such standards require that the identifying device be able to capture key data on owner, locality, date and place of birth, ancestry, sex, geographic movement, health and other production records for purposes of tracing the animal and its products.

Although Kenyan legislation provides for registration and recognition of brands (Branding of Stock Act, Cap 357), this has not enabled compliance with international standards. Animal identification has been accomplished through hot iron branding but, in recent years, efforts have been made to trace animal products throughout the entire food chain and many initiatives are ongoing to implement modern identification and traceability systems of farm animals.

In Kenya, animal theft, including cattle rustling is common, so animal identification would

provide a useful deterrent to the vice while at the same time providing a scientific tool for recovery of any stolen animals. Cattle rustling is a national security and livelihood issue as the vice has led to deaths and impoverishment of victim communities. Appropriate animal identification and traceability would greatly enhance security and protect livelihoods; this may necessitate a regional approach.

The national government, in collaboration with stakeholders, will support the establishment of an animal identification and traceability system that complies with international standards.

The county governments will promote the application of identification and traceability measures to animals and animal products in compliance with national guidelines and international standards.

2.6.3 Livestock theft and bio-security

Security is a key factor to consider in any form of investment. Insecurity poses a challenge to animal health and production services. Marketing and trade in animals and animal products are similarly hampered by rampant insecurity. Whereas stock theft occurs all over the country, its intensity is particularly discernible in the ASALs. The government expends a lot of resources in addressing this crisis.

Veterinary laboratories and other animal establishments handle hazardous micro-organisms that are a potential bio-security risk to workers, the public and the wider environment. Such micro-organisms can escape when appropriate Standard Operating Procedures are not strictly observed or through the mischief of certain workers.

Both levels of government will:

1. *Support introduction of modern measures of animal identification, tracking and traceability to combat livestock theft and enhance livestock production;*
2. *Prioritize peace building to enhance delivery of veterinary services;*
3. *Mainstream bio-security risk management in veterinary services and national security systems.*

2.6.4 Marketing infrastructure

Marketing of animals and animal products is essential for the growth and sustainability of the animal resource industry. The private sector plays a leading role in marketing while the government provides regulatory services and an enabling environment. Marketing chains are convoluted with many players who aim at maximizing profits at the expense of producers.

Regional and international markets have not been fully exploited due to Kenya's inability to meet Sanitary and Phytosanitary standards set by the WTO and other trade certification organizations. Farmer cooperatives and associations have attempted to streamline marketing channels but they are few and concentrate on a limited range of animals and animal products. The imposition of levies and other forms of taxation across counties increases costs and reduces competitiveness of animal products locally and internationally.

The national government will provide for effective Sanitary, Phytosanitary and traceability measures in the entire value chains of respective animal products.

The county governments will:

1. *Provide for an efficient marketing infrastructure for different animal species and animal products. Emphasis will be placed on marketing of value-added products and adherence to sanitary measures;*
2. *Support the organization of producers, processors and marketers into viable groups that can access credit, improve on their powers of negotiation and entrepreneurship, maximize on the economies of scale and reach agreements and contracts on the supply of animals and animal products to markets.*

Both levels of government will continually monitor, evaluate and regulate levies and taxes charged on animals and animal products in order to ensure a favourable trading environment.

2.7 Veterinary pharmaceuticals

The Pharmaceutical industry functions include the manufacture, importation, exportation, registration, efficacy trials, distribution, prescription and dispensing of medicines and poisons. Regulation of pharmaceutical products ensures their safe use in humans and animals.

The animal resource industry relies on medicines, chemicals and medical appliances in the prevention, control and management of animal diseases, many of which are transmissible to human beings. Appropriate use of medicines in animals is internationally guided by the OIE in order to guarantee animal welfare and animal food safety that are important aspects in local and international trade in animals and animal products.

The veterinary pharmaceutical industry is vibrant in Kenya. However, uncoordinated enforcement of its current legislation by multiple agencies has led to the misuse of drugs and increased antimicrobial resistance that pose a threat to human and animal health.

The national government will provide for the regulation of production, quality assurance, import

and export, marketing and sale of veterinary pharmaceuticals, poisons, pesticides and ethno-veterinary medicines.
The county governments will promote the judicious use of veterinary pharmaceuticals, poisons, pesticides and ethno-veterinary medicines.

2.8 Animal resources' statistics, information and communication

The animal resource industry's potential for reducing poverty and contributing to economic growth has remained largely untapped to-date due to lack of accurate data necessary for planning and budgeting. The contribution of the sector to national wealth remains underestimated leading to inadequate financing. Research and development of animal resources require up-to-date data that should be easily retrievable.

The national government will ensure that periodic census is conducted to establish the population of various animal species, provide a register of animal owners and determine the animal resources' contribution to the national economy and livelihoods.

Accurate and timely communication and information sharing in the animal resource industry are key factors in the development and exploitation of animal resources. Effective information and communication strategies contribute to improved functioning and acceptance of scientific, technical and operational output of Veterinary Services.

In crises, transparency and quality of communication and information management are issues of national, sub-regional, regional and global strategic significance. Communication capacities in Veterinary Services enable precise response to national and international demands in compliance with set standards, guidelines and recommendations. Trade in animals and animal products calls for accountability of Veterinary Services towards the public and other stakeholders.

Effective National and County veterinary governance will encompass communication strategies with a focus on stakeholders and the public. In this regard, the government shall ensure continuous access to adequate human, technical and financial resources in order to manage animal resource industry information and communication at the national, regional, sub-regional and global levels.

The national government will support the establishment of a transparent and science-based information management system in veterinary services.

The county governments will prioritize the collection of data and information, analysis and timely reporting to the national government and other stakeholders in the animal resource industry.

2.9 Research, extension and development

Animal related research, education and extension programmes are continually changing to address emerging challenges and opportunities brought about by rapidly advancing technologies, evolving consumer demands and the need to make positive contributions to human, animal and environmental health. Efficient, science-based animal research translates into affordable and high-quality food for the nation and trade.

Animal-related research programmes embrace multi-disciplinary approaches and integrate education and extension. These programmes focus on activities that are economically sound, socially acceptable and environmentally advantageous. Animal research programmes encompass a balance of disciplines including animal health; animal breeding, genetics and genomics; animal reproduction; animal production, animal welfare, animal products, value addition, marketing and trade; animal use to counteract terrorism and trade in prohibited substances; animal use in security; aquaculture and apiculture.

2.9.1 Research and development

Animal research and development is mainly undertaken by Universities and international, regional and national research institutions. Research is important for present and future development of animal resources which are currently under-researched. The linkages with extension officers, farmers, implementers and policy makers remain inadequate.

Laboratory or experimental animals are important for research. The care and use of laboratory animals for research, testing and teaching including the scope of the animals is uncoordinated and does not always follow established standards.

Over 80% of Kenya's land mass is arid or semi-arid and is suitable for animal production necessitating a need for dry-land development based research. Animal research in Kenya has been largely conducted alongside crop research; this has reduced focus on various animal-specific research needs.

Both levels of government will support targeted research on animals and animal products.

The county governments will provide for the dissemination of research findings and technological innovations through various extension agencies including Non-State Actors.

The national government will provide for the development of regulations on the scope, care and use of laboratory or experimental animals.

2.9.2 Extension services

Extension is a critical factor in addressing animal health in order to improve animal production and productivity necessary for transforming traditional animal practices into viable commercial enterprises. It serves the role of transferring knowledge and technologies to stakeholders and involves dissemination of information on animal production, health and welfare, food safety, value addition and trade.

Extension aims at improving productivity of animals in order to increase farmers' incomes, enhance their standards of living, promote household food security and reduce poverty by maintaining healthy animals. For many years, extension services were dominated by the Government. However, due to the decline in budgetary support, Non-State Actors including Community Based Organizations, Non-Governmental Organizations, the private sector and individual consultancy groups are now offering these services.

The national government will provide for appropriate regulatory frameworks for animal resources' extension services.

The county governments will support extension services including modern extension delivery channels employing ICT in the animal resource industry.

2.9.3 Genetic engineering

Genetic engineering refers to technologies that alter the genetic makeup of organisms such as animals, plants and bacteria through genetic modification techniques in order to confer greater resistance to diseases, increase productivity, improve hardiness and feed efficiency. Genetic modification can increase yields of meat, eggs and milk and improve animal health and disease diagnostic methods. Genetically Modified Organisms (GMOs) constitute a source of genetically modified foods and are widely used in biological and medical research, production of pharmaceutical drugs and experimental medicine.

There is broad scientific consensus that food and other products derived from Genetically Modified Organisms pose no greater risk to human health than conventional ones; however GMOs may adversely impact human health through transfer of antibiotic resistance markers, increased allergic reactions and other unknown effects. Potential environmental impacts include unintended transgenic transfer through cross-pollination, unknown effects on other organisms and loss of biodiversity.

The national and county governments, in partnership with relevant agencies will promote research on and uptake of genetic engineering to enhance production and respond to other

challenges in the animal resource industry while protecting animal and human health.

2.10 Training

Training provides a platform for knowledge and skills development. Among other aspects, today's world is characterized by constantly changing consumer needs, the emergence of hitherto unknown diseases and the development of new technologies for the animal resource industry. Adequate training is central to the satisfaction of all these demands and trends.

Training targets staff, students, animal keepers and other stakeholders in the animal resource industry. Training of staff is mainly achieved through Continuous Professional Development, workshops, seminars and further education in institutions of higher learning. Training of animal keepers and other stakeholders is accomplished through extension services. Students receive pre-service training in middle level colleges and tertiary education institutions including Universities.

The national government will:

1. *Prioritize capacity building to improve skills of professionals in the animal resource industry;*
2. *Support the establishment of internship programs involving veterinary surgeons and veterinary paraprofessionals to enhance their training for better service delivery to the animal resource industry.*

The county governments will support the training of extension service providers and animal keepers.

Both levels of government will mainstream Continuous Professional Development on emerging livestock issues and new challenges in the animal resource industry.

2.11 Veterinary governance

Veterinary Services are classified as a global public good for which the Veterinary Authority takes primary responsibility with regard to good governance and service delivery in accordance with national and international standards and public expectations.

The governance must be within an effective, structured national legislative framework supported by appropriate financial and human resources. The establishment of good governance of veterinary services, based on a close partnership between the public and private sectors falls within the responsibility of the government. Effective governance of Veterinary Services contributes to "public goods" such as food security, public health and alleviation of poverty.

Both levels of government will:

1. *Strengthen veterinary governance through provision of adequate human, material and financial resources for effective delivery of veterinary services;*
2. *Prioritize development of an effective consultation and cooperation mechanism in line with Kenyan laws as well as international treaties ratified by Kenya;*
3. *Provide for institutional and legal frameworks for the animal resource industry.*

2.11.1 Regulation of the veterinary profession

The foundation of a viable and competitive animal resource sector is in the quality of animal health and welfare services. Poor quality of services result in unmitigated animal health and welfare concerns: low animal productivity, disincentives among producers and traders, residues and contaminants in products and eventual access problems in the domestic and export markets.

Kenya has a widely recognized veterinary training and a large number of veterinary surgeons and veterinary paraprofessionals that are adequate to offer services to the industry. However, there is weak regulation, monitoring and supervision of service providers which has resulted in abuse of the veterinary practice as well as abuse and misuse of veterinary medicines.

The distribution of professionals and paraprofessionals is skewed against the ASALs where the sub-optimal animal: professional ratio encourages use of inadequately trained community members. These situations need to be effectively addressed through effective regulation of the profession and ensuring that all regions in Kenya, including the pastoral areas, benefit from quality animal health services in accordance with international standards.

The national government will:

1. *Strengthen the veterinary statutory body, the Kenya Veterinary Board, and empower it to: develop autonomy, professional and financial independence and capacity, supported by appropriate legislation to exercise and enforce control over all veterinarians and veterinary Para-professionals including licensing and registration, minimum standards of education (initial and continuing) for the recognition of degrees, diplomas and certificates, setting standards of professional conduct and exercising control and the application of disciplinary procedures;*
2. *Support development of a framework for formal training of Community-based Animal Health Workers (CAHWs) to attain the minimum requirement for delivery of quality animal health services and registration by the regulatory authority.*

Both levels of government will encourage professional associations to regulate the conduct of their members and provide advocacy services for improvement of the animal resource industry.

2.11.2 Occupational Safety and Health

Occupational Safety and Health requirements protect the safety, health and welfare of workers, customers and other people who may be affected by the workplace environment. The goals of occupational safety and health plans include fostering a safe and healthy working environment.

Delivery of veterinary services involves a number of risks including diseases, injuries and a hostile working environment. Safety of veterinarians, veterinary paraprofessionals, leather development personnel, zoologists in veterinary services and veterinary laboratory personnel working in the sector therefore needs to be taken into consideration.

The national and county governments will promote compliance with occupational safety and health requirements to protect veterinarians, veterinary paraprofessionals, leather development personnel, zoologists in veterinary services and veterinary laboratory personnel from risks at work.

2.12 Veterinary services' infrastructure

Appropriate infrastructure is necessary for optimum animal production and trade. This includes suitable establishments, premises, animal inspection and disease management structures, sale yards, loading rumps, border control facilities, slaughter and processing plants and laboratories. Many stakeholders are involved in infrastructure development but need harmonization and targeting in order to support efficient animal production, movement and trade. Animal health, food safety and food defense-related infrastructure are standardized under the OIE and CAC systems and therefore require official inspection and approval.

Animal enterprises depend on good roads, railways, airports, border posts, harbours and telecommunication infrastructure for optimal performance. Bitumen roads and the railway lines cover only a small section of the country and do not cover vast animal production areas especially the ASALs. The infrastructure is not adequate for efficient trade in animal commodities. Telephone network is fairly widespread except in the ASALs while there is generally low internet connectivity. This has made it difficult for appropriate information management that is necessary for vibrant animal enterprises.

The 21st Century is highly dependent on Information and Communication Technologies (ICT) for development. ICT has given rise to the phenomenon of the global village where information exchange is easily conducted among nations of the world. Animal resources' development priorities that directly benefit from ICT include disease surveillance, extension services, research, training, marketing and trade.

The national government will:

1. *Provide for the regulation of abattoirs, tanneries, dairies and other processing plants of animal products;*
2. *Provide for development of a food defense strategy to minimize risks of food contamination.*

The county governments will:
Facilitate the development and management of animal markets, abattoirs, pounds and vector control facilities.

Both levels of government will:

1. *Support improvements and development of infrastructure for optimum animal health, production and trade in collaboration and partnership with stakeholders;*
2. *Provide for development and approval of appropriate infrastructure for animal inspection and quarantine;*
3. *Promote the advantages of ICT in disease surveillance, reporting, traceability, general animal health, production and welfare.*
4. *Mainstream OIE standards and legislate on appropriate transportation facilities for animals.*

2.13 Cross-cutting issues

Cross-cutting issues encompass aspects that impact the animal resource industry directly or indirectly but are not limited to animal resources. They include the environment, climate change and disasters, gender and pro-poor measures, youth, credit facilities and land.

2.13.1 Environment, climate change and disasters

Climate change refers to the gradual variation in parameters such as temperature and rainfall over time. Ruminating animals produce methane which, like Carbon dioxide, is a potent Green House Gas that contributes to climate change.

Disasters like drought and massive flooding displace communities and contribute to the spread of vector-borne, contagious and infectious diseases like Foot and Mouth Disease, Rift Valley Fever, Nairobi Sheep Disease, Bluetongue and Lumpy Skin Disease. Drought and floods also lead to wind or water erosion of top soils and destabilize the range environment.

Land and water are components of the environment that constitute important factors of animal production, health and processing of animal products. Overgrazing of pastures results in vegetation loss accompanied by land degradation that can eventually lead to desertification.

Various types of wastes are generated along different animal value chains including animal health care wastes such as chemicals, sharp objects like needles and broken glass bottles, used media and pathological wastes from laboratories, expired medicines and veterinary biologicals.

Animal production wastes encompass, among others, uro-genital and gastro-intestinal discharges, remnants of feeds, particularly roughages and components of abandoned animal housing structures. Processing of animal products in establishments like slaughterhouses, tanneries, dairies and feed manufacturing plants generate a wide range of wastes that need to be properly managed to prevent environmental pollution.

The national government will:
1. Support development of strategies for early warning, preparedness and rapid response to mitigate disasters that affect animals;
2. Support development of appropriate insurance packages to respond to disasters in the animal resource industry.

The county governments will:
1. Mainstream, in the animal resource industry, early warning, preparedness and rapid response to mitigate disasters that affect animals;
2. Promote animal insurance to address losses that arise from natural and man-made disasters that impact animal resources.

Both levels of government will:

1. *Ensure protection of the environment and conservation of natural resources through compliance with Environmental Impact Assessments and periodic Environmental Audits in animal health and production, processing of animal products and by-products, marketing and trade in animals and animal products;*
1. *Provide for effective and sustainable waste disposal mechanisms, along the animal value chains, backed by a suitable legal framework.*

2.14.2 Animal resources and gender, youth and persons with disabilities

Women contribute approximately 60-80% of the labour-force in the animal resource industry and work longer hours than men yet they have limited access to and almost no control over land and other factors of production. The level of poverty in Kenya is estimated to be 46%, whereas both men and women are affected, women, because of various factors that include cultural disadvantages, are particularly vulnerable.

Exploitation of animal resources partly addresses the problem of poverty, but poverty in itself, can hinder entry and investment in the animal resource industry. Pro-poor measures need to be

instituted in the strategies for the development of animal resources in order to encourage uptake of animal-based enterprises and in the process, improve livelihoods and economic stability.

The national and county governments, in collaboration with stakeholders, will:
1. Ensure that all strategies, programmes and projects in the animal resource industry are engendered;
2. Promote gender transformative strategies that encourage active participation of both men and women in the animal resource industry;
3. Mainstream pro-poor measures in plans, projects and programmes to develop the animal resource industry.

The youth form 60% of the total labour force but many of them have not been absorbed in the job market owing to the country's low economic growth rate. They have remained at the periphery of the country's development affairs and their status has not been accorded due recognition.

The national and county governments will ensure that the youth play their role, alongside adults, in the development of the country through participation in the animal resource industry programmes including production and processing to promote formal and informal sector employment.

Persons with disabilities represent approximately 10% of the World's population and 80% of them live in developing countries. Arising from this recognition, all organizations and institutions are expected to provide a supportive environment for their personal wellbeing and professional advancement while mainstreaming disability considerations in their plans.

The national and county governments will:
1. Mainstream disability considerations in Veterinary Services and discourage discrimination of personnel on account of disability;
2. Support the progressive implementation of the principle that at least 5% of Veterinary Services personnel in appointive posts are persons with disabilities.

2.13.2 Land

The National Land Policy classifies land into three categories: communal, government and privately owned land. Increasing human population has prompted continuous land subdivision into uneconomic units that are unsuitable for animal enterprises. Reduced land areas restrict animal movements in search of pastures thus contributing to degradation, soil erosion, siltation of waterways and recurrent flooding.

The national and county governments will:

1. *Ensure that animal owners maximize on suitable animal enterprises through appropriate land use systems;*
2. *Prioritize rehabilitation of degraded lands in conjunction with promotion of suitable animal production systems for specific Agro-Ecological Zones;*
3. *Prioritize protection of land set aside for Veterinary Services.*

2.13.3 Human-wildlife conflicts

As human population expands and the effects of climate change present new challenges, human-wildlife conflicts have become frequent in communities that border national parks and game reserves. The conflicts take various forms including; competition for water and pastures, predator menace, animal disease outbreaks and pests, human encroachment, poaching, hunting and poisoning. Peaceful coexistence with wildlife has come under serious threat as government interventions are viewed as inadequate or unsatisfactory.

The national and county governments will:

1. *In collaboration with relevant institutions, support appropriate measures to mitigate human-wildlife conflicts in communities that border national parks and game reserves.*
2. *Develop a mechanism for adequate compensation where human-wildlife conflicts result in injury to or loss of domestic animals.*

2.13.4 Integrity and ethics

Professionalism and integrity, as emphasized in chapter six of the Constitution of Kenya, are key to delivery of quality services to all stakeholders in the animal resource industry. Corruption limits equitable access to resources, impedes growth of the industry and discourages local and foreign investors.

The national and county governments will:

1. *Ensure that service providers in the animal resource industry uphold the professional code of integrity and ethics in service delivery to all stakeholders.*
2. *Provide for establishment of systems to discourage the practice of corruption in the animal resource industry through professional regulatory bodies and institutionalization of appropriate anticorruption measures.*

2.13.5 HIV/AIDS

The animal resource industry has not been spared from the prevailing Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) pandemic and conditions associated

with it such as tuberculosis as they affect both service providers and animal producers. This has had profound social and economic implications as it limits productivity of the labour force in a highly labour intensive sector. Resources, both human and financial, have been diverted to care for the sick and orphaned.

To realize optimum human health for increased animal production and productivity, the national and county governments, in collaboration with stakeholders, will continue to implement measures aimed at controlling HIV/AIDs to minimize its socio-economic impacts and maximize resources for improved production.

2.13.6 Drug and Substance Abuse

Drug and substance abuse affect the work place and make workers unable to carry out their duties. The vice is related to petty crime where victims become corrupt and steal in order to access money for buying drugs. Both levels of government require institutions to develop capacities and implement measures to curb the vice within their organizations.

The national and county governments will mainstream relevant policies and build capacity of veterinary institutions to prevent and control Drug and Substance Abuse within their ranks while instituting appropriate operational plans.

CHAPTER THREE

INSTITUTIONAL FRAMEWORK

Institutions that will play leading roles in the implementation of this Policy include national and county Ministries, Departments and Agencies responsible for veterinary services and livestock production, the Kenya Veterinary Board, the Kenya Dairy Board, the Kenya Meat Commission, the Kenya Veterinary Vaccines Production Institute, the Kenya Animal Genetics Resource Centre, Kenya Tsetse and Trypanosomiasis Eradication Council and training institutions. There are several private sector institutions, including CBOs, NGOs, cooperative societies, input suppliers, development partners and professional associations through which implementation will be done. Collaborating institutions (ANNEX 5) for the purpose of this policy include institutions dealing with wildlife, aquatic animals, agriculture and public health among others.

The national and county governments will support establishment of institutions, based on need, to address emerging challenges in the animal resource industry.

3.1 Veterinary Services

The present day Directorate of Veterinary Services was created as a Department of Veterinary Services in 1895 to oversee veterinary services. It is the Veterinary Authority as defined by the OIE and provisions of the WTO and CAC. It has been operating through specialized functional units for the purpose of delivering veterinary services. The National Veterinary Services provides regulatory services, international veterinary certification services, diagnostic services, disease investigation; capacity building, quality and safety assurance of animal products. It exercises its functions in collaboration with county governments and other government agencies.

The head of veterinary services is the competent Authority for the country on animal health matters. The overall responsibility for veterinary services lies with the national and county governments. In animal disease control, a formal delegation system assists the management of diseases classified as “private good” performed by accredited private sector service providers while management of diseases classified as “shared good” is carried out in partnership between the both levels of government and private service providers. The management of notifiable animal diseases is a “public good”.

3.1.1 Public Sector Veterinary Services

Veterinary Services, in particular, control of animal disease epidemics and food safety are trans-county in nature requiring coordination between various devolved governments. Animal health services invariably need to respond to disease threats and outbreaks necessitating a well-

coordinated mechanism across the whole Nation. International trade requirements for animals and animal products as well as disease surveillance protocols require certification based on a clear reporting structure.

The national government will provide for:

1. *Development and review of policies and strategies for veterinary services;*
2. *The Veterinary Authority who will be the WTO National Enquiry Point for animal health measures and the custodian of sanitary mandate.*
3. *The head of the national veterinary services who will be the Kenyan Delegate to the OIE and will, through appropriate mechanisms, advise both levels of government on animal health, welfare, production and trade matters.*

The county governments will:

1. *Uphold the responsibility for county veterinary services including animal husbandry, livestock sale yards, county abattoirs, animal disease control, animal control and welfare.*
2. *Support implementation of national policies, strategies, programmes and projects in veterinary services.*

The Delivery of veterinary services at both levels of government will be conducted on the basis of mutual consultation and cooperation.

3.1.2 Private Sector Veterinary Services

The transfer of responsibilities for veterinary services from the public to the private sector is inhibited by, among other things, a weak private sector. Experience suggests that state withdrawal can disrupt the provision of services if no private sector assumes the responsibility of service delivery. For instance, the privatization of dipping services led to the collapse of over half of the communal dips in the country, in part, because no private sector operators were able to assume responsibility for providing the service. In certain areas competition from the Public Veterinary Services has hampered growth of Private Veterinary Services.

The national and county governments will:

1. *Support appropriate measures to enhance participation of the private sector in delivery of veterinary service;*
2. *Promote measures to improve complementarity between Public and Private Veterinary Services and provide clear roles for Private Veterinary Services in the implementation of programmes and strategies.*
3. *Support private animal health service providers through research, technology transfer, strategies and oversight.*

3.2 Kenya Veterinary Board

The Kenya Veterinary Board (KVB) is established under the Veterinary Surgeons and Veterinary Paraprofessionals Act No. 29 of 2011 to: register and license veterinary surgeons and veterinary paraprofessionals; regulate training of veterinary surgeons and veterinary paraprofessionals and to carry out inspection of veterinary service providers.

The national and county governments will support KVB in its core function of registering and licensing veterinary surgeons and veterinary paraprofessionals and accrediting institutions offering animal health programmes.

3.3 Kenya Meat Commission

The Kenya Meat Commission(KMC) was established in 1950 under the Kenya Meat Commission Act, Cap 363 with the objective of promoting the country's meat industry through the purchase and slaughter of livestock and to act as a strategic drought management agent as a buyer of last resort. Recent developments have seen the successful entry of private processors and distributors into the meat industry. This is a progressive development which should be encouraged since meat processing and marketing is a private good service, the role of the public sector being promotion and regulation.

The national government will restructure the Kenya Meat Commission and provide for its status as the custodian of strategic meat reserves in the country.

3.4 Kenya Animal Genetics Resource Centre

The Kenya Animal Genetics Resource Centre (KAGRC) was created on 5th September 2011 as a State Corporation vide Legal Notice No. 110. It took up the roles of the former Central Artificial Insemination Station that was established in 1946 with the objective of controlling venereal diseases and genetic improvement of exotic dairy cattle through collection and distribution of quality bull semen. KAGRC runs the Bull Station at Kabete for the production of bull semen. The Constitution provides for the recognition and protection of genetic resources and their use by the communities of Kenya. These include documentation, patenting and preservation of the country's animal genetic resources of all species.

The national government will:

1. *Strengthen KAGRC to: produce and distribute appropriate and affordable animal genetic resources and to establish an animal resources gene bank; perform the role of development and promotion of conservation and preservation of Kenya animal genetic resources;*
2. *Encourage the private sector to play a complimentary role in the production and*

distribution of animal genetic resources.

3.5 Kenya Animal Genetics Resources Board

Currently, livestock breeding services are fragmented, thus making coordination of breeding activities difficult. Livestock registration, data collection and management for performance evaluation are major challenges.

The national government will support the establishment of Kenya Animal Genetics Resources Board (KAGRB) to regulate all breeding services and give direction on breeding strategies.

3.6 Kenya Veterinary Vaccines Production Institute

The Kenya Veterinary Vaccines Production Institute (KEVEVAPI) was established by the government of Kenya as a parastatal institution via Legal Notice No. 223 of 4th June 1990. It is currently classified as a commercial state corporation with a strategic function. The original facility was built in 1957 as a joint venture between the Kenya Government and the Welcome Trust foundation and currently produces 15 different types of livestock vaccines.

The Institute's mandate is to coordinate and undertake production of veterinary vaccines; to market and distribute veterinary vaccines locally and abroad; to undertake research with respect to vaccine development and production; to develop and produce chemicals, media and laboratory materials for use in the production of vaccines and other veterinary products and to provide information on the suitability and effectiveness of veterinary vaccines. The facilities are old and outdated and the design does not meet requirements of Good Manufacturing Practices. As a result, the Institute has not been meeting the demand for various vaccines for local and export markets.

The national government will:

1. *Provide for the revamping and transformation of KEVEVAPI into a modern bio-secure institution for producing high quality vaccines for both domestic and international markets and to act as the custodian of strategic vaccines reserve;*
2. *Encourage the private sector to invest in vaccine production.*

3.7 Kenya Tsetse and Trypanosomiasis Eradication Council (KenTTEC)

The Kenya Tsetse and Trypanosomiasis Eradication Council was established under the State Corporation Act on 27th July 2012 vide legal Notice No. 77. It is mandated to be the Government agency on strategies, resource mobilization, linkages and coordination of tsetse and Trypanosomiasis eradication matters in Kenya. The decision (Decision AHG/Dec.156 (XXXVI) of African Heads of States and Government to free Africa from the scourge of Trypanosomiasis will

lead to economic gains and poverty alleviation through the reclamation of tsetse infested environments for animal production, human habitation and Wildlife-based Tourism. The transboundary nature of tsetse and Trypanosomosis demand effective coordination nationally and internationally and enormous resources for implementation of eradication activities.

The national government will:

1. *Support KenTTEC to fully implement its functions towards eradication of tsetse and trypanosomosis in Kenya.*
2. *Provide for development of a legislative framework for tsetse and trypanosomosis eradication owing to their cross-cutting effects on human and livestock health, land reclamation for agriculture, settlement and tourism;*
3. *Support the development of partnerships between KenTTEC and relevant government sectors, departments, agencies, the private sector and development partners to eradicate tsetse and trypanosomosis and to boost investment in reclaimed land in collaboration with county governments;*
4. *Provide for establishment of a fund to mobilize resources to support tsetse and trypanosomosis eradication.*

3.8 Training institutes

The animal resource industry currently has three categories of training institutes: The Animal Health and Industry Training Institutes (AHITIs), The Meat Training Institute (MTI) and The Dairy Training Institute (DTI).

The Animal Health and Industry Training Institutes in Kabete, Nyahururu and Ndomba were established in 1963, 1979 and 1984 respectively. They train categories of veterinary para-professionals for government Veterinary Services. However, with the structural adjustment provisions of 1992 and rationalization of Public Service, graduates were no longer directly absorbed by the government and ended up in the private sector. The roles of the AHITIs in tertiary-level training in animal health need to be aligned with those of other colleges offering comparable courses.

The Meat Training Institute (MTI) at Athi River was founded as a Regional Training Centre for Meat Inspection and hygiene personnel by the Government of Kenya and the Food and Agriculture Organization (FAO) in 1972. It was meant to train personnel for English speaking Sub-Saharan African Countries before they developed their own training centres. The Institute has developed training programmes for Meat Industry personnel in order to improve meat hygiene standards.

The Dairy Training Institute (DTI) in Naivasha was established in 1963 with the mandate of

training personnel from Kenya and other countries on value addition to milk and dairy products. The graduates serve the dairy industry by offering appropriate extension services and carrying out necessary value addition to milk and dairy products. The standard of training is yet to be mainstreamed in line with educational policies of tertiary institutions.

The national government will:

1. *Support the restructuring of Animal Health and Industry Training Institutes to offer quality veterinary paraprofessional courses according to need as advised by the Kenya Veterinary Board; Ensure that the distribution of Animal Health and Industry Training Institutes or the opportunities there-of is equitable taking into consideration the ASALs and rain-fed areas;*
2. *Ensure that the Kenya Veterinary Board, in collaboration with organizations responsible for technical and vocational training, determines the curricula and standards of AHITI and MTI training programmes;*
3. *Support the Meat Training Institute to enhance Veterinary Public Health training;*
4. *Support upgrading of the Animal Health and Industry Training and the Meat Training Institutes to offer Diploma courses in order to effectively respond to emerging trends in animal health and production and changing consumer needs;*
5. *Provide for the progressive development of training institutes in the animal resource industry into Semi-Autonomous Government Agencies in order to increase their efficiency.*

Both levels of government will provide for establishment of other institutes to cater for new consumer demands.

3.9 Other public institutions

The government will establish institutions in the management of the animal resource industry both nationally and within the county governments. The following institutions which are already provided for in law shall be operationalized by the national government:

1. *Veterinary Medicines Directorate to regulate the manufacture, importation, exportation, registration, distribution, prescription and dispensing of veterinary medicines and poisons.*
2. *Animal Health Inspectorate Service for the regulation of sanitary aspects of animals, animal health establishments, animal production inputs and animal products.*

The national government will support upgrading of the Agricultural Information and Resources Center to cover all information aspects of the Agricultural Sector.

3.10 Collaborating institutions

The animal resource industry in Kenya involves many actors, both private and public, in the execution of its programmes and implementation of its mandate. These institutions include Fisheries, Cooperatives, Ministry of Health, Kenya Medical Research Institute, Kenya Forestry Service, Kenya Wildlife Service, National Environment Management Authority, Kenya Revenue Authority, Kenya Bureau of Standards, Kenya Police, Kenya Plant Health Inspectorate Service, National Biosafety Authority, Kenya National Bureau of Statistics, insurance companies and financial institutions (ANNEX 5).

The national and county veterinary governments will:

1. *Support the development of effective mechanisms for collaboration with relevant institutions.*
2. *Encourage collaborating institutions to incorporate professional veterinary input in execution of their mandates with regard to the animal resource industry.*

3.11 Public-Private-Partnerships

The private sector is very important in the animal resource industry. It is responsible for most of the animal production, processing and marketing as well as the application of animal health and product safety measures in animals and animal products' value chains respectively. The private sector self-regulates and enforces industry-based Good Practices. In the area of service provision, it is able to take up delegated "private good" services or work with the government through the Public-Private-Partnership (PPP) framework.

The national and county governments will:

1. Prioritize support to growth of the private sector and encourage its organization into producer, processor and marketing associations, groups and institutions;

2. Promote Public-Private-Partnerships in delivery of private and shared goods and services in the animal resource industry;

3. Foster close cooperation with all development partners and financial institutions in the advancement of animal resources in order to ensure maximum benefits to Kenyans.

CHAPTER FOUR

LEGAL AND IMPLEMENTATION FRAMEWORKS

4.1 Legal framework

The legal framework for animal health, welfare, production, food safety and trade certification in Kenya has been based on three categories of legislation over the years. The first category comprises of the Acts of Parliament that are solely implemented in Veterinary Services. The second category contains Acts whose objectives cut across several professions and sectors including Veterinary Services. The third category has by-laws developed and applied by local authorities in collaboration with Veterinary Services (ANNEX 4).

The existing veterinary legislations need to be reviewed and consolidated to address contemporary challenges and to achieve conformity with the Constitution and relevant international treaties ratified by Kenya.

The national government will, in consultation with stakeholders, review all the animal health, welfare, production and trade certification legislations currently in force while developing new legislation depending on need.

4.2 Implementation framework

The government in consultation with stakeholders in the animal resource industry and development partners shall outline a framework for the implementation of this Policy including the required human and financial resources at the national and county governments. The framework shall provide for the reorganization, strengthening and refocusing of existing institutions and establishment of others to operationalize this Policy.

4.2.1 Public financing

Veterinary Services are recognized as a “global public good” through availing protection of animal health, public health, Animal Welfare as well as providing poverty alleviation, food security, food safety and market access. This global policy implies that the government is ultimately responsible for financing the services but should encourage private investment and collaboration with financial institutions and development partners in mobilizing resources. The government has been supporting the provision of Veterinary Services through the exchequer. The Constitution stipulates that National or County governments may levy charges for services they provide to the public.

The national and county governments will support measures to mobilize adequate financial resources for the enhanced provision and development of animal health, welfare and production in the country.

Both levels of government will continue to collaborate with development partners, WTO Members, financial and credit institutions in harnessing resources for developing the animal resource industry and may establish appropriate means of mobilizing resources for animal enterprises.

The national and county government will prioritize the utilization of technical assistance provisions of WTO-SPS Agreement to access advice, credits, donations and grants for processing technologies, research and infrastructure, establishment of national regulatory bodies and other capacity development for compliance with international standards.

4.2.2 Monitoring and Evaluation

Development in the animal resource industry shall be effectively guided through close monitoring and evaluation at management and technical levels. The objective of Monitoring and Evaluation will be to ensure prudent utilization of resources against set targets and to learn and document useful lessons for planning purposes.

Technical audits of the sector will establish, through risk analysis, the level of success in achieving and maintaining the desired animal health, welfare and food safety status. Instruments that will be utilized for management and technical assessment include performance contracting, compliance monitoring, quality control and evaluation of Veterinary Services. Voluntary peer reviews through established OIE procedures shall be encouraged.

The national and county governments will provide for establishment of participatory Monitoring and Evaluation mechanisms, compliance monitoring and quality control systems and carry out periodic risk analyses including the evaluation of veterinary services.

4.2.3 Policy review

The Veterinary Policy is a progressive living document that outlines a framework and set of principles to guide legislative and institutional reforms in the animal resource industry which is multi-sectoral, dynamic and vibrant. Hence there will be need to review the Policy periodically to take into consideration emerging trends in the animal resource industry. In the intervening period, contributions from stakeholders will be received, analyzed and stored and will form the basis of periodic reviews.

ANNEXES

ANNEX 1: NOTIFIABLE DISEASES IN KENYA, 2015

S/No	Disease	Species commonly affected	S/No	Disease	Species commonly affected
1.	Foot and Mouth Disease	Cattle, pigs, sheep, goats, wild cloven-hoofed species	22.	Surra and Trypanosomosis	Cattle, sheep, goats, camels, horses, donkeys, humans
2.	Rinderpest	Cattle, buffaloes	23.	Glanders	Horses, donkeys
3.	Lumpy skin Disease	Cattle	24.	Atrophic rhinitis	Pigs
4.	Anthrax	Domestic and wild warm-blooded animals and humans	25.	Swine Erysipelas	Pigs
5.	East and Coast Fever	Cattle	26.	Swine Fever	Domestic and wild pigs
6.	Rabies	Domestic and wild mammals, humans	27.	Contagious Caprine Pleuro Pneumonia	Goats
7.	Rift Valley Fever	Sheep, goats, cattle, camels, buffaloes, humans	28.	Sheep pox and goat pox	Sheep, goats
8.	Contagious Bovine Pleuro Pneumonia	Cattle	29.	Bacillary White Diarrhoea	Domestic fowl
9.	Mange in horses and mules	Horses and donkeys	30.	Epizootic lymphangitis	Equines
10.	Johnes Disease	Domestic and	31.	Farcy	Cattle

		wild ruminants			
11.	Bovine Spongiform Encephalopathy	Cattle, humans	32.	Avian Influenza	Domestic fowl, other birds, humans
12.	Scrapie	Sheep, goats	33.	Pullorum disease	Chicken, turkeys
13.	Heart water	Cattle, sheep, goats	34.	Psittacosis or Ornithosis	Chicken, parrots
14.	Newcastle Disease (Fowl pest)	Domestic fowls, humans	35.	Tuberculosis	Cattle, sheep, goats, equines, camels, pigs, buffaloes, wild boars, deer, antelopes, dogs, cats, rats, primates, kudus, elands, elephants, rhinoceroses, hares, lions, leopards, humans and birds
15.	Mucosal Disease Virus Diarrhoea Complex	Cattle	36.	Sheep scab	Sheep, humans
16.	Avian encephalomyelitis (Epidemic tremors)	Domestic fowl	37.	Peste des Petit Ruminants	Goats, sheep
17.	American foulbrood	Bees	38.	Avian leucosis	Chicken
18.	European foulbrood	Bees	39.	Foul paralysis	Chicken
19.	Varrosis	Bees	40.	Infectious bursal disease	Chicken
20.	Acarapisosis	Bees	41.	Brucellosis	Cattle, sheep, goats, pigs, camel, buffalo, antelopes, humans
21.	Tropilaelapis	Bees	42.	Infectious bronchitis	Chicken

ANNEX 2: NOTIFIABLE DISEASES REPORTED IN KENYA IN THE LAST 10 YEARS

Foot and Mouth Disease
Lumpy Skin Disease
Surra and Trypanosomiasis
Brucellosis
Anthrax
African Swine Fever
East and Coast Fever
Contagious Caprine Pleuro Pneumonia
Sheep pox and goat pox
Rabies
Rift Valley Fever
Bacillary White Diarrhoea
Contagious Bovine Pleuro Pneumonia
Johnes Disease
Tuberculosis
Sheep scab
Heart water
Peste des Petits Ruminants

ANNEX 3: GLOSSARY OF TERMS

Animal: All species belonging to the kingdom "Animalia"

Animal health status: The status of a country or a zone with respect to an animal disease according to the criteria listed in the relevant chapter of the Terrestrial Code dealing with the disease.

Animal identification: The combination of the identification and registration of an animal individually with a unique identifier or collectively by its epidemiological unit or group with a unique group identifier.

Animal identification system: The inclusion and linking of components such as identification of establishments/owners, the person(s) responsible for the animal(s), movements and other records with animal identification.

Animal traceability: The ability to follow an animal or group of animals during all stages of life

Animal welfare: How an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal Welfare refers to the state of the animal. The treatment that an animal receives is covered by other terms such as animal care, animal husbandry and humane treatment.

Approved: Officially approved, accredited or registered by the Veterinary Authority.

Artificial insemination centre: A facility approved by the Veterinary Authority and which meets the conditions set out in the Terrestrial Code for the collection, processing and/or storage of semen.

Biodiversity: Variety of life forms as exemplified by plants and animals.

Border post: Any airport or any port, railway station or road check-point open to International Trade of commodities, where import veterinary inspections can be performed.

Commodity: Live animals, products of animal origin, animal genetic material, biological products and pathological material.

Compartment: An animal subpopulation contained in one or more establishments under a common bio-security management system with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and bio-security measures have been applied for the purpose 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 in the OIE Aquatic Animal Health Code in the whole territory.

Disease: The clinical and/or pathological manifestation of infection.

Emerging disease: A new infection resulting from the evolution or change of an existing pathogenic agent, a known infection spreading to a new geographic area or a 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.

Eradication: The elimination of a pathogenic agent from a country or zone.
Establishment: The premises in which animals are kept.

Exporting country: Means a country from which commodities are sent to another country.

Food defense: refers to the act of putting in place measures that reduce the chances of food supplies getting intentionally contaminated using chemicals, biological agents or other harmful substances by people who want to cause harm. For instance, terrorists might contaminate food to kill people, destabilize economies or destroy businesses.

Food safety: addresses the accidental contamination of food products by biological, chemical or physical hazards. The main types of food safety hazards are microbes, chemicals and foreign objects.

Free compartment: A compartment in which the absence of the animal pathogen causing the disease under consideration has been demonstrated by all requirements specified in the Terrestrial Code for free status being met.

Free zone: A zone in which the absence of the disease under consideration has been demonstrated by the requirements specified in the Terrestrial Code for free status being met. Within the zone and at its borders, appropriate official veterinary control is effectively applied for animals and animal products and their transportation.

Importing country: A country that is the final destination to which commodities are sent.
International trade: Importation, exportation and transit of commodities.

International veterinary certificate: A certificate, issued in conformity with the provisions of international requirements describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

Laboratory: 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.

Livestock: domesticated or animals kept on the farm.

Market: A place where animals or animal products and services are assembled for the purpose of trade or sale.

Notifiable disease: A disease listed by the Veterinary Authority and that, as soon as detected or suspected, should be brought to the attention of this Authority, in accordance with national regulations.

Official Veterinarian: A veterinarian authorized 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 to be notified when appropriate.

Official veterinary control: The operations where 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.

Quarantine station: An establishment under the control of the Veterinary Authority where animals are maintained in isolation with no direct or indirect contact with other animals, to ensure that there is no transmission of specified pathogen(s) outside the establishment while the animals are undergoing observation for a specified length of time and, if appropriate, testing and treatment.

Registration: Is the action by which information on animals (such as identification, animal health, movement, certification, epidemiology, establishments etc.) is collected, recorded, securely stored and made appropriately accessible and able to be utilized by the Competent Authority .

Risk: The likelihood of the occurrence and the likely magnitude of the biological and economic consequences of an adverse event or effect to animal or human health.

Risk analysis: The process composed of hazard identification, risk assessment, risk Management and risk communication.

Sanitary measure: A measure, such as those destined to protect animal or human health or life within the territory of a country from risks arising from the entry, establishment and/or spread of a hazard.

Stakeholders: Persons, institutions and organizations involved in the animal resource industry.

Surveillance: The systematic on-going 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.

Vaccination: The successful immunization of susceptible animals through the administration, according to the manufacturer's instructions and acceptable standards where relevant, of a vaccine comprising antigens appropriate to the disease to be controlled.

Vector: An insect or any living carrier that transports an infectious agent from an infected individual to a susceptible individual or its food or immediate surroundings. The organism may or may not pass through a development cycle within the vector.

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

Veterinary Authority: 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: A person who, for the purposes of the Terrestrial Code, is authorized 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 veterinary surgeon. The tasks for each category of veterinary Para-professionals should be defined by the veterinary statutory body depending on

qualifications, training and according to need.

Veterinary Services: The governmental and non-governmental organizations that implement animal health, welfare measures and other standards. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organizations, 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: An autonomous authority regulating veterinarians and veterinary Para-professionals.

Zone/region: A clearly defined part of a territory containing an animal subpopulation with a distinct health status with respect to a specific disease for which required surveillance, control and bio-security measures have been applied for the purpose of International Trade.

Zoonosis: Any disease or infection which is naturally transmissible from animals to humans.

ANNEX 4: CATEGORIES OF LAWS

Category 1: Acts applied wholly by the Veterinary Services Sector

1. Animal Diseases Act, Chapter 364;
2. Meat Control Act, Chapter 356;
3. Rabies Act, Chapter 365;
4. Veterinary Surgeons and Veterinary Para-professionals Act, Number 29 of 2011;
5. Branding of Stock Act, Chapter 357;
6. Prevention of Cruelty to Animals Act, Chapter 360;
7. Cattle Cleansing Act, Cap 358;
8. Hides, Skins and Leather Industry Act, Chapter 359.

Category 2: Acts applied by Veterinary Services and other sectors

1. Public Health Act, Chapter 242, in collaboration with the Ministry responsible for human health;
2. Food, Drugs and Chemical Substances Act, Chapter 254 , in collaboration with the Ministry responsible for human health;
3. Pharmacy and Poisons Act, Chapter 244, in collaboration with the Ministry responsible for human health;
4. Narcotics Drugs and Psychotropic Substances Control Act, Chapter 245, in collaboration with the Ministry responsible for human health;
5. Pest Control Products Act, Chapter 346, in collaboration with the Ministry responsible for Crop Agriculture;
6. Stock and Produce Theft Act, Chapter 355, in collaboration with the Ministry responsible for Crop Agriculture;
7. Crop Production and Livestock Act, Cap 321, in collaboration with the Ministry responsible for Crop Agriculture;
8. Agriculture Act, Chapter 318, in collaboration with the Ministry responsible for Crop Agriculture;
9. Standards Act, Chapter 496, in collaboration with the Ministry responsible for Trade and Industrialization;
10. Fisheries Act, Chapter 378, in collaboration with the Ministry responsible for fisheries development;
11. Wildlife Management and Conservation Act, Chapter 376, in collaboration with the Ministry responsible for wildlife and tourism;
12. Customs and Excise Act, Chapter 472, in collaboration with the Ministry responsible for customs;
13. Bio-safety Act, Number 2 of 2009, in collaboration with the Ministry responsible for Science and Technology;
14. Witchcraft Act, Cap 67, in collaboration with the Ministry responsible for culture;

15. Dairy Industry Act, Chapter 336;
16. Uplands Bacon Factory Act, Chapter 362;
17. Kenya Meat Commission Act, Chapter 363.

Category 3: By-Laws

The Local Authorities frequently enact animal control and Animal Welfare by-laws in collaboration with the Department of Veterinary Services. Such by-laws include the following:

1. Animal Control By-laws 2009 of Nairobi City Council;
2. Kericho Urban District Council (Domestic Animals and Pound) By-laws, 1962;
3. Municipal Council of Kitale (Control and Licensing of Dogs) By-laws, 2008;
4. Municipal Council of Kitale (Pounds) By-laws, 2008;
5. Municipal Council of Kitale (Licensing of Slaughter men) By-laws, 2008.

ANNEX 5: SOME COLLABORATING INSTITUTIONS

Institution	Some areas of collaboration
Fisheries	Aquatic health and welfare; health certification of aquatic animals and their products by veterinary authorities
Ministry of Health	Management of zoonoses, One Health plans, projects and programmes
Kenya Medical Research Institute	Research in zoonoses and other animal-based hazards of public health importance
Cooperatives Development	Strengthening governance and organizing actors along animal value chains to realize economies of scale and ideals of farming as a business
Kenya Forestry Service (KFS)	Forests are sources of ethno-veterinary medicine; veterinary authorities need the cooperation of KFS in the control of forest-based vector-borne diseases including trypanosomosis and emerging diseases such as Ebola that are associated with monkeys
Kenya Wildlife Service	Wildlife health and welfare; health certification of wildlife and their products
National Environment Management Authority	Environmental Impact Assessment and audit for relevant projects and programmes in the animal resource industry
Kenya Bureau of Standards	Standards of animal health and production inputs; standards of animal products
Kenya Plant Health Inspectorate Service	Quality Assurance of plant-based inputs for the animal resource industry
National Biosafety Authority	Animal health and production biotechnologies, animal genetics' modification or engineering, biosecurity

Kenya Police	Control of illegal livestock movement, security in livestock rearing areas including minimization of cattle rustling
Kenya Revenue Authority	Requires certification of imports and exports (custom goods) by veterinary authorities before entry or exit from the country
Kenya National Bureau of Statistics	Animal resources' statistics including census
Insurance companies	Animal insurance
Financial institutions	Provision of credit for animal-based enterprises
Other animal health & welfare organizations	Support to animal health and welfare improvements