

DVS MAGAZINE 2020



**A NEW DAWN
AT THE DIRECTORATE
OF VETERINARY SERVICES**

MANDATE

To safeguard animal and human health, improve animal welfare, increase animal resource productivity and ensure safe and high quality animals and their products to facilitate food security and domestic and international trade.

VISION

Healthy and productive animal resource that contributes to sustainable economic development and social welfare in Kenya.

MISSION

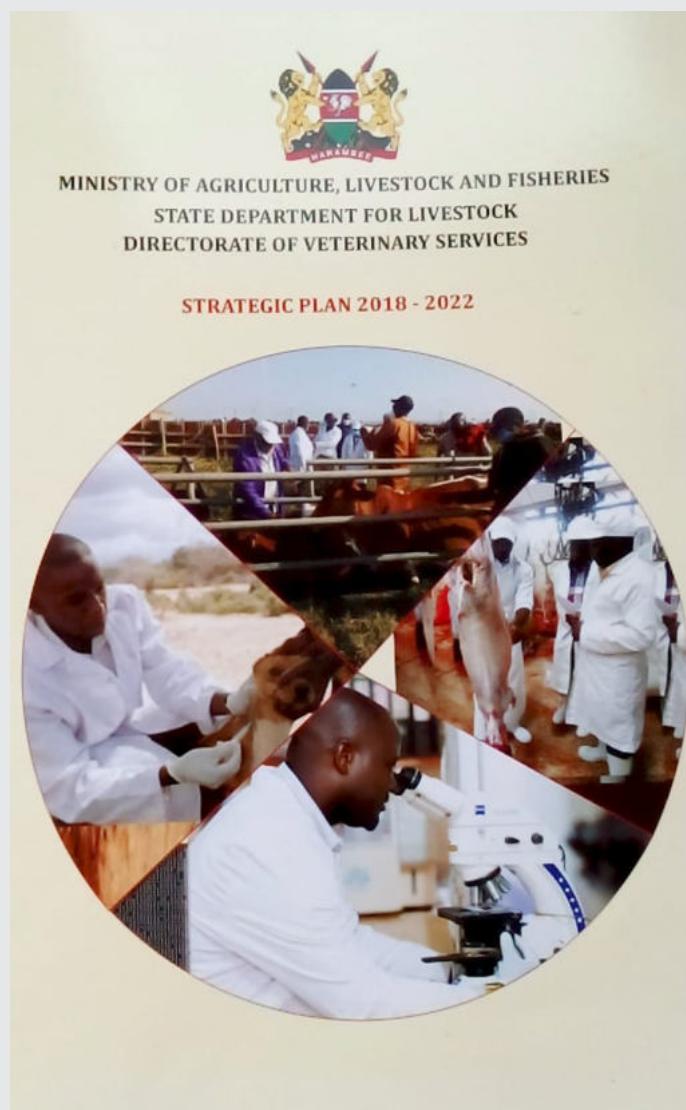
To provide and facilitate efficient veterinary services for production of safe and high quality animals, animal products and by-products and promote trade and industrial growth in a sustainable environment.

CORE VALUES

Professionalism, Efficiency, Integrity, Team work, Fairness.

CORE FUNCTIONS OF THE DIRECTORATE OF VETERINARY SERVICES

- Country delegate to the World Organization for Animal Health (OIE)
- World Trade Organization (WTO) enquiry point for SPS measure
- Formulation and implementation of animal health and welfare policies and strategies
- Provision of veterinary regulatory and quality control services
- Compliance with national, regional and international standards in animal health, food and feed safety
- Board and Technical Committee Member of various Government Agencies, Semi-Autonomous Government Agencies (SAGAs) and Programs
- Capacity building and technical assistance to counties
- Training of animal health service providers



DVS ORGANIZATIONAL STRUCTURE

Director of Veterinary Services/OIE -Chief Veterinary Officer Heads of Divisions

1) Disease Surveillance and Risk Management

- Veterinary Epidemiology and Economics
- Disease Risk Management and Disaster Preparedness
- Vector Surveillance
- Quarantine, LITS and External Markets Development
- Special Projects – SMAP
- Zoonotic Disease Unit
- Animal Welfare and Vet. Advisory Services

2) Diagnostics Services

- Laboratory Services and Biological Products
- Veterinary Investigation Laboratories
- Veterinary Farms/Trial Centers
- Quality Management
- Reference Laboratories
- Central Vet. Labs
- Foot and Mouth Diseases (FMD)

3) Veterinary Governance and Management Support Services

- Policy Coordination and Parliamentary Affairs
- Training, Programs, Monitoring and Evaluation
- Training Institutes
- Veterinary Internship Program
- Human Resource Management
- Information Communication Technology (ICT)

4) Veterinary Public Health and Animal Breeding

- Veterinary Public Health
- Animal Breeding and Reproduction
- Hides, Skins and Leather Quality Control

5) Budget, Finance, Land and Assets

6) Joint Agricultural Secretariat

- Council of Governors
- County Directors of Veterinary Services



EDITOR'S NOTE



Dr. Peter Kimondo

This maiden edition of the Directorate of Veterinary Services (DVS) magazine will serve as a publicity tool for the Directorate. The magazine will publicize the milestones covered by the directorate; its affiliate semi-autonomous government agencies and key stakeholders.

In this edition we cover the activities carried out in 2020 amid the COVID-19 pandemic. It has started off as an annual magazine however, the editorial team envisages a higher frequency of production culminating into a quarterly publication.

The magazine will be a valuable reference material for the development of any legacy document for the directorate. The support offered by the Director of Veterinary Services to make this magazine a reality is highly acknowledged, recognized and appreciated. The moral encouragement that he gave to the members of the editorial team provided the drive and enthusiasm to complete this noble task.

Finally, all veterinary staff working in the directorate, and all stakeholders in the animal resource industry, are encouraged to contribute articles in future publications.

For improvements on the DVS magazine, the editor invites comments and suggestions from readers.



Editorial team

Dr. Kimondo Peter

– Editor,

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– Contributor,

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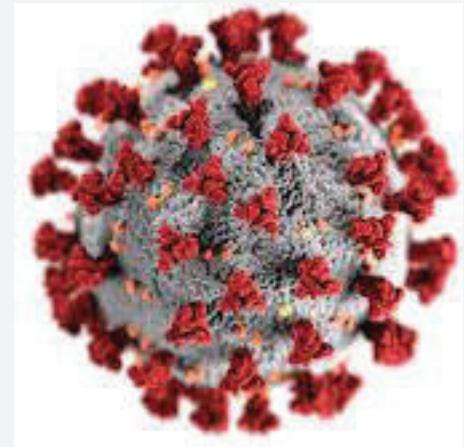
Ms. Sharon Michoma

– Contributor

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Opening of renovated central Veterinary laboratory



Putting Covid19 at bay



New look DVS Headquater's block

WORD FROM THE DVS



Dr. Obadiah Njagi - PhD, OGW

The sudden change in the way we used to work was a challenge ...

The Directorate of Veterinary Services just like any other government directorate was affected by the COVID-19 pandemic. Although the effects were negative we worked as a team and managed to make it through the hurdle. We achieved a good measure of success and I am very grateful to the teamwork and support I got from all staff.

Among the negative effects was the sudden change in the way we used to work. We were all used to physical workspace which quickly converted to virtual workspace. It was not easy for me either but a stark reminder that the only constant in life is change. As a directorate we took the preventive measures given by the Ministry of Health seriously and we immediately cut down on number of people coming to office. I am indeed grateful to the immense support I received from all by way of obeying the directives.

Although the veterinary fraternity lost a number of doctors we are grateful to God that our directorate did not suffer causalities in 2020. It is our prayer that 2021 will equally be good to us.

We pass our sincere condolences to the vets who succumbed to COVID-19 and other causes in 2020; may their souls rest in peace.

We managed to secure our place as essential services providers. This enabled vets to give their services across counties for food security and safety.

In 2020, the directorate achieved a lot of its set targets despite the covid19 pandemic. We celebrated the World Rabies Day and the World Antimicrobial Awareness Week. These two are well elaborated in this magazine. The Directorate in collaboration with FAO carried Middle East Respiratory Syndrome Corona Virus (MERS CoV) surveillance and a Knowledge, Attitudes and Practices Survey in Garissa and Isiolo Counties.

Under the Flemming Fund the Directorate trained vets and lab technicians on sample collection and data entry in preparation for a national Antimicrobial Resistance (AMR) survey.

The Meat Training Institute was reopened after the prolonged lockdown and students graduated just in time. Our Animal Health and Industrial Training Institutes (AHITIS) also opened their doors to students under tight covid19 preventive measures.

This maiden DVS magazine is one of the successes that we managed to come up with and it is my clarion call that we have it annually if not biannually. Information sharing does not only need to be in reports but also in such a form; so that a wider audience is reached.

It was an evening like any other. Then suddenly disaster struck. What started as a small fire grew into an inferno and engulfed the whole block housing the DVS office. Together with other senior officers offices.

A good part of the block had been destroyed when eventually the inferno was extinguished. Luckily no human casualties were reported.

While the exact cause of fire is yet to be established a lot of physical office infrastructure and information was destroyed.

"When I came into office, my first task was to mobilize funds towards the rebuilding of the burnt down offices" says the DVS Dr. Obadiah Njagi.

"We lost a lot of information, but we are stronger and now understand better the importance of security at workplace." He adds.

But the silver lining in the whole event was an opportunity to better the biosecurity status of the Central veterinary Laboratories (CVL) as a quarantine area.

The management grabbed the opportunity and mobilized funds not only for the destroyed block but the whole CVL.

The CVL added another gate; to control the traffic entering the DVS compound. Also added was a wheel bath just after the first gate (GATE A).

The Motor Transport Yard Section was also upgraded so were the roads within the CVL. All the blocks have been painted and all asbestos roofs replaced with iron sheets. Asbestos have been documented to be carcinogenic and hence a workplace hazard.

All parking lots have been paved, the hedges manicured. In summary the whole CVL today wears a new face; its former glory is renewed.

"I feel good working in such a nice environment. It is motivating, it shows our place as a noble profession." Mr. Adul told the DVS magazine.

"This is not the end but the beginning; we are mobilizing funds to finish the work. We plan to renovate the remaining block. To offer a bigger and better working space for our staff" says the DVS.

***"We lost a lot of information,
but we are stronger and
now understand better
the importance of security
at workplace"***



New DVS Block



DVS block before renovation

KENYA CELEBRATES WORLD ANTIMICROBIAL AWARENESS WEEK



“We are committed to the AMR fight. Kenya has taken a lead in this in the region and globally.”
Dr. Obadiah Njagi

Antimicrobials have saved millions of lives both in animal and human populations. Within human populations, antimicrobials have been used to treat various infections with an amazing success. Use of antimicrobials in animal populations have ensured high productivity and subsequently food security. These gains today face a great threat in antimicrobial resistance phenomenon which has been declared a global emergency by Food and Agriculture Organization (FAO), World Health Organization (WHO) and World Organization for Animal Health (OIE).

Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines that they initially responded to making infections harder to treat and increasing the risk of disease spread, severe illness and death.

The World Antimicrobial Awareness Week (WAAW) which runs from 14th to 18th November every year seeks to increase awareness on prudent use of antimicrobials. World Antimicrobial Awareness Week (WAAW) was previously called the World Antibiotic Awareness Week. From 2020, it will be called the World Antimicrobial Awareness Week. This will reflect the broadened scope of WAAW to include all antimicrobials including antibiotics, antifungals, anti-parasitics and antivirals.

Held annually since 2015, WAAW is a global campaign that aims to raise awareness of antimicrobial resistance worldwide and encourage best practices among the general public, health workers and policy makers to slow the development and spread of drug-resistant infections. The overarching slogan used for the last 5 years was “Antibiotics: Handle with Care.” This has been changed to “Antimicrobials: Handle with Care” in 2020.

AMR occurs naturally usually through genetic changes. Antimicrobial resistant organisms are found in people, animals, food, plants and the environment (in water, soil and air). They can spread from person to person or between people and animals, including from food of animal origin. The main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials; lack of access to clean water, sanitation and hygiene (WASH) for both humans and animals; poor infection and disease prevention and control in health-care facilities and farms; poor access to quality, affordable medicines, vaccines and diagnostics; lack of awareness and knowledge.

DRIVING AMR AGENDA IN KENYA

Kenya has done a lot towards reduction of Antimicrobial Resistance (AMR). Kenya was among the first countries to develop a National AMR Action Plan (NAP), an AMR policy, an AMR communication Strategy and NAP monitoring and evaluation framework. Kenya has done a lot of awareness creation on AMR targeting the public, journalists and even the policy makers. The Kenyan model is being replicated in other countries across the world.

The Kenya National Action Plan on Antimicrobial Resistance Prevention and Containment was launched in 2017 following the international adoption of the Global Action Plan (GAP) on AMR in 2015 through decisions in the World Health Assembly, the FAO Governing Conference and the World Assembly of OIE Delegates.

This National Action Plan Monitoring and Evaluation Framework has been developed in line with the One Health Platform and will be used to monitor the NAP implementation and evaluate the outcomes. It also outlines the key indicators and the roles and responsibilities for the different partners and stakeholders in the Monitoring & Evaluation process.

This year Kenya will celebrate the WAAW through a number of activities throughout the country. The climax was in Nyeri, where the governor launched the County AMR action plan.

By Othieno Joseph



Dr Allan Azegele the DVS AMR focal point awarding the winner of WAAW2021 student photo-essays competition.

AMR AWARENESS CREATION



Group Photo of the WAAW 2021 featuring students, partners and organizers.

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Opportunities and challenges in antimicrobial resistance behavior change communication

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ABSTRACT

Antimicrobial Resistance (AMR) is already affecting human and animal health sectors negatively. The UN General Assembly in 2015, FAO/OIE/WHO tripartite took lead and jointly developed Global Action Plan (GAP) to tackle the problem. States and Governments have developed AMR National Action Plans (NAP), Policies and Communication Strategies.

In health communication realms AMR is a distinctive and novel phenomenon. Consequently, communication theories and principles on this issue have not been tested adequately; even as literature around AMR is growing. While there are lessons that can be learned from previous and ongoing health communication campaigns targeting various audiences and centred around behavior change strategies; AMR is certainly a unique and maiden case. Kenya developed and is implementing its AMR - NAP. Kenya is among few countries that have developed and implemented an AMR Communication Strategy with the goal to create awareness and subsequently change human behavior.

This paper presents a review of available literature, reports, Kenya experiences and theories that can be applied to AMR communications. It illustrates the gaps, opportunities and challenges and proposes strategies that can be applied at the moment as more literature on AMR communication is collected through research and documentation of country experiences.

HARRY KIMTAI
Principal Secretary, State Department of Livestock

While mutation of microorganisms is a natural process, humans through the misuse of antimicrobials are fuelling this process. The effects of antimicrobial resistance are already being felt



ANTIMICROBIALS OUR LIFE, USE WISELY

History is punctuated by pandemics that have tormented humanity. Although only human microorganisms have been decimated by pandemics, resulting in fatalities. Today this is not the case because we have antimicrobials.

With the discovery of penicillin, the first antibiotic, in 1928, the world was able to vanquish an infection that had claimed millions of lives. Antibiotics emerged as a potent tool in the fight against infectious diseases and were called antibiotics that they were "christened Magic Bullets". Their unique ability to selectively "identify" and "kill" bacteria with the might of a gun bullet. The discovery of antibiotics heralded the advent of the "Antibiotic age".

Today many medicines have been discovered targeting bacterial, viral, fungal and parasitic diseases and have greatly impacted the quality of life for humans. The quality of life has improved, lifespan increased and suffering from diseases significantly reduced. For animals, antimicrobials have improved reproduction and productivity and subsequently food security and farmers' income.

Antimicrobials are the centre of public health and veterinary health. If we turn them the two would turn down. The livestock and human health are the main consumer of antimicrobials globally. Unfortunately, antimicrobials, important as they are, have not been used well. Misuse of antimicrobials has resulted in the microorganisms developing resistance to the initially effective medicines. This phenomenon is known as antimicrobial resistance and it threatens not only animal health but animal health as well.

Already, many antibiotics are no longer effective in the treatment of disease, leading to probably heard of multidrug-resistant tuberculosis in humans. Similarly, there is an increasing resistance towards antibiotics commonly used in the treatment of animals. While the mutation of micro-organisms is a natural process, human beings through the misuse of antibiotics are fueling this process. The effects of antimicrobial resistance are already expected to worsen if we do not use available antibiotics more prudently. This will be seen in increased hospital stays, use of costly antimicrobials to save lives and an increase in deaths. Farmers are likely to see an increase in veterinary costs, lowered production, animal deaths and reduced profits.

The World Organization for Animal Health, the Food and Agriculture Organization of the United Nations and the World Health Organization agreed to work together to tackle the global threat posed by antimicrobial resistance. The world has set aside November 18-21 every year to raise awareness on prudent use of antimicrobials to avert this doomsday scenario.

The State Department of Livestock, together with the Ministry of Health and other ministries, departments, agencies and development partners, in partnership with the FAO, have made progress towards prevention and containment of the AMR. The National Policy and the National Action Plan for prevention and containment of AMR are a clear testament of the government's commitment to addressing the threat caused by resistant pathogens.

Through the national secretariat, many counties have been sensitized and have prioritized antimicrobial resistance in their work plans. The Veterinary Medicines Directorate, a state corporation, is sensitizing the public on prudent use of veterinary drugs while enforcing regulations on antimicrobial use.

Antimicrobials are a key cog in our lives and we should take care of them to lengthen their potency lifespan. The public should not buy and administer antimicrobials to their animals; this is likely to result in misuse by way of overdosing or underdosing, which have been shown to precipitate antimicrobial resistance. It can also be fatal to the animal considering the limited knowledge of farmers on how drugs work. Medicines require proper handling and farmers should only buy what a veterinary doctor has prescribed after examining their animals.

As we celebrate this year's World Antimicrobial Awareness Week under the theme 'Antimicrobials: Handle with care' and 'United to preserve antimicrobials', let's be alive to the fact that antimicrobials are our lives and we are therefore duty bound to use them prudently.

The full paper can be accessed through the link below
<https://www.sciencedirect.com/science/article/pii/S235277142030272X>

KENYA CELEBRATES WORLD RABIES DAY

By Dr. Othieno Joseph

The Directorate of Veterinary Services and Ministry of Health through the Zoonotic Diseases Unit have been aggressively spearheading wiping out of the disease by 2030. This year more than 200,000 dogs have been vaccinated and the country has heightened awareness creation through the use of mass media and collaborations with organizations such as the World Animal Protection to train and educate the public on responsible dog ownership.

Dr. Obadiah Njagi-Director of Veterinary Services says according to the Rabies Act, dogs should not be left to stray. But, if they do, vaccination should be one of the ways of mitigating the spread of rabies in dogs to humans. "This year, 200,000 doses of the rabies vaccine have been issued to 34 counties." He says. He reiterates that the aim is to vaccinate 70% of the dog population in the country.

"Furthermore, in order to abate the impact of the disease, the Directorate of Veterinary Services and the Ministry of Health jointly developed and are in the process of implementing a rabies elimination Strategic Plan that aims to eliminate dog-mediated human rabies by 2030," says Dr Njagi.

Whilst efforts such as the commemoration of the world rabies day are to be lauded, the emphasis should be on the prevention of the disease. The World Health Organization (WHO) suggests; increasing awareness of rabies prevention and control in communities this includes education and information on responsible pet ownership, how to prevent dog bites, and immediate care measures after a bite.

World Rabies Day: Time to eradicate this fatal but preventable disease from Kenya

This day Kenya joins other countries in commemorating the World Rabies Day (September 28). The day is set aside to spur efforts towards the eradication of rabies but above all disease of man and animals. Rabies is mainly spread through bites of infected dogs. According to the World Organisation for Animal Health (OIE) about 50,000 lives are lost to rabies every year, most of them affecting children in underdeveloped countries. Rabies is a viral disease of all warm blooded animals. It affects the nervous system and was in the past confused with witchcraft. In its terminal stages in humans, the disease progresses clinically in distorted mental activities like altered voice, fits, fits of anger, biting objects and finally, delirium and infected saliva. In dogs and other animals, rabies makes them lose the fear of man and will salivate, bite any moving objects and develop unusual vocalisation. Wild animals wander out of their usual hideouts and adopt an unusually aggressive nature. This easily exposes people, especially children, to bites from rabid animals. Luckily, there is an effective and affordable vaccine for dogs against this disease. Countries that have eradicated rabies have adopted the "source control" - by vaccinating all dogs and educate the public on responsible dog ownership. Similarly, through good rabies control laws virtually in all countries, Kenya has the Rabies Control Act Cap 365, Public Health Act, Cap 24, Animal Disease Act, Cap 364 and many county government laws and regulations that spell out the legal intervention to safeguard the public in disease control. The demographics of the disease have necessitated the One Health Concept in its control and final eradication. The World Health Organization (WHO), the Food and Agriculture Organization (FAO) and OIE from a tripartite global movement against rabies. Under this, a lot of financial and human resource has been harnessed into rabies eradication. Kenya joined the global efforts and started off the journey by drawing a strategic plan that envisages archiving rabies in humans by 2030. Towards this, the Directorate of Veterinary Services and Ministry of Health under the Zoonotic Diseases Unit are spearheading the eradication efforts. Already a lot has been achieved, but still more effort is needed as the country moves closer to the finish line. This year alone more than 300,000 dogs have been vaccinated in Kenya. Kenya has heightened awareness creation on rabies through mass media campaigns aimed at increasing the risk perception index of the disease for quick post intervention medical treatment to save lives. The Ministry has carried out training of both human and animal health professionals to equip them with rabies diagnostic and treatment skills. A dog rabies vaccine can cost as low as Shs 100. Vaccinating our dogs is the surest way to prevent rabies. Vaccinating our dogs is a very cost effective control measure. In case of a bite from an infected dog, there is still an effective health intervention, but only when instituted without any delays. As we mark this day, ensure your dog is vaccinated against rabies to save you and other human lives.

Dr Obadiah Njagi, Director of Veterinary Services and the Chief Veterinary Officer representing Kenya at the World Organisation for Animal Health

PREVENTION IS BETTER THAN CURE

By Sharon Michoma

They are affectionately referred to as our 'furry friends', research dating back to the 18th century has shown that dogs were companions to humans. Over time, the human-animal bond has developed and strengthened.

Several studies demonstrate how a dog's presence increases socialization among people. Court-room or service dogs help children and adult abuse victims testify by decreasing their anxiety and lessening sympathetic nervous system arousal. We should not overlook the scientifically proven health benefits to this bond including a decrease in blood pressure, cholesterol, and triglyceride levels.

What happens when our famed companions are the carriers of disease- rabies? Rabies is a vaccine-preventable, zoonotic, viral disease. Once clinical symptoms appear, rabies is virtually 100% fatal. In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans. Yet, rabies can affect both domestic and wild animals. It is spread to people and animals through bites or scratches, usually via saliva (WHO).

Every year, the World Rabies Day is commemorated on the 28th of September. It is an opportunity to reflect on the efforts to control the deadly disease and remind ourselves that the fight is not yet over. Several organizations such as the Centres for Disease Prevention and Control (CDCs), World Health Organization (WHO) and World Organization for Animal Health (OIE) are at the fore front to ensure that the pledge to eliminate human deaths from dog-transmitted rabies by 2030 is actualized.

This year's theme for the World Rabies Day 2020 was "End Rabies: Collaborate, Vaccinate"— it called upon collaboration between with doctors, veterinarians, educators, community workers, policy makers, and others in the community to raise awareness around rabies prevention and control. An individual can contribute to the cause by ensuring that their pets' vaccination is up to date.

While vaccinating dogs against the rabies disease is cost effective and the most accurate way to stop the disease in its tracks, it is interesting to note that mechanisms for the same have not been fully actualized. Vaccination of a dog costs between Kshs. 150- 200 while the treatment of a human being after exposure to rabies is approximately Kshs.4, 000 to 5,000 where an individual may require 5 to 7 sessions of treatment. As most of the dog bites occur in rural areas, the cost implication for this is devastating to a family that has to survive under \$1 a day.



A rabies vaccination exercise in Kitui County
Photo: by Dr. Mathew Muturi

According to the Centre of Disease Control, rabies has been declared an endemic. The first case was reported in Kenya in 1912. Each year a total of 2,000 people lose their lives to the disease while 73,000 are bitten by stray dogs. The number might be higher as several cases go unreported.



from the left respectively, **Dr. David Mwangani, Dr. Charles Ochodo, Dr. Obadiah Njagi (DVS), Erick Kneedler, Dr. Jebii Kilimo (CAS).**

What it means to have a BSL3 lab?

1. Faster sample processing

2. Safer sample handling

3. Biosecurity enhanced

KENYA OPENS BSL3 LABORATORY

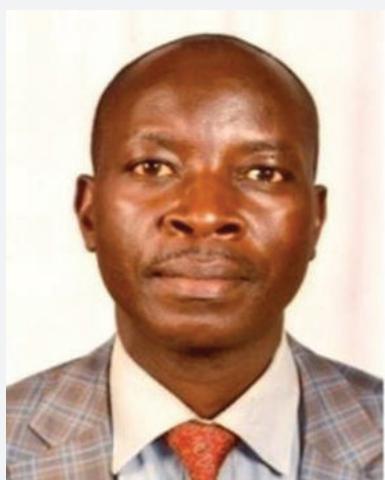
By Dr. Obadiah Njagi

It is documented that 75% of new human infections including the current COVID 19 have their origin in animals. Veterinarians though working to safeguard the health of the animals do so to protect the larger human public. When animals are healthy so are we – this has been coined into the One-Health Principle. Timely diagnosis of diseases is of utmost importance in taming the spread of diseases both man and animals.

The world is currently under a cloud of uncertainty as relates to emerging, re-emerging and zoonotic diseases. Preparedness is key to disease prevention and subsequent control. The preparedness covers both continuous human capacity development and infrastructural development. All this come with a huge cost and commitment from governments and institutions. Disease causing micro-organisms though small seem to be running ahead of humanity; attacking in ambush despite technological advancements in medicine.

Kenya is an economic powerhouse in the region; even in matters veterinary diagnostics we have supported our neighboring countries like Somalia, Southern Sudan, Uganda, Ethiopia, Rwanda and Burundi at their points of need. The Central Veterinary Investigation Laboratories in Kabete has been a center of excellence in the region. This certainly comes with risks which must be kept at a bare minimum. This has attracted the attention of development partners and research institutions to collaborate in the upscaling of our veterinary laboratories.

The Government of Kenya through the State Department of Veterinary Services supported by the United States Defense Threat Reduction Agency (DTRA) opened the doors of their Level 1, and Level 2 on 11th March 2020. The government has also built a level 3 Biosecurity lab at a cost of KES 327 million. These milestones mark a new chapter in disease diagnosis just at an apt time when the globe is fighting to contain COVID19 and fears of outbreak of other diseases. On 9th March H.E the president presided over the opening of the first health convention in Kenya at the Sarit Centre. During this meeting he reiterated the government's goal to make Kenya a health hub for the region. These activities reaffirm the government's efforts in ensuring that our citizens are safe from diseases.



"The world is currently under a cloud of uncertainty as relates to emerging and re-emerging zoonoses"

BSL3 LAB FOR IMPROVED SERVICES

By Dr. Obadiah Njagi

Having fully equipped level 1, 2 and 3 veterinary laboratories puts Kenya on a higher pedestal as a regional hub for veterinary diagnosis. It means that Kenya now has the capacity to isolate in the laboratory COVID-19 if at all it crossed over to animals as has happened in Hongkong where the virus was isolated from a dog. It means that our laboratories can now handle bioterrorism, emerging, re-emerging and zoonotic diseases.

Kenya has been supporting her neighboring countries in veterinary diagnosis as a reference laboratory. The new status means that the country is now capable of handling highly infectious materials from these countries while ensuring safety to the laboratory workers, the public and the world.

It also means that Kenya has made a step towards compliance with global bodies like World Organization for Animal Health (OIE); Codex Alimentarius Commission (CAC); World Trade Organization (WTO); that set and monitor national sanitary and phytosanitary standards that are crucial for international trade in animals and animal products. It is a plus for our surveillance, control and diagnostic capacity for trade sensitive and zoonotic diseases like Foot and Mouth, sheep & goat plague, Contagious Bovine Pleuropneumonia (CBPP), Anthrax which have over the years locked Kenya out of the lucrative global livestock markets.

The Directorate of Veterinary services has an elaborate plan to train its staff on ever advancing diagnostic techniques. The directorate has embarked on awareness creation to inform the public to make use of the veterinary laboratories in timely disease diagnosis to prevent deaths and subsequent losses.

These efforts have put us a step closer to making a comeback into the international market for our livestock and livestock products and therefore improving our economy. Most importantly with the upscaled veterinary laboratories our public health is guaranteed so is our animal welfare and productivity especially with the current pandemics.



"We have the capacity to not only serve Kenya but the region" Dr. Obadiah Njagi

WADING THROUGH THE MURKY WATER OF COVID-19 -THE DVS APPROACH

By Sharon Michoma

The first case of COVID 19 in the country was reported on 12th March 2020. Consequently, a number of directives to contain the spread of the disease were issued by the Ministry of Health (MoH) and all government Ministries and Agencies played a role in their implementation.

The Directorate of Veterinary Services (DVS) was not left behind in putting up measures to control the spread of COVID-19. Immediately the first case of COVID 19 was reported the DVS COVID-19 team comprising of division and section heads was formed with the aim of ensuring the Directorate implemented the MoH Covid19 prevention and control measures. In conjunction with the Directorate of Veterinary Services, the Field Epidemiology Lab Training Program (FELTP) deployed 65 veterinary officers to help with contact tracing within the counties under the umbrella of the One Health approach.

FELTP trains field veterinarians and human doctors on participatory epidemiology; at masters degree level. This is geared towards equipping them disease surveillance skills especially for zoonotic diseases.

Dr. David Mwangagi the head of Diagnostic services says the DVS through the COVID-19 team ensured that measures to stop the disease in its tracks have been put in place. "One of the key factors is the movement control of staff and this includes maintaining of a rota where people were encouraged to work from home and only a few were to remain in the office." He says.

"In addition to this there has been a strict maintaining of the transfer and reception facility control to ensure that only those who do not present classic symptoms such as a high temperature are allowed into the organization. Putting measures such as hand washing points, information on how to prevent the spread of COVID-19 and sanitization was crucial." He adds.

Early this year, when the country was thrown into an abrupt partial lockdown, some of the staff had travelled to different counties or some were domiciled in their home counties. It was the task of the team to ensure that those that required to report to work were issued with letters ensuring that they could travel to their duty stations. The team ensured that the DVS staff which is considered among essential services providers were allowed to move without restrictions.

"As COVID-19 hit Kenya abruptly, the team had to approach donors to aid in stopping the spread of the disease. Food Animal Organization (FAO) and Washington State University (WSU) were instrumental in donating hand sanitizers, hand washing basins and Personal protective equipment (PPEs). The DVS also directed funds towards the purchasing of sanitizers." Dr. Mwangagi says.

Communication is extremely critical more so where a pandemic is concerned. It is imperative that the organizations stakeholders and especially the staff are kept abreast with information. "For this reason, the team was charged with undertaking the responsibility of issuing circulars which in essence were to enlighten the staff on any new development regarding the disease." He says.

"The future in regard to the end of COVID-19 remains a mirage; therefore we must ensure we learn how to acclimatize and continue to put in place measures to stop the spread of the disease." Dr. Mwangagi.



**Dr. David Mwangagi,
Head Labs and Diagnostics**

DVS SETS UP MODERN LEATHER PRODUCTION UNIT TO TRAIN STUDENTS

By Sharon Michoma

Manufacturing is one of the key components of the Big Four Agenda. The leather industry in Kenya is currently not optimally exploited in turn, denying the country revenue in exports and jobs for citizens. However, this may soon change. The Animal Health Industry and Training Institute (AHITI) has launched courses in footwear design, leather technology and a number of short courses to address capacity gaps along the value chain.

To effectively train students in this highly practical course the DVS has invested in modern equipment all set up in a production workshop. Students will therefore be exposed to practical sessions that will impart skills necessary to produce various leather products.

Dr. Marilyn Karani the principal of AHITI- Kabete says a value chain approach has been used in the development of this course as the final quality of hides and skins is dependent on the entire production process from animal nutrition, animal breeding, and control of ecto-parasitic diseases and adoption of standardized flaying procedures to storage procedures. Poor production processes often result in damage to the hide.

"It is estimated that 60% of the damage to hides and skins occurs during the slaughtering process, while 40% are due to pre-slaughter conditions like tick bites, thorn marks and brand marks." She says. To solve this the students will be taken through animal husbandry training.

She says this can be remedied by acquiring proper skills in handling of the raw hides and skins. This involves both ante and post slaughter operations which need specialized skills in animal husbandry, slaughtering and curing methods.

Globally, the leather industry is estimated to be worth \$ 100 billion and despite Africa owning a fifth of the global livestock population, the continent accounts for a measly four per cent of the world's leather production and 3.3 per cent value addition in leather. Data sourced from the Economic Survey of 2019 shows that Kenya's leather exports declined to 23,141 in 2018 from 26,212 tonnes in 2014. The leather Industry in Kenya has been on a downturn after China drastically cut imports of semi-processed leather products from Kenya due to quality concerns. Potential investors were slowly turning to Ethiopia and Tanzania. This is the reason why this course is very timely and will certainly get Kenya back to her rightful position in the leather sector on the continent.

The employment opportunities in this field include working in tanneries, county offices, leather goods manufacturing facilities, training institutions among others. "Through working with the county offices, they are able to train farmers on ways to improve the quality of hides such as changing animal branding practices;

branding an animal closer to the head for example ensures the hide is not destroyed." Dr, Karani says.

"We also encourage the students to venture into entrepreneurship once they finish the course. The opportunities are endless here as they are now equipped with skills to delve into production of leather goods." She says.

Dr. Karani emphasizes that the training based on this curriculum will facilitate growth of the livestock sub-sector and will definitely ensure that there is some restoration to the already ailing leather industry. With the leather production workshop set to be commissioned early next year, it is apparent that Kenya will move a step forward in the right direction.

Animal Health Industry and Training Institute (AHITI) Kabete was founded in 1963, with aid sourced from Food and Agriculture Organization (FAO), United Nations Development Programme (UNDP) and the Government of Kenya. It was officially handed over to the Kenyan Government in 1973. The institution offers a number of courses in animal health.



Dr. Karani showcases one of the leather production machines at the new workshop



An array of leather production machines at the AHITI- Kabete Workshop

TOWARDS A SUSTAINABLE LEATHER GOODS ECONOMY

By Sharon Michoma

The Directorate of Veterinary Services (DVS) has made strides towards reviving the ailing leather industry in Kenya. This is in line with leather processing being identified as a priority manufacturing sub-sector in Kenya's Big 4 Agenda.

Leather represents a potential area for sustainable economic growth and employment. Unfortunately, value addition in the leather sector has been minimal. Most of Kenya's exports have been in the form of unprocessed, raw hides and skins

According to a 2015 World Bank report, the target for the manufacturing industry is to raise the sector's contribution to the Gross Domestic Product (GDP) from less than 9% to 15% by 2022.

The DVS through the Hides and Skins Department has been contributing positively toward the above through some key ways. One of the major projects the DVS has undertaken is the construction of Ngong Leather Science Institute. Already, four Bill of Quantities have been completed these include the fences, tanners, water tanks and the road access to the institute. 80% of footwear machines and 5% of tanning machines have been procured and installed at the AHITI-Kabete workshop.

The hide, skin and leather trade Act CAP 359 is being reviewed so as to align it with the current dynamics in the sector. The total export for Hides, skins and leather was 774,105,202 sq metres while the total imports for hides, skins and leather was 181,900 pieces and total wool export was 237 bales in 2020.

The DVS held consultative workshops with Kenya Bureau of Statistics (KEBS), Kenya Leather Development Council (KLDC) to look into the downward trend of hides, skins & leather market prices. In addition to this, capacity building meetings took place between the DVS and Kenya Meat Commission (KMC). 19 tanneries and 13 go downs were inspected through November and December 2020 to ensure quality control.

DVS ATTENDS DONKEY WELFARE CONFERENCE IN LODWAR

By Dr. Mwangi David Kiai

Donkeys have been kept for various purposes that include; Draft animal technologies in transport and tillage, pack animals in transport for fetching water and in migration, ambulances, food animal, dowry payment and for status symbol.

On 15th December, 2020, Hon. Linah Jebii Kilimo, Cabinet Administrative Secretary (CAS) in Ministry of Agriculture, Livestock, Fisheries and Cooperatives together with a team of officers from Kilimo House and Veterinary laboratories, Kabeto participated in a Donkey Welfare Conference in Lodwar, Turkana County.

In the recent past, the economic value of donkeys has risen alarmingly due to increased demand for donkey meat and other products in China. Four donkey export slaughter houses have been opened in Kenya namely; Gordox Kenya Ltd in Mogotio -Baringo County, Star Brilliant Donkey Abattoir in Naivasha - Nakuru County, Fuhai Machakos Trading Co. Ltd in Kithyoko -Machakos County and Silzha Ltd in Lodwar - Turkana County.

The wanton slaughter of donkeys in the four slaughter houses threatened to decimate the donkey population in Kenya and in the neighbouring countries, negatively impacting on the socio- economic livelihoods of donkey users in the country. In February 2020, the Agriculture Cabinet Secretary (CS), Hon. Peter Munya imposed a ban on donkey slaughter for export purposes and degazetted export statuses for those slaughter houses to correct this situation.

During the conference, the following resolutions were made; closure of Silzha Ltd donkey slaughter house, mount a campaign to reform donkey thieves to become ambassadors of donkey welfare, no slaughter of pregnant donkeys, convert Silzha Ltd donkey slaughter house into a sheep, goat and cattle slaughter facility for export market and finally establishment of a donkey breeding programme.



The CAS and DVS giving their remarks during the conference

DVS GOES CASHLESS

By Dr. Evans Muthuma

The mandate of the DVS is to safeguard animal and human health, improve animal welfare, increase animal resource productivity and ensure safe and high-quality animals and their products to facilitate food security and domestic and international trade. This is achieved through provision of various services to the livestock industry such as licensing of service providers for example artificial insemination services, licensing of livestock breeders, meat inspection services, veterinary laboratory services, licensing of hides/skins traders, issuance of livestock and livestock products import/export veterinary certificates.

In the provision of the veterinary services, the DVS collects fees and levies which are paid through cheques, electronic funds transfer and cash payment.

In order enhance the ease of doing business, in June 2020, the Directorate of Veterinary Services embarked on use of mobile money transfer services (Paybill) platform, which is easy to use by all categories of the livestock stakeholders, as it only requires the user to have a mobile phone. It is also convenient for the account reconciliation at the DVS. With the rollout of this platform, cash payment to the DVS is no longer acceptable.



Dr. Evans Muthuma, Veterinary Public Health

	Pay Bill Name	Pay Bill Number
1	CVIL Kabete	4024161
2	VIL Kericho	4024163
3	VIL Nakuru	4024165
4	VIL Eldoret	4024167
5	VIL Karatina	4024169
6	VIL Mariakani	4024171
7	VIL Ukunda	4024173
8	VIL Witu	4024175
9	VIL Garissa	4024177
10	Vet Farm Kabete	4024179
11	Vet Farm Machakos	4024181
12	Vet Farm Ngong	4024183
13	Vet Farm Maseno	4024185
14	Vet Office Farmers Choice	4024187
15	Vet Office Kenchic	4024189
16	Vet Office Neema	4024191
17	Vet Office Quality Meat Packers	4024193
18	Vet Office KenMeat	4024195
19	Vet Office KMC Athi River	4024197



DVS LAUNCHES DIGITAL DISEASE REPORTING TOOL

DVS in collaboration with the Centre for Disease Control (CDC) and the Kenya Wildlife Service through the Global Health Security Agenda, launched the Kenya Livestock and Wildlife Syndromic Surveillance (KLWSS) system — a near real-time electronic surveillance and reporting system developed by Washington State University.

According to CDCs, zoonotic diseases account for 60% of emerging diseases. This makes quick detection and reporting of such diseases a critical component for effective disease prevention and control. Such diseases include Rift Valley Fever, Middle East Respiratory Syndrome (MERS), rabies, brucellosis and highly pathogenic influenza.

Dr. George Njogu explains that field surveillance officers submit data via a mobile application and the data is made available to county and national authorities through a central server which is hosted at the Directorate of Veterinary Services headquarters.

The KABS system or platform enables rapid analysis and generation of potentially actionable data for recognition of the syndrome and response to disease events. Therefore, immediate feedback is sent to the person(s) who sent the information and relayed to relevant people responsible for outbreak response.

“KABS reports on syndromes such as abortions, sudden death and oral/foot lesions among others in seven livestock species. These are cattle, sheep, goats, chicken, camels, dogs, and cats.” He adds. Conversely, the KABS-Wildlife form reports the same syndromes in five animal categories namely, herbivores, carnivores, avian, aquatic, and non-human primates.

“This system boasts a multitude of advantages, these include real time reporting of diseases therefore treating a disease before it escalates, there is the early detection of diseases and finally, accurate data can be recorded.” He says. He adds that the challenge has been inadequate funds to cover each county in the country.

Dr. Njogu says training of the KABS system has already been rolled out in the counties to veterinarians in the public and private sector with 32 counties benefitting from the training. However, the goal is to ensure that training in all the counties is done by the end of 2021.



The KABS App

SENTINEL HERDS FOR DISEASE SURVEILLANCE

The DVS has established sentinel herds to monitor Rift Valley Fever (RVF) and contribute towards early warning of outbreaks. Sentinel herds are an important means of obtaining epidemiological information on Rift Valley Fever (RVF). Continuous surveillance is a critical block in disease prevention and control.

The sentinel herds have been established in Naivasha at the sheep and goat farm, Kitale, Maseno, Bachuma and Machakos government farms. Surveillance is done continually and also strategically before the rains and as the rain progresses. This has ensured the early detection of Rift Valley Fever and intervention before the disease strikes.

Early detection of RVF is a prerequisite to effective control of the disease.



**Dr. George Njogu,
Deputy head of Vet. Epidemiology and Economic Section (VEES)**

Clinical Signs of RVF

- ✓ Fever
- ✓ Lack of appetite
- ✓ Abortion storms
- ✓ Listlessness
- ✓ Disinclination to move
- ✓ High morbidity and mortality rates in neo-natal animals

DVS OFFERS INTERNSHIPS TO VETERINARY AND ANIMAL HEALTH GRADUATES

The Director of Veterinary Services enforced the Veterinary Surgeons and Veterinary Paraprofessionals Act No. 29 of 2011 which state that it is mandatory for all Veterinary and Animal Health graduates in Kenya to undergo a twelve (12) month internship prior to being registered to practice by the Kenya Veterinary Board (KVB). veterinary practice.

This program was implemented in 2017 and throughout this period, a total of over 3,200 students have successfully completed this training. The programme seeks to address the problem of inadequate staff in veterinary services nationally as the internships are done through out the country.

This program offers a unique case of Public Private Partnership as interns are also attached to private sector entities like pharmaceutical firms, milk, meat and pork processing factories.



Mr. Samuel Kiminza the Veterinary Internship Programme Coordinator at the Directorate of Veterinary Services says, this is a very structured, practical on the job training aimed at gaining practical experience . " By the end of the internship, students will have covered the following key areas clinical practice, laboratory practice, public health ambulatory and herd health. " He adds.

**Mr. Samuel Kiminza, Co-ordinator,
Veterinary Internship Programme**



A section of Interns with their supervisors

This year was different however considering the challenges that COVID 19 pandemic brought about. Those undergoing the internship were supposed to report on 1st April 2020 however they reported on 1st September due to the processes of online assessment.

Currently, a total of 875 interns are engaged. 76 of them have pursued Bachelor of Veterinary Medicine, 189- Bachelor of Science in Animal Health and Production, 250- Diplomas and 360 have finished Certificate courses in Animal Health. Of the 875 interns, 254 are female while 621 are male. Mr. Kiminza says that due to the successful implementation of the programme applications are on the rise each subsequent year.

"The programme is not without challenges." says Mr. Kiminza . Some of the students do not adhere to the internship regulations therefore leading to their discontinuation from the 12 month programme. "In addition to this there is the problem of funding for the internship programme. " He says. The interns are paid as per the Public Service Commission's scheme.

Among the pioneers of the Veterinary Internship Programme ,13 have already been employed by the Public Service Commission and deployed to the DVS. Others have been employed by the Counties and private organizations. This goes a long way to show that the programme has been a success.

He attributes the above to the three things he says the programme hopes to impart to the interns. These are creating are the necessary networks, building confidence and gaining skills.

DVS INTERN SHARES HER EXPERIENCE

By Sharon Michoma

Mumina Daro Ahmed is an intern at the Directorate of Veterinary Services Headquarters under the Kenya Veterinary Board. Hers is a story much bigger than what she studied though closely tied to it.

Mumina is a graduate from Pwani University. She pursued a degree in Animal Health and Production. She is not only serving the animal health sector but is also working towards changing the place of girl child in her community.

Mumina hails from Moyale, a town nearly 800km from Nairobi, she grew up seeing that the place of the girl child was in the kitchen and eventually being groomed for marriage. She decided to change this narrative by going to school in the hope of being an advocate of change in her community.

It is important culturally, for people from her largely pastoralist community to keep large herds which are usually not healthy as it is a source of pride for the owner. She decided to study Animal Health and Production, having witnessed people from the town owning large herds of animals even though they were living a low quality life.

She says working at the Directorate of Veterinary Services has been an eye opening experience. "I have been able to put into practice the theory that I was taught at school." She adds. "Transitioning into the work environment has been made easier by the staff that work at the laboratory especially; they are resourceful, friendly and are always ready to guide the interns." She says.

While she hopes that eventually, she will get into employment, she has not ruled out venturing into entrepreneurship. "I would like to set up an Agrovet in Moyale, focused on offering consultation to the pastoralist communities around the area." "Most of the pastoralists sell animal products just to get enough money to survive." She says. She hopes to teach them how to maximize their profits from sale of animal products and also educate them on value addition to their products.

Her community is dear to her and she aspires to educate the public to especially embrace modern ways to treat their animals. She says that she wants to do this by offering free services whenever she can. She also hopes to mentor girls and encourage them to pursue an education and a livelihood instead of rushing into early marriages.



Mumina Ahmed analyzes samples at the DVS Laboratory



**Mumina Ahmed analyzes samples under the supervision of
Mr. Samuel Gacheru, the Principal Laboratory Technologist**

TRAINING IN PREPARATION FOR A NATIONAL AMR SURVEY

The Director Of Veterinary Services (DVS) carried out a two week long training of field veterinarians on Antimicrobial Resistance (AMR) surveillance in Naivasha in November and December 2020.

This was done in collaboration with the International Livestock Research Institute (ILRI), Washington State University (WSU) and PATH under the flemming fund.

A total of 75 veterinarians and laboratory technicians from ten counties were trained. The training is in preparation for a national AMR survey targeting commercial poultry farms.

The training was on sample collection, data entry, team work and laboratory testing.

A representative of the DVS, Dr. Allan Azegele officially opened the workshops. In his opening remarks he noted the importance of AMR surveillance which addresses the objectives in the National Action Plan (NAP).

Inadequate data on AMR will certainly be addressed by these surveillances which will take place in 2021 in selected counties.



DVS Staff Dr. Damaris Mwololo during the training

To abide the Ministry of Health preventive directives on COVID19; the training were split into two groups each lasting for a week.

Kenya has taken lead in the implementation of AMR activities not only in the region but globally.

Under one health approach the DVS collaborates with the Ministry of Health in the implementation of AMR activities



Donning and doffing practicals

Kenya has developed an AMR National Action Plan (NAP), an AMR policy and an AMR Communication Strategy.

Kenya's model has been applied by other countries. During the 2017 second OIE global conference on AMR; Kenya's Dr. Othieno Joseph shared our national experience on AMR communication. Dr. Azegele has also participated in several regional and global AMR conferences.

Kenya is probably the only country that has published its experiences in a journal. The DVS has published a paper entitles "Opportunities and Challenges in AMR behavior Change Communication in the One Health Journal.

<https://www.sciencedirect.com/science/article/pii/S235277142030272X>

Impact of Antibiotic Resistance

Why is Resistance to Antibiotics a problem?



*“Kenya
has taken lead
in matters
AMR globally”*

ANTIBIOTIC RESISTANCE



Antibiotic Resistance Affects Us All



KAP SURVEY ON CAMEL RESPIRATORY DISEASES

By Dr. Othieno Joseph

The DVS in collaboration with FAO carried out a Knowledge Attitudes and Practices survey on camel respiratory conditions.

But why camel respiratory disease? Well, there was misleading information in the media to the effect that camels in northeastern Kenya had died of MERS CoV? The DVS had already collected samples from these areas and laboratory diagnosis pointed to a bacterial disease – (*Manhemia Haemolytica*). The DVS cleared the air through a press release.

But this pointed to inadequate information on camel health. The DVS requested for support from FAO to carry out a KAP survey on camel respiratory conditions. This was a proxy study considering that Kenya has not reported any cases of MERS- CoV.

The KAP survey was done in Isiolo and Garissa Counties. Questionnaires, Key Informants and Focus Group Discussions were used to collect information.



DVS Staff Dr. Brigit Muasa administering a questionnaire to camel herders in Isiolo



DVS & FAO team carrying out a focus group discussion in Garissa

“Treatment of camels by their owners is a major challenge in camel keeping communities and will worsen AMR”

Treatment of camels by their owners was a major finding. This presents a hurdle in AMR mitigation. The team found out that most camel farmers do not consider camel as a livestock that should be treated by veterinary doctors.

Agrovets in this areas are also a weak link due to imprudent dispensing of antibiotics to camel keepers.

On a positive note, camel keepers have a lot of information on camel health and value the animals so much. This can serve as an entry point to change behavior through communication initiatives.

The team is working to get this work published to further answer to the challenge of measly information on KAP surveys done on camel respiratory diseases.

AGRICULTURE CS MUNYA LAUNCHES MASS VACCINATION EXERCISE

The Cabinet Secretary, Ministry of Agriculture, Livestock, Fisheries and Cooperatives- Hon Peter Munya launched the National Livestock Vaccination program on 19th June 2020 at Oloosuyian cattle vaccination crush in Kajiado. The massive livestock vaccination exercise is to take place in regions prone to animal diseases.

The CS said the exercise, which would cover 14 counties, was aimed at boosting livestock market and farmers' earnings. The CS handed over to the country over three quarter million doses of vaccine to be used during the vaccination campaign.

During the launch, he said livestock production in Kenya is always under the threat of occurrence of animal diseases and the vaccination drive aims at preventing the spread to enhance livestock production and health.

Munya noted that trans-boundary disease such as Rift Valley Fever (RVF), Foot and Mouth Disease (FMD), Blue tongue disease, Peste des Petites Ruminants (PPR), Lumpy Skin disease (LSD) and Brucellosis continue to threaten livestock production, resulting in economic and livelihood losses.



CS Hon. Peter Munya during the launch of the exercise

“Transboundary animal diseases requires that counties harmonize vaccination exercise and that is what we as the National government are supporting”

The diseases, he said spread easily from one country to another, thus the control and management of the outbreaks require regular treatment and monitoring as well as cooperation between countries.

The CS added that the mass treatment, deworming and vaccination exercise that is being conducted countrywide targets over 18 million cattle, 26 million goats ,18 million sheep and 2.2 million camels which are expected to be vaccinated to protect them from the deadly Foot and Mouth, Rift Valley Fever and the Blue tongue diseases.

Munya added that livestock keeping is the backbone of the economy and the potential must be fully tapped so as to enable farmers' secure foreign markets for their animal products.

WHAT IS CODEX ALIMENTARIUS?

By Dr. Kimutai Maritim

The Codex Alimentarius Commission (CAC) is a Latin word for "Food Code", is a collection of standards, guidelines and codes of practice that governments may opt to use to ensure food safety, quality and fair trade. It comprises of a series of general and specific food safety standards that have been formulated with objective of protecting consumers' health and ensuring fair practices in food trade. CAC was formed in 1963 by two United Nations Organizations (FAO and WHO) and its headquarters is in Rome, Italy.

From 2015 -2020, Kenya was the Coordinator for FAO/WHO Regional Codex Coordinating Committee for Africa (CCAFRICA). This committee was chaired by Dr. Kimutai Maritim.

CAC currently comprises 189 Member Countries and 1 Member Organization (European Union) and 219 Observers of which 56 are intergovernmental organizations, 147 non-governmental organizations and 16 United Nation agencies. CAC has six regional committees: Asia (CCASIA), Europe (CCEURO), Latin America and The Caribbean (CCLAC), North America and South West Pacific (CCNAS-WP), Near East (CCNEA), with Africa Region Codex Committee (CCAFRICA) accounting for 49 member. Kenya has been a member of Codex Alimentarius Commission and CCAFRICA from 1969 and 1974 respectively. Kenya has served twice as a CCAFRICA Coordinator from 1983 to 1985 and from 2015 to 2020 and will be handing over to the new Coordinator, Republic of Uganda in February, 2021.

Courtesy Call to office of Hon. Peter Munya, Cabinet Secretary Ministry of Agriculture, Livestock, Fisheries and Cooperatives and Mr. Harry Kimtai, Principal Secretary State Department for Livestock: Switzerland Officials: Amb. Dr. Thomas Jemmi and Mrs Awilo Ochieng Pernet.





**Dr. Kimutai Maritim,
Codex Coordinating Committee for Africa
(CCAFRICA) Chairman 2015-2020.**

MILESTONES COVERED

Directorate of Veterinary Services participate in most Codex activities as a Member of the National Executive Committee and as part of its mandate in food safety. During our tenure of office, DVS executed its role diligently as the Codex regional Coordinator by:

- Defining the problems of the region concerning food standards and food control;
- Promoting coordination of all regional food standards work being undertaken by international governmental and non-governmental organizations within the region;
- Promoting the use of Codex Standards and related texts by members;
- Coordinating development of regional standards for food products moving exclusively or almost exclusively in intra-regional trade; and
- Attending all the Executive Committee of the Codex Alimentarius Commission (CCEXEC) meetings and presented interests of the region.

In 2020 the DVS joined the rest of the world in commemoration of the second World Food Safety Day on June 7th. This was done virtually through presentations on various food safety issues. This demonstrated commitment and desire to ensure that food safety is fully entrenched in the daily lives of the populace.

The committee is currently drafting two regional standards namely Dried meat standards and guidelines to support the development of regional harmonized food laws. Africa region has the highest number of countries, 18 Member countries, that benefited from the Codex Trust Fund (CTF). Africa hosted the First FAO/WHO/African Union (AU) International Food Safety Conference in Addis Ababa, 12-13 February, 2019. Kenya successfully hosted the 23rd Session of FAO/WHO Regional Codex Coordinating Committee for Africa (CCAFRICA23) on 2nd to 6th September, 2019.

Director of Veterinary Services hosted Switzerland officials from the Federal Food Safety and Veterinary Office, Deputy-Director General, Amb. Dr. Thomas Jemmi and Mrs Awilo Ochieng Pernet (Former Chairperson Codex Alimentarius Commission) who visited Kenya from 2nd to 6th March 2020 for bilateral discussions on sharing experiences. The objective was to strengthen collaborations between the two countries and learn from Switzerland's best practices for improving food control systems.

ENSURING SANITARY STANDARDS AT PORTS OF ENTRY

By Dr. Damaris Mwololo

Ports of Entry (POEs) such as airports, seaports and land crossing borders are crucial to trade growth, economic prosperity, communications and tourism. Ports of entry are avenues for introduction of exotic diseases and spread of trade sensitive animal diseases across the borders.

The Directorate of Veterinary Services (DVS) manages international trade in animal and animal products at various Ports of Entry in the country. This is geared towards safeguarding human and animal health by ensuring importation of safe animal products and healthy animals into the country.

Specifically, the DVS officers at the POEs carry out document verification, integrity checks and physical inspection of the consignments of veterinary concern which consist of live animals and animal products, Veterinary Medicines, animal feeds, commercial insects, wildlife trophies among others.

To offer convenient and reliable services at the Ports of Entry, the DVS has staff at the various POEs which include JKIA, Wilson Airport, Inland Container Depot at Embakasi, Kilindini Sea Port, Moi International Airport, Lungalunga, Taveta, Namanga, Isebania, Busia and Malaba One stop Border Posts.

With the introduction of the Kenya National Electronic Single Window System for international trade and introduction of One Stop Border Posts (OSBPs), the role of Ports of Entry has been enhanced.



**Dr David Irungu,
DVS officer
in-charge of
veterinary services
at JKIA inspecting
a consignment of
meat for export.**

What does DVS issue to an exporter or importer of livestock and livestock products?

- Sanitary no Objection
- International Veterinary Health Certificate
- Import and Export permit

FAO, DVS, MOH CARRY OUT A TABLE TOP RVF SIMULATION

By Dr. Davin Sachi

The Director of Veterinary Services (DVS) in collaboration with Food and Agriculture Organization (FAO) carried out a Rift Valley Fever (RVF) table top simulation in Machakos from 6th to 10th December 2020. The participants were drawn from the Ministry of Health (MoH), the DVS and FAO.

The goal of the exercise was to sensitize the MoH and DVS frontline staff on how to handle RVF outbreak and to subsequently review the Contingency Plan (CP). The CP was presented to the participants and thereafter stagewise simulation of the outbreak of RVF was done. The outputs of the workshop will be used to update the CP.



An aborting ewe



Dr. Njogu making a presentation on RVF history in Kenya



**Dr James Wakhugu
(in PPPE)
practicing donning
and doffing**

“supporting countries to prepare for disease outbreaks is among our goals. We are happy to work with Kenya to achieve this” Dr. Micheal Apamaku – ECTAD country team leader

Among the gaps identified were missing Standard Operating Procedures (SoPs), lack of a communication strategy, weak SoPs, inadequate awareness about the RVF contingency plan among the MoH and DVS staff and weak coordination mechanisms between the Counties and national governments.

The workshop was opened by Dr. Harry Oyas and closed by Dr Micheal Apamaku (FAO-ECTAD). They both lauded the good working relationship and promised to strengthen the mutual collaboration.



Group photo of workshop participants

IMPROVING BIOSECURITY IN LABS

In an effort to improve biosecurity in all its labs the DVS carried out a number of activities in the regional and central veterinary laboratories. This is in an effort to improve service delivery by creating a safe and secure working environment for its staff.

Laboratory work presents a number of risks not only to the staff working in them but to the general public too. All laboratories are quarantine areas requiring strict admission criteria to minimize introduction or spread of any dangerous disease causing micro-organisms.

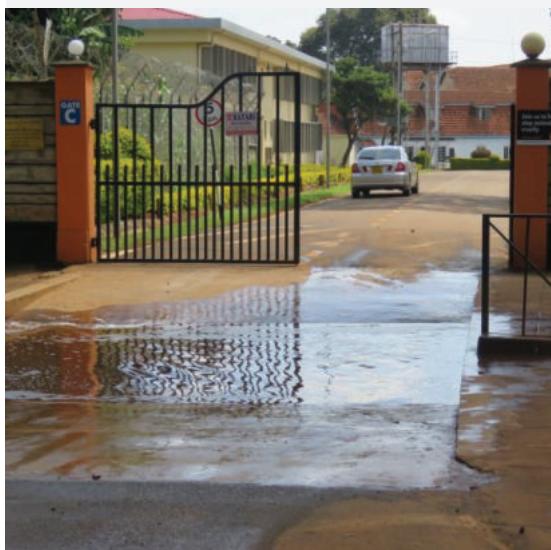
Towards this the DVS has reinforced the biosecurity of Karatina, Mariakana, Garissa, Kericho and Nakuru regional laboratories. All the Regional Veterinary Investigation Laboratories (RVILs) wall fences have been reinforced with electric and razor wires all round. Wheel baths have been constructed for Karatina and Nakuru RVILs.

The Kericho Veterinary Investigation Laboratory is currently being expanded. A new block is being constructed by the DVS. Upon completion the block will host more laboratories and offices.

The improvement in laboratory infrastructure is coming at a time when the globe is gearing up to reduce Antimicrobial Resistance (AMR). Labs will play a key role in the battle against AMR and already the DVS is collaborating with development partners to further equip laboratories to carry out surveillance.

Under the Flemming fund all the RVILs and the Central Veterinary Investigation Laboratories (CVIL) have been benefited from upgrades and training of staff on various techniques.

Two labs namely the Kericho RVIL and Kabeto CVIL have been equipped with PCR machines. This will enable these two labs to carry out timely molecular diagnosis of diseases.



Entrance to Karatina Veterinary Laboratory – Notice the wheel bath

Wheel bath at Central Veterinary investigation lab. in Kabeto



Biosecurity is a vital requirement for the safety of the staff and the general public



**Dr. David Mwangangi,
Head of Vet. Labs and Diagnostics**

One of the rooms at Kabeto CVIL

HONEY BEE HEALTH

By Dr. Othieno Joseph

Enhancing honey production through farmer sensitization

Honey and hive products have many industrial and domestic uses, making honey bee keeping a viable commercial venture. Bees are critical in pollination without which crops can not produce. The Kenyan government through the Big Four Agenda strives to improve food nutrition and security. The DVS is contributing towards this pillar by supporting honey production through maintaining bee health.

Bee keepers in Homabay, Narok, Busia, Kitui, Tharaka Nithi, Nakuru, Nyandarua, Baringo, Uasin Gishu, Kilifi and Kwale were sensitized on various aspects of bee keeping. The farmers were sensitized on bee pests and diseases and setting of bee hives in apiaries.

Honey bee pests such as wax moths, large and small hive beetles and varroa mites have a negative impact to bee keeping. For example, the Varroa mite is implicated in the spread of more than eighteen viral honey bee diseases. These pests destroy honey, hive products and hives thus leading to loss of income to honey bee farmers.

The vector regulatory and zoological services section also carried out monitoring of apiaries. This entail assessing the apiary and its surrounding and obtaining feedback from the beekeepers on apiary performance and challenges faced. During the exercise adult honeybees and capped broods cells were inspected for varroa mites, wax moth and hive beetles were also monitored.

Assessing farmer's knowledge on pests and diseases of honey bee

The awareness on the pests and diseases in bee colonies by farmers is key towards maintaining honey bee health. Keeping bee colonies free from pests and diseases require that the beekeepers are knowledgeable on bee pests and diseases. To assess this the section used self-administered questionnaires in Kwale and Kilifi counties.

It emerged that a majority of farmers in the two counties had very little knowledge on honey bee pests and diseases. Most of them lacked tools for managing their hives such as bee suits and this negatively affected their level of productivity. Knowledge in notifiable diseases and pests such as American foul brood, European foul brood and varroa mites was found to be low or lacking and therefore affecting the quality of their honey and other bee hive products for the international markets.



Mr. Samuel Kamau, Senior Deputy Director, Zoological Services



Inspecting the sentinel apiary at Kiamuriuki in Chuka

DVS team inspecting Kitui FTC apiary

SOURCE APPROACH; WHY MUST WE HAVE GOOD POULTRY HATCHERIES?

By Dr. Othieno Joseph

The poultry industry in Kenya is exponentially growing. Increased urbanization and subsequent demand for poultry products is spurring the growth to poultry industry.

Commercial poultry production is dependent of hatcheries as a source of day old chicks. Currently eighteen hatcheries and five distributors of day old chicks are licensed. There are many other hatcheries that are operating illegally and therefore threatening poultry health and public health.

The Director of Veterinary Services inspects and licenses this hatcheries. This is in an effort to regulate the production of day old chicks. Hatcheries can be a source of poultry diseases some zoonotic in nature. Without regulation farmers can suffer losses due to mortalities of their birds and also serve as a public health threat.

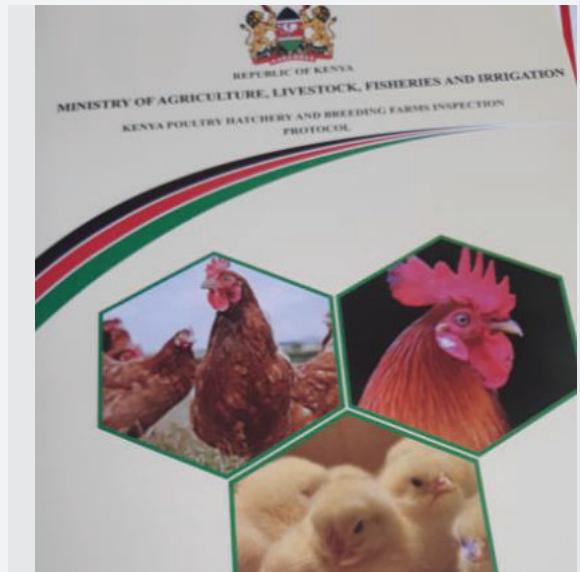
Hatcheries and the Big Four Agenda

Towards the Big Four Agenda under the Food and Nutrition component the DVS in collaboration with the Directorate of Livestock Production (DLP) is laying ground for a production of day old Kienyeji chicks. Marimanti Sheep and Goats Farm in Tharaka Nithi County is one of farms identified for the construction of a government poultry hatchery and Breeding farm.

When complete, the state Department is targeting to rear 1000 Parent stock of improved indigenous breed popularly known as kienyenji sourced from Kenya Agricultural and Livestock Research Institute (KARLO) producing 5000 eggs per week.



A government Hatchery under construction in Marimanti



Kenya poultry hatchery and breeding farms inspection protocol

HATCHERIES & BREEDING FARMS INSPECTION PROTOCOL

Increasing commercialization of poultry sector has resulted in an increase in demand for fertile eggs and day old chicks.

The result has been an increase in establishment of hatcheries across the country. Hatcheries produce biological and living products and regulation is key in sustaining this sector. This is further exacerbated by the threat of emerging, re-emerging and endemic poultry disease some being zoonotic in nature.

To safe guard the poultry sector the Director of Veterinary Services developed poultry hatchery and breeding farms inspection protocol. The main goal of the protocol us to standardize inspection methodology and reporting systems for authorized inspection officers.

The Protocol will be used by National and County Veterinary Technical staff and poultry stakeholders as guide when inspecting hatcheries and breeding farms



Mrs. Margret Wandaka, DVS Officer in charge of Hatcheries

LICENSED HATCHERIES

	Hatchery	Poultry Species/stock	Location	Contact
1	Kenchic hatchery and breeding farm, Isinya	Layer & Broiler Parents, Broiler grandparents & Kenbro +Sasso Pure Breeds	Kajiado	0722202163 0734600204
2	Kenchic, Mlolongo	Layer & Broiler Parents, Broiler grandparents & Kenbro +Sasso Pure Breeds	Machakos	0722202163 0734600204
3	Sigma Supplies Ltd(hatchery and breeding farm), Isinya	Layer & Broiler	Kajiado	0711473592
4	Sigma Supplies - hatchery, Mombasa	Layers and broilers	Mombasa	0711473592
5	Anirita (hatchery and breeding farm)	Broilers	Nairobi	0733617446
6	Muguku Poultry Farm(hatchery and breeding farm,), Kikuyu	Layers & Broilers	Kiambu	0724266087
7	Muguku Farm (hatchery and breeding farm), Ngong	Layers & Broilers	Kajiado	0719645711
8	C. E. Nightingale (hatchery and breeding farm)	Turkeys	Nakuru	0722526389
9	Kukuchic Ltd (hatchery and breeding farm)	Rainbow breed (dual purpose breed)	Uasin Gishu	0788887111 0726529904
10	Yegen farm (hatchery and breeding farm)	Operational	Uashin Gishu	0721517663
11	Franku (hatchery and breeding farm)	Operational	Kiambu	0723944209
12	Kenbrid (hatchery and breeding farm)	Layers & Broilers	Nakuru	0722866205
13	KALRO (hatchery and breeding farm)	KARI improved and indigenous	Nakuru	0708620095
14	Ostrich farm (hatchery and breeding farm)	Ostriches	Kajiado	
15	Farhan Farm	Mixed breeds	Kilifi	0724270970
16	Fizaa Hatchery	Rainbow breed	TransNzoia	0705505505
17	MidKenya Chicken Ltd	Mixed breeds	Nyeri	0725040455
18	Avipro East Africa Ltd	Parent Stock , broiler	Bahati, Nakuru	0796192781

LICENSED DAY OLD CHICKS (DOC) DISTRIBUTORS

	Distributor	Stock	Location	Contact
1	Kenol Chicks	Sasso DOC	Ruiru, Kiambu	0720251857
2	Jolly Footprints Limited	Improved Kienyenji	Rongai. Kajiado	0720832072
3	Mimosa Poultry Ltd	Ross 308 broiler Broilers, layers	Ruiru Kiambu	0723443300
4	Mawadi	Mixed breeds	Limuru, kiambu	0722527316
5	Big Ben	DOC: broilers & layers of exotic and improved Kienyeji	Kisumu	0722739454

BACHUMA LIVESTOCK EXPORT ZONE

By Dr. Othieno Joseph

Despite a rich livestock sector; Kenya lost access to the international livestock markets. This denied livestock farmers value for their livestock. The existence of trade sensitive diseases has been the main reason for this. The Government of Kenya through the Directorate of Veterinary Services (DVS) in its development blue print Vision 2030 envisioned the establishment of Disease-Free Zones (DFZs).

The DFZs were to be set up in the following areas Coast, Laikipia/Isiolo complex, Tana River and Kajiado. These four zones were to automatically delineate the central part of Kenya as the fifth zone.

However, upon roll out this plan was deemed not feasible; due to challenges encountered that included land tenure system, wildlife conservancies within the zones, high cost of installation and management of veterinary fences and lack of buy in by farmers.

The land tenure system in Kenya was a hinderance to acquisition of land required for the erection of veterinary fences. Wildlife conservancies were against wildlife movement restriction due to the veterinary fences. The DFZs would also require establishment of entry and exit gates along major highways resulting into high costs of management through disinfection of people and vehicles passing through these gates.

It was against this background that the government opted for an easier to implement and regionally acceptable concept as recommended to the Horn of Africa Countries by IGAD. This concept known as Livestock Marketing Value Chain Disease Risk Reduction concept. This was domesticated as Livestock Export Zones (LEZ). Proposed development sites at Bachuma, Kurawa, Miritini and Marsabit as captures in Medium Term Plans (MTP) II&III of Vision 2030 Flagship Projects.

Through a phased approach the National Government is developing Bachuma Livestock Export Quarantine Station as part of the LEZ. The establishment of Bachuma Livestock Export Zone (LEZ) began in 2015.

Double peripheral fence has been done and a 5 km trench excavated round the facility. Cattle, camel and goats pens, staff houses, administration offices, watch towers, workshop, handlers rest rooms, fodder barns, incinerator unit, emergency slaughter house, laboratories, loading and offloading ramps have been constructed. A bore hole to supply portable water has been drilled and equipped with water storage tanks.



**Dr. Hesbon Awando
the DFZ Coordinator**

"For an effective operation of the facility, it should be linked to an upstream livestock marketing infrastructure that is well managed with good disease risk management measures" Dr. Hesbon Awando.



***A livestock pen shade
at the Bachuma Quarantine
station***

Proposed Operational Framework

The Bachuma LEZ construction is almost done; once completed the facility will be operated by a private partner under the oversight of the DVS.

A long term lease to a private operator; competitively recruited through the provisions of the Land Act no. 6 of 2012 will be provided.

Under this lease the private operator will manage the station, develop all the infrastructure, transport and equipment facilities necessary for handling livestock during transportation, housing, feeding and disease screening. The operator will as well deploy all the manpower required to manage the facility. The operator will charge fees per unit animal processed as a revenue generation model within an approved framework in consultation with the State Department for Livestock.

The DVS will provide technical backstopping in matters relating to sanitary standards. This will form the basis on which the requisite international veterinary certificates for export bound animals or products. This DVS will then charge the exporter or operator an applicable sanitary certification fee for every consignment or laboratory service fee to the operator for every sample submitted to DVS lab.

HOW THE PRIVATE SECTOR WILL BENEFIT FROM LEZs

By Dr. Othieno Joseph

As envisioned in the proposed operation of the LEZs; the State Department of Livestock has undertaken promotion of the concept of feedlots. These feedlots are expected to be the major facilities within Livestock Marketing Value Chain to finish export destined livestock as per the requirements of the international markets and also mainstream animal health protocols as bilaterally agreed by the government and importing countries. The feedlots will be operating alongside compacts or large farms to ensure that disease risks are reduced as livestock are being produced and processed for finishing. This will entail mainstreaming effective biosecurity measures to eliminate disease risk as recommended by DVS.

Mackinnon feedlot farms is an example of a private sector investment that has taken up the concept of Livestock Marketing Value Chain Disease Reduction Concept. This investor has set up a feedlot in Kwale County to tap into the LEZ concept with the DVS offering technical backstopping. The investor has put in place biosecurity measures and disease management system which ensures that the animals finished apart from attaining the market specifications are free from trade sensitive diseases.

Mackinnon feedlots currently supply specific local markets and also exports to other countries. The farmer has over 1300 cattle on 60 acres with a capacity to handle over 4000 animals. "The DVS has supported me from the very beginning and I am very happy and call upon other investors to join me in this venture. It is the way to assist our farmers get value for their livestock and also conserve our environment." Abdi Ibrahim Mackinnon Feedlot proprietor.



Cows on the feedlot



The owner of the feedlot



Mac kinnon Feedlot

IMPROVED ANIMAL BREEDING SERVICES FOR INCREASED PRODUCTIVITY

By Dr. Julia Kinyua

Animal breeding and reproductive services are DVS mandates. Animal Breeding is an important service to animal health and production. The Directorate is involved in inspection and licensing of facilities producing semen and in genetic advisory on sire (bull) recruitment to the centres.

The growth of dairy industry in Kenya has been attributed to conducive policy environment and institutional framework, significant dairy cattle population, dietary importance of milk and favorable climatic conditions. Milk consumption demand is growing at a rate of 7 percent.

Currently, Kenya has two semen production facilities namely: - Kenya Animal Genetic Resources Centre (KAGRC) in Lower Kabete, Nairobi and ADC Livestock Genetic Centre in Kitale. There are two semen production facilities under construction by Nyeri Cattle Breeders Association and Goat Semen Production Centre at AHITI Ndomba in Kirinyaga County. There is also an Embryo production facility at Ol pajeta Ranch in Laikipia. Which produces Boran embryos for export.

Kenya imports semen to complement the genetics being produced locally and offer genetic diversity. There 15 licensed semen importing and distribution companies in Kenya. The Directorate has developed standards for import of bovine semen. The standards ensure semen being imported is of good genetic merit and will improve production, functional and type traits of our herds.

**Dr. Juliah Kinyua
(in a red jacket) on
risk assessment for
importation of bulls
to ADC Livestock
Genetic Centre
from South Africa**



**Dr. Juliah Kinyua.
Head Vet. Public Health
and Animal products**

Delivery of breeding services

Since privatization of AI services in 1992, provision of AI services has been undertaken by private livestock entrepreneurs. There are over 2,000 AI service providers in the country. The AI service providers procure supplies from the semen distributors. Some county governments have taken over AI service delivery at subsidized costs. The County Directors of Veterinary Services regulate through inspection and issuance of annual A.I licenses. The Directorate has done capacity building of Kitui and Nyeri counties in regulation and supervision of breeding services. This was followed by field semen quality checks targeting the semen distribution agents and County offices where the Counties are offering the service

LICENSED IMPORTERS OF SEMEN

No.	Company	Location	Source Semen
1.	ABS TCM Ltd	Kabarnet Rd	UK
2.	Agreval East Africa Ltd	Mombasa Road	Germany
3.	AI Total Kenya Ltd	Ngara	Netherlands
4.	Bimeda Ltd	Industrial Area	Canada
5.	Bles Dairies	Eldoret	Netherlands
6.	Caritas Archdiocese of Nairobi	Limuru	Italy
7.	Cooper K-brands Ltd	Cooper Centre Kangemi	Netherlands
8.	CRI K Limited	Thika	U.S.A
9.	Geneplus Breeders Kenya Ltd	Kijabe Street	UK/USA
10.	Home Farm Breeders Ltd	Nyandarua	Austria
11.	Maxim Agri Ltd	Westlands	USA
12.	Pokea Dairy Farm Ltd	Njoro Nakuru	Germany
13.	Timeless Genetics E.A. Ltd	Garden Estate	Germany/France
14.	Twiga Chemicals Ltd	Industrial Area	Canada
15.	World Wide Sires E.A Ltd	Kijabe Street	U.S.A

ENHANCING DEVOLUTION BY SHARING OF RESOURCES BETWEEN THE NATIONAL AND THE COUNTY GOVERNMENTS

By Dr. Jane Njuguna

As envisaged in the new constitution and for enhanced delivery of veterinary services, Veterinary services are a devolved function. This change came with the need to share out resources especially infrastructure between the national and county government. This has been done successfully by a Committee that was formed to spearhead the sharing.

The State Department of Livestock is represented by Dr. Jane Njuguna from the Directorate of veterinary services. Dr. Njuguna has a wealth of experience in devolution matters having worked with the Transition Authority of Kenya in the Inter-agency Technical Committee (I.A.T.C) under the guidance of Inter-Governmental Relations technical committee. The I.A.T.C is charged with spearheading the exercise for the identification, verification and transfer of assets and liabilities of devolved functions.

The Principle is that resource follow functions and so it is important to first un bundle the functions so as to determine which functions are domiciled at the National level and which belong to the county level. This exercise had been carried earlier by the Transition Authority and thus it was easy to determine which resources should be transferred to the county governments. The exercise started in the month of October 2019 by training of Inter- Governmental County committees. For this purpose I. A.T.C undertook two (2) Backstopping exercises in order to give guidance on the exercise.

Teams were dispatched to various counties to carry out a monitoring and evaluation exercise in Kajiado, Nairobi and Kiambu counties to make sure that the exercise was on course and in the prescribed manner. The three counties have already submitted their reports and the teams are waiting for dates to be set for the next stage of analyzing the reports once all the 47 county reports are received.



Dr. Njuguna (in red) with the team when they visited Kajiado County

DVS REVIEWS VET LAWS TO ENHANCE SERVICE DELIVERY

By Dr. Othieno Joseph

For a long time, the laws governing veterinary services delivery have been applied with little or no reviews. Times have changed, diagnostic technologies have advanced so have the tastes and preferences of the public also changed. Laws are alive, they grow by being tested and reviewed to achieve the goals for which they were developed. More importantly Kenya had a constitutional moment that saw the country promulgate a new constitution which devolved veterinary services.

In this spirit, that the Directorate of veterinary services embarked on development of a livestock policy and an overhaul of its current laws. This has resulted in the consolidation of some Acts by way of repeal and creation of new laws. A total of three bills are lined up for parliamentary debate and passage into law.

Veterinary Policy

For a better understanding of the veterinary services delivery the Directorate of Veterinary Medicine took lead in the development of the Veterinary Policy. This was done through a wide stakeholder consultation with various groups.

The Veterinary Policy is provided for in the Fourth Schedule of the Constitution of Kenya. The schedule aligns developments in the animal resource industry through animal health, production, welfare, food safety and trade to the Constitution as well as the Kenya Vision 2030, Sustainable Development Goals and international animal health and food safety treaties, agreements and conventions ratified by Kenya.

The Veterinary Policy aligns the animal health, production, welfare, food safety and trade issues in the animal resource industry in Kenya to the Constitution, the International Treaties ratified by Kenya including the Regional Economic Communities' Agreements. The alignment aims at ensuring that Kenyans receive their benefits from constitutional guarantees in animal products while trading in high value international markets to improve incomes from animal resources. 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.



**Ministry of Agriculture,
Livestock, Fisheries and Irrigation**

Veterinary Policy

AUGUST 2016



DVS REVIEWS VET LAWS TO ENHANCE SERVICE DELIVERY

By Dr. Othieno Joseph

Animal Health Bill

When this Bill becomes law, the following acts will be repealed; Branding of Stock Act, (Cap. 357), Cattle Cleansing Act, (Cap. 358), Animal Diseases Act, (Cap. 364), Rabies Act, (Cap. 365).

The main objective of the Bill is to provide for promotion and protection of animal health. This will be done through early detection, prevention and control of animal diseases. The Bill provides a sustainable management of animal health system for consultation and co-operation on the management of veterinary services both at the national and county levels.

Methods of animal disease prevention, control and surveillance proposed in the Bill includes the declarations of restricted, protected and quarantine areas. The Bill transfers some animal health responsibilities to the animal owners and this will enhance livestock health. For example; Clause 7 and 9 of the Bill will obligates animal owners to prevent pest infestation and disease infection and report to nearest animal health profession in case of a notifiable disease respectively.

To be in tandem with the Constitution, the Bill outlines the functions of the County Governments and the Director of Veterinary Services. This will ensure Kenya complies with the international guidelines set by the World Trade Organization (WTO), World Organization for Animal Health (OIE), Codex Alimentarius and Intergovernmental Authority on Development (IGAD) for improved access of Kenyan animal and animal products to international market.

Veterinary Public Health Bill

This Bill builds on the Meat Control Act Cap. 356. While initially the onus was on the DVS this Bill seeks to transfer some public health responsibilities to the food businesses operators to fully operationalize the farm to folk principle as applied in veterinary public health. Through this Bill the DVS will audit farms producing foods of animal origin; this approach will ensure antimicrobial residues; aflatoxins are reduced right from the source.

Food business operators will be required to take care of contaminations happening at loading, transportation, offloading, at points of sale, consumption among others. This Bill therefore seeks to apply a risk-based foods of animal origin system. This system requires good practice in the production process, distribution and sell.



Dr. Charles Ochodo.
Head Vet. Governance and Management support services

DVS REVIEWS VET LAWS TO ENHANCE SERVICE DELIVERY

By Dr. Othieno Joseph

Animal Welfare and Protection Bill

This Bill when it becomes law shall repeal the Prevention of Cruelty to Animals Act, Cap 360. The Bill establishes National Animal Welfare and County Animal Welfare Advisory Committees, animal welfare and animal protection is delineated. Animal protection is what farmers and keepers do to animals to make sure they are safe and healthy while animal welfare is a state of the animal as gauged against the Five Freedoms.

For a long time, animals have been viewed from an economic view point while ignoring animal welfare. Welfare should be the primary concern of farmers; animals that are well taken care of will produce more and quality product. The animal welfare is grounded on the Five freedoms. Awareness creation will be heightened for all the stakeholders along the livestock and animal value chain actors

Animal Welfare and Protection Bill, 2020

ANIMAL WELFARE AND PROTECTION BILL, 2020

ARRANGEMENT OF CLAUSES

Clause

PART I—PRELIMINARY

- 1—Short title.
- 2—Interpretation.
- 3—Objects of the Act.
- 4—Application of the Act.
- 5—Conflict of laws.

PART II—PRINCIPLES OF ANIMAL WELFARE

- 6—Principles of animal welfare
- 7—Care or use of an animal.
- 8—Animals in captivity or confinement.
- 9—Farm animals.

The Veterinary Public Health Bill, 2020

THE VETERINARY PUBLIC HEALTH BILL, 2020

ARRANGEMENT OF CLAUSES

PART I - PRELIMINARY

Clause

- 1. Short title.
- 2. Interpretation.
- 3. Objects.
- 4. Application.
- 5. Principles of governance of veterinary public health.

PART II – FOOD ANIMALS

- 6. Prohibition of consumption of non-declared food animals.
- 7. Production and importation of food animals.
- 8. Use of veterinary medicines, pesticides and chemicals on food animals.
- 9. Audit of farms producing food animals.
- 10. Transportation of food animals.

PART III – FOOD SAFETY REQUIREMENTS

- 11. Food safety practices.
- 12. Slaughterhouses and food processing plants.
- 13. Storage, sale and transport of slaughterhouse products.
- 14. Safe food.
- 15. Unsafe food.
- 16. Food safety and quality standards.
- 17. Accountability for food safety.
- 18. Dissemination of food safety information.
- 19. Right to report food safety violations and seek information.

PART IV – FEED SAFETY REQUIREMENTS

- 20. Unsafe feed.
- 21. Safe feed.
- 22. Feed safety standards.
- 23. Feed safety information.
- 24. Inspection of feed premises or establishments.
- 25. Authorization of feed import or export.

PART V – RISK ANALYSIS AND MONITORING

- 26. Risk analysis.
- 27. Risk assessment.

KENYA MEAT TRAINING INSTITUTE 75TH GRADUATION



The 75th Graduation ceremony for meat inspectors was held on 16th December 2020 under strict COVID-19 protocols. The occasion was presided over by the Cabinet Secretary Ministry of Agriculture, Livestock, Fisheries and Cooperatives Hon. Peter Munya, who was represented by the Principal Secretary State Department for Livestock Mr. Harry Kimutai. Others who graced the occasion were; the Director of Veterinary Services Dr Obadiah Njagi, the acting Director of Livestock Production Mr Elmi Bashir and the representative of Machakos County Commissioner. The

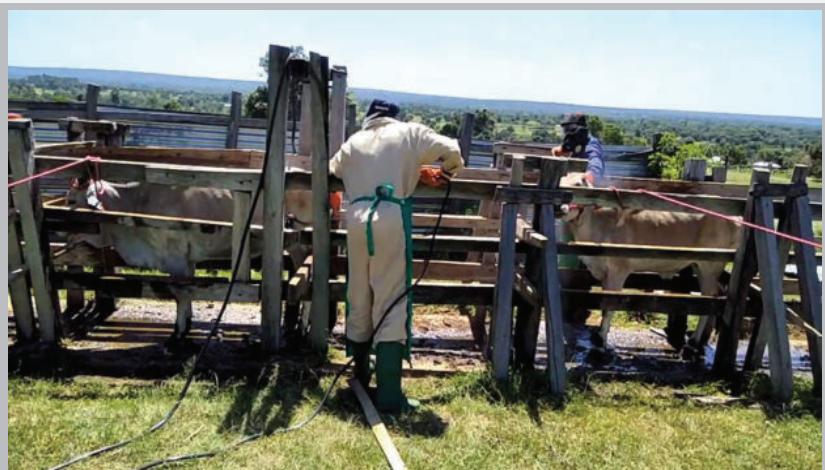
Principal Secretary also officially opened the new administration/ classrooms block.

The PS addressed the congregation and presented the 92 graduands with academic, merit certificates and trophies. He congratulated them for their achievement and advised them to exercise fully what they had learned during their stay in the institution.

The Meat Training Institute has been carrying out its mission of training personnel from meat trade and industry in the hygienic production, inspection and processing of meat and meat products since 1972.



**Dr. Salome Kairu – Wanyoike PhD
Principal, Meat Training Institute**



Field efficacy evaluation of new acaricides

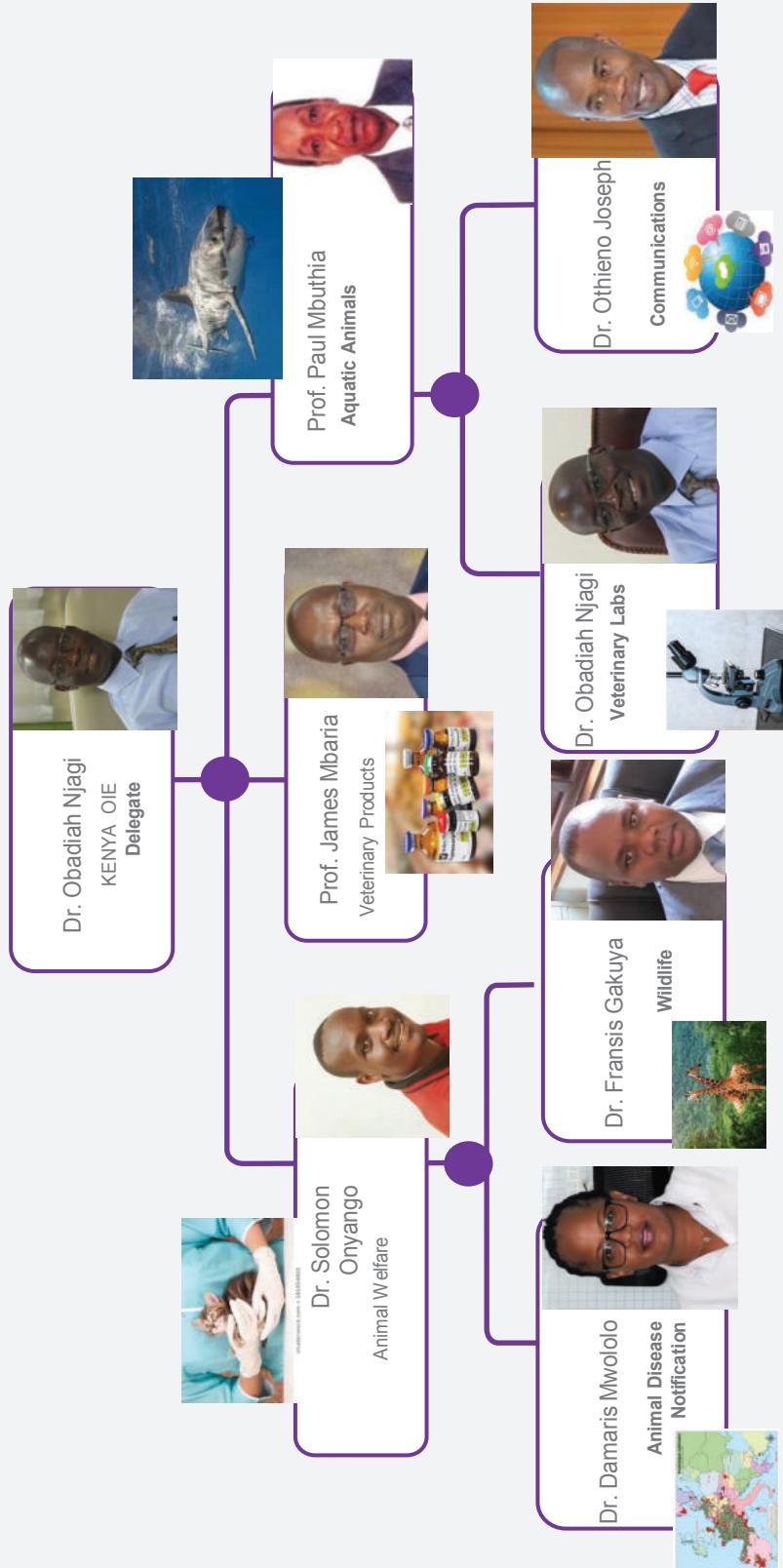
Mandates of Acarology laboratory

- 1) Field efficacy evaluation of new acaricides prior to registration in the Kenya
- 2) Dip stability testing of new acaricides
- 3) Acaricide susceptibility/resistance testing
- 4) Ticks, mites and other ectoparasites identification
- 5) Monitoring of field tick resistance to acaricides

DVS OIE FOCAL POINTS



World Organization for Animal Health (OIE)
Protecting animals preserving our future



REMEMBERING OF OUR FALLEN VETS



Mr. Joash Kerosi



Dr. James Korir



Dr Anthony Gichohi

*“Eternal
rest
grant
unto
them”*



Dr. John Nyamu



Dr Mbwiria Stanley



Dr Josh Odhiambo



Dr. John Maina Jimnah



Dr. Muinde David

