

**MINISTRY OF AGRICULTURE, LIVESTOCK,  
FISHERIES & COOPERATIVES**

**DEPARTMENT OF VETERINARY SERVICES**

**TANA RIVER COUNTY**



**LIVESTOCK DISEASES & VECTOR CONTROL,  
VACCINATION AND TREATMENT PROJECT**

**Pest Management Plan (PMP)**

**2019-2020FY4th June 2020**

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## Acronyms and Abbreviations

CAHW	Community Animal Health Work
CBPP	Contagious Bovine Pleuropneumonia
CCPP	Contagious Capri Pleuropneumonia
CDVS	County Director of Veterinary Services
CESSCO	County Environmental and Social Safeguards Compliance Office
CPC	County Project Coordinator
CPCU	County Project Coordinating Unit
CPSC	County Project Steering Committee
CTAC	County Technical Advisory Committee
CTD	County Technical Departments
COVID 19	Corona Virus. of 2019
ESMP	Environmental and Social Management Plan
KCSAP	Kenya climate smart Agriculture Project.
M&E	Monitoring and Evaluation
NEMA	National Environmental Management Authority
NPCU	National Project Coordinating Unit
PMP	Pest Management Plan
PPE	Personal Protective Equipment
RVF	Rift Valley fever
SCVO	Sub-County Veterinary Officer
SMS	Subject Matter Specialists
WA	Ward Administrator

## **Executive Summary**

The Tana River Livestock sub-sector is a key sector to the economy of Tana River. The County has prioritized livestock vaccination and diseases surveillance as key projects for implementation in the CIDP frame work (2018-2022) hence the development of the Proposed Livestock Diseases, Vector Control, Vaccination and Treatment Project by the County Department of Veterinary Services. The aim is to ensure that the county and farmers are cushioned from the adverse effects of Rift Valley Fever Disease, which mostly occurs whenever there are enhanced rains, resulting in disruption of economy and market through livestock quarantines. Other opportunistic wet weather related animal diseases and vectors to the animals include CCPP, CBPP, Blackquarter, Ticks and other endo-parasites will also be covered and addressed during the implementation of the proposed project.

The land in the county is largely non-arable covering 29,798.7 km<sup>2</sup> suitable for livestock production. The rest is either under forest 3,457 km<sup>2</sup>, arable land covering 2,547 km<sup>2</sup>, and 3,059.5 km<sup>2</sup> under national reserves with crop based farming being done along the river basin under flood recession system and small-scale irrigation systems. The main livestock species found in the county are; cattle, goats, sheep, camel, donkey & poultry for meat, milk, eggs, leather and sustaining farm incomes from the sale of the live animal and products.

Climate change presents a key environmental challenge to the county characterized by two main hazards of drought and floods. The two hazards have resulted to massive loss of livestock to weakened body immunity, diseases and pests. The livestock vaccination project funded by KCSAP project will be implemented across all the 15 wards in the 3 sub-counties targeting 2,250 direct household beneficiaries, 160,000 cattle, 260,000 sheep & 220,000 goats.

The KCSAP project focuses on increasing agricultural productivity, enhancing resilience to impacts of climate change and contributing to reduction in GHG emissions. Successful implementation of the proposed livestock diseases vaccination and treatment is envisaged to increase livestock productivity while building resilience of both the livestock and livestock keepers through improved body immunity and sustained incomes respectively.

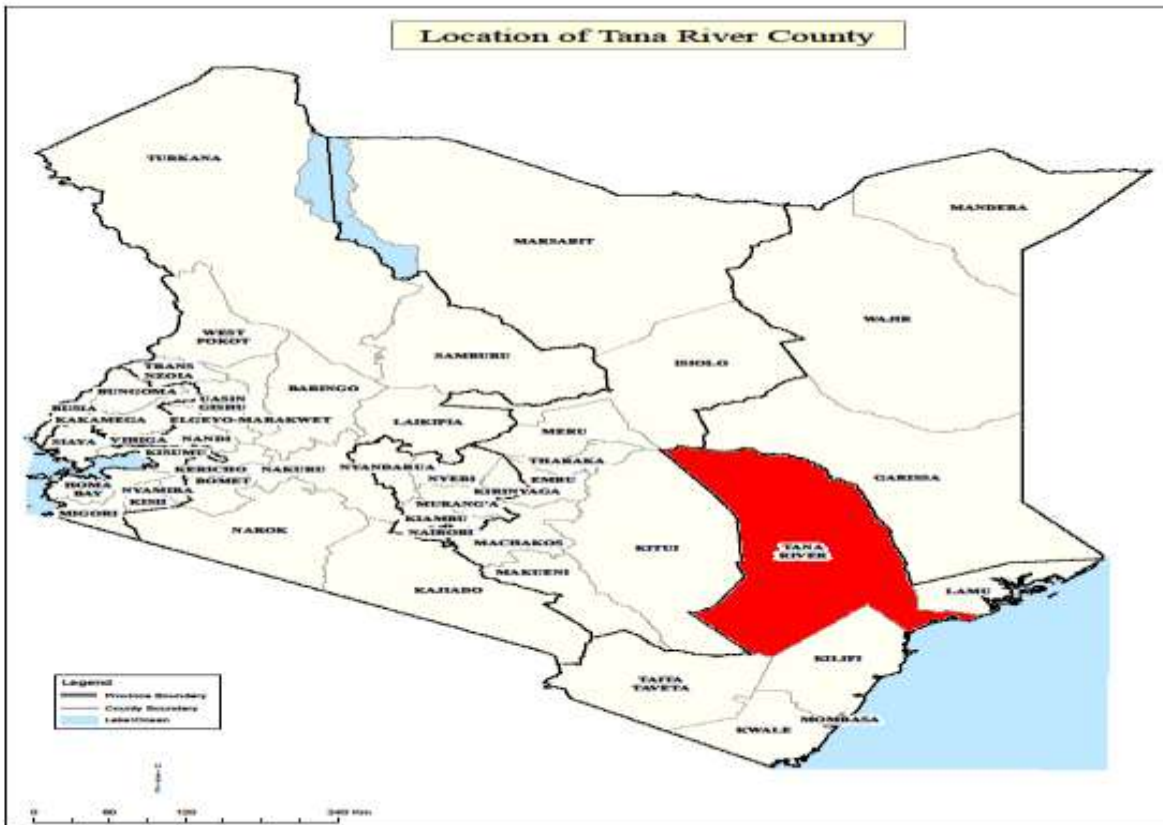
Main livestock keepers are the Orma, Wardei and Somalis who herd their livestock in the delta region during the dry spells. The Pokomos and other minority tribes also keep livestock but at small scale. The budget to implement the activities of this management plan is integrated in the sub-project. This being a County Technical Department activity the CPCU manages the Sub project funds by facilitating various aspects as stipulated in the overall budget.

A sound Pest Management Plan is therefore necessary and is prepared to ensure requisite compliances on Environmental and Social safeguards during the project implementation.

## 1. Project Background:

Tana River County is one of the six Counties in the Coast Region. It borders Kitui County to the West, Garissa County to the North East, Isiolo County to the North, Lamu County to the South East and Kilifi County to the South (Figure 1-1). The county lies between latitudes 0°0'53" and 2°0'41" South and longitudes 38°25'43" and 40°15' East. The county has a total area of 38,862.2 Km<sup>2</sup> with a projected population of 349,338 (KNBS, 2018) and covers about 76 kms of the coastal strip.

Figure 1-1



*Source: Tana River County Development Planning Office, 2018*

The County is composed of three administrative sub-counties namely: Bura, Galole and Tana Delta, and three constituencies namely: Galole, Bura and Garsen with 15 electoral wards.

### Livestock population

- Cattle 379,900
- Goats 365,700
- Sheep 257,300
- Camels 68,500
- Poultry 465,500
- Donkeys 12,300

Source Department of Veterinary

## **Proposed vaccination areas**

Livestock Diseases Surveillance along the stock routes, Vector Control, Vaccination and Treatment across the whole county has been prioritized as one of the key projects to be implemented by the County Veterinary Department in the current edition of the Tana River County CIDP 2018-2022 (**Annex 4 shows Migratory and stock routes**)

### **Stock routes**

1. Garissa – Bangali – Mwingi
2. Garissa – Hola – Garsen – Malindi
3. Bura – Waldena – Mutha
4. Hola – Waldena – Mutha
5. Bangali – Waldena – Mutha
6. Bura – Wolesorea – Titila -Bangali

### **Migratory routes**

1. Waldena – Assa – Tana Delta Lamu
2. Garsen – Assa – Galana/Kulalu
3. Bangali –Waldena – Galana – Taita taveta
4. Haroresa – Assa – Tsavo
5. NEP – Tana North – Kitui
6. Ijara – Boji/Hara Assa Tsavo
7. Banali – Boka – Kora Reserve

### **Project cost**

The sub-project is estimated to cost a total of Kshs 12,847,300; with Kshs 8,052,400 from KCSAP, Kshs 3,714,900 from County Government and Kshs 1,080,000 from community contribution in kind.

#### **1.1 Targeted Beneficiaries and Livestock numbers**

The expected project direct beneficiaries is 2,250 Households (Male: 1,810 Female: 440) and 11,250 indirect Beneficiaries (Male: 4,890 Female: 6,360) while targeted livestock population numbers as indicated (in Table1)

**Table1: Targeted animals**

Species	RVF	CBPP	CCPP	Blanthrax	Baytico l	Albenda zole	Oxteracycl ine injection la	Multi vitami n injecti on	Penstrep injection
<b>Cattle</b>	95,000	160,000	-	60,000	20,000	25,000	5,000	5,000	6,000
<b>Sheep</b>	260,000	-	-		30,000	40,000	6,000	6,000	8,000
<b>Goats</b>	180,000	-	220,00 0		30,000	30,000	7,000	7,000	6,000

*\*Dosage for RVF in sheep/goats =half that of cattle*

### **Justification**

Due to prolonged rains that occurs in Tana River County, there is a pattern of occurrence of livestock diseases outbreak like rift valley fever like the one which occurred after the El nino rains in 1997/98. In 2016/2017 another outbreak occurred in various areas of the county following prolonged *elnino* rains. A total of 12 people died in the county.

In the Rift Valley Fever outbreak which occurred in June-August 2018 in Tana Delta sub-county, about 300 sheep and goats aborted and about 100 died. No human being was reported to have been affected. This was mainly due to early detection and intervention following enhanced surveillance in the county after a joint alert from the County Director of Veterinary Services and County Director of Medical Services. The only livestock market in the Tana Delta sub-county was closed causing loss of revenue to farmers & traders amounting to Ksh.52 in two months.

All slaughter premises and meat outlets were closed causing further unquantified loses to butchers and hoteliers.

The county government lost about Ksh.345,000 in revenue in the two months of the quarantine following the close of the market.

Based on these factors there is need to make proactive measures to prevent disease outbreak following the heavy rains which are currently experienced in the county

### **Expected results**

1. Increased animal production and productivity from quality livestock products (meat, milk)
2. Improved household income from livestock sales.
3. Reduced livestock disease incidences.
4. Reduced loss of animals due to wet weather induced diseases (RVF, CCPP, CBPP)

5. Increased County Revenue Collection through uninterrupted Livestock market sales.
6. Sustained revenue flow to the County Government through livestock sale levies and permits.

**Project objectives**

To control livestock diseases outbreaks through timely application of disease mitigation measure.

**Problem being addressed**

1. Common occurrence of livestock diseases incidences
2. Low animal productivity
3. Prevention of zoonotic diseases to humans through unsafe livestock
4. Interrupted and reduced farm incomes.

**2. Vaccination Process**

2.1 Pre-vaccination sero-surveillance

Pre-vaccination sero-surveillance to establish antibody titer levels before vaccinations as a baseline to gauge success of the earmarked vaccination will be conducted. PPR rapid test kits will be used during the exercise. Serum samples from animals will be collected for further processing at Mariakani laboratory.

2.2 Mobilization and targeting

Community mobilization Vaccination will take place in three Sub Counties namely Tana River, Tana North and Tana Delta. 15 wards from these sub counties will be targeted. The minority and vulnerable groups, elderly will be involved in this vaccination exercise by ensuring there is inclusivity through information sharing throughout the process and affirmative action. The local leadership will help identify them and ensure their involvement throughout the vaccination exercise. The Mobilization exercise will be undertaken by the Veterinary Department staff in collaboration with local community leaders and CDR (Table 2)

**Table 2: mobilization means**

<b>CHANNEL OF COMMUNICATION</b>	<b>MEDIUM</b>	<b>RESPOSIBLE PERSON</b>
Telephone	phone	Local administrator, CDVS, KCSAP
Watering points	Word of mouth	Local administrator, CDVS, KCSAP,CDR

2.3 Stakeholder mobilization Mobilization meetings will be done aimed at bringing stakeholders to collective participation in the vaccination exercise. Meetings will be held under strict guidelines to minimize spread of COVID-19 as provided by the Public Health Act. This includes maintaining social distancing and use of face masks and observation of personal hygiene (hand washing and sanitizing) during the meetings. Representatives of the following sectors/ departments will be engaged: County Technical Advisory Committee, County Project Service Unit (CPSU) Administration (County and National governments), Community representatives (male and female), Veterinary Department, Public Health department.



Areas of discussion during planning will largely center on minimizing COVID-19 spread and ensuring a clean environment during vaccination exercise. This is from vaccine collection/ transportation, community mobilization, pre-vaccination surveillance transportation to the field, vaccination exercise, waste collection, COVID-19 Surveillance and supervision.

#### **2.4 Vaccine & equipment Procurement**

This will be the responsibility of the Veterinary department. KCSAP will initiate procurement process with guidance from the NCPCU

KCSAP will procure the vaccines and supportive drugs while the other equipment to be used during the vaccination activity will be provided by the Department of Veterinary as their contribution.

#### **2.5 Vaccine collection procedure**

Two officers (Veterinary officer, County Project Procurement Officer-KCSAP) will collect the vaccine at KEVEVAPI cold stores in Embakasi. At the stores, COVID-19 containment measures (according to the Public Health Act) will be followed to minimize exposure and possible spread. During the exercise, all persons involved will wear face masks and gloves, and keep socially acceptable distances. Each vehicle will have sanitizers for use during transportation. During collection the officers will verify the status of vaccine as follows: Packaging, labeling, expiry dates among other vaccine attributes. Government

### **2.5 Disease Hot spots in Tana River**

#### **1. RVF**

The RVF Disease is exacerbated by increased and prolonged wet condition which forms conducive breeding grounds for mosquitoes during period of enhanced rains and flash floods for the case of Tana River County. The hinterland areas of the County forms the fall back areas for pastoral livestock keepers whenever there are floods and enhanced rains incidences with the sedentary agro-pastoral farmers settling along the riverine section of the floods basin bearing the burden of any incidences of RVF as they cannot shift to higher ground hence the need to vaccinate nearly in all the areas both in the hinterland and along the flood basin. However, due to Tana River being used as a stock route for livestock from even neighboring counties of Garissa and Lamu the occurrence of RVF is sometimes not localized within the Hotspot areas but across the entire county hence the need to vaccinate animals across the entire county.

The following are the targeted RVF hotspot areas within the county.

1. The whole of Tana Delta Sub-County
2. Kinakomba, Mikinduni and Wayu Wards and Lower of Chewani Ward in Tana River Sub-county
3. Hirimani and Bangale Wards of Tana North sub-county

#### **2. CBPP**

This disease is highly contagious affecting cattle. The whole of Tana River County is classified as hot spot area to this disease therefore the whole county will be targeted.

#### **3. CCPP**

This disease is highly contagious affecting goats. The whole of Tana River County is classified as hot spot area to this disease there by hence there is need to spread the vaccination in the whole county to contain the disease.

#### 4. Blanthrax

The disease affects both sheeps, goats, cattle etc. The hot spot areas for this disease in the county is in the Tana Delta and Tana North Sub Counties.

##### **Collaborators and Stakeholders engagement**

During the implementation of the project a multidisciplinary & participatory approach will be used to involve key stakeholders during identification, planning, implementation, monitoring and evaluation. As part of ensuring sustainability of the project, the technical inputs and the community as a key stakeholder acting as a social capital will ensure ownership and sustainability in adoption of the control of livestock diseases, safe use and disposal of pesticides and pesticide products.

The community would mobilized by the department of veterinary using the chief who would announce to the beneficiaries the exact point where the vaccination would be carried out.

The chief will work closely with the CDR to enable accurate information is delivered to the community.

The various collaborators and key stakeholders in the county identified are as follows in table 3 below:

**Table 3: List the collaborators and Stakeholders and their Roles.**

No	Collaborator/Stakeholder	Area of collaboration /Role
1.	Local administrators/chiefs	Security and Community Mobilization
2.	Ward administrators	Community mobilization and awareness
3.	Village elders	Community mobilization
4.	Kenya Climate Smart Agriculture Project (KCSAP)-CPCU	Resources mobilization- Procurement of Vaccines
5.	County Government (Veterinary Department)	Cooling & Storage of vaccines facilities.
6	County Project Steering group/committee (CPSC & CTAC)	Supervision
7.	Beneficiary Community	Construction of makeshift crushes and availing of the animals for vaccination.

## 5. Drugs and Vaccines to be used in the Livestock Vaccination

The following recommended vaccines and drugs will be used during the vaccination exercise on different species of animals for control of different diseases and vectors accordingly. A list of the drugs and pesticides will be submitted to the NPCU for approval by the WB safeguards team before use.

The list of vaccines and drugs to be used during the vaccination exercise is provided in table 3 below:

**Table 4: List of Vaccines and Drugs to be used in the Livestock Vaccination Project**

<b>s/no.</b>	<b>Item</b>	<b>Quantity</b>
1.	Caprivax(CCPPP vaccine)	100,000 doses.
2.	Flumethrin 1% (bayticol)	280 ltrs
3.	Albendazole 10% (albafas)	400 ltrs.
4.	Contavax (cbpp)	100,000 doses
5.	RVF Vaccine	130,000 doses
6.	BQ	22,000 doses
7.	Oxytetracycline LA 20%(100 mls)	37 bottles
8.	Multi vitamin	80 bottles

There is elaborate mechanism of ensuring the cold chain would be maintained during transportation and at the vaccination sites.

The Department of Veterinary has portable gas fridges which would be used during the activity. This would ensure that the cold chain is maintained hence the vaccines would remain in good quality throughout the process.

They also have cold boxes that would be used to store the vaccines at the required temperature.

There will be also temperature monitors to ensure cold chain is observed.

The Department of Veterinary also have other equipment like syringes, PPE among others which would be used during the vaccination exercise.

## VACCINATION PLAN

**Table 5**

### Tana Delta

S/no	Site/village	Ward	Vaccine
1	Kone	Garsen West	CBPP,CCPP,Blanthrax
2	Odo ganda	Garsen West	CBPP,CCPP,Blanthrax
3	Asa	Garsen West	CBPP,CCPP,Blanthrax
4	Dulo Ade	Garsen West	CBPP,CCPP,Blanthrax
5	Mnazini	Garsen North	CBPP,CCPP,RVF,Blanthrax
6	Ida isagodana	Garsen North	CBPP,CCPP,Blanthrax
7	Abaganda	Garsen North	CBPP,CCPP,Blanthrax
8	Sera	Garsen North	CBPP,CCPP,RVF,Blanthrax
9	Tana salt	Kipini West	CBPP,CCPP,Blanthrax
10	Kurawa	Kipini West	CBPP,CCPP,RVF,Blanthrax
11	Ngumu	Kipini West	CBPP,CCPP,RVF,Blanthrax
12	Jamadho/ wema	Kipini West	CBPP,CCPP,RVF,Blanthrax
13	Kikomo/ nduru	Kipini West	CBPP,CCPP,RVF,Blanthrax
14	Oda/Gubani	Kipini West	CBPP,CCPP,RVF,Blanthrax
15	Tarasaa/Ngao	Kipini West	CBPP,CCPP,RVF,Blanthrax
16	Dibe/Dalu	Kipini West	CBPP,CCPP,RVF,Blanthrax

### Tana River

S/no.	Site/ village	Ward.	Vaccine
1	Konekaliti	Wayu	CBPP,CCPP,RVF
2	Waldena/Fifteen	Wayu	CBPP,CCPP,RVF
3	Titila/Ongola	Wayu	CBPP,CCPP,RVF
4	BultoAbarufa	Wayu	CBPP,CCPP,RVF
5	Chifiri	Wayu	CBPP,CCPP,RVF
6	Rhoka	Chewani	CBPP,CCPP,RVF
7	Makere	Chewani	CBPP,CCPP,RVF
8	Laini	Chewani	CBPP,CCPP,RVF
9	Gafuru	Mikinduni	CBPP,CCPP,RVF
10	Handampia	Mikinduni	CBPP,CCPP,RVF
11	Lenda	Mikinduni	CBPP,CCPP,RVF
12	Hara	Kinakomba	CBPP,CCPP,RVF
13	Haroresa	Kinakomba	CBPP,CCPP,RVF
14	BullaWenje	Kinakomba	CBPP,CCPP,RVF

## Tana North

S/no	SITES /Village	Wards	Vaccine
1	Walesorea	Hirimani	CBPP,CCPP,Blanthrax
2	Subukie	Hirimani	CBPP,CCPP,Blanthrax
3	Gale/ Towfiq	Hirimani	CBPP,CCPP,Blanthrax
4	Meti	Hirimani	CBPP,CCPP,Blanthrax,RVF
5	Walestokocha	Hirimani	CBPP,CCPP,Blanthrax
6	Wadesa	Chewele	CBPP,CCPP,Blanthrax
7	Gasura	Chewele	CBPP,CCPP,Blanthrax
8	Matagala	Chewele	CBPP,CCPP,Blanthrax
9	Dukanotu	Chewele	CBPP,CCPP,Blanthrax
10	Charidende	Chewele	CBPP,CCPP,Blanthrax
11	Bilbil	Chewele	CBPP,CCPP,Blanthrax
12	Maramtu	Madogo & Sala	CBPP,CCPP,Blanthrax
13	Konoramadha	Madogo & Sala	CBPP,CCPP,Blanthrax, RVF
14	Buwa	Madogo & Sala	CBPP,CCPP,Blanthrax
15	Anole	Madogo & Sala	CBPP,CCPP,Blanthrax,RVF
16	Baleneka	Bangale	CBPP,CCPP,Blanthrax
17	Bultobanta	Bangale	CBPP,CCPP,Blanthrax
18	Bisanhergesa	Bangale	CBPP,CCPP,Blanthrax
19	Boka	Bangale	CBPP,CCPP,Blanthrax
20	Kamaguru	Bangale	CBPP,CCPP,Blanthrax

Vaccination exercise will be carried out by three teams (**See annex 5**). Before rolling out the vaccination exercise, there will be proper briefing to staff participating in the activity prior to its commencement. Staff involved have undergone IPM safeguards sensitization and will wear protective gear during the period of vaccination. Vaccination equipment will be provided by the project and County Director of Veterinary Services, Tana River County. The exercise will be preceded by community mobilization using County administrators, chiefs, local leaders in form of barazas and telephone calls among others.

Crush names to be covered will be provided by the community during publicity and community mobilization.

Status of the crushes will be verified and repairs will be done to prime it for the exercise. The County has a limited number of crushes and as such makeshift crushes will be constructed for vaccination exercises.

### Vaccination site

During mobilization, community will be requested to construct crush pens/ vaccination sites adequate enough to minimize crowding during the exercise. Proper community organization by the community committee will be done and herds led into crush pens in a systematic manner (based on households or areas of origin) to minimize crowding, ensure social distancing and also adherence to laid down COVID-19 control measures by the government. Community committee will provide hand washing containers and water (most communities have equipment that were donated by County) while the project will provide soap.

The Public Health Officers (PHOs) accompanying each team will make sure that hand washing, social distancing and use of safety gear is adhered to all the time at the vaccination site, as well as continued surveillance of COVID-19. They will also take the temperature of the community members coming to present their animals. The team leaders will ensure that all waste generated during the exercise will be collected into the designated waste bins while NEMA Officer and PHO to oversee the collection and disposal of the waste. Used face masks and gloves will be kept in separate waste collection receptacle for proper disposal.

Vaccinators-The project will ensure that the vaccinators are registered with the Kenya Veterinary board and other relevant professional bodies, and have undergone IPM safeguards training. All officers will be required to declare their health status and those found ill or with fever will be required to seek medical attention and certification of COVID-19 free before joining the teams. Any officer with history of travel especially in COVID-19 reported hotspots will also be required to undertake mandatory testing and subsequent certification before joining the teams. They will wear protective gear (overalls, gumboots, face shield, mask and gloves) during the vaccination activities. All vaccination equipment will be provided by the 19 project and County Director of Veterinary Services. Face shields, masks and gloves will be provided including sanitizers to each team for use by the vaccinators, community animal handlers and recorders. Officers will be required to observe necessary measures that will minimize infection and spread of COVID-19.

**Role of Stakeholders in the Vaccination Process**

- i. NPCU- Procurement of Vaccines, Avail funds for vaccination
- ii. KEVEVAPI-Supply of quality vaccines and right quantities
- iii. CDVS-Requisition of vaccines and associated equipment, transport, logistics
- iv. Stores Officer-Stores and Cold chain management, timely and adequate supplies
- v. CPCU-Facilitation of the field teams, supervision of the vaccination process
- vi. NEMA-Waste management supervision
- vii. Public Health-Monitoring of COVID 19 compliance and implementation of COVID 19 control management
- viii. Community-Avail livestock for vaccination, maintaining the crushes, restraining the animals
- ix. Vaccination teams- Administration of vaccine, site cold chain management, site waste management, daily reporting

**Logistics & Cold chain management**

A team comprising of 3 staff, including public health officer and a driver and designated vehicle will be in-charge of cold chain supervision and distribution of additional ice blocks. The team will be composed as shown in Table 6

**Table 6 logistics team**

<b>RESPONSIBLE OFFICER</b>	<b>DEPARTMENT</b>
CDVS	VETERINARY
Procurement officer	KCSAP
Driver	

**COVID-19 Surveillance**

Vaccination campaign will be carried out in collaboration with the County Public Health Department. Public health officer will have a responsibility of ensuring that community members adhere to laid down procedures in control of COVID-19 spread. Where the public health regulations will be breached, the

exercise will be stopped and re-scheduled to a date when proper mechanisms are put in place. This is to minimize risk of spread of the pandemic.

PHO will have Infra-Red Temperature monitors and will check and record details and temperature of vaccination team members before they leave for the field and also of all persons at the vaccination site.

They will ensure adherence to Public Health regulations from time of briefing to transportation, vaccination to closure of the exercise and will work closely with the County COVID-19 Surveillance team in order to report any incidences including references.

**Disposal and waste management**

NEMA will oversee waste collection and disposal at the licensed incinerator at Hola.

Waste will be segregated and put in well-labeled Biohazard bags and sharps containers, which will be provided to the field teams and a schedule for collection given to them. The waste will then be deposited at the County headquarters and later, be disposed in accordance with waste management best practices. Table 7 give details of those responsible for Waste Disposal.

**Table 7: Disposal team**

<b>RESPONSIBLE OFFICER</b>	<b>DEPARTMENT</b>
CDVS	Veterinary
County Director- NEMA	NEMA
Public Health Officer	Health
CESSCO	KCSAP
Driver	

**Monitoring**

This will be a continuous exercise throughout the implementation process. It will be participatory by County Project Coordinating Unit representative, County Director of Veterinary Services, Monitoring & Evaluation, & County Steering Committee representative and a driver. The team will oversee implementation at community level by visiting teams and meeting community committees formed to oversee the exercise. It team will address technical, Environmental, social and welfare issues during the exercise.

**Grievance Redress Mechanism**

Complaints/grievances received from communities before, during and after vaccination campaign will be channeled to the CDVS and escalated to County Grievance Redress committee for redress. The community will be given the contacts of the CDVS to forward their complaints and compliments. A Grievance log register for the sub project will be opened to launch all complaints.

Table 8 gives the names of CGRC members and their roles.

**Table 8: GRM team**

	<b>MEMBER</b>	<b>RESPONSIBILITY</b>
1	Dr Paul Mwamburi	Team leader at the county level where all grievances by the community will be lodged; he will be the initiator of the grievance resolution process.
2	Alfonce Munguti- M&E	Tracking and monitoring all issues raised
3	George Wasonga-CESSCO	Guide in environmental impacts posed by the project and mitigations provided for as per law or in the project documents
4	NEMA representative	To ensure that all environmental impacts of the project have been mitigated.
5	Public Health Officer	Waste management and disposal issues
6	Chief Officer Livestock	Department leader
7	CEC-Agriculture	County Government representation in the project area

**Reporting**

During the preparation and actual vaccination exercise, the following reports will be generated.

The reports will include information on:

- i. List of participants during the consultative meeting
- ii. Copy of livestock vaccination manifest detailing the Ward, Sub location, Crush site, Names of farmer, Number of cattle vaccinated.
- iii. Photographs during the exercise
- iv. Summary report on mobilization and engagement of VMG and Marginalized groups
- v. Covid-19 compliance

Table 9 shows the reporting team

**Table 9: Vaccination reporting team**

<b>REPORT TYPE</b>	<b>FREQUENCY</b>	<b>RESPONSIBLE PERSON</b>
Vaccine procurement	Once	CDVS/CPCU
Publicity report	Once	CDVS
Daily vaccination report	Daily	Vaccination team leaders
Monitoring report	Once	CDVS/M&E CPCU
Waste disposal report	Once	NEMA/CDVS/PHO
COVID-19 Compliance Report	Once	PHO
Overall vaccination report	Once	CDVS/CESCO
Cold Chain Management	Once	CDVS

**3. Regulatory, Policy and Legal Frameworks Relevant to the Activity.**

There are several policies, laws and regulations that exist to guide Animal health management concerns in Kenya. Some of those relevant to livestock vaccination issues include The Constitution of Kenya 2010, Animal Diseases Act (Revised edition 2012, the Environmental Management Co-ordination Act, and the Public Health Act, among others



### **3.1 Legal framework**

#### **3.1.1 The Constitution of Kenya 2010**

The Constitution assures Kenyans of the right to “be free from hunger and to have adequate food of acceptable quality”, protection for human health and attainment of the highest standard of health. It assures consumers of goods and services of reasonable quality and access to information necessary for them to gain full benefit for the necessary protection of their health, safety and economic interests. Article 42 states that every person has the right to a clean and healthy environment. The constitution provides guidance on steps that may be taken in case any of any infringement on these rights. In addition, the constitution supports systems ensuring safe and healthy environment such as livestock vaccination and monitoring for sustainable environmental management.

#### **3.1.2 Animal Diseases Act (Revised edition 2012).**

The Department of Veterinary Services plays a key role in preventing emergence, spread of notifiable animal diseases and to issue restrictive orders or quarantines for areas affected by the diseases. Therefore, guaranteeing production of quality animal products to the market is the basis for this pest management plan to guide actualization of protective measures through vaccination campaigns.

#### **3.1.3 Public Health Act 242**

The Public Health Act provides for the protection of human health through prevention and guarding against introduction of infectious diseases into Kenya from outside, to promote public health and the prevention, limitation or suppression of infectious, communicable or preventable diseases within Kenya, to advice and direct local authorities in regard to matters affecting the public health, to promote or carry out research and investigations in connection with the prevention or treatment of human diseases. This Act provides the impetus for a healthy environment and gives regulations to waste management, pollution and human health. Other related legislation on emerging issues including the current COVID-19 pandemic

#### **Subsidiary Legislation, 2020 Legal Notice NO: 54 on Covid-19 Restrictions**

Since, the subproject will be implemented at a time when the country and the whole world is experiencing Covid-19 pandemic, necessary arrangements and preventive measures will be made to prevent the livestock owners, veterinary staff and other stakeholders from being infected with the virus, guided by the Public Health Act (Covid-19 Restrictions of movement of persons and related measures) while ensuring that the public will continue to receive healthy animal products from the animals. The department of veterinary will ensure that:

- i. Appropriate social distancing is observed by the staff and livestock owners/keepers
- ii. Provision of face masks during vaccination and while travelling to the vaccination sites.
- iii. Adequate supply of clean water and detergents for hand washing by all those participating in the vaccination sites.
- iv. Provision of sanitizers at all sites.
- v. Minimum holding of herds at the vaccination sites will be controlled to reduce on congestion at the vaccination sites.
- vi. All those who will be at the Vaccination will need to be sensitized on COVID-19 and safety measures.

- vii. Wearing personal protective clothing/equipment (PPE) will be observed –gumboots, overalls, gloves.
- viii. Ensure there will be involvement of local health personnel to oversee safety issues and implementation of COVID-19 guidelines during the exercise
- ix. There is need for temperature monitors/ screening of the people as they arrive
- x. Those who are unwell will need to be directed to nearby health facilities for further checkup and treatment

### **3.1.4 Environmental Management and Coordination Act (2012)**

Efforts will be made to ensure that the environment is kept clean free from pollution and contamination by the vaccines, drugs or sharps used during vaccination. To that effect observing environmental protection and conservation through safe use and disposal of the wastes (empties & sharps) will be ensured. Containers with right labelling / standard colors will be provided, and that hazardous wastes will be disposed at designated disposal sites.

### **3.1.5 Other Acts applied wholly by the Veterinary Services Sector**

- i) Meat Control Act, Chapter 356;
- ii) Rabies Act, Chapter 365;
- iii) Veterinary Surgeons and Veterinary Para-professionals Act, Number 29 of 2011;
- iv) Branding of Stock Act, Chapter 357;
- v) Prevention of Cruelty to Animals Act, Chapter 360;

### **3.1.6 Acts applied by Veterinary Services and other sectors**

- i) . Food, Drugs and Chemical Substances Act, Chapter 254 , in collaboration with the Ministry responsible for human health;
- ii) . Pharmacy and Poisons Act, Chapter 244, in collaboration with the Ministry responsible for human health;
- iii) . Narcotics Drugs and Psychotropic Substances Control Act, Chapter 245, in collaboration with the Ministry responsible for human health;
- iv) . Pest Control Products Act, Chapter 346, in collaboration with the Ministry responsible for Crop Agriculture;

## **3.2 Policies**

### **3.2.1 Kenya Vision 2030**

The Kenya Vision 2030 outlines several approaches to improve livestock productivity. It recognizes animal health as a key input. It proposes establishment strategically-located Disease Free Zones to increase livestock productivity and quality; unifying the efforts of different ministries and other stakeholders for coordinated development of the livestock sector with special emphasis on ASALs such as Tana River county. Preventive measure against livestock diseases are among the strategies that have been used safely, effectively and successively by the sector over years.

### **3.2.2 The Veterinary Policy**

The Policy provides an enabling environment for safeguarding animal life, health and welfare as well as animal propagation and production for food security and economic development. It seeks to ensure that Kenyans benefit from proximate and quality health by guaranteeing animal health, welfare and production services. The Policy is provided for in the Fourth Schedule of the Constitution of Kenya. It aligns developments in the animal resource industry to the Constitution as well as the Kenya Vision 2030 and the international animal health laws, treaties, agreements and conventions ratified by Kenya. The overarching treaty is the World Trade Organization agreement particularly the agreement on the Application of Sanitary and Phytosanitary measures which Kenya ratified on 23rd December 1994 and came into effect on 1st January 1995

### **3.2.3 Environment Policy, 2014**

The aim of the Environment Policy (Sessional Paper No.10 of 2014) is to ensure that environmental concerns are part of the national planning and management processes; and that guidelines are provided for environmentally sound development. The policy has seven broad goals under which guiding principles are mainstreamed to achieve conservation and management of the natural resources (fauna and flora).

### **3.2.4 The National Policy on Gender and Development (2000)**

The policy recognizes that it is the right of men, women, boys and girls to participate in and benefit from development and other initiatives for sustainable development. All the gender groups within the pastoral set ups in Tana River County have been actively involved in the identification and development of the proposed project. Besides, all the gender groups will have equal opportunities to actively participate in the project implementation process from publicity and community mobilization barazas, sensitizations, monitoring the vaccination process and even evaluation of the project.

Though the ownership of the large stock livestock species; cattle, camel, sheep and goats is a preserve of men, women have a key role in the utilization of livestock products. Therefore, women will also have a noble opportunity in ensuring that all the animals are mobilized and taken to the vaccination sites. The youth full of energy and activism, will be very hardy in mobilizing and controlling the livestock herds during the vaccination exercise.

Successful control of livestock diseases will result in sustained and improved production of good quality animal products; meat & milk hence overall good human health and consistent farm incomes translating to a productive and resilient local economy.

### **3.2.5 World Bank Safeguard Policies.**

To ensure that the proposed livestock vaccination project is environmentally and socially sound and sustainable by promoting positive impacts and avoid/mitigate negative impacts various World Bank Operational Policies will be employed to increase transparency and participation of stakeholders in the decision-making process throughout project planning, implementation, monitoring and evaluation.

#### **OP/BP 4.01: Environmental Assessment**

After the proposed project proposal was developed, the County project implementation team carried out project screening which lead to development of a broad Environmental & Integrated Pest Management Plan. Implementation of this PMP will ensure that potential environmental and pesticide hazards and risks are avoided and their impacts minimized.

#### **OP 4.09 Pest Management**

To avoid predisposing the environment to negative impacts of the drugs and vaccines and the wastes accruing from the used products, the project has developed this Integrated Pest Management Plan to guide on the use, handling and proper disposal of waste materials.

A list of drugs and vaccines to be used during the vaccination and treatment has been developed for sharing the NPCU and the World Bank Safeguards team for clearance shown below

1. Caprivax(CCPP vaccine)
2. Flumethrin 1% (bayticol)
3. Albendazole 10% (albas)
4. Contavax (cbpp)
5. RVF Vaccine
6. BQ
7. Oxytetracycline LA 20%(100 mls)
8. Multi vitamin
9. Penstrep

Similarly, an elaborate plan has been put in place for central collection and disposal of the drugs & vaccines empties, syringes and sharps at the Director Veterinary Services Office to avoid pollution of the environment and reduce human exposure and related health risks.

#### **OP 4.10: Indigenous Peoples**

Tana River pastoral communities are composed of mainly the Orma, Wardei tribes who keep fairly large herds of animal species. There are also other Indigenous communities like the Waliuwana & Munyoyaya and pockets of areas where the Pokomo community keep animals in small scale.

During the project implementation, deliberate efforts for involvement will be adhered to ensure that the Indigenous People community animals are also reached and vaccinated regardless of the number of animals or size of the herds per household. The community would be mobilized by being given appropriate notice through their village elders to prepare their animal for vaccination. The exercise will also be done at their appropriate time to enable wide outreach.

This will ensure equity and non-discrimination of Indigenous People in the project implementation.

## **6. Pest Management Plan (EMP) and Monitoring**

### **6.1 Pest Management Plan.**

#### **POTENTIAL IMPACTS OF THE VACCINATION AND MITIGATION MEASURES**

The sub-project fall under category B, it has the potential to cause harm both to the environment and the social aspect of human life. It was subjected to screening where the adverse impact were identified and mitigation measures identified.

The stakeholders who were involved included Department of Veterinary, Public Health, NEMA among others.

#### **Environmental and Social Impacts of the Vaccination**

##### **Positive impacts of vaccination**

Building Resilience – Vaccination will lead to healthy animal because they would not be prone to disease attack. This would increase productivity and income.

Continuous trade – Vaccination will make the animal immune to diseases that usually occurs during different weather occurrence like prolonged which creates market closure and restriction of movement. This will enhance continuous trade.

The community would be aware of disease control measures from the technical team

The community would understand the government measures that will be employed to combat Covid 19 through the public health staff.

##### **Potential negative risks of the vaccination subproject**

In line with World Bank Environmental and Social Safeguard Policies, an agricultural development project which uses pesticides in a wide scale such as this triggers World Bank's Operational Policy OP 4.09 (Pest Management Plan-PMP). The key risks and impact areas in the county were identified in procurement, on transit to county, in the county cold stores, on transit to vaccination sites, during actual vaccination, post vaccination and disposal. General mitigation practices have been outlined to be carried out as outlined in Table 4

##### **Veterinary waste around vaccination sites**

Vaccination team usually throw or leave all waste in the field thereby affecting the aesthetic value of the environment. The empties might be collected and reused by the surrounding households which would pose risk to their health.

The disposal team will ensure that all wastes are collected at the vaccination site, sorted out, grouped and effectively disposed according to set waste disposal regulations by the public health officer

##### **Soil contamination**

The vaccination waste material might spill on the soil thereby contaminating the soil. To ensure this does not occur, the team would ensure they have put in place all mechanism of handling the material to prevent spillages.

Surface and Groundwater Contamination Rainwater surface runoff may transport pesticides to streams, rivers, and other surface water bodies.

Groundwater contamination may also occur from pesticide residue in surface water, such as drainages, and streams. There are four major routes through which pesticides reach the water: they may drift outside of the intended area when sprayed, may percolate or leach through soil, may be carried to the water as runoff, or may be spilled. Proper care will be taken by qualified personnel in delivering the vaccines to the animals,

thereby effectively preventing spillage on the surface and ground water. Location of the crushes will be strategic placed to avoid marshy and those areas with stagnant water or run-offs.

Pollution of air –Some of the supportive drugs that would be used has the potential of polluting the air because they might produce vapor which will be blown by the wind to non-intended target. Effective measures will be put in place to ensure this occurrence would be mitigated.

**Harm to Non-target Species** The environmental impact of pesticides consists of the effects of pesticides on non-target species. Runoff can carry pesticides into aquatic environments while wind can carry them to other fields, grazing areas, human settlements and undeveloped areas, potentially affecting other species. Other problems emerge from poor production, transport and storage practices. Over time, repeated application increases pest resistance, while its effects on other species can facilitate the pest's resurgence. The project officers will ensure that vaccine will only be administered to target animals (cattle/Goats/Sheep) hence no harm to non-target species.

**Social Risks-** Some farmers might not avail their livestock due to some social factors in the community. This might affect the impact of the activity because some livestock and beneficiaries might be left out. Effective measures have been put in place to ensure no group is left out like the VMG through proper publicity and following them at their sites to vaccinate their animal. Grievance redress mechanism measures have also been put in place to address complaints that might arise.

**Health and Safety Impacts** Pesticides can enter the body through inhalation of aerosols, accidental self-jabbing, dust and vapor that contain pesticides; through oral exposure by consuming food and water; and through skin exposure by direct contact or in some cases as reported from most counties through drug abuse by use of pesticides as human drugs by pastoralists. The effects of pesticides on human health depend on the toxicity of the chemical and the length and magnitude of exposure. Farmers, veterinary officers, farm workers and their families experience the greatest exposure to pesticides through direct contact. Children are more susceptible and sensitive to pesticides, because they are still developing and have a weaker immune system than adults. Children may be more exposed due to their closer proximity to the ground and tendency to put unfamiliar objects in their mouth. To reduce health and safety impacts, PPEs will be used by all the vaccinators, therefore minimizing cases of injury and exposure to the vaccines. The supervisors will ensure proper sensitization of the community on potential exposure risk and mitigation measures.

The beneficiaries might consume the livestock products like milk, meat etc before the recommended time thereby posing danger to their health. The team will sensitize them on the same to make them aware of the duration which is safe before consuming the products

**COVID-19 and livestock vaccinations** Cognizant of the ongoing COVID-19 pandemic, it is agreeable that vaccinations like any other activities is likely to be a conduit through which the COVID-19 disease could spread. Therefore, it is necessary to put measures to minimize risk of spread among the stakeholders participating in the exercise. Ministry of Health has provided guidelines to prevent spread of the disease. The project will endeavor to institute both environmental and social safeguards to prevent spread of the disease during vaccination exercise. Vaccination teams and the community beneficiaries will observe all the guidelines provided by ministry of health including:

**Screening of livestock keepers at the vaccination sites:** Public health officer accompanying the teams will screen people on site using temperature monitors and those found to have fever immediately referred to nearest health care for further screening.

Use of personal protective equipment: All participants at the site will be required to wear face masks. Vaccinators will in addition wear gloves while handling animals and vaccines. They will also put on protective clothing (overalls, caps and gumboots)

Hand washing with soap and water: the project will provide potable water jerry cans with taps for hand washing at every vaccination site. Every person will be required to wash hands immediately they arrive to the vaccination site. In addition, alcohol based hand sanitizers will be provided for the vaccination teams.

Keeping social distance: social distancing will be implemented and no large crowds of people will be allowed. Community will be required to organize themselves in a manner to prevent crowding and allow procedural driving of animals to and from the vaccination sites.

Making sure the vaccinators and the beneficiaries follow good respiratory hygiene. This means covering mouth and nose with a bent elbow or tissue when coughing or sneezing, and then dispose of the used tissue in the bins immediately.

Potential Site-related KCSAP Health Concerns } Consumption of animals under chemical pest control could cause health hazards to humans and animals within and around the project site. Livestock owners to be sensitized on withdrawal periods } Certain kinds of chemical intoxication especially after drinking pesticide-contaminated water are a medium to high likelihood. This is a crucial potential impact considering that most of the locals get drinking water from surface and groundwater sources – safe handling and disposal of all waste during the vaccination will be observed Skin, eye, and nose irritation – wearing of PPE during the exercise will be adhered to by the vaccination teams.

Possibility of cancers, neurologic, endocrine and reproductive problems from direct and indirect exposure to pesticides – the vaccines have been used before with no adverse effects reported, however precautionary measures will be put in place during the vaccination exercise.

Recommended mitigation measures

Table 10 below outlines the measures that will be employed to mitigate adverse Environmental Management Plan is tool used to ensure undue or reasonably avoidable adverse impacts of the project implementation are prevented and that the positive benefits of the project are enhanced.

**Table 10: Environmental & Pest Management Plan (EMP) – Rift Valley Fever and other Diseases Vaccination**

	IMPACT ISSUE/RISK	MITIGATION	INPUT	Output	RESPONSIBLE PERSON
1.	Community Awareness and mobilization/public awareness.				
	<ul style="list-style-type: none"> <li>Lack of community and grassroot stakeholders awareness of the project implementation</li> </ul>	A multi-disciplinary County team visits the benefiting communities to create awareness and set tentative dates of training and vaccination.	Daily Subsistence Allowances, Fuel, Vehicle, PPEs	Community well prepared and informed	CDVS, SCVOs, Ward Admins, Public Health Officer, Area Chiefs, Ward Livestock Production officers .
	<ul style="list-style-type: none"> <li>Lack of gender participation in publicity and trainings</li> </ul>	Sub-county Implementing teams to ensure all gender are accorded same opportunities to participate in the public forums and trainings.	Airtimes , Transport, Publicity/training aid Materials	All community members aware and receptive	Opinion leaders, Community Disease reporters, Ward Health Assistants
2	At Procurement				
a	<ul style="list-style-type: none"> <li>Packaging of the wrong vaccine, insufficient diluent</li> </ul>	A team with S-12 will be responsible for confirming the packaging the expiry date and amounts	Daily Subsistence Allowance for the persons, vehicle, fuel	Right quantities & vaccines packed	CDVS/ Supply Chain Assistant
	<ul style="list-style-type: none"> <li>Packaging of poor quality vaccines</li> </ul>	Checklist, check the expiry dates and quantities of the drugs.	S12 and any other relevant documents	Good quality and potent vaccines packed.	CDVS/ Supply Chain Assistant
	<ul style="list-style-type: none"> <li>Un-qualified personnel collecting the vaccines.</li> </ul>	Qualified Veterinary personnel to collect the vaccines at KEVVAPI.	Qualified technical personnel	Vaccines rightly collected and transported.	CDVS
b.	Accidents	Use well trained drivers.	Competent Driver PPE	Safe delivery of vaccines.	CDVS/CPC



c	Leakages, less volumes and lack of labels.	Verification at dispatch of vaccine. Officer collecting the vaccines should be a technical staff	Qualified Personnel	Right Vaccines doses collected. CDVS/CPC
d	Absence of temperature monitors during transit.	Use temperature monitor. Use of refrigerated/cold chain trucks.	Temperature Monitors	Vaccines delivered viably potent. CDVS/Procurement Assistant
e	Lack of communication and proper arrangement for vaccine collection and transport	Timely arrangement with vaccines supplier and communication with supplier and destination	Airtime and data bundles	Reduced operational costs and inconveniences. CDVS/procurement and Assistant.
3. Transportation of Vaccines and drugs				
a	Poorly maintained and serviced vehicle	Use of hardtop carrier and reliable well maintained and serviced vehicle, Rescue vehicle in case of breakdown.	Fuel & Driver	Drugs/vaccines delivered in time. CPC/CDVS
b	Unnecessary police check and stoppage	Provision of labeled stickers urgent, don't delay on the cool boxes and vehicle. Dully approved/signed Vehicle Work ticket	Emergency stickers.	Vaccines Delivered unhindered. CPC/CDVS
c	Inadequate storage facilities (freezer)	Mobilize for more freezers and office storage space.	County Departments Networking	Safe transportation of vaccines CPC/CDVS
d	Diversion of the co-duty.	-Work ticket should be specific. -Avoid double duty	Close follow-up & constant communication while on Transit	Vaccines delivered timely CPC/CDVS
e	Using of inappropriate tools to transport vaccines (cartons, instead of cool boxes)	Ensure the vehicle carries cool boxes with ice packs	Cool boxes, & icepacks	Vaccines transported safely. CESSCO/CDVS

f	Lack of gadgets to monitor vaccines temperatures	Transport and storage temperature monitors to be in the cool boxes and fridges.	Temperature monitors (Thermometers)	Vaccines potency maintained. CDVS
g	Lack of communication on transit	Prior communication between the person delivering and the store ETA (Expected time of arrival);	Avail adequate Airtime	Timely delivered of CESSCO/CDVS drugs.
4	Offloading and loading of vaccines and equipment.			
a	Inadequate staff at the store to offload and count the vaccine	Staff mobilization in good time.	Right Personnel	Smooth offloading CDVS/Supply Chain Assistant
b	Lack of firefighting equipment.	Ensuring proper firefighting facilities are available, liaise with County Department responsible for fire fighting	Firefighting equipment (Extinguishers), Availability of buckets with sand	Fire insecurity avoided. CPC/CDVS
c	Inadequate store space & equipment	Ensure there is adequate well ventilated space & equipment	Adequate storage space	Accidents avoided. CPC/CDVS
d	Power disconnection and blackout.	Timely payment of electricity bills.	Around the clock monitoring of the stores	Potency of vaccines maintained. CDVS
e	Failing of Cooling system	Ready ice cube for emergency, well maintained fridges, training of technical staff on basic maintenance of fridges and provision of fridge guards.	Funds , personnel, Emergency calling of Electrical technicians	Potent vaccines CDVS/CPC
f	Danger of infection from some vaccines while handling by the officers.	Knowledge of proper handling of vaccines and management of contamination.	Allow handling by Competent and trained Staff Provision of Protective Clothing/Gear to	safe vaccines handling. CDVS/CPC

			the personnel (Hand gloves, Mouth & Nose Masks, Overall, Aprons, Gum boots, Head Caps)	
g	Faulty deep freezer/fridges	Frequent and Routine checks of the freezers and fridges. Plan in place for mobilization of a back-up Freezer	A developed check list, Plan for prompt repairs	Vaccines potency CDVS maintained.
h	Inadequate adherence to the protocol of acquisition of vaccines from the stores	All officers including Veterinary Officers should be sensitized on the need to follow the protocols	Communication conspicuously put outside the stores for sensitizing relevant personnel	Zero fraud cases. CDVS
i	Inadequate labeling especially of vaccines returned from the field,	The Veterinary Officers from the field should clearly inform the cold chain manager of the vaccines, the batch numbers and expiry dates of the vaccines returning from the field before receiving them for storage	Water proof stickers clearly labeled with the details of vaccine details	Properly labelled Sub-County/Wards Team vaccines and stock taking Leaders
j	Inadequate cold chain materials	1) Procure polythene enough tubing for making ice packs or Dry Ice	Polythene tubing Dry ice/frozen Carbon dioxide	Quality vaccines CDVS/Procurement Assistant
k	Inadequate monitoring of temperature	Regular monitoring of the temperature of the freezers using a temperature tracking sheet and a thermometer	Temperature tracing sheet. Thermometer	Quality of vaccines CDVS maintained.
L	Bio safety problems	Provision of Personal protective clothing to the store man/CDVS	PPEs	Safe handling of CDVS vaccines.

		Provision of clean water at the store	Water supply tank	Health technical staff.	CDVS
		Receptacles for disposal	Receptacles for waste	Safe waste disposal.	CDVS
5	Transit to the Vaccination sites				
a	Inadequate/ missing vaccination equipment	Ensure availability and provision for extra equipment	Plan adequately. Sharing planning briefings	Smooth vaccination exercise	CPC/CDVS
		Confirm availability of all equipment via checklist during loading	Personnel	Smooth kick-off	CDVS
		Ensure availability of all required vaccination equipment during planning process	Assorted Equipment	Smooth vaccination exercise	CDVS/CDSO
b	Failure to collect essential equipment	Prepare a detailed checklist	Detailed Checklist	Smooth vaccination exercise	Vaccination Team Leaders
		Assign task to specific officer to tick the checklist during loading	Competent Officers		Vaccination Team Leaders
		Forgetting some vaccination equipment and vaccines	Detailed procurement and packing list;		Team Leaders

		<p>Sanitizers, Automatic syringes, Needles, Vaccines, disposal syringes, Markers, (Spares) Glass barrels, repair kits, First aid kit, vaccine diluent, Syringe lubricants, vaccine Temperature monitors, cooler boxes Ice packs, pliers, PPE (Overalls, gumboots, Mouth Masks, Head caps, Hand gloves), Disposal equipment (sharps containers, biohazard bags), Camping equipment (Tents, Beds, table, mattress, chairs, Nets, bed sheets, basin,</p>	<p>Personnel protected</p>
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			Water containers, torches, Gas cooker, solar lamp, sufurias, utensils, Panga, knife, metallic box) detergents, stationery (pens, books, vaccination manifests).	
5	Actual Vaccination			
A	Mechanical breakdown during vaccination (including punctures and tyre bursts) mobile pressure machines Driver to ensure spare tyre is in good condition	Provision for stand by vehicle (if available) Provision for hire of vehicle Purchase of tyres, repair kits	Adequate Funds For Fuel, Repairs And Maintenance	Unhindered transport CPC/CDVS/Drivers
B	Non-targeting of the VMGs in the project wards	The County Director of Veterinary and Community/Village Leadership will identify and Target VMGs HHs including Agro-livestock keeper along the riverine areas.	Equitable spreading of the Sub-Project Benefits to all Livestock Keepers in the hotspot areas.	Minimal grievances and right targeting CDVS, WA, Chiefs & Village heads.
C	Lack of gadgets to monitor vaccines temperatures	Transport and storage temperature monitors to be in the cool boxes and Fridges.	Temperature monitors to be in place.	Viable vaccines all CDVS through
D	Inadequate vaccination personnel i.e due to staff	Have standby personnel	Stand by personnel Back-up teams/squat	Adequate technical manpower SCVO (Team Leaders)

	shortage, sickness/ emergency commitment				
		Co-opt from private practitioners	Provide for emergency per diems		CDVS
		Co-opt technical staff from neighboring Project County	Plan for DSAs		CDVS
E	Shortage of fuel in the field	Provide extra fuel in jericans/drums (200Ltr)	Plan for Fuel reserves Containers Fuel	Continuous transport	CDVS/SCVOs
		Standby vehicle to deliver fuel	Vehicle		CDVS
F	Delay in replenishment of cold chain (ice.)	Cool boxes to be in good condition	Vehicle for delivery	Potent vaccines	CDVS
G	High turnover of animals	Proper Planning and controlling of herds.	Flexible vaccination timetable	All animals vaccinated	Vaccination Team
		Set targets with community prior to vaccination	Joint participatory planning with Community leaders		Team leader
H	Sick animals left at bomas	Provide for transport to move and take samples	Vehicle	Sick animals treated.	Vaccination Team leader
i	Accidents / injury/	Provide first aid kits	Kits & emergency transport to health facilities.		CDVS
j	Parasites and Diseases Resistance to Vaccines and Drugs	County Department of Veterinary Services to Conduct Routine Surveillance ,Train communities on use IPM and disease prevention methods	Plan by the Department to Conduct periodic IPM Trainings to all villages		CDVS & CDLPO

		(Hand picking of ecto-parasites, Use of repellants, Improved animal nutrition etc)			
k	Infection of vaccinating teams and beneficiaries with Covid-19 and diseases through contact	<ul style="list-style-type: none"> <li>All the 3 Sub-County Vaccination teams observe Covid-19 Restrictions (Social Distancing, Hand washing/ Sanitizing, wearing protective clothing,</li> <li>Flow of herds to be controlled to minimize congestion at the vaccination sites.</li> <li>Sensitize the communities to observe social distancing.</li> </ul>	Adequate PPEs, Sanitizers, Adequate water for hand washing,	Health personnel and community. Well informed and protected public	CDVS/CPC/Public Health/Chief
6	Post –vaccination				
a	Misuse of livestock drugs and pesticides leading to drugs residual in animal consumable products	<p>Continuous sensitization and training of communities on safe use, storage and handling of livestock drugs and vaccines.</p> <p>Use of qualified and competent Veterinary officers</p>	Competent & Trained Personnel Training of Community members (Funds)	Safe animal products	CDVS/CAHWs
b		Deliberate efforts to involve all gender groups and VMGs in the Capacity Building programs by the Department of Veterinary Services.	Trainers to mobilize and target all gender groups for capacity building within the project area coverage.	Well informed public	CDVS, SCVOs, CPC
b	Poor Disposal of used containers and syringe needles ( Empties)	Proper disposal of remnants, empties & Sharps	DSAs/ Vehicle for Transport,	Safe and protected environment.	NEMA Officer, M&E/CESSCO, Public HEALTH



c	Misreporting of vaccinated animals and other cross-cutting issues	Consolidation of weekly reports to a final Activity report. Writing of M&E Reports for counter checking.	Quality weekly & M&E Reports,	Informed reporting	M&E/CESSCO, CDVS, SCVOs (Teams leaders)
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## 6.2 Monitoring and Reporting at Various stages

### At community level

Monitoring of the livestock vaccination exercise at the community level will be done by the Community Disease Reporters, who will report any cases of unvaccinated animals and movement of livestock herds as the vaccination exercise goes on. They will be reporting to the Leaders of the Sub-County Vaccination teams.

### At the County level

During the vaccination a multidisciplinary team from CTAC and CPSC representatives will move around to monitor the vaccination exercise. They will compile their reports and share with the CPCU for actions and reference.

The CTAC and CPSC responsibility will be to ensure that the implementation process would be done as per the proposal that was approved during their sittings (**Annex 1, 2, 3**). They would also provide Technical advice to the implementers to enable them achieve their objectives.

The CPCU together with CTDs Subject Matter Specialists will carry out a Monitoring and backstopping visits and advise accordingly on matters of compliances in relation the EMP.

The Public Health Officer will ensure that waste handling will be done in a safely to prevent pollution and contamination of the environment

He will also ensure Covid 19 guidelines will be followed to the latter to prevent it from spreading

He will also advice and take necessary measures whenever Public Health concerns arises.

Report will be shared with the NPCU.

### At the National Level.

The NPCU will organize Monitoring through emails, phone calls, Whatsapp, Skype among other online platforms

### Grievance Redress Mechanism

In case of any arising conflicts, the community will be sensitized to use the formal channels of reporting the grievances that has been established by the project through the safeguard and compliance officer desk to be addressed by the CPCU

Among the vaccinators in each team, there would be a specific person who will be nominated to handle the grievances from the community and resolve them accordingly.

Un resolved grievances will be forwarded to the CPCU desk for necessary action.

### Publicity.

- Deliberate efforts will be made for participatory mobilization of the community, creating awareness and set tentative dates for vaccination and trainings prior to the starting through chief's barazas, door-to-door campaigns, word of mouth among others
- **Disclosures.**

During the publicity barazas, the vaccinations teams will ensure the community understands the project proposal and the objective of the vaccination exercise and answer any other concerns that the communities and other stakeholders will raise.

The CPCU will also make adequate copies of the project proposal document to the stakeholders allow accountability and transparency both from the public and the direct beneficiaries.

### 6.3. Implementation schedule

**Table 11: Implementation Schedule for the Livestock Diseases & Vector Control, Vaccination and Treatment Project**

#### Vaccination exercise

##### Tana Delta

S/no	Site/village	Ward	Date 2020
1	kone	Garsen West	25-26/5/2020
2	Odo ganda	Garsen West	27/5/2020
3	Asa	Garsen West	28-29/5/2020
4	Dulo Ade	Garsen West	30-31/5/2020
5	Mnazini	Garsen North	1/6/2020
6	Ida isagodana	Garsen North	2/6/2020
7	Abaganda	Garsen North	3/6/2020
8	Sera	Garsen North	4/6/2020
9	Tana salt	Kipini West	5/6/2020
10	Kurawa	Kipini West	6/6/2020
11	Ngumu	Kipini West	7/6/2020
12	Jamadho/ wema	Kipini West	8/9/2020
13	Kikomo/ nduru	Kipini West	9/9/2020
14	Oda/Gubani	Kipini West	10/9/2020
15	Tarasaa/Ngao	Kipini West	11/9/2020
16	Dibe/Dalu	Kipini West	12/6/2020

##### Tana River

S/no.	Site/ village	Ward.	Date.
1	Konekaliti	Wayu	27/5/2020
2	Waldena/Fifteen	Wayu	28/5/2020
3	Titila/Ongola	Wayu	29/5/2020
4	BultoAbarufa	Wayu	30/5/2020
5	Chifiri	Wayu	31/5/2020
6	Rhoka	Chewani	1/6/2020
7	Makere	Chewani	2/6/2020
8	Laini	Chewani	3/6/2020
9	Gafuru	Mikinduni	4/6/2020
10	Handampia	Mikinduni	5/6/2020
11	Lenda	Mikinduni	6/6/2020
12	Hara	Kinakomba	7/6/2020
13	Haroresa	Kinakomba	8/6/2020
14	BullaWenje	Kinakomba	9/6/2020

##### Tana North

S/no	SITES /Village	Wards	Date
1	Walesorea	Hirimani	27/5/2020
2	Subukie	Hirimani	27/5/2020
3	Gale/ Towfiq	Hirimani	28/5/2020
4	Meti	Hirimani	28/5/2020
5	Walestokocha	Hirimani	29/5/2020
6	Wadesa	CheweLe	30/5/2020
7	Gasura	CheweLe	30/5/2020
8	Matagala	CheweLe	30/5/2020
9	Dukanotu	CheweLe	31/5/2020
10	Charidende	CheweLe	1/6/2020
11	Bilbil	CheweLe	1/6/2020
12	Maramtu	Madogo & Sala	2/6/2020
13	konoramadha	Madogo & Sala	2/6/2020
14	Buwa	Madogo & Sala	3/6/2020

15	Anole	Madogo & Sala	4/6/2020
16	Baleneka	Bangale	5/6/2020
17	Bultobanta	Bangale	6/6/2020
18	Bisanhergesa	Bangale	7/6/2020
19	Boka	Bangale	8/6/2020
20	Kamaguru	Bangale	9/6/2020

**Table 12: Implementation schedule for the Livestock Diseases & Vector Control, Vaccination and Treatment Project**

Activity /Date	Disease surveillance	Community Mobilization and Publicity	Livestock Vaccination	Supervision/Back stopping & Monitoring	Report Compilation and submission	Ward
May-12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
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27						
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31						
June-01						
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## ANNEXES

### 1. ANNEX 1 :CPSC Meeting Minutes

MINUTES OF THE CPSC MEETING TO APPROVE MICRO-PROJECTS PROPOSALS AND RECOMMEND SUB-PROJECTS PROPOSALS HELD AT YWCA HALL ON THE 10<sup>TH</sup> & 11<sup>TH</sup> OCT 2019

#### PRESENT

S/NO	Names	Designation	Phone No.	Email Address
1	Javan Bonaya	CECM & Chair CPSC	0718201551	ddaddah@gmail.com
2	Buya Phares	CCO-Agric	0721295672	buyatphares@yahoo.com
3	Ahmed Barako	CCO-Lvsk & vet	0727958277	ahmedbarako@yahoo.com
4	Alfonce M. Munguti	M&E-KCSAP	0720469802	munguti2002@yahoo.com
5	Clotilda Nekesa	RS I-KALRO	0722779749	nekesac@yahoo.com
6	Faith Buya	AO	0718833191	hadiyafaith@yahoo.co
7	John Ouko	CASO-KCSAP	0775393610	johnouko82@gmail.com
8	Protus Musawa	CDE-NEMA	0715247167	profusmusawa@yahoo.com
9	Nzioka Wambua	CDLP- Lvsk	0722420037	cdlivestockrc@yahoo.com
10	Dr. Paul Mwamburi	CDVS-Vet	0721342795	paulmwamboi2@gmail.com
11	Samuel M. Baya	CDA-Agriculture	0721540191	cdatanariver@yahoo.com
12	Evans M. Nyarango	SFO-Fisheries	0711191612	emerabaup@yahoo.com
13	George O. Wasonga	AO-ESSO KCSAP	0725760206	gwogola@yahoo.com
14	Peter K. Munyoki	CPC-KCSAP	0722762674	petkats@yahoo.com
15	Said B jillo	Driver	0727421307	saidjilo59@gmail.com
16	Habona Harriet	Accountant- KCSAP	0711491305	habona89@gmail.com
17	Rahma Galgalo	CO-Op	0722218783	nadinsabayan13@yahoo.com
18	Francis Njogu	RLRP	0722404072	njogufm@yahoo.com
19	Jilo Berhe	Driver	0700407950	

#### AGENDA:

1. Preliminaries and introductions.
2. Approval of Micro-Projects Proposals.
3. Review & Approval of Sub-Projects
4. A.O.B

#### MIN: 1/CPSC/10/2019: PRELIMINARIES AND INTRODUCTIONS.

The CPSC Chairperson, the County Executive Committee Member for Lands and Agriculture Mr. Javan Bonaya called the meeting to order and welcomed all the members to the meeting inviting them to make self- introductions.

**1. Project Background:**

a) **Project Title:** *Livestock Diseases control Vector Control, Vaccination and Treatment Project*

b) **Project duration:** *2 Months*      **Start:** *December 2019*    **End:** *January 2020*

c) **No. of beneficiaries:** *13,500*      **Male:** *6,700*    **Female:** *6,800*

**Direct beneficiaries:** *2,250*      **Male:** *1,810*    **Female:** *440*

**Indirect beneficiaries:** *11,250*    **Male:** *4,890*    **Female:** *6,360*

**Vulnerable beneficiaries (poor, widows/widowers, orphans, physically challenged, elderly, HIV/AIDs affected/infected):** *1,350*    **Male:** *570*    **Female:** *780*

**Location of the project (coordinates):** Tana River, Tana Delta, Tana North

d) **Project Problem statement**

Due to prolonged rains that occurs in Tana River County, there is a pattern of occurrence of livestock diseases outbreak like rift valley fever like the one which occurred after the El nino rains in 1997/98. In 2016/2017 another outbreak occurred in various areas of the county following prolonged *elnino* rains. A total of 12 people died in the county.

In the Rift Valley Fever outbreak which occurred in June-August 2018 in Tana Delta sub-county, about 300 sheep and goats aborted and about 100 died. No human being was reported to have been affected. This was mainly due to early detection and intervention following enhanced surveillance in the county after a joint alert from the County Director of Veterinary Services and County Director of Medical Services. The only livestock market in the Tana Delta sub-county was closed causing loss of revenue to farmers & traders amounting to Ksh.52 in two months.

All slaughter premises and meat outlets were closed causing further unquantified loses to butchers and hoteliers.

The county government lost about Ksh.345,000 in revenue in the two months of the quarantine following the close of the market.

Based on these factors there is need to make proactive measures to prevent disease outbreak following the heavy rains which are currently experienced in the county

**2. Project Identification**

i. **How was the project identified?**

*Through public participation forums during CIDP development*

*The department of veterinary reports*

ii. **Who was involved?**

Pastoralists and Agro-Pastoralists, County Director of Veterinary Services, County Administrators, Village elders, CTAC and CPCU.

iii. **What events took place in developing the project idea?**

- Awareness creation and understanding on KCSAP funding (Sub-projects) on the potential areas of funding by CPCU
- Weather forecast information which has been released on prolonged rains
- Request for development of Proposals for funding was made by the KCSAP project through the CPCU.
- County Department of Veterinary Services drafted the project Proposal in consultation with other county departments and stakeholders

**iv. Compliance status to various statutory requirements**

**EIA**...To consult NEMA.....**Water permits**.....N/A

**Land ownership, legal agreements and related procedures**

.....N/A .....

**Other statutory requirements**

- Public awareness creation through public barazas

**Beneficiary management committee: for instance give details on- how they were constituted e.g. democratically; composition, GRM, Frequency of meetings**

The committee members would be elected by the community through a democratic process and it consists of 9 members and the one third gender rule was taken into account. They will also elect a committee to handle grievances that may arise

The committee will be meeting quarterly to discuss and deliberate issues on project implementation process.

The department of veterinary staff would offer technical support to the committee for effective and informed decision making.

**Project Framework**

**a) What is/are the expected *results* post-implementation (increased household income, livelihood diversification, food security through water availability/accessibility, reduced land degradation etc)**

- Increased animal production and productivity from quality livestock products (meat, milk)*
- Improved household income from livestock sales.*
- Reduced livestock disease incidences.*
- Reduced loss of animals due to wet weather induced diseases (RVF, CCPP, CBPP)*
- Increased County Revenue Collection through uninterrupted Livestock market sales.*
- Sustained revenue flow to the County Government through livestock sale levies and permits.*

**b) What is/are the *objective(s)* of the project?**

*To control livestock diseases outbreaks through timely application of disease mitigation measure.*

**c) What problems does the project aim at addressing at the community level?**

- Common occurrence of livestock diseases incidences*



- ii. *Low animal productivity*
- iii. *Prevention of zoonotic diseases to humans through unsafe livestock*
- iv. *Interrupted and reduced farm incomes.*

d) **Activities to be carried out:**

No.	Activity	Who will provide advise & training (institution or person):	Time
1.	Procurement of Vaccines	County Director of Veterinary Services	4 days
2.	Community Mobilization & Publicity & sensitization of pastoral communities on safe use of livestock drugs and safe disposal	Village elders, Community Disease Reporters (CDRs),  Local Administrators, Ward Animal Health Assistants, Sub-county Veterinary Officers, Livestock Officers, Public Health Officers.	5 days
3.	Disease Surveillance and Monitoring	Sub-County Veterinary Officers, Livestock Officers, Ward Animal Health Assistants, CDRs	10 days
4.	Vaccination and Treatment	Veterinary Officers, Livestock Officer (LOs) /Animal Health Assistants, CDRs	30 days
5.	Supervision and Follow-ups	Chief Officer, County Director Of Veterinary Services, CPCU, CTAC, CSG	15 days

**\*Attach a separate sheet if space is not enough**

e) **List the collaborators you will work with**

No	Collaborator	Area of collaboration
1.	Local administrators/chiefs	Security and Community Mobilization
2.	Ward administrators	Community mobilization and awareness
3.	Village elders	Community mobilization
4.	Kenya Climate Smart Agriculture Project (KCSAP)	Resources mobilization- Procurement of Vaccines
5.	County Government	Cooling & Storage of vaccines facilities.
6	County Project Steering group/committee (CSG/CPSC)	Supervision

7.	Beneficiary Community	Construction of makeshift crushes and availing of the animals for vaccination.
----	-----------------------	--

**\*Attach a separate sheet if space is not enough**

### 3. Monitoring of Progress

**a) Who will be involved in monitoring?**

*CTAC, CPCU, Chief Officers and CPSC. The monitoring would be participatory for effective process*

**b) How frequent will the progress report be submitted?**

*Reporting will be consolidated and shared on weekly basis.*

**c) Who will be responsible for reporting?**

*The Sub-County Veterinary Officers to County Director of Veterinary Services to the CPC (County Project Coordinator) KCSAP*

**d) How will the feedback report reach the community members?**

*Through the ward Animal Health Assistants, administrators locational chiefs and the project management committee*

**e) How will the proposed project assist in responding to the predicated excess rains/el nino during the month of December 2018:**

- *The Acaricides will reduce mosquito bites to the animals and also reduce the mosquito populations.*
- *The vaccines (RVF, CCPP, CBPP & BQ) will build the immunity of the animals hence reducing chances of outbreaks of zoonotic diseases and notifiable diseases in the entire County.*
- *Supportive drugs for treatment of opportunistic infections caused by the wet conditions during the rains.*
- *Dewormers will reduce the internal parasites burden giving the animals enhanced resistance to infections.*

**How will the proposed project assist in achieving the Project Development Objective (PDO) which is to increase agricultural productivity, build resilience and reduction of GHG emissions in the long term? (indicate the targeted coverage in terms of type of livestock numbers or acreage of crops/types)**

Increased productivity will be achieved through treatment and prevention of livestock diseases. This will improve their capacity to produce good quality of products as well as the quantity.

The resilience of the livestock farmers would be improved because through vaccination their animal would be immune from disease outbreaks that may occur

**Targeted animals (per species)**

Species	RVF	CBPP	CCPP	Blanthrax
Cattle	95,000	160,000	-	60,000
Sheep	260,000	-	-	

Goats	180,000	-	220,000	
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*\*Dosage for RVF in sheep/goats =half that of cattle*

**f) How will you measure your success in planning, implementing and managing your projects in a sustainable and socially inclusive manner?**

- Number of Beneficiaries reached disaggregated by gender.
- Number of animals vaccinated during the exercise.
- Number of disease incidences reported by the beneficiaries after the project interventions.

**g) How will you ensure sustainability of the project?**

- Linking the community beneficiaries with inputs agro-dealers and service providers.
- Sensitizing the communities on early warning systems and safe use of animal drugs.

**h) How will you manage the benefits that will accrue from the project?**

The income that the farmers would earn can be used for livelihood diversification like starting small businesses to improve their resilience. They can also use the proceeds to support their households like eating balanced diet, paying school fees among others

**i) Strategy on operation and maintenance**

Communities will establish and/or strengthen disease and vector control committees.

#### 4. Detailed Budget

Project cost including community and County Government contribution.

No.	Activity	Budget item	No.	Unit Cost (ksh)	Total Cost (ksh)	Community Contribution(kshs)	County Contribution (kshs)	KCSAP Grant (kshs)	Total Amount (kshs)
1	Procurement of Vaccines	CBPP	200,000 Doses	Ksh 5	1,000,000	0	500,000	500,000	1,000,000
		CCPP	150,000 Doses	Ksh 10	1,500,000	0	500,000	1,000,000	1,500,000
		RVF	200,000 Doses	Ksh 10	2,000,000	0	700,000	1,300,000	2,000,000
		BQ	40,000 Doses	Ksh 18	720,000	0	320,000	400,000	720,000
		BAYTICOL	400 Liters	Ksh 3500	1,400,000	0	420,000	980,000	1,400,000
		ALBENDAZOLE	800 Liters	Ksh 500	400,000	0	200,000	200,000	400,000
		OXTERACYCLINE INJECTION LA	50 Pcs(100ml)	Ksh 300	15,000	0	4,000	11,000	15,000
		MULTIVITAMIN INJECTION	100 Pcs (100mls)	Ksh 300	30,000	0	6,000	24,000	30,000
		PENSTREP INJECTION	40 Pcs 100mls	Ksh 300	12,000	0	2,400	9,600	12,000

2	Community Mobilization/ Publicity and sensitization on safe use of pesticides and disposal of used containers.	VO	3*3days	7,000	63,000	0	0	63,000	63,000
		LO	3*3days	7,000	63,000	0	0	63,000	63,000
		AHA	3*3days	7,000	63,000	0	0	63,000	63,000
		CDR	3*3days	1,000	9,000	0	0	9,000	9,000
		Area Chief	3*3days	1,000	9,000	0	0	9,000	9,000
		PHO	3*3days	7,000	63,000	0	0	63,000	63,000
		DRIVER	3*3days	4,200	37,800	0	0	37,800	37,800
3	Disease Surveillance	VO	3*10days	7,000	210,000	0	0	210,000	210,000
		LO	3*10days	7,000	210,000	0	0	210,000	210,000
		CDR	3*10days	1,000	30,000	0	0	30,000	30,000
		DRIVER	3*10days	4,200	126,000	0	0	126,000	126,000
4	Vaccination	VO	3*20days	7,000	210,000	0	0	210,000	210,000
		LO	3*20days	7,000	210,000	0	0	210,000	210,000

	AHA	9*20days	7,000	1,260,000	0	0	1,260,000	1,260,000
	CDR	3*20days	1,000	60,000	0	0	60,000	60,000
	DRIVER	3*20days	4,200	252,000	0	0	252,000	252,000
	<b>Cooling and Storage of Vaccines</b> ( cooler boxes, freezers, electricity bills)	3 Sub-counties	300,000	900,000	0	900,000	0	900,000
	<b>Fuel for Transport</b>	1000litrs of Disel	115	115,000	0	0	115,000	115,000
	<b>Protective Gear</b> (Overall, Gum boots, Dust coats, Hand Gloves)	25 officers	6,500	162,500	0	162,500	0	162,500

		<b>Construction of makeshift crushes, Mobilization of livestock keepers and availing of the animals for vaccination</b>	mandays and fencing materials	15 wards	1,080,000	1,080,000	0	0	1,080,000
5	Collection and Central Disposal of Empties	1 Public Health Officer/NEMA	4 days	7,000	28,000	0	0	28,000	28,000
6	Supervision, Backstopping and Monitoring	1 CO	1*10days	10,500	105,000	0	0	105,000	105,000
		1 CDVS	1*10days	8,400	84,000	0	0	84,000	84,000
		3 CTAC	3*10days	8,400	252,000	0	0	252,000	252,000
		2 CSG/CPSC	2*10 days	8,400	168,000	0	0	168,000	168,000
<b>Total project cost: (kshs)</b>									<b>12,847,300</b>
<b>Community contribution: (kshs)</b>									<b>1,080,000</b>
<b>County Contribution (kshs)</b>									<b>3,714,900</b>
<b>Total KCSAP grant applied for: (kshs)</b>									<b>8,052,400</b>

**ANNEX 3 CTAC RECOMMENDATIONS**

**List the in-kind contribution that the group will provide:**

**A. Labour ( man-days & value)**

Community Labour for Construction of Makeshift Crushes- 20man days @ 8  
crushes per ward \* 15 wards @kshs 300= **kshs 720,000.00**

**B. Materials (type, quantity & value)**

Fencing material – 15 wards \* 8 crushes @kshs 3,000 =**kshs 360,000**

**We certify that the preceding information is true. (N/A)-**

Chairperson: .....N/A..... signature ..... Date.....

Secretary: .....N/A..... signature ..... date.....

Group member: .....N/A..... signature ..... Date. ....

**(For official use only)**

**Comments by the Relevant CTD:** *The proposal is recommended for approval by CPSC.*

**Recommended:** *YES*

**Date of meeting:** *9/15/2019*

**(Attach minutes)** *(ATTACHED)*

**Comments by the CTAC:**

*The proposal is recommended for presentation to CPSC for approval purposes.*

**Endorsed:** *Yes*

**Date of meeting:** *9/15/2019*

**(Attach minutes)** *(ATTACHED)*

**Chairman Name:** *Samuel S. Daga* **signature:** *[Signature]*

**Forwarded to NPCU by**

**Name:** *Peter K. MUMYOKI*

**Date:** *09-10-2019*







## ANNEX 5: REQUISITION ALLOWANCES AND PROGRAM

### COUNTY GOVERNMENT OF TANA RIVER



#### Department of Livestock & Fisheries. VETERINARY UNIT.

#### Internal Memo

**TO:** Project Coordinator - KCSAP

**FROM:** County Director of Veterinary services.

**DATE:** 1<sup>st</sup> May ,2020

**RE:KENYA CLIMATE SMART AGRICULTURAL PROJECT( KCSAP) DISEASE SURVEILLANCE,LIVESTOCK VACCINATION AND COMMUNITY MOBILIZATION /PUBLICITY EXERCISES**

The department intends to carry out county wide disease surveillance to be followed with mass vaccination and treatments of livestock (cattle, camels, goats and sheep) against , cbpp, anthrax & black quarter, ccpp , rvf and ppr as a department it's our mandate to control diseases and to minimize chances of outbreaks which can result to paralysis of livestock trade within our county.

Appended below find programs and budgets for respective sub counties and the activities to be undertaken.

### **A). Disease surveillance.**

#### **1. TANA DELTA SUB COUNTY.**

Team composition.

- 1) Dr Daniel Ong'are (VO)
- 2) Mr.Maranga Benard(LO)
- 3) Driver.
- 4) Area CDR

#### **Program.**

site/village	Ward	days	Date
Kone/Asa	Garsen West	1	12/5/2020
Dulo ade/Ramada	” ”	1	13/5/2020
Mnazini/Abaganda	Garsen North	1	14/5/2020
Danisa/BuraRahma	Garsen central	1	15/5/2020
Dibe/Dalu	Garsen south	1	16/5/2020
Ngumu/wema	Garsen North	1	17/5/2020
Hurara/Tana salt	Kipini west	1	18/5/2020
Mandingo/Nduru	” ”	1	19/5/2020
Tarasaa/Ngao/oda	Garsen south	1	20/5/2020

Mkokoni	Kipini East	1	21/5/2020
<b>TOTALS</b>		<b>10</b>	

**Budget.**

S/No.	Name	Design	J/G	P/no.	Lunch Ksh.	Days	Per Deim Ksh.	Days	Total Ksh
1	Dr Onga're Omondi	CVO	M	2011002536	~	~	7000	10	70,000
2	Mr Benard Maranga	AHO	K	2009086794	~	~	7000	10	70,000
3	Driver		G		--		42000	10	42,000
4	CDR				1000	10	~	~	10,000
<b>TOTALS</b>									<b>192,000</b>

**2. TANA RIVER SUB COUNTY.**

**B). PROGAM**

s/no	Sites/villages	Ward	Days	Date
01	Waldena	Wayu	1	12.5.2020
02	Ongola	„	1	13.5.2020
03	Daba	„	1	14.5.2020
04	WayuDuka	„	1	15.5.2020
05	BulaWenje	Kinakomba	1	16.5.2020
06	Fanjua	„	1	17.5.2020
07	Gafuru	Mikinduni	1	18.5.2020
08	Handampia	„	1	19.5.2020
09	Laini	Chewani	1	20.5.2020
10	Ghorei	„	1	21.5.2020
<b>TOTAL</b>			<b>10</b>	

**Team Composition.**

s/no	Name	Designation	Role
1	Dr.Renson Bakari	VO	Team leader
2	Mohamed Ijema	LO	Asst T/leader
3	Khalif Dubat	Driver.	Driver
4	CDR	CDR	Community Mobilizer.

**Budget.**

S/no	DESIGNATION	J/G	Rate.	Days	Total.
01	VO	M	7,000	10	70,000/=

02	LO	L	7,000	10	70,000
03	CDR	-	1,000/=	10	10,000/=
04	DRIVER	G	4,200/=	10	42,000/=
	<b>TOTAL</b>				<b>192,000/=</b>

### 3. Tana North – Sub County.

#### *Sites to Be Visited*

1. Subukie
2. Titila
3. Boka
4. Kamagur
5. Charidende
6. Bilbil
7. Matagala
8. Hosingo-Chewele
9. Bisanhergesa
10. Konoramadha

#### **Budget.**

S/n	Name	P/No.	Design	J/G	Diem	Days	Total
1	Njau Thuo	2009054365	CVO	N	7000	10	70,000/=
2	Tonui Samuel	1987062067	CLHA	L	7,000	10	70,000/=
3	Wario Omaro	12726377	CDR	N/A	1,000	10	10,000/=
4	Mohamed Buya	20140026580	Driver	G	4,200	10	42,000/=
	<b>TOTALS.</b>						<b>192,000/=</b>

## **B). Community mobilization/publicity.**

### **1. Tana DELTA SUB COUNTY.**

This crucial exercise will take place in three days prior to vaccination to sensitize farmers in all those targeted sites.

The team will comprise of:

- 1 Dr Daniel Ong'are (VO)
- 2 Mr.Maranga Benard(LO)
3. Mr.Micheal Abae(AHA)
- 4 PHO.
- 5.Area chief.
- 6 Driver.

7Area Community Disease Reporter (CDR)

**Budget.**

S/No.	Name	Design	J/G	P/no.	Lunch Ksh.	Days	Per Deim Ksh.	Days	Total Ksh
1	Dr Onga're Omondi	CVO	M	2011002536	~	~	7000	3	21,000
2	Mr Benard Maranga	AHO	K	2009086794	~	~	7000	3	21,000
3	Mr Abae Micheal	CLHA	K	1986076013	~	~	7000	3	21000
4	PHO		L		-	-	7000	3	21000
5	Chief		K		1000	3		-	3,000
7	Driver		G		--		42000	3	12600
8	CDR				1000	3	~	~	3000
	TOTALS								102,600

**2. Tana River Sub county.**

**Team Composition.**

s/no	Name	Designation
1	Dr. Renson Bakari	VO
2	Mohamed Ijema	LO
3	Mweri Kombo	AHA
4	~	Driver.
5	~	Area chief
6	Yosia Maro	CDR
7	~	PHO

**Program.**

s/no	Ward.	Dates.
1	Wayu	23.5.2020
2	Chewani/Mikinduni	24.5.2020
3	Kinakomba	25.5.2020

**Budget**

Name	Design	J/G	Rates.	Days	Total (Kshs)
------	--------	-----	--------	------	--------------

Renson Bakari	VO	M	7,000/=	3	21,000
Mohamed Ijema	LO	K	7,000/=	3	21,000
Mweri Kombo	AHA	J	7,000/=	3	21,000
Yosia Maro	CDR	~	1,000/=	3	3,000
Kiprop.	Driver	G	4,200/=	3	12,600
	Chief		1,000/=	3	3,000
	PHO		7,000/=	3	21,000
<b>TOTAL</b>					<b>102,600</b>

### 3. TANA NORTH SUB COUNTY.

#### Budget

	Name	P/No/Id No.	Designation	J/G	Diem	Days	Total
1	Njau Thuo	2009054365	CVO	N	7,000	3	21,000/=
2	Tonui Samuel	1987062067	CLHA	L	7,000	3	21,000/=
3	Moses Kofa	20160167144	AHA	G	4,200	3	12,600/=
4	Elvis Mworoa		PHO	L	7,000	3	21,000/=
5	Mohamed Buya	20140026580	DRIVER	G	4,200	3	12,600/=
6	Wario Omaro	12726377	CDR	N/A	1,000	3	3,000/=
7	Area Chiefs	6-CHIEFS			1,000		6,000/=
	<b>TOTALS.</b>						<b>97,200/=</b>

#### Program

Dates,2020	SITES	NO. OF DAYS	Wards
	Walesorea	1	
	Subukie		
	Gale/ Towfiq		
	Meti		
	Walestokocha		
	Wadesa	1	<i>Chewele</i>
	Gasura		
	Matagala		
	Dukanotu		
	Charidende		
	Bilbil		
	Maramtu	1	<i>Madogo &amp; Sala</i>
	konoramadha		
	Buwa		
	Anole		
	Baleneka		
	Bultobanta		

	Bisanhergesa		<i>Bangale</i>
	Boka		
	Kamaguru		
Total		3 days	

## C). Vaccination

### 1. Tana DELTA SUB COUNTY.

The team will compose of;

- 1 Veterinary officer(vo).
- 2 Livestock officer(Lo)
- 3 Animal health Assistants AHA -3
- 4 Driver
- 5 Area CDR.

**program.**

Vaccination site/village	Ward	NO Of days	Date 2020
kone	Garsen West	2	25 <sup>th</sup> & 26 <sup>th</sup> May
Odo ganda	” ”	1	27 <sup>th</sup> May
Asa	” ”	2	28 <sup>th</sup> & 29 <sup>th</sup> May
Dulo Ade	” ”	2	30 <sup>th</sup> & 31 <sup>st</sup> May
Mnazini	Garsen North	2	1 <sup>st</sup> June
Ida isagodana	” ”	1	2 <sup>nd</sup> June
Abaganda	” ”	1	3 <sup>rd</sup> June
Sera	” ”	1	4 <sup>th</sup> June
Tana salt	Kipini West	1	5 <sup>th</sup> June
Kurawa	” ”	1	6 <sup>th</sup> June
Ngumu	” ”	1	7 <sup>th</sup> June
Jamadho/ wema	” ”	1	8 <sup>th</sup> June
Kikomo/ nduru		1	9 <sup>th</sup> June
Oda/Gubani		1	10 <sup>th</sup> June
Tarasaa/Ngao		1	11 <sup>th</sup> June
Dibe/Dalu		1	12 <sup>th</sup> June
		20 days	

**budget.**

	Name	Design	J/G	P/no.	Lunch Ksh.	Days	Per Deim Ksh.	Days	Total Ksh
1	Dr Onga're Omondi	CVO	M	2011002536	-	-	7000/=	20	140,000/=
2	Mr Benard Maranga	AHO	K	2009086794	-	-	7000/=	20	140,000/=
3	Mr Abae Micheal	CLHA	K	1986076013	-	-	7000/=	20	140,000/=
4	Mr Hamisi Maro	CLHA	K	1988058312	-	-	7000/=	20	140,000/=
5	MR Hassan Ali	AHA	G		-	-	42000/=	20	84,000/=

6	Driver		G		--		42000/=	20	84,000/=
7	CDR				1000/=	20	-	-	20,000/=
	TOTALS								748,000/=

## 2. TANA RIVER SUB COUNTY.

### Team Composition.

<i>s/no</i>	<i>Name</i>	<i>Designation</i>	<i>Role</i>
1	Dr. Renson Bakari	VO	Team leader
2	Mohamed Ijema	LO	Asst T/leader
3	Daudi Abae	AHA	Vaccinator
4	Ronald Mkalla	AHA	Vaccinator
5	Wellington Mwanza	AHA	Vaccinator
6	-	Driver.	Driver
7	Mahamud Makoma	CDR	Community Mobilizer.

### Program.

<i>S/no.</i>	<i>SITE/ village</i>	<i>Ward.</i>	<i>Date.</i>	<i>Days.</i>
1	Konekaliti	Wayu	27/5/2020	2
2	Waldena/Fifteen	„	28/5/2020	2
3	Titila/Ongola	„	29/5/2020	2
4	BultoAbarufa	„	30/5/2020	1
5	Chifiri	„	31/5/2020	2
6	Rhoka	Chewani	01/6/2020	1
7	Makere	„	02/6/2020	2
8	Laini	„	03/6/2020	1
9	Gafuru	Mikinduni	04/6/2020	1
10	Handampia	„	05/6/2020	1
11	Lenda	„	06/6/2020	1
12	Hara	Kinakomba	07/6/2020	1
13	Haroresa	„	08/6/2020	2
14	BullaWenje	„	09/6/2020	1
		<b>TOTAL</b>		<b>20</b>

### Budget

<i>Name</i>	<i>Design</i>	<i>j/g</i>	<i>rates</i>	<i>days</i>	<i>Total(Kshs)</i>
Renson Bakari	VO	M	7,000/=	20	140,000
Mohamed Ijema	LO	K	7,000/=	20	140,000



Daudi Abae	AHA	M	7,000/=	20	140,000
Ronald Mkalla	AHA	G	4,200/=	20	84,000
Wellington Mwanza	AHA	K	7,000/=	20	140,000
~	Driver	G	4,200/=	20	84,000
~	CDR	~	1,000	20	20,000
<b>TOTAL</b>					<b>748,000</b>

### 3. TANA NORTH SUB COUNTY.

#### Program

Dates,2020	SITES	NO. OF DAYS	Wards
	Walesorea	1	<i>Hirimani.</i>
	Subukie	1	
	Gale/ Towfiq	1	
	Meti	1	
	Walestokocha	1	
	Wadesa	1	<i>Chewele</i>
	Gasura	1	
	Matagala	1	
	Dukanotu	1	
	Charidende	1	
	Bilbil	1	<i>Madogo &amp; Sala</i>
	Maramtu	1	
	konoramadha	1	
	Buwa	1	
	Anole	1	
	Baleneka	1	<i>Bangale</i>
	Bultobanta	1	
	Bisanhergesa	1	
	Boka	1	
	Kamaguru	1	
Total		20 days	

#### Budget.

S/No	Name	P/No.	Design.	J/G	Diem	Days	Total(Kshs)
1	Njau Thuo	2009054365	CVO	N	7,000	20	140,000/=
2	Tonui Samuel	1987062067	CLHA	L	7,000	20	140,000/=
3	Alow Dahir	2016116763	AHA	G	4,200	20	84,000/=
4	Moses Kofa	20160167144	AHA	G	4,200	20	84,000/=
5	Patrick Odeo	2011012515	AHA	G	4,200	20	84,000/=
6	Wario Omaro	12726377	CDR	N/A	1,000	20	20,000/=
7	Mohammed Buya	20140026580	DRIVER	G	4,200	20	84,000/=
	TOTALS.						636,000/=

#### D. Vaccines collection from Embakassi & Samples submission to Kabete VII.

S/No	Name	Design.	Number	Days	Rates	Total
1	Paul Mwamburi	cdvs	1	4	14200	56,800
2	Paul Mwamburi	cdvs	1	3	14200	42600
3	Paul Mwamburi	FARE			10000	10000
4						109,400

### E. ) .Supervision

S/No	Name	Design.	Number	Days	Rates	Total
1	Paul Mwamburi	cdvs	1	10	8400	84000
2	Kanchoru Gollo	CO	1	10	10500	105000
3		Nema	1	4	7000	28000
4	Wambua Nzioka	CDLP		10	8400	84000
5	Evans Nyarang'o	CDF		10	8400	84000
6	Samuel Baya	CDA		10	8400	84000
7	Mutua	DCC		10	8400	84000
8	Mary luty.	NDMA		10	8400	84000
9	Fatuma Ulaya.	Driver	1	10	4200	42000
10	Totals					679,000

### E). Budget summary.

#### 1. Tana Delta Sub County.

S/no.	Activity.	Amount (kshs)
1	Surveillance.	192,000.00
2	Sensitization & publicity	102,600.00
3	Vaccination campaign.	748,000.00
	Grand total.	1,042,600

#### 2. Tana River Sub County

S/no.	Activity.	Amount (kshs)
1	Surveillance.	192,000.00
2	Sensitization & publicity	102,000.00
3	Vaccination campaign.	748,000.00
	Grand total.	1,042,000

#### 3. Tana North sub County.

s/no.	Activity.	Amount (kshs)
1	Disease Surveillance.	192,000
2	Sensitization & publicity	97,200
3	Vaccination.	636,000
4	Grand total.	925,200.00

#### 3. Supervision & back stopping.

s/no.	Activity.	Amount (kshs)
1.	Supervision.	679,000
2.	Vaccines collection and samples submission.	109,400
3.	Total.	788,400

S/NO.	SUB COUNTY	Amount (kshs).
1	Tana delta.(garsen)	1,042,600
2	Tana River (Galole)	1,042,000

3	Tana North. (Bura)	925,200
4	Head Quarter. ( Hola)	788,400
5.	Grand Totals	3,798,200



*Dr. Paul Mwamburi.*  
*County Director of Veterinary Services*  
*Tana River County.*

Cc

*CO Livestock & Fisheries.*