



Kenya Climate Smart Agriculture Project

Office of the County Project Coordinator – KCSAP Wajir.

P.O. Box 33-70100 Wajir.

LIVESTOCK DISEASE CONTROL

**VACCINATION CAMPAIGN FOR MANAGEMENT OF PESTE DES
PETITS RUMINANT (PPR), SHEEP AND GOAT POX, CONTAGIOUS
CAPRINE PLEUROPNEUMONIA (CCPP) AND BLACK
QUARTER/ANTHRAX DISEASES.**

PEST MANAGEMENT PLAN

NOVEMBER 2020.

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ABBREVIATIONS AND ACRONYMS

BQ	Black Quarter
CCOs	County Chief Officers
CCPP	Caprine Pleuropneumonia
CDPH	county department of public health
CDR	Community Disease Reporters
CDVS	County Director of Veterinary Service
CECM	County Executive Committee Member
CESSCO	County Environmental and Social Safeguard Compliance Officer
COVID -19	Corona Virus Disease
CPC	County Project Coordinator
CPCU	County Project Coordination Unit
DALF	Department of Agriculture, Livestock and Fisheries
FCDC	Frontier Counties Development Council
GOK	Government of Kenya
KEVEVAPI	Kenya Veterinary Vaccine Production Institution
KCSAP	Kenya Climate Smart Agriculture Project
LHO	Livestock Health officer
M&E	Monitoring and Evaluation
MPs	Members of Parliament
NEMA	National Environmental Management Authority
OP	Operational policy
PMC	Project Management Committee
PMP	Pest Management Plan
PPE	Personal Protective Equipment
PPR	Peste Des Petit Ruminant
SAIC	Social Accountability and Integrity Committee
SCVO	Sub County Veterinary officer
SGP	Sheep and Goat Pox
VO	Veterinary Officer
WB	World Bank
WHO	World Health Organization

EXECUTIVE SUMMARY

Wajir County is among the counties with the highest populations of livestock from which the community source their livelihoods. Livestock production under the extensive production system of nomadic pastoralism is the backbone of the County's economic activity. It accounts for 70% of the livelihoods and food security in a normal year. Livestock production also accounts for 75% of employment in the rural set up earning the County approximately, Sh.10.5 Billion from Livestock and livestock products annually. However, the sector faces numerous challenges including emergence of frequent notifiable diseases such as PPR, CCPP, Sheep and Goat Pox and Blackquarter/Anthrax among others.

The County government of Wajir has in her County Integrated Development Plan 2018-2022 plans to respond to these diseases by way of vaccination so as to reduce losses. Vaccination against these diseases is also in the annual work plan of the county veterinary service of Wajir. Furthermore, the sub sector has developed livestock disease control framework for Wajir County that prioritized livestock diseases through mapping and identification of hotspots. The development of the framework culminated in the development of common strategies for livestock disease control in Frontier Counties Development Council FCDC region which recognized the importance of common approaches to livestock disease control. In a bid to achieve these goals, the Department of Agriculture, Livestock and Fisheries has requested Kenya Climate Smart Agriculture (KCSAP) to support this vaccination exercise as one of its sub projects.

Environmental and Social Safeguard screening has been done on the proposed project which has identified several positive impacts and negative impacts whose mitigation measures have been highlighted in this Pest Management Plan (PMP). The positive impacts are reduced mortality in camel, cattle, sheep and goat, improved quantity and quality of milk and beef production, and reduced chances of loss of livelihoods for the pastoralist.

Negative impacts are wastes from empty vaccine containers and damaged needles, accidents and injuries, exposure to Covid-19, conflicts as well as exclusion of some beneficiaries due to some beliefs. These wastes will be managed by ensuring that they are all collected using well labelled containers, segregated into different categories (hazardous and non-hazardous) and disposed off safely using the NEMA protocol of disposing off such wastes. Accidents and incidents will be mitigated by provision of PPEs. Ministry of Health protocol in containment of Covid-19 will strictly be adhered to minimize risk of exposure. Proper sensitization and mobilization will also be done to mitigate the risk of exclusion of beneficiaries.

The project is estimated to cost KSH: 32,399,620 out of which KSH 23,999,620 will be paid by KCSAP while the rest, KSH 8,400,000, will be contributed by the County Government of

Wajir and the community. The sub project funds will be managed under CPCU project account including PMP activities. The exercise targets 1.1m livestock heads (Sheep, Goat, Cattle and Camels). The proposed vaccination will be carried out in the entire Wajir County and is expected to benefit about 28,800 households.

1.0. INTRODUCTION

Wajir County is located in the North Eastern region of Kenya between latitudes 3° N 60'N and 0° 20'N and Longitudes 39° E and 41° E and covers an area of 56,685.9 KM². It borders the federal republic of Somalia to the East, Ethiopia to the North, Mandera County to the Northeast, Isiolo County to the South West, Marsabit County to the West and Garissa County to the South. The county comprises of eight sub-counties namely Wajir East, Tarbaj, Wajir West, Eldas, Wajir North, Buna, Habaswein and Wajir South. Projections from the Kenya 2019 Population and Housing census indicate that the county has a total population of 781,263. The county experiences annual average relative humidity of 61.8 per cent which ranges from 56 per cent in February to 68 per cent in June. It receives on average of 240 mm precipitation annually or 20 mm each month and the average temperature is 27.9 °C. Wajir is mainly inhabited by Somalis, with Degoodia, Ogaden & Ajuran being the majority of Wajir County respectively.

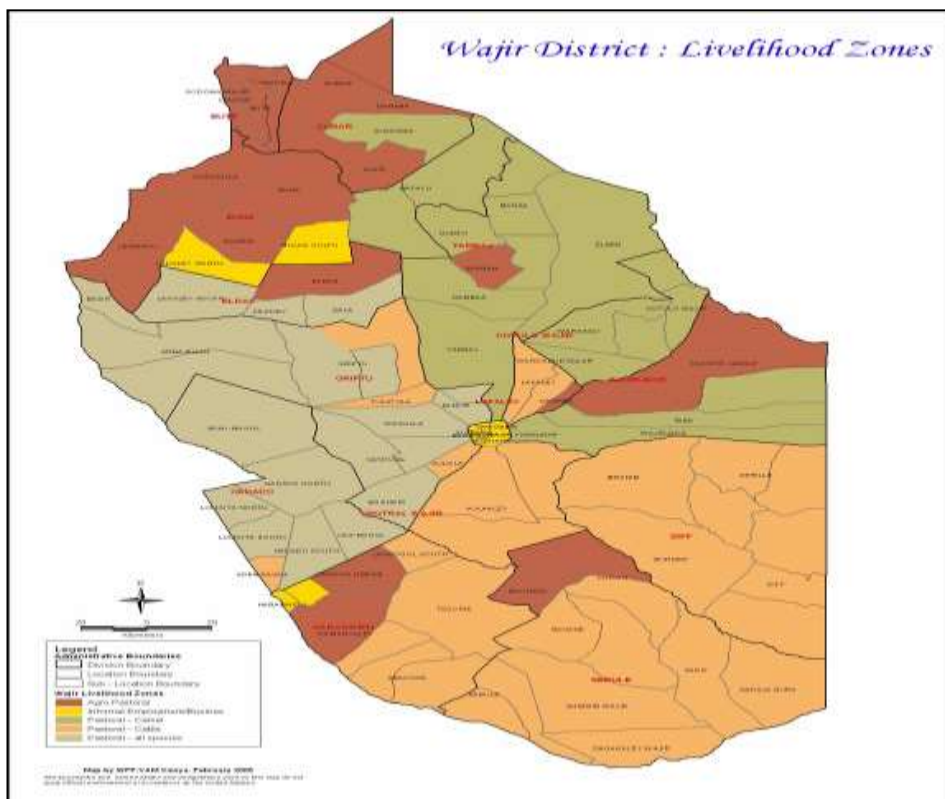


FIGURE 1: MAP OF WAJIR COUNTY.

Wajir County is an arid area falling in the ecological zone V-VI. Zone V receives rainfall between 300-600mm annually, has low cover of trees, grass and shrubs. On the other hand, zone VI receives an annual rainfall of 200-400mm. Overall, the county receives an average of 240 mm of rainfall per year which is erratic and short making it unfavorable for vegetation growth and rain fed agriculture. There are two rainy seasons' i.e. short and long rains. The short rains are expected between October to December and the long rains from March to May each

year. Crop activity is carried out in the Lorain swamp and along the drainage lines in Bute. The main crops grown in the area are sorghum, beans, fruits and vegetables.

The county is home to one of the largest animal population in Kenya. According to the 2019 population and housing census, there were 794, 552 cattle, 1,406,883 sheep, 1,866,226 goats, 115,503 donkeys and 533,651 camels. The production of milk and meat is estimated at 3,875,940 liters and 191,100 Kgs respectively per year. Indeed, this form the main source of livelihood in Wajir County accounting for over 70% incomes and employing over 65% of labour force. The main types of livestock are cattle (mostly Borana type and dairy crosses), sheep, goats (dominantly Totenberg goats), camels and donkeys. Poultry keeping is more pronounced in Wajir Town. However, the productivity of the livestock sector in this county is greatly impacted by the emergence of frequent notifiable and trans-boundary diseases such as PPR, CCPP, Sheep and Goat Pox and Blackquarter and Anthrax among others. This in parts is because of the county sharing a long international border with Somalia and Ethiopia that has weak livestock disease control system. The porous nature of the border facilitates livestock migrations in to the county resulting to sporadic outbreak of livestock diseases such as PPR, CCPP and SGP for sheep and goat and Anthrax and Black Quarter for cattle and camel which degenerates to emergency situations and loss of livelihoods. Currently there are no cross border disease control programs with the Republic of Somalia. Management of these diseases is done by vaccination of this animals using approved vaccines. The Kenya Veterinary Vaccines Production Institute (KEVEVAPI) is the authorized government institution charged with production of the above vaccines among other livestock vaccines. The other factor affecting productivity of the sector includes scarcity of livestock feeds. This is as a result of inadequate rainfalls in the area, persistent droughts, over-grazing and poor rangeland management practices which limit pasture growth.

Wajir lies on the north-eastern livestock trade route (Somalia, Wajir, Mandera, and Garissa) that supplies a large proportion of livestock to the terminal markets in Kenya (Nairobi, Mombasa and Coastal ranches). There are two main secondary markets in Wajir County: Habaswein and Wajir. The infrastructure in this two markets is relatively better developed than primary markets. Livestock received in Wajir and Habaswein markets come from primary markets within the county that operate on a daily basis. Most of the animals are sold in Nairobi, Mwingi, Thika and Garissa. However, others especially camels are taken to neighboring Countries such as Somalia and Ethiopia where they fetch good prices. However, there are a

number of factors affecting market activities including the poor state of roads in Wajir. These roads become impassable during rainy season since they are not tarmacked. The emergency of diseases like Rift Valley Fever also inhibits market activities since most of the slaughter houses are closed during this times. In addition, the emergence of COVID-19 has worsened the situation. Almost all markets have been closed during this pandemic so as to stop the spread of the disease. This has significantly reduced livestock trade in the county.

1.1 Relevant Regulations and Policies

1.1.1 Occupational Health and Safety Act 2007

The Occupational Health and Safety Act (OSHA) provide for the health, safety and welfare of persons employed, and all persons lawfully present at workplaces and related matters.

Part II of the Act clearly stipulates the duties of occupiers. Part IX particularly deals with chemical safety. In particular, section 83 Section 83 gives provisions for handling, transportation and disposal of chemicals and other substances; Section 84 gives provisions for material safety data sheet; Section 85 provides for proper labeling and marking of all chemical packaging; Section 86 advocates for classification of hazardous chemicals and substances. In addition, Section 89 provides for control of air pollution, noise and vibration. The provision of this Act and in particular the above quoted sections will be complied with during the vaccination exercise. All employee engaged in this exercise will be provided with PPEs so as to ensure their safety and health. Furthermore, the animals will be vaccinated in designated crushes so that they do not cause injuries or harm to the employees. All waste will be collected using appropriate waste receptacles, segregated according to their characteristics and property, clearly labelled, transported by a licensed transporter and disposed off in a designated disposal site such nearby dumpsites and/or Wajir County Referral Hospital incinerator or any other nearby incinerator of health facilities. There will be a monitoring team that will closely supervise compliance with these regulations.

1.1.2. Waste Management (EMCA) Regulations 2006

These Regulations define rules for the management of waste in general and for the management of solid waste, industrial waste, hazardous waste, pesticides and toxic substances, biomedical waste and radioactive substances in particular. Section II of the act clearly stipulates that no person shall dispose of any waste on a public highway, street, road,

recreational area or in any public place except in a designated waste receptacle. Section 2 further states that any person whose activities generate waste shall collect, segregate and dispose or cause to be disposed off such waste in the manner provided for under these Regulations. Section 33, 34 and 35 (part IV) further give provisions for classification, registration, labeling, packaging, advertising, distribution, storage, transportation, handling and disposal of pesticides. The project will indeed generate waste in different forms (hazardous and non-hazardous). These include used needles, empty vaccine bottles, bent needles, empty plastic containers and other waste from the vaccination team. In compliance with this regulation, the proponent (KCSAP Wajir) will ensure that this waste is collected, segregated into hazardous and non-hazardous waste and disposed off in a manner provided for in this regulation. Furthermore, all waste will be categorized and properly labelled. All non -hazardous waste will be disposed off in the nearest dumpsites while hazardous wastes that have been segregated will be incinerated in the nearest health facility. Where there are no nearby health facilities, the waste will be transported by a licensed transporter and incinerated in the incinerator of Wajir County Referral Hospital.

1.1.3. World Bank Operational policies

The project uses pesticide in a wide scale and this triggers World Bank's Operational Policy OP4.09 (Pest Management) which requires preparation of pest management plan. The policy supports safe, effective, and environmentally sound pest management which promotes use of biological and environmental control methods and reduces reliance on synthetic chemical pesticides. The policy aims at assisting proponents to manage pests that affect either agriculture or public health. It also triggers operational policy OP 4.01 Environmental assessment which dictates that all WB funded projects are environmentally and socially sound. In this exercise solid waste in form of empty vaccine bottle, used injection needles that can contaminate the environment will be generated. The specific impacts mentioned have mitigation measures that are captured in the PMP. Major players of the vaccination exercise including the county veterinary staff, NEMA representative, cold chain team, public health staff, county interior and waste disposal team will be sensitized on the PMP.

2.0 JUSTIFICATION.

Wajir County is faced with high livestock disease burden ranging from notifiable to Trans boundary animal diseases that are expensive to control and have high negative impact on the livelihoods of the pastoral community. Some of the important livestock diseases include: PPR, CCPP, SGP, Anthrax, Black quarter and Trypanosomiasis. The disease challenge is exacerbated by inadequate private veterinary practice and public veterinary personnel that serve the vast county with inadequate veterinary infrastructure. Livestock vaccination requires specialized cold chain infrastructure that can only be afforded by the public veterinary sector.

Global warming and intensive human activities have brought about climate change that subsequently led to recurrent drought, loss of livestock from drought, extensive migrations, and resource based conflicts, emerging and reemerging of both crop and livestock pest and diseases.

The county shares long international border with Somalia and Ethiopia that has weak livestock disease control system, the porous nature of the border facilitates livestock migrations in to the county resulting to sporadic outbreak of livestock diseases which degenerates into emergency situations and loss of livelihoods. Currently there are no cross border disease control programs with the Republic of Somalia

In a bid to control these diseases the county veterinary service has developed livestock disease control framework for Wajir County that prioritized livestock diseases through mapping and identification of hotspots. The development of the framework culminated in the development of common strategies for livestock disease control in Frontier Counties Development Council FCDC region which recognized the importance of common approaches to livestock disease control. The mapping of livestock diseases has taken participatory approaches, heavily relied on the pastoralist who have indigenous technical knowledge and are well-versed with the local context. It prioritized livestock diseases in sheep and goats, camel and cattle. For sheep and goats PPR, CCPP and SGP have been identified and ranked in that order, while cattle and camel Anthrax and Black quarter ranked high.

A disease like PPR has high morbidity and mortality rates (85%) and has the potential to clear the small stock population by a greater proportion. The total population of small stock is estimated to be 2,681,230 animals, in case where there is widespread PPR, the county is likely to lose livestock worth 10 Billion. Livestock diseases are also major inhibitors of functional livestock markets which earn the government a huge source of revenue. Quarantine and

restricted movement of livestock due to diseases disrupt the livelihoods and therefore contributing to high poverty index of the local community.

3.0 COVID-19 PANDEMIC AND LIVESTOCK VACCINATIONS

The first case of Coronavirus disease, COVID-19, was confirmed in Kenya on 12th March 2020. Since then, the COVID-19 National Emergency Response Committee, Ministry of Health, Ministry of Agriculture, Livestock, Fisheries and Cooperatives and various county governments have issued guidelines on public and individual behavior to manage the disease. On March 19th 2020, National Director of Veterinary Services issued a communique on delivery of veterinary services at such times of COVID-19 disease outbreak. His communication was based on the fact that veterinary services are essential in ensuring a continuum in food safety, disease prevention and animal emergency management. Accordingly, the measures he outlined were in line with the communique of the World Organization for Animal Health (OIE) and the World Veterinary Association (WVA) entitled “COVID-19 and veterinary activities designated as essential”. Among the areas addressed by the DVS included: Disease surveillance; prioritize animal movement control; animal markets and other gatherings; slaughterhouses and meat market. About vaccination of animals in large groups, the DVS advised that vaccinators must wear Personal Protective Equipment (PPEs) including a face mask and gloves since they would be meeting many livestock producers from diverse locations. Where possible, inform livestock producers to present animals individually at vaccination sites and observe personal hygiene and social distancing during the exercise. To adhere to all these guidelines, the personnel involved in the vaccination process will be sensitized and provided with PPEs, sanitizers and proper transport. The project will ensure these protocols are adhered to. Social distancing, use of PPEs by the vaccination teams (including animal handlers), handwashing and proper sensitization of communities about COVID-19 will be done. This will be carried out in collaboration the Public Health department and the COVID-19 Control committees at Sub-County and Ward levels.

4.0 VACCINATION PROCESS

4.1 Mobilization, surveillance and sensitization

The vaccination exercise will take place in the six sub counties of Wajir as shown below.

Table 1: Targeted Ward

S/NO	SUB COUNTY NAME	TARGATED WARDS
1.	WAJIR NORTH	Bute, Korondille, Malkagufu, Batalow, Danaba, Gurar, Godoma
2.	TARBAJ	Wargadud, Elben, Tarbaj, and Sarmaan
3.	WAJIR EAST	Khorof harar
4.	WAJIR SOUTH	Diif, Burder, Banane, ibrahim Ure, Lagbogol South, Dadajabula, Habaswein
5.	ELDAS	Basir, Eldas, Della, Elnur
6.	WAJIR WEST	Arbajahan, Hadado, Ganyure/Wagalla, Adamasajida

To ensure wider coverage of livestock during vaccination campaigns, adequate prior mobilization and sensitization is paramount. These will be done by technical staff from the department of veterinary and CPCU Wajir in collaboration with the local community leaders. The community will be mobilized using radio announcements, text messages, posters and telephone calls. Mobilization and sensitization will also be done through radio messages in local languages. The team will visit each and every sub county and meet with the Sub County Administrators, Ward Administrators, chiefs and assistant chiefs, religious leaders, respected elders, women and youth leaders, and targeted beneficiary members so as to create awareness. During this meeting, strict adherence to ministry of health guideline on containment of covid-19 will be followed. This includes; wearing of face mask, keeping of 2-meter social distance and regular hand sanitization. The attendees will not be more than ten persons. The county public health officer will also accompany the team so as to check temperatures of attendee as well as sensitizing the participants on the dangers of covid-19. During this meetings, the most vulnerable and marginalized members of the community will be identified and registered so that they can be given priority during the vaccination exercise. Furthermore Community members will appoint a team consisting of both genders and including VMGs that will work with social accountability and integrity committee (SAIC) who are part of the PMCs of the sub project together with the team leaders and the area chiefs to deal with complains/grievances. All complains will be logged in the grievance log registers for purposes of documentation and learning. Any grievance that cannot be resolved will be escalated to the county grievance

committee. The county leadership headed by the Governor, county secretary, County Executive Committee Member (CECM) for Department of Agriculture, Livestock And Fisheries (DALF), County Chief Officer (CCOs) Department of Agriculture, Livestock And Fisheries (DALF), Chair Departmental Committee of the department of Agriculture livestock and Fisheries in County assembly, Area Member of Parliament (MP)s, Sub county and Ward administrators will all be mobilized so that they can be present during the flagging off of the sub project. Communities will also be sensitized of the risks associated with the project such as injuries, accidents, pollution as well as vaccine reaction during the mobilization. Mobilization will be followed by a pre surveillance exercise so as to obtain accurate data of the hotspots of these diseases.

Table 2: Stakeholder Mapping

STAKEHOLDER	ROLES
Beneficiary community	<ul style="list-style-type: none"> • Participate in the vaccination exercise by bringing their animals to the vaccination area • Construct and repair crushes • Comply with the ministry of health guidelines in containing the spread of COVID-19 disease
NGAO (Chiefs / Assistant	<ul style="list-style-type: none"> • Participate in publicity and mobilization exercise • Participate in the monitoring of the vaccination exercise
Security personnel	<ul style="list-style-type: none"> • Ensure security of the vaccination team • Assist in relaying information regarding the status of security when called upon • Ensure law and order is maintained during conflicts • Assist in the implantation of covid -19 containment measure
DALF	<ul style="list-style-type: none"> • Provide technical teams to undertake the vaccination exercise • Participate the procurement and collection of vaccines • Prepare the work plan for vaccination exercise • Undertake the vaccination exercise • Ensure vaccine cold chain is maintained • Participate the monitoring of the exercise • Prepare reports of the overall vaccination exercise • Provide means of transport for the exercise
KCSAP/CPCU	<ul style="list-style-type: none"> • Coordination of the sub project activities • Participate in the procurement and collection of vaccines • Ensure safeguard issues are taken care of in the implementation process • Monitoring the implementation process • -Reporting

	<ul style="list-style-type: none"> • Prepare the PMP for the sub project
NEMA	<ul style="list-style-type: none"> • Ensure Environmental safety during implementation process of the sub project • Supervise collection and safe disposal of waste • Reporting
PMC	<ul style="list-style-type: none"> • Participate during mobilization and flagging off the project • Receive and handle all complains during the implementation of the project • Participate in the monitoring of the progress of the project

4.2 Procurement of Vaccines and other equipment

This will be the responsibility of the veterinary directorate. The CDVS will initiate the procurement process with guidance from the CPCU. 250,000 doses PPR, 350,000 doses of SGP, 300,000 doses of CCPP and 50,000 doses of BQ/Anthrax will be procured. In addition, the following items will also be procured:

Table 3: Vaccine and other equipment to be procured

Item	Quantity
Vaccines	
PPR Vaccine	420,000 doses
SGP vaccine	350,000 doses
CCPP Vaccine	360,000 doses
BQ/ANTHRAX Vaccine	55,500 doses
Dewormers and other drugs	
Albendazole 10% 1litre	2496 lts
Tylosin	308 ml
Oytetrycycline LA 20%	234 ml
Penstrip	208 ml
Multivitamin	291 ml
Equipment	

Chest freezer- capacity 446L	1pc
Refrigerator –total volume 263	3pcs
Disposable Syringes 20ml	1500 pcs
Disposable Needles G18	1500 pcs
PROTECTIVE GEAR(OVERALL)	40 pcs
DUST COAT WITH CAP	40 pcs
Automatic syringes- 50 ml german	30 pcs
Barrels 50ml	30 pcs
Hypodermic needles 14 ½ doz	2160 pcs
Hypodermic needles 16 ½ doz	2160 pcs
Spare repair kits	15 pcs
cool box medium	18 pcs
Large cool box	2 pcs
Livestock markers	324 pcs
Dust mask	6 boxes
Gumboots	40 pcs
Alcohol based hand sanitizers	21 bottles
Bar soaps – 1 kg	20 pcs
Waste receptacles (clearly labelled polythene paper)	10 bundles
Face mask	50 boxes
Surgical gloves	3000 no
Temperature monitors	8 no
Improvised water dispensers	6 (for the 6 teams)
First aid kit	12 (2 for @team)

4.3 logistics and Cold Chain Management

The vaccines will be collected from KEVEVAPI where they have been procured by a lean team comprising of the County Director of Veterinary Service, County Project Procurement Assistant from CPCU Wajir and two drivers. Two well-maintained vehicles with motorized cool boxes will be assembled to transport the vaccines. Furthermore, the vehicles will be branded with biohazard stickers so as to avoid traffic inconveniences. During the collection, the officers will verify the status of the vaccines including; packaging, labeling, expiry dates among other vaccines attributes. Vaccine collection sheet (Annex 1) will be filled and photographs taken for purpose of documenting the process. Temperature monitor will be activated on collection and once inside the cool box. The CCPP vaccine should not be frozen but rather stored or transported in a refrigerator with temperatures of +40 C. Under this condition the shelf life of the vaccine is one year. As for the SGP and PPR vaccines, the recommended storage temperature is at -200C (freezer) so as to have a shelf life of 2 years. However, if stored at temperatures of between +20C and +80C the shelf life reduces to one month. Likewise, the Blanthrax vaccine for BQ/Anthrax disease, the recommended storage temperatures are between 20C and 80C. However, it should not be frozen and kept away from light. All these indications are captured in the material safety data sheets that are accompanying the vaccines and therefore the team spearheaded by the experienced veterinary Director will have a close look and ensure the right temperatures are kept for each vaccine during transportation of the vaccines.

Once in Wajir, the vaccines will be received at the local veterinary store by the store manager who will check, verify and store the vaccines accordingly. The delivery documents will need to be signed and entered into the stores ledger book. The best cold chain management Practices will be adhered to during storage.

A team comprising of seven (7) staff, spearheaded by the store manager, County Project Administrative Assistant from CPCU Wajir, two support staff (women) from veterinary department, two drivers and 2 designated vehicles will be in-charge of cold chain management and distribution of additional ice blocks. The team will be supervised by the CDVS. Temperature monitors will be used on cooler boxes and freezers to ensure that recommended temperatures are maintained during transportation and storage of the vaccines.

4.4 Briefing for vaccination campaign

Before rolling out the vaccination exercise, the CPCU will hold a one (1) day intensive activity to brief the teams participating on environmental and social safeguards issues to be adhered to during the vaccination exercise. The briefing will also entail discussion on documentation, vaccination targets, and daily records among others.

4.5 Vaccination Exercise

The vaccination team composition will comprise of a team leader from CDVS, veterinary officer (VO) livestock health officer (LHO), Animal health technician, SAIC and a driver. Depending on the funds available and the number of vaccines and treatments to be delivered and be assisted by the community disease reporters (CDR).

4.6 Criteria of selecting Vaccination sites

The following criteria will be used to select the site:

- Pre surveillance report
- Population of animals
- Gather intelligence on outbreaks on the site
- Safety on the team and the animals

In high insecurity areas the teams will brief the respective security personnel in the area.

4.7 Vaccinators

The project will ensure that the vaccinators are registered with Kenya Veterinary Board and other relevant professional body. They will undergo a sensitization of Environmental and Social Safeguards and the World Bank Operational Policies by the county environmental and social safeguard compliance officer from KCSAP Wajir. The vaccinators are required to be physically fit and morally upright so as to stay with the community they work for. These vaccinators are the technical from the Livestock sector Wajir County.

4.8 Waste and disposal management.

A team comprising of veterinary officers, County Public Health Officer, CPCU member and NEMA will be in-charge of waste and disposal of hazardous wastes. Waste that are expected from the exercise include; Syringes and used needles, empty vaccine bottles, gloves, face masks, empty plastic water containers, food remains, among others. This 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. All non-hazardous waste will be disposed of in Wajir county dumpsite, while the hazardous waste will have disposed in incinerators of any nearby health facility. Where there are no nearby health facilities, the waste will be transported by a licensed transporter and will be disposed of in Wajir county Referral Hospital incinerator.

4.9 Reporting

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

Table 4: Reports to be generated

Report	Responsible
1. Vaccine procurement and collection report	CDVS/CPC/PROCUREMENT OFFICER
2. Vaccination Publicity report	CDVS/SCVO/M&E KCSAP
3. Cold chain Management	CDVS
4. Daily vaccination reporting	CDVS/SCVO
5. Vaccination Monitoring report	CDVS/M&E KCSAP
6. Safeguards report	CESSCO/CDVS
7. Vaccination waste Disposal report	CDVS/CESSCO/NEMA
8. Overall vaccination report	CDVS
9. Knowledge management	M & E
10. COVID-19 containment report	CDPH

During reporting, the following information will be included in the reports:

- List of participants during the consultative meetings (annex 2)
- Copy of livestock vaccination manifest detailing the sub county, ward, site, number of animals vaccinated and the beneficiary (annex 3)
- Photographs during the exercise

4.10 Grievance and redress committee

All grievances will be handled by the Social Accountability and Integrity Committee (SAIC) with the help of a smaller committee from the community at the beneficiary level. The committee from the community will comprise of three Community elders (one male, one female and one youth), the area chief and his assistant, the ward administrator and vaccination supervisor. The committee will ensure that complains are promptly reviewed and addressed at the beneficiary level. Any grievance that cannot be resolved at that level will be escalated to the next level of grievance redress committee at the county level. The committee will ensure that the aggrieved persons are brought to the knowledge of the project, vaccination planning and area of coverage.

4.11 Supervision and monitoring teams

The vaccination exercise will be supervised and closely monitored by a team composed of the CECM, Chief Officers, CPCU, CDVS and members of the Project Management Committee. The team will oversee implementation at community level by visiting teams and meeting with the community committees formed to oversee the exercise. The team will address technical, environmental, social and welfare issues during the visit

5.0 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

5.1 Positive impacts of vaccination

Vaccination improves animal health hence improved productivity. This will lead to increased availability and accessibility of livestock products; milk and meat which will enhance household nutrition and increased household income through sale of livestock and livestock products e.g. meat and milk. Vaccination will also ensure access and stability of markets. PPR, SGP, CCPP and BQ/ANTHRAX are notifiable and trans-boundary diseases and therefore their occurrence calls for imposing of quarantine as a measure to contain the diseases and avoid their spread to other regions. This disruption, leads to reduced income as farmers cannot access market for their livestock and livestock products. Vaccination also leads to reduced cost of production as farmers will not spend money on disease treatment which is a threat in absence of vaccination. This will lead to increased investment in agriculture as farmers will plough back the profit accrued leading to increased agricultural productivity.

5.2 Negative impacts

- **Impacts on health and safety**

The exercise has the potential to cause accidents and injuries to vaccinators and animal handlers. Injuries can also happen to the animals themselves especially during handling. Accidental self-jabbing can also occur. Accidental snake and scorpion bite are also some of the potential health impacts of the exercise.

Congregation of people during vaccination can also bring about spread of this deadly Covid-19. Local community members can also consume or even sell the milk and meat of the vaccinated animals before the waiting period elapses thus endangering their lives and that of the consumers.

These impacts will be mitigated by providing PPEs to all who are undertaking the exercise so as to avoid accidental self-jabbing and snake bites. Animals will also be vaccinated in crushes so as to avoid/minimize injuries during handling. People will also be sensitized on the dangers of the vaccines and the importance of observing the waiting period during the mobilization and sensitization of the exercise.

- **Solid waste**

Vaccination team sometimes throw or leave all waste around and within vaccination site that may be picked by livestock owners, passersby and children unaware of the danger posed by such waste. The disposal team will ensure that waste collected at the vaccination sites are sorted out, grouped and effectively disposed according to waste disposal regulations.

- **Air pollution**

Pollution arise from movement of livestock on bare soils especially when they are many. It also arises when vaccination is not done in the designated crushes more so during handling.

This will be mitigated by allowing small sizes of herds at point of vaccination. Vaccination of animal should also be done in well-established crushes.

- **Social risk**

The exercise can bring conflict among the beneficiaries. These clashes can happen when different beneficiaries meet with their livestock at the vaccination point at the same time. There will be competition of who is to be served first. Members of some marginalized communities may fail to avail their animals for the vaccination.

. Social and/or professional misconduct by the vaccination team, handling of grievances/complaints arising out of the vaccination are some of the social risks foreseen with this sub project. Proper publicity and mobilization of the community to agree on dates and sites of vaccination will be undertaken. In place as county grievances redress committee to handle complaints/ grievances received from communities before, during and after vaccination campaign

This can be mitigated by undertaking the vaccination exercise in the respective Manyatta at a stipulated time. This can be achieved by first mapping the areas where the exercise will take place. Use of GRM team to deal with grievance before they scale upwards

Spread of COVID-19 may increase during the vaccination exercise as farmers, herders, vaccinators, drivers, health officers and other staff monitoring the exercise congregate at the vaccination site. This will be mitigated by:

- Starting the vaccination exercise early enough in the morning so that there is no building up of large herds of animals or crowds of people.
- Strictly following the guidelines of the ministry of health of social distancing, wearing of face masks, washing hands with running water and soap or use of alcohol based sanitizer.

Table 5: Pest Management Plan

	Impact issue/Risk	Mitigation	Required resources/ materials	Indicators	Cost	Responsible person
A	AT PROCUREMENT					
A1	Unnecessary delays at the collection point	Prior arrangement with personnel at point of issue	1) Airtime 2) Fuel 3) DSA for officers, fuel and vehicle maintenance	1) no of phone calls made 2) No of SMS sent	167,400	Chief officer & CDVS
A2	Failure of accountability on the receipt of vaccines	Enter the vaccines in the vaccines ledger	1) S12 2) S13 3) Trainings conducted 4) Vaccines ledger entries	1) No of vaccines entered into the ledger		Vet store Manager
A3	Expired/ short expiry vaccines/Less No. of doses	Check on expiry dates before packing and collection	1) Airtime for communication 2) Telephone contacts of these personnel 3) Labor for offloading 4) Personal protective Clothing	- No of properly packed vaccines - No of non- expired vaccines - No of personnel trained on checking the vaccines		CDVS
A4	Biosafety of transit Team/Exposure due to Spillage	1) Guidelines for emergency action upon exposure to the vaccines (antidote) 2) Provision of first aid kits 3) Provision of antidotes for field emergency use. 4) Provision of Personal protective clothing to the VO, Driver 5) Receptacles for disposal 6) Insurance of Personnel	1) PPEs 2) Receptacles for waste disposal 3) Antidotes 4) Insurance	- No of PPEs bought and worn - No of first aid kits used - No of wastes disposed - No of antidotes used		CO/ CDVS

A5	Spread of COVID-19 by staff during procurement and transportation of vaccines, and during publicity	-Provide double-cab vehicles carrying only two staff to ensure social distance, - staff and driver to wear face mask, -vehicle to be equipped with alcohol based sanitizer.	-Double-cab vehicles, -Face masks, -Alcohol based sanitizers. Temperature Guns	-No of Double Cab vehicles available, - No of face masks, soap and sanitizers procured, -Amount of clean running water availed, -No of people whose temperature is checked	50,000	CDVS
B	ON TRANSIT					
	Impact issue/Risk	Mitigation	Required Resources/ Materials	Indicators	Cost	Responsible person
B1	Vehicle breakdown	1) Authority letter from CO to drive outside working hours 2) Use of a serviceable vehicle in good condition. 3) Have alternative stand by Vehicle 4) Collaborative arrangement with health department for transport of vaccines like use of ambulances. 5) Use of designated drivers	1) Serviceable vehicle 2) Fuel 3) Competent driver 4) Having an alternative driver. 5) Alternative vehicle	a) Quantity of fuel used b) No of detail orders used c) Number of standby/ alternative vehicles a	20,000	Chief officer/CDVS

B2	Poor communication	Allocate enough air time while travelling from Wajir to Nairobi and back.	airtime	a) No of phone call/SMS sent	3000	Chief officer/CDVS
B3	Poor cold chain maintenance on Transit	1) Use of motorized cool boxes 2) Cold chain team that will be monitoring the temperatures 3) Sensitize on cold chain monitoring	1) Enough fuel 2) Temperature monitors 3) Cool boxes	a) Fuel consumption b) No of temperature monitors installed c) No of vehicles with motorized cool boxes	120,000	CDVS
B4	Inadequate staff at the Store to off load and count the vaccine	Staff mobilization in good time both casuals and regulars.	Lunches for the offloading and counting staff	a) No of off loaders given lunches	15,000	Chief officer/CDVS
B5	Biosafety of Transit Team/Exposure due to Spillage	1) Provision of Personal protective clothing to the storeman, off-loading staff 2) Provision of clean water at the store 3) Receptacles for disposal	1) PPEs 2) Receptacles for waste disposal 3) Subordinate staff responsible for cleanliness	a) No of vaccines broken/damaged b) No of PPEs issues c) No of waste receptacles availed	10,000	Chief officer/CDVS
C	IN CDVS COLD STORE					
	Impact issue/Risk	Mitigation	Monitoring Indicators	Means of Verification	Cost	Responsible person
C1	Poor cold chain maintenance on storage	1) Deep freezers and fridges. 2) Alternative source of power in case electricity fails e.g. Generators 3) Monitoring by the storekeeper. 4) Alternative storekeeper in case of absence. 5) Preparation of icepacks	1) Freezers and fridges 2) Icepacks 3) Generator	a) No of deep freezers and fridges bought b) No of generators availed for alternative power c) No of ice packs prepared	500,000	Chief officer/CDVS

C2	Inadequate storage Capacity	<ol style="list-style-type: none"> 1) Procurement of more freezers 2) Strengthen the sub county cold chain facilities 	<ol style="list-style-type: none"> 1) Finances to procure additional Freezers and fridges at the level of the Sub County. 	<ol style="list-style-type: none"> a) No of freezers and fridges bought 		Chief officer/CDVS
C3	Faulty deep freezer/ Fridges	<ol style="list-style-type: none"> 1) Frequent checks of the freezers and fridges 2) Have a back-up freezer 3) Wajir County Referral hospital(WCRH) fridges 	<ol style="list-style-type: none"> 1) A developed checklist 2) Funds for repairs 3) Air time to communicate to WCRH 	<ol style="list-style-type: none"> a) Amount of funds allocated for repair and maintenance b) No of calls made c) No of back up freezers 		CDVS
C4	Inadequate cold chain Materials	<ol style="list-style-type: none"> 1) Procure polythene enough tubing for making ice packs 2) Or alternatively dry ice. 	<ol style="list-style-type: none"> 1) Polythene tubing 2) Device/frozen Carbon dioxide 	<ol style="list-style-type: none"> a) No of polythene tubing bought 		Vet cold chain/store manager
C5	Inadequate monitoring of temperature	Regular monitoring of the temperature of the freezers Using a temperature tracking sheet and a thermometer	Temperature tracing sheet. Thermometer	<ol style="list-style-type: none"> a) No of functioning thermometer b) Temperature tracing data sheet 	100,000	Vet cold chain/store manager
C6	Fire incidences	Installation of fire extinguishers in the store. Train team on fire safety	<ol style="list-style-type: none"> 1) Training on fire safety 2) Fire extinguishers 	<ol style="list-style-type: none"> a) No training for firefighting b) No of fire extinguishers installed c) No of fire drills 		Chief Officer/CDVS
C7	Biosafety of Vaccination Team/Exposure due to Spillage	<ol style="list-style-type: none"> 1) Provision of Personal protective clothing to the Store man, 2) Provision of clean water at the store 3) Receptacles for disposal 	<ol style="list-style-type: none"> 1) PPEs 2) Storage Water Tank 3) Receptacles for waste disposal 	<ol style="list-style-type: none"> a) No of broken/damaged vaccines b) No of PPEs availed 		Chief Officer/CDVS

D TRANSIT TO THE VACCINATION SITE						
	Impact issue/Risk	Mitigation	Monitoring Indicators	Means of Verification	Cost	Responsible person
D1	Cold burns by ice packs as you collect vaccine from the refrigerator and packing in the cool box	Get proper protective gear (industrial gloves)	Industrial gloves	a) No of surgical gloves and other PPEs available	500,000	CDVS
D2	Picking of expired or leaking vaccines and diluents from the store when dates are not checked well	1) Verification; 2) Having a checklist to ensure the correct quantity and number of equipment are taken. 3) Keeping a vaccine stores list indicating dates of vaccine expiry	1) Checklist	a) No of checklists developed		Vet cold chain/store manager
D3	Forgetting some vaccination equipment and vaccines	Prepare checklist	A) Vaccines and drugs -vaccines -Diluents -antihistamines -antidote -Surgical spirit -plastic tubes for packing vaccines B) Vaccination equipment Needles (hypodermic) G14 and G16 -automatic syringes 50mls and 30mls -disposable syringes 20mls,10mls and 5mls -disposable needles G 18 11/2	a) no of vaccines doses, diluents, antihistamines, antidotes, surgical spirits and plastic tubing available	2,049,820	Vaccination team leaders
				b) no of vaccination equipment available		

			<ul style="list-style-type: none"> -cool boxes -forceps -cotton wool -Monitoring thermometer -ice packs -stickers -writing materials (pens/marker pens/note books) -Tool box -ice tubing for packing the vaccines -Glass barrels 			
D4	Vehicle breakdown	<ol style="list-style-type: none"> 1) Use of a serviceable vehicle in good condition. 2) Have alternative stand by Vehicle 3) Collaborative arrangement with health department for transport of vaccines. 	<ol style="list-style-type: none"> 1) Serviceable vehicle 2) Fuel 3) Competent driver 4) Having an alternative driver. 	<ol style="list-style-type: none"> a) DSA and fuel used b) No of detail orders requested 		CO/ CDVS
D5	Inadequate adherence to the protocol of acquisition of vaccines from the stores	All officers including VO should be sensitized on the need to follow the protocols	Memo produced to circulated to all relevant persons	<ol style="list-style-type: none"> a) No memos developed b) No of sensitizations conducted 		CO/ CDVS

D6	Breakdown of Cold Chain	1) Procure New Cool Boxes, Proper icepacks 2) Preparing of makeshift shade at Vaccination Sites 3) Mapping out Stakeholders who can support	1) New cool boxes	a) No. of new cool boxes procured		CDVS
D7	Biosafety of Vaccination Team/Exposure due to Spillage	1) Provision of Personal protective clothing to the vaccination team, 2) Receptacles for disposal	1) PPEs 2) Receptacles for waste disposal	a) No. of PPEs available b) No. of waste receptacles available		CO/CDVS
E	Actual Vaccination					
	Impact issue/Risk	Mitigation	Monitoring Indicators	Means Of Verification	Cost	Responsible person
E1	Lack of coordination of the program.	1) Pre vaccination meeting 2) Carrying Out Proper Publicity 3) Mapping Out Areas with Livestock in Advance 4) Proper Planning of Vaccination Schedule/Program 5) Quality crush pens to help in controlling the animals when vaccination.	1) Consulting Local Administration And Herdsmen 2) Consultation With Vaccination Team	a) No. of consultation meetings held b) No. of minutes written c) Number crushes repaired/ constructed		(CDVS) Vaccination team leaders
E2	Poor Quality Equipment which breaks during vaccination	Procuring Best Quality Equipment	1) Automatic Syringes, 2) Extra Glass Barrels, 3) Needles 4) Waste Receptacles	a) No. of automatic syringes, extra glass barrels and needles procured	349,260	CO – L/stock CDVS

E3	Misconduct/ Unethical behavior by officers	<ol style="list-style-type: none"> 1) Maintain high level 2) Discipline and observe professional ethics 3) Tough disciplinary measures to be instilled to the culprits 	<ol style="list-style-type: none"> 1) COR 2) Code of Ethics 	a) No. of show cause/warning letters written and served		CO – L/stock CDVS
E4	Failure to present animals for vaccination	<ol style="list-style-type: none"> 1) Proper and extensive Publicity 2) Consult with the community the convenient day 	<ol style="list-style-type: none"> 1) Vaccination program 2) use of all local languages for publicity 	<ol style="list-style-type: none"> a) no. of planning for vaccination program developed b) No. publicity campaigns through radios, posters, sms made. 	200,000	CO – L/stock CDVS Local leaders (chiefs)
E5			<ol style="list-style-type: none"> 3) Engage the locals and area political leaders in publicity. 4) Use the media (TV, Radio, Newspapers) 5) -posters 6) –public address 7) -Banners 			
E6	Injuries and exposures to the hazardous chemicals. These include the physical injuries to the personnel, farmers and animals.	<ol style="list-style-type: none"> 1) Procuring of Protective Gear and Antidotes 2) Establishing good crushes 	Gum Boots, Caps, Face Masks, Overalls, Gloves	a) No. of PPEs bought	258,400	CDVS CO- L/stock

E7	Snake/Spider/ Scorpion Bites And Stings	Procuring of Anti-venoms	1) Anti-venoms	a) No. of anti- venoms bought	5000	CO – L/stock CDVS
E8	Poor Restraint Of Livestock	1) Quality crush pens to help in controlling the animals during vaccination. 2) Establishing new Crushes and repairing of existing ones	Mobile crushes and Finances	a) No. of crushes repaired	100,000	CO – L/stock CDVS
E9	Indiscipline Cases such theft of drugs and general misconducts	1) Counseling to the team 2) Reprimanding the culprits 3) Replacing the culprits	Team Working	a) No. of indiscipline cases reported		CDVS Vaccination Team Leader

E10	Livestock in inaccessible areas	Camping Gear	1) Well maintained vehicles 2) fuel	a) no. of well-maintained vehicles available b) amount of fuel consumed	25,000	CO/CDVS
E11	Poor communication network coverage	1) Provide Satellite Phones 2) Publicity 3) Local FM Stations	1) Airtime 2) PAS 3) Posters 4) DSA	a) No. of phone calls b) No. of posters displayed c) No. of talk shows made	10,000	CO/ CDVS
E12	Sick animals brought for Vaccination	Procuring Support Treatment Drugs	Finance to procure support drugs i.e. albendazole, multivitams, oxytetracyclin, penstrep, tylosin	a) No. of supportive drugs procured	2,443,200	CO/ CDVS

E13	Vaccine Wastage	<ul style="list-style-type: none"> 1) Estimate the numbers of Livestock per site during publicity 2) Reconstituting vaccine in small quantities 	Vaccine register	<ul style="list-style-type: none"> a) No. of vaccines procured b) Mobilization report 		TEAM LEADER/ CDVS
E14	Sick animals/ animals Reacting to vaccine.	<ul style="list-style-type: none"> 1) -Provide essential antibiotics 2) –Supportive therapy drug i.e.--multivitamin -Antidote -Alamycin spray -Antihistamine -Anti venom -Iodine -Cotton wool -Disposable syringes and needles 	Finances for procuring drugs	<ul style="list-style-type: none"> a) No. of supportive drugs procured 		CO- L/stock

E15	Pastoralists picking wastes (dewormer bottles) for their own use	<ul style="list-style-type: none"> a) Create awareness during publicity that all the wastes are hazardous and will be carried for proper disposal & accountability; b) waste disposal team will be assisting in collecting, segregating and 	DSA Waste receptacle	<ul style="list-style-type: none"> a) No. of waste receptacles available b) Waste disposal reports 		VACCINATION TEAM LEADER
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		disposing off all waste as per the waste management regulation				
E16	Injuries (a) to the technical officers during the vaccination exercise	PPE (personal Protective Equipment). Insurance cover for the Private practitioners	-Cap -Dust mask -Overall -Leather boots -Disposable gloves -Rain coat -Fully equipped first aid kit per team. -antidote	a) no. of PPEs procured b) no. of injuries reported		CDVS
	(b) Injuries to the animal handlers	Proper restrain animals Procure insurance cover for the Non GoK staff	-Proper constructed crushes -First aid kit -antidote	a) no of crushes constructed/repaired b) no of first aid kit & antidote procured c) no. of injury cases reported		CDVS
	(c) Injury to the Animals	1. Proper handling 2. Handle adult and young animals separately	-Aerosol sprays -Antibiotics - Cotton wool	a) no. of animal injuries reported b) no. of antibiotics procured and used		Vaccination Team leader
E17	Spread of Covid-19 during the actual vaccination process	-Provide water, soap, sanitizers and temperature guns. -All persons to wear masks, -Animals to be vaccinated as soon as they arrive at the site,	-Face Masks, -Alcohol based sanitizers, -Clean running water. -Soap -Temperature guns	-No of face masks, soap and sanitizers procured, -Amount of clean running water availed, -No of people whose temperature is checked	40,000	CPC, CDVS, Director Public Health

		-Check the temperature of all participating in the vaccination exercise each day.				
F	Post Vaccination					
	Impact issue/Risk	Mitigation	Monitoring Indicators	Means Of Verification	Cost	Responsible person
F1	Inadequate labeling especially of vaccines returned from the field,	Supervisors from the field should clearly inform the cold Chain manager of the vaccines ,the batch number 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	a) Vaccination report b) No. of unused vaccines with labels		Vaccination Supervisors / leaders

F2	Biosafety of Vaccination Team/Exposure due to Spillage	1) Provision of Personal protective clothing to the storeman, off-loading staff 2) Provision of clean water at the store 3) Receptacles for disposal	1) PPEs 2) Receptacles for waste disposal 3) Subordinate staff responsible for cleanliness	a) No. of PPEs available b) Volume of water provided c) No of waste receptacle		CO/CDVS
G	Disposal of Vet Waste					
	Impact issue/Risk	Mitigation	Monitoring Indicators	Means Of Verification	Cost	Responsible person

G1	<p>Environmental contamination / pollution</p> <ul style="list-style-type: none"> -misuse of the uncollected containers e.g. use for drinking water by children -breeding grounds for mosquitoes -can be refilled by unscrupulous people with other substances e.g. water and sodas counterfeits -can cause physical injuries to both human and animals e.g. broken glass vials, glass barrels, needles 	<ol style="list-style-type: none"> 1) Sharps immediately placed in bio-hazard containers or sharp receptors. 2) Receptors used to three-quarter full 3) All wastes at the vaccination sites to be collected in a proper manner so that they can be disposed off as per NEMA protocol 	<p>Provision of appropriate waste receptacle</p> <p>Licensed and accredited Incinerators- WCRH,</p> <ul style="list-style-type: none"> •Transport to disposal site <p>N/B-disposal fees- infectious waste per 1kg- 100ksh, Expired drugs and discarded drugs per 1kg- 200ksh Sharps- 200ksh per 1 safety box</p>	<p>a) No. of waste receptacles procured</p>	<p>20,000</p>	<p>CDVS</p>
	<ul style="list-style-type: none"> - plastics used as icepacks can be swallowed by children and animals -blockage of water ways and poisoning of aquatic ways in case of run off -needles, Disposable syringes and vials left can become a source of disease transmission. Sharps (vaccination needles, vacutainer needles, scalpel blades, broken glasses) 					
G2	<p>Environmental contamination and reuse by people</p>	<p>Segregation, collection, storage of infectious material</p>	<p>One plastic receptacle per day per</p>			<p>CDVS</p>

	from: Plastics Infectious e.g. vaccine vials, reconstitution syringes & other drugs vials	for Incineration	team			
G3	Consumed by animals causing intestinal obstructions:	Segregation, collection, storage of infectious material for Incineration	One plastic receptacle per day per team			CDVS
	Plastics Non-infectious e.g. water bottles, cartons, gloves, papers	Segregation, collection, storage of infectious material for Incineration	One plastic receptacle per day per team			CDVS
G4	Biosafety of Disposal Team/Exposure due to Spillage	1) Provision of Personal protective clothing to the store man, off-loading staff 2) Provision of clean water at the store 3) Receptacles for disposal	1) PPEs 2) Receptacles for waste disposal 3) Subordinate staff responsible for cleanliness			CDVS

Table 6: Implementation schedule

Activity	Scheduled time								
	November 2020			December 2020			January 2021		
Preparation of the pest management plan									
Holding planning meeting									
Procuring of vaccines and other equipment									
Pre-surveillance exercise									
Mobilization and sensitization exercise									
Vaccine collection from KEVEVAPI									
Actual vaccination									
Monitoring and backstopping									
Post surveillance exercise (M&E)									

6.0. CONCLUSION AND RECOMMENDATION

After subjecting the proposed project to screening, it's evident that minimal negative impacts that can easily be mitigated is anticipated. On the other hand, the positive impacts are socio-economic and contribute greatly towards increasing livestock productivity through disease controls, adaptation and resilience to climate change and reduced greenhouse gases. In addition, if the proponent and the community undertake the necessary measures to mitigate the few negative impacts as identified in this PMP, then there should be no reason to prevent the project from proceeding on as planned.

Annex 1: Vaccine collection checklist

a. Vaccine details

Date	Name of vaccine	Batch Number	Date of expiry	Packaging	Labelling
1					
2					

i. Vaccine issued by;

Name	Personal Number	Institution	Signature
1			
2			

ii. Vaccine collected by:

Name	Personal Number	Designation	Signature
1			
2			

B. Motor vehicle Details

Vehicle Registration:

.....

Annex2: Participants list

Activity Venue:

Team Leader Sign Date.....

No.	Name	P/No. or ID/No.	M/F	Community/ Organizations	Mobile Number	Thumb Print/ Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

Annex 3: Daily Forms

MINISTRY OF AGRICULTURE, LIVESTOCK & FISHERIES COUNTY GOVERNMENT OF WAJIR VETERINARY

DEPARTMENT

WAJIR COUNTY LIVESTOCK DISEASE CONTROL SUB PROJECT 2019/20

SUB COUNTY	Ward	Site	LIVESTOCK VACINATED								LIVETSOCK DE-WORMED		MALE BENEFICIARIES		Female beneficiaries
			PPR		CCPP		BQ/ANTHRAX		SHEEP & GOAT POX						
			Sheep	Goats	Sheep	Goat	Cattle	Camel	Sheep	Goat	Cattle	Goats	Sheep	Camels	