



PEACE, PROSPERITY AND
REGIONAL INTEGRATION



**INFORMATION SHARING PROTOCOL ON CROSS-BORDER
ANIMAL HEALTH AND SANITARY MEASURES IN THE
KARAMOJA CLUSTER
(KENYA, UGANDA, ETHIOPIA, SOUTH SUDAN)**

July 2024

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List of acronyms

ADNIS	Animal Disease Notification and Investigation System
ASAL	Arid and Semi-Arid Lands
CIDP	County Integrated Development Plan
CVO	Chief Veterinary Officer
IGAD	Inter-Governmental Authority on Development
IT	Information Technology
JSC	Joint Steering Committee
MOU	Memorandum of Understanding
MTC	Multidisciplinary Technical Committee
ODK	Open Data Kit
OIE	World Organization for Animal Health
SNNP	Southern Nations, Nationalities and Peoples
TADs	Transboundary Animal Diseases
WAHID	World Animal Health Information Database
WAHIS	World Animal Health Information System
WOAH	World Organization for Animal Health

1.0 Background

1.1 Livestock production in the IGAD region

The Karamoja cluster which comprises of the border areas of (Ethiopia, South Sudan, Uganda and Kenya) are members of the Intergovernmental Authority on Development (IGAD); the other members include Somalia, Sudan, Eritrea and Djibouti. Over 70% of the IGAD region is made up of Arid and Semi-Arid Lands (ASALs) which receive less than 600mm of rainfall annually. The IGAD region is home to over 532 million heads of livestock of which 360 million are ruminants (cattle, sheep, goats and camels) presenting a huge potential for wealth creation and economic progress. However, the region has a high degree of variability in rainfall patterns and is prone to recurrent droughts and dry spells making it one of the most vulnerable regions on the African continent. The productivity and production of the livestock sector and the livelihoods of the pastoral and agro-pastoral communities in the ASALs is limited by extreme climatic events such as the recurrent droughts and excessive rainfall and flooding associated with El Nino and the occurrence of a wide range of endemic and trans-boundary animal diseases (TADs) that easily spread across the national borders. Livestock mobility, an essential part of the way of life in a pastoral environment, is generally motivated by the need to access available grazing areas and water during dry spells and drought periods, the need to move from areas affected by disease or inter-ethnic conflict and banditry, and the need to access markets.

Various factors influence the spread, persistence and epidemiological profile of animal diseases and zoonoses, and the risks of pathogen circulation or introduction are increased by cross-border movements of animals and trade channels, legal or otherwise, for animals and animal products. The risk of epizootic diseases is strongly related to the increase in the frequency of cross-border movements of livestock, the inadequacy of border controls and health surveillance systems and the various conflict situations. The mobility of herders exposes their animals to new pathogens, while their animals may in turn be carrying other pathogens, thus creating a vicious circle of disease circulation. Sanitary constraints are a constant limitation to the development of the livestock sector. They relate to both animal health and to food safety. Sanitary measures designed to protect animal or human health or life within the whole territory or a zone of a Member Country from risks arising from the entry, establishment or spread of diseases, disease-

carrying organisms or disease-causing organisms as described in various chapters of the Terrestrial Code should be applied in a manner that is supported by epidemiological evidence.

A myriad of challenges impedes the prevention and control of TADs in cross-border areas. These challenges include poor enforcement of cross-border livestock movement control, presence of a wide range of TADs that stretch the limited capacity of the few veterinarians and veterinary paraprofessional (public and private) in ASALs, lack of guidelines for cooperation on animal disease management across the borders, internal and cross border conflicts, and circulation of the fake veterinary drugs.

The livestock production and productivity in the expansive ASALs is further constrained by a very weak animal diseases surveillance. Animal Disease Surveillance (Terrestrial Animal Health Code) is key to improving disease analysis, early warning and predicting disease emergence and spread. As a preventive measure, disease surveillance is aimed at reducing animal health-related risks and major consequences of disease outbreaks on food production and livelihoods. Early warning systems are dependent on the quality of animal disease information collected at all levels via effective surveillance; therefore, data gathering and sharing is essential to understand the dynamics of animal diseases in diverse agro-ecological settings to support effective decision-making to prevent disease and for emergency response. Since resources are always limited every effort should be made to use innovative surveillance tools that are inexpensive but effective in collecting animal health and sanitary information for cross-border sharing.

Informal cross-border livestock trade in the Karamoja cluster (between Ethiopia, Kenya, Uganda and South Sudan) has long operated in the pastoral areas and makes significant contribution to regional and national economies with almost no support from the governments. Communities living close to the Uganda Kenya-Ethiopia and South Sudan borders have long benefited from sharing natural resources and economic exchanges. However, occasional clan conflict over resources has caused a detrimental effect not only on natural resource sharing but also human life as well as trade.

The cross-border regions of the Karamoja cluster which include Southern Ethiopia, South-West, and Oromia regions of Ethiopia, Eastern Equatoria State (Kapoeta east and Budi counties) in South Sudan, Turkana and West Pokot counties in Kenya and the Karamoja Sub-region

(Moroto, Amudat, Napak, Kotido, Abim, Kaabong, Karenga, Nabilatuk, Nakapiripirit) in Uganda are pastoral and agro-pastoral ASAL areas along the Ethiopia-Kenya border (Figure 1).

Figure 3: Map of Karamoja cluster



1.2 Animal health information systems

In a world where there is extensive trade in animals and animal products, where both people and animals and animal products move long distances in a very short time, rapid detection of diseases (both existing and emerging) and dissemination of this information is needed to ensure that the risk of disease spread is minimised. The use of web-based animal health information systems now makes it possible to achieve almost instant dissemination of information, while increased communication and connectivity between individuals and organisations throughout the world means that there are now more sources of information on animal diseases than ever before. Animal health information systems are systems into which information and data relating to animal health and disease are gathered, collated and analysed into meaningful and useful forms which can then be used for disease monitoring, early warning or decision-making purposes.

Animal health information systems operate at different levels (national, regional and global) and their principal purpose, inputs and outputs vary depending upon the level at which they are used.

Where countries have a good surveillance system in place and detailed, accurate data is collected and collated into an animal health information system, useful results can be produced by that system. However, where surveillance and data gathering is weak, the benefits of an animal health information system are limited by the inadequate data it contains.

Information technologies now available to the global animal health community are revolutionizing the way animal disease data and information is collected, integrated, reported, analyzed, shared, and disseminated to stakeholders. These new technologies offer substantial opportunities for enhancing animal, public and ecosystem health across the globe. Harnessing existing and new technological advances in an effort to ensure timely and accurate disease information collection and dissemination will require resources, development of policy and standards, as well as training for individuals located throughout every level of veterinary services.

The notification of diseases may have a negative impact on the economic performance of a country (e.g., by causing loss of export markets or discouraging tourism). However, new information technologies and practices make it difficult for governments to hide occurrences of serious notifiable diseases. A country's credibility must be based on timely and accurate notification of diseases, and this also gives the respective government a much better position to contain a disease, as compared with the situation where it first has to defend a failure to comply with international obligations. Regaining credibility in the face of public knowledge of failure to meet international rules is a costly and time-consuming exercise and can be of the highest political risk for policy-makers. A transparent Veterinary Service, which undertakes prompt and accurate disease notification, builds credibility and trust between trading partners, which is one of the crucial elements for fair and safe trade in animals and animal products. Timely reporting enables early warning and preparedness and, if data are accurate, limited resources can then be redirected accordingly. However, the quality of information and the timely notification of any disease depend on the professionals who are responsible for communicating to the WOA. H.

2.0 Animal health information sharing Protocol for regions/counties across the Karamoja cluster

An information sharing protocol is a set of common rules binding on all the organizations involved in information sharing initiative. The protocol provides the procedures and guidelines for the information sharing initiative, the partner states and organizations that will be involved in the information sharing, the information to be shared and the basis for sharing. The protocol facilitates the lawful and secure sharing of information between partner agencies. It is not intended that this document be definitive or exhaustive, it is recognized that as policy develops and implementation arrangements mature, this protocol will need to be reviewed and amended in light of new information sharing requirements to ensure that it is ‘fit for purpose’.

2.1 Purpose of the Protocol

This document aims to provide the basis for an agreement between the cross-border counties and regions along the Karamoja cluster to facilitate and govern the efficient, effective and secure sharing of good quality information on animal health to strengthen planning and implementation of animal disease prevention and control measures within the cross-border ecosystem.

2.2 Scope of the Protocol

The information sharing Protocol:

- i. is developed within the framework of the MOU on cross-border cooperation on animal health and sanitary measures that exists within the Karamoja cluster;
- ii. applies to the sharing of animal health information between cross-border administrative units along the Karamoja cluster for better animal health management, natural resource management and trade in livestock and livestock products;
- iii. provides a framework within which information sharing can be encouraged and developed whilst being kept consistent with the legal framework of devolved and national Veterinary Services.
- iv. is primarily concerned with the sharing of information, which is the provision of information among the different parties in the Karamoja cluster for the receiving party to use but not to process.

- v. applies to all animal health information held by the local parties and any disease prevention and control planned for implementation in the cross-border administrative units.
- vi. is not legally binding on the parties but is to be used to set good practice, standards and expectations that the parties need to meet in sharing mutually beneficial information to improve cross-border animal health and trade in livestock and livestock products.
- vii. recognizes the national and international obligations for disease reporting nationally and internationally.
- viii. Monitor and evaluate for improvement of the information sharing protocol

2.3 General Principles of the Protocol

This Protocol derives its foundation from the multilateral Memorandum of Understanding (MOU) between Republic of Uganda, Republic of Kenya, Republic of South Sudan and the Federal Democratic Republic of Ethiopia on Cross-border animal health coordination (signed on 5th July 2019).

The principles of the MOU include.

- Mutual respect, understanding and recognition
- Legitimacy for which resources are allocated.
- Mutual transparency and accountability
- Flexibility and local adjustment
- Maintaining equity among partners

The MOU also recognizes that:

- i. Strong socio-cultural ties exist between the pastoral and agro-pastoral ethnic groups living within the Karamoja cluster that involve cross border grazing and trading in

livestock and livestock products who stand to benefit from improved cross border disease prevention and control.

- ii. Ethiopia, Uganda and Kenya have national animal disease surveillance systems that continue to be strengthened at the local level through use of mobile based technologies for capturing on-farm animal disease data and conveying it to national level for analysis and action planning; while South Sudan is planning to adapt this system
- iii. Animal owners have sufficient knowledge on animal disease syndromes that can be tapped into to improve disease reporting to animal health service providers including community-based disease reporters, Community Animal Health Workers, Animal Health Auxiliaries;
- iv. Respective countries send immediate notifications and follow-up reports to WOA/WHIS according to the Terrestrial Animal Health Code (Terrestrial Code);
- v. Respective countries send to WHIS six-monthly reports on the presence or absence of endemic WOA-listed diseases according to the Terrestrial Code.
- vi. CVOs of the four countries will work within the spirit of the MOU to fully support implementation of this Protocol by empowering the cross-border regions/counties to share real-time and other information on animal health and sanitary measures;
- vii. Cross border animal health coordinators will share animal health information in their jurisdiction according to this protocol.
- viii. The protocol will be monitored and reviewed to make it fit-for-purpose to serve the four countries better.

2.4 Legal and policy framework for sharing animal health information

This protocol is guided by relevant laws, policies, and practice. At all the times, the requirements to comply with national and international regulatory requirements is vital to the success of this information sharing protocol. The sharing of information recognizes international obligations of the WOA Member States, the national laws relating to animal diseases and the prevailing practice of information sharing along the livestock value chains and animal health service

providers. The Protocol aims to fill the gaps that currently exist in the national and international disease reporting systems by enhancing the sharing of real-time animal health information both between the participating administrative units and across the border areas of the Karamoja cluster.

The Protocol is guided by the following key statutes and documents:

- Proclamation No. 267/2002 - Animal Diseases Prevention and Control Proclamation, Ethiopia
- Animal Diseases Act (Chapter 364), Kenya
- Animal Diseases Act (CAP - 48), Uganda
- Animal Diseases Act of South Sudan (awaiting approval)
- Data protection laws of the parties
- WOAHA organic statute
- Terrestrial Animal Health Code – Terrestrial Code
- Multi-lateral MOU on cross border animal health coordination (signed on 5th July 2019)
- AU pastoral policy framework strategy 2.2 which supports mobility between within and between countries.
- Implementation framework for cross-border animal health and sanitary interventions to operationalize the multi-lateral MOU between Ethiopia, Kenya, Uganda and South Sudan.

The key provisions relating to disease reporting and sharing of animal health information are highlighted below:

2.4.1 Proclamation No. 267/2002 (ETHIOPIA)

A Proclamation to provide for the prevention and control of animal diseases.

The specific provisions that support sharing of animal health information include:

Article 3: Notification to be given upon outbreak of Animal Disease

- i. The custodian of an animal shall immediately notify verbally or in writing the occurrence of animal disease to the nearest veterinary animal health representative, administrative officer or animal health officer.
- ii. Every animal health professional, who in the course of his work or practice discovers the existence of a noticeable (notifiable) disease, shall forthwith report the matter to the nearest veterinary administration.
- iii. The animal health officer after being notified shall take steps as may be necessary for the purpose of ascertaining the existence of the said disease and on being satisfied that such disease exists, shall promptly make a report to the concerned veterinary administration.
- iv. The region so notified the occurrence of noticeable disease shall forthwith report to the Ministry.

Article 9: Exchange of Animal Health Information

iii) In order to prevent and control notifiable animal diseases, each regional government shall exchange necessary information with neighbouring regional governments and the Ministry.

The Proclamation makes provisions for disease reporting both vertically to higher authority and laterally to the neighbouring regions. The animal health information sharing protocol aims to expand the lateral sharing of real-time disease information with cross-border sub-counties and counties in Kenya.

2.4.2 Animal Diseases Act – Chapter 364 (KENYA)

An Act of Parliament to provide for matters relating to the diseases of animals. The specific provisions relating to animal health information include:

Article 4. Animals affected with notifiable disease

- (i) Every person having in his possession or charge an animal infected with a notifiable disease or suspected of being infected with a notifiable disease shall—

- (a) keep such animal tied up or enclosed in a boma or other enclosed place and kept separate from other animals not so infected or suspected of being infected; and
- (b) forthwith give notice of that fact to the nearest administrative officer or inspector, and for the purposes of this subsection any animal lawfully on a farm with the agreement of the owner or occupier shall be deemed to be in the possession or charge of the owner or occupier of such farm.
- (iv) An administrative officer or inspector shall, on being satisfied of the existence or suspected existence of a notifiable disease within his district, forthwith cause all owners or occupiers of farms and owners of stock in the neighborhood to be notified of the outbreak, and shall further inform the most senior veterinary officer in the adjoining district.

2.4.3 The Animal Diseases Act- Chapter ~~33~~ 48 (UGANDA)

Part II: Steps for Checking Disease

Section 2. Diseased animals to be separated and reported.

~~Any~~ A person having in his or her possession or charge any animal affected with disease or suspected of being affected with disease shall as soon as possible— (a) keep that animal separate from animals not so affected or suspected of being so affected; (b) cause that animal to be tied up or put in a kraal or other enclosed place; and (c) notify an administrative officer or veterinary officer or inspecting officer, whoever is the nearest, of the fact of the animal being affected or suspected of being affected.

Section 3. Report to be forwarded to Commissioner. A veterinary officer who is notified of any animal being affected or suspected of being affected by disease shall give such directions and take such steps as may be necessary for the purpose of ascertaining the existence and nature of the disease, and he or she shall on being satisfied that the disease exists forthwith immediately report to the e Commissioner of livestock and entomology.

Section 4. Farmers to be notified of outbreak. An administrative officer in charge of a district or area shall, on being satisfied as to the existence within his or her district or area of a disease affecting stock, forthwith immediately cause all owners and occupiers of farms and owners of stock in the neighborhood to be notified of the disease.

2.4.4 Animal Diseases Act (South Sudan- Awaiting Approval)

2.4.5 Multilateral Memorandum of Understanding to enhance cross-border cooperation and joint coordination on animal health and sanitary measures

The objective of the MOU is to enhance cross border Multilateral cooperation and joint coordination on agreed animal health issues and sanitary measures to improve community livelihoods and development. Some of the areas of cooperation include:

- The surveillance, prevention and control (vaccination, movement control) of TADs including disease reporting, information sharing and awareness creation for communities.
- Cross border networking among communities.

The cross-border cooperation on animal health and sanitary measures will be implemented in the border administrative areas of Nakapiripirit, Amudat, Nabilatuk, Moroto, Napak, Abim, Kotido, Kaabong and Karenga districts of Karamoja sub-region in Uganda, Budi and Kapoeta East Counties in South Sudan, Southern nations and nationalities in Ethiopia, and Turkana and West Pokot counties in Kenya.

This Protocol is implemented and monitored through management arrangements or governance structures set out by the Multilateral MOU of the parties in the Karamoja Cluster. The Parties will manage this Protocol through the following governance framework structure:

- i. Joint Steering Committee (JSC) appointed by the Parties and comprising of Chief Veterinary Officer (CVO), senior technical staff from the CVO's office and officers from the County/Regional States;
- ii. Multidisciplinary Technical Team (committee established by JSC) of officers from each of the Parties.
- iii. Cross-Border Animal Health Coordinator – appointed by the JSC for each country to coordinate implementation of various animal health and sanitary activities. The coordinator will work with communities, cross-border veterinary service units and other relevant stakeholders;

- iv. Veterinary Units at District/County/Woredas/subcounty level;
- v. Participating Communities and Community-based Organizations within the livestock sector.

The Chief Veterinary Officers in the four countries will be the lead authorities to ensure effective implementation of the Protocol. The Terms of Reference of the governance structure are defined in the report on Implementation Framework for Cross-Border Animal Health and Sanitary Interventions to Operationalize the multilateral MOU of the parties in the Karamoja cluster (2019).

The MOU is an expression of the Parties' mutual intentions to cooperate in the area of health and does not constitute any legal obligation on either Party. The endorsement of this Protocol by the four CVOs provides the necessary authority for cross-border sharing of animal health information and coordination of disease surveillance, prevention and control.

3.0 Cross-border Animal health information to be shared

This protocol recognizes that WOAHA Member Countries through WAHIS share animal health information of their territory through:

- Immediate notification (within 24 hours) whenever an important epidemiological event occurs in the animal population;
- Six-monthly reports that provide information on the presence or absence of diseases in the WOAHA list and the prevention and control measures applied.

The occurrence of several diseases in the WOAHA-list (notifiable animal diseases) among the parties in the Karamoja cluster and the uncontrolled movement of livestock within the cross-border ecosystem remain a major challenge in the protection of animal health in the region. To improve animal health and facilitate trade in livestock and livestock products through application of appropriate sanitary measures requires close collaboration and timely sharing of animal health information by the Parties. This protocol identifies the list of diseases (Annex 1) of major concern to the neighboring countries and defines the procedure and guidelines for sharing animal health information on the presence of the diseases and the sanitary measures being applied. The

animal health information shall be generated using appropriate surveillance tools as described elsewhere (references 1, 2, 3). Actors in the livestock value chain should be involved in disease reporting. The vaccination calendars for the member states are outlined in Annex 2.

3.1 Information to be shared

- Information on disease outbreaks indicating the location of the outbreak, the species affected, nature of the diagnosis (clinical, postmortem or laboratory confirmation), outbreak investigation report (see cross border disease reporting form, Annex 3);
- Outbreak investigation and surveillance results (risk-based surveillance);
- Anticipated cross border livestock movement (pattern, direction);
- Any restriction on movement of livestock e.g., quarantines measures;
- Information on requirement for movement e.g., movement permit;
- Vaccination plans or calendars, the number of animals to be vaccinated and the vaccine to be used.
- Change in local or national policy that is likely to affect sanitary measures in the cross-border areas;
- Information on counterfeit drugs that are circulating in the cross-border areas.
- Any other pertinent information on animal health.

3.2 When the information should be shared.

- In the case of disease outbreak, the information about the outbreak should be shared immediately the office gets a rumor or suspicion of occurrence of a disease. Follow up information should be shared after clinical diagnosis and finally after laboratory confirmation of the disease outbreak.
- Information on sanitary measures being applied or planned should be shared as soon as the decision to apply the measures has been made and or gazetted.

- In the absence of disease within the administrative unit, quarterly zero reports should be shared.

The protocol recognizes that several barriers to effective sharing of cross-border animal health information will arise from time to time. The barriers to effective sharing of information need to be carefully identified and resolved in a way that promotes confidence in the information being shared.

4.0 Methods used to share animal health information.

The sharing of information will always use the most expedient communication system to ensure complete transmission of information regardless of infrastructural challenges in the cross-border ecosystem. The animal health information shared should be reliable and accurate and communicated in a timely manner to allow the receiving party to respond and minimize any disease risks. An information sharing format is outlined in Annex 3. A Cross-Border Animal Health Coordinator will collect disease information from the respective Districts/Counties/Woredas or Sub-counties, compile it by completing the disease outbreak form and share it with the counterpart who will cascade the information to the users.

The preferred methods for sharing of animal health information include:

- Direct communication through phone calls, short message service and face to face in cases of outbreak
- Bi-annual narrative reports
- Email communication to share disease outbreak forms
- Alerts through mobile applications
- Rumor Registers
- Cross-border meetings to plan coordinated disease prevention and control interventions;
- Centralized Animal health information database

The cross-border meetings should be convened by the Cross-border Animal Health Coordinators and be attended by the District/County/Woreda and Sub- County veterinary officers, members of

the Multidisciplinary Technical Committee (MTC) and policy makers. The reports of the meetings should be communicated to the JSC.

To make the flow of information efficient and effective it is important that a new pathway is created that links the District/County/Woreda/Sub- County veterinary office to the Cross-Border Animal Health Coordinator who will receive animal health information from all the administrative units under his jurisdiction. The coordinator can also receive animal health information from the National Epidemiology Unit, the National and Regional Veterinary Laboratories and other regions that may be epidemiologically linked to the Districts/County/Woredas and Sub-counties. The office of the coordinator will provide the link between the respective national animal health information systems of the four countries.

The coordinator shall keep a log of all communication with his/her counterpart. Within each side of the border, the coordinator will facilitate the sharing of real-time animal health information between relevant administrative units in the Karamoja cluster (Figure 2).

The JSC will ensure that there is continuous political and financial support for the information sharing protocol. Furthermore, the JSC will support creation of awareness amongst the communities to ensure prompt reporting of disease outbreaks and also explore ways of motivating the community-based disease reporters or Animal Health service providers so that they remain active in disease reporting to the District/County/Woredas/Sub-counties and the national animal health information systems.



Figure 4: Cross-border sharing of animal health information (See Arrows)

5.0 Management of the protocol

This Protocol is enforced and monitored through management arrangements which define the responsibilities of the Parties and the committees established under the Multilateral MOU.

- i. The JSC appointed by the Parties and comprising of Chief Veterinary Officer (CVO), senior technical staff from the CVO's office and officers from the County/Regional States will undertake the following activities in support of the animal health information sharing protocol:
 - The CVOs will be the lead authorities to ensure effective implementation of the cross-border information sharing protocol and other cross-border initiatives;
 - Conduct evaluation and review of the information sharing protocol.
 - Appoint the MTC that will be chaired by the Cross-border Animal Health Coordinator.
 - Facilitate cross-border information sharing about disease situation including early warning.

- Facilitate institutional and policy support to the implementation of the information sharing protocol.

ii. Cross border Animal Health coordinators

- DVOs/CDVSs/SDGs/RAHDs appoints Cross-border Animal Health Coordinator who will work with communities, cross-border veterinary service units (District/County/Woredas and Sub-counties) who will compile and share real-time animal health information across the borders;

iii. The MTC will undertake the following activities to assist in implementation of the Protocol:

- Facilitate the participation of the cross-border communities in the implementation of this protocol (creation of awareness on the need for timely disease reporting to the community-based disease reporters or other animal health service providers;
- Support the Cross-border Animal Health Coordinator in the timely collection and sharing of animal disease outbreak and early warning information;
- Undertake synchronized cross-border disease surveillance and provide the reports to the coordinator;
- Coordinate controlled livestock movements and application of appropriate sanitary measures.

Cross-Border Animal Health Coordinator – appointed by the JSC for each country to coordinate implementation of various animal health and sanitary activities will chair the MTC. The coordinator will work with communities, cross-border veterinary service units and other relevant stakeholders. The Cross-border animal health coordinators will gather and compile animal health information from their jurisdictions and share it with their counterparts in a way that captures relevant epidemiological data.

6.0 Sustainability of the Protocol

Without good veterinary governance, countries cannot sustainably deliver effective veterinary services and improve the animal health and information systems (AHISs) required for effective disease monitoring, surveillance and control. Considering that livestock move freely within the Karamoja ecosystem, every effort should be made to ensure that adequate support to implement the protocol sustainably is provided. The rolling out of the information sharing protocol requires financial, technical and political support for:

- acquiring the necessary technologies for data gathering, analysis and sharing,
- training of key actors on collection and transmission of disease data.
- creation of awareness amongst local communities on disease recognition and reporting.
- facilitating the Cross-border Animal Health Coordinators to discharge the information sharing mandate.
- providing incentives (such as mobile phones and airtime) for the community-based disease reporters.
- Providing feedback to animal owners on the benefits accruing from timely disease reporting and adherence to sanitary measures.
- quarterly cross-border meetings convened by the coordinator.
- bi-annual meetings of the JSC to review the Protocol.

The successful implementation of the Protocol will depend on national and regional support. One option is to integrate the implementation of this Protocol in the District/County/ Woredas and Sub-counties Integrated Development Plan (CIDP) to guarantee funding. A similar approach can be used on all sides of the parties in the Karamoja cluster to ensure sustainability. For this approach to be successful, a strong political support is needed and the JSC that has a major link to the national government and the devolved governments has a critical role to play.

7.0 Monitoring and evaluation of this Information Sharing Protocol

The implementation of this Protocol will be closely monitored by the MTC chaired by the Cross-Border Animal Health Coordinator to see if information sharing is timely and find out in good time what modifications need to be made. The MTC should develop appropriate tools for monitoring the protocol implementation. A bi-annual review exercise will be conducted by the JSC that will evaluate the relevance, effectiveness and efficiency of the animal health information sharing protocol and make recommendations for its modification as necessary.

8.0 Road map for implementation of the protocol

The roll out of the Protocol after validation will require some key steps to be very well coordinated. A road-map for Protocol development and implementation is as shown Annex 5.

9.0 Entry into force, duration and termination of the Animal Health Information Sharing Protocol

- i. This Protocol shall enter into force upon signature by the Chief Veterinary Officers of the four countries.
- ii. The Protocol shall remain in force for a period of five years from the date of its entry into force and shall be automatically renewed for successive five-year periods.

IN WITNESS WHEREOF, the undersigned being duly authorized by Multilateral MOU on Cross Border Cooperation on Animal Health and Sanitary Measures signed between the Four Countries (Ethiopia, Kenya, South Sudan and Uganda) have signed this Protocol in Four originals, in the English language, all texts being equally authentic.

Signed on this date:

Signed:	Signed:
DR FIKRU REGASSA;	DR AZEGELE ALLAN
CHIEF VETERINARY OFFICER	CHIEF VETERINARY OFFICER
FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	REPUBLIC OF KENYA
Signed:	Signed:
DR AGOL M. KWAI	DR ANNA ROSE OKURUT ADEMUN
CHIEF VETERINARY OFFICER	CHIEF VETERINARY OFFICER
REPUBLIC OF SOUTH SUDAN	REPUBLIC OF UGANDA

Annex 1: List of priority animal diseases in the Karamoja cluster

KENYA	ETHIOPIA	Uganda	South Sudan
Contagious caprine pleuropneumonia (CCPP)	Contagious caprine pleuropneumonia (CCPP)	Contagious caprine pleuropneumonia (CCPP)	Contagious caprine pleuropneumonia (CCPP)
Peste des petits ruminants (PPR)	Peste des petits ruminants (PPR)	Peste des petits ruminants (PPR)	Peste des petits ruminants (PPR)
Sheep and goat pox (S&GP)	Sheep and goat pox (S&GP)	Sheep and goat pox (S&GP)	Sheep and goat pox (S&GP)
Contagious bovine pleuropneumonia (CBPP)	Contagious bovine pleuropneumonia (CBPP)	Contagious bovine pleuropneumonia (CBPP)	Contagious bovine pleuropneumonia (CBPP)
Trypanosomiasis	Trypanosomiasis	Trypanosomiasis	Trypanosomiasis
Haemorrhagic septicaemia	Haemorrhagic septicaemia	Helminthosis	Haemorrhagic septicaemia
Black quarter (Blackleg)	Blackleg	Black quarter	Black Quarter
Brucellosis		Brucellosis	
Foot and mouth disease (FMD)	Foot and Mouth Disease (FMD)	Foot and Mouth Disease (FMD)	FMD
	Anthrax		Anthrax
	Mange	Mange	Brucellosis
Camel pox		Camel Pox	
Enterotoxaemia			Enterotoxemias
TBDs (ECF, Anaplasmosis, Babesiosis, Cowdriosis)		TBDs (ECF, Anaplasmosis, Babesiosis, Cowdriosis)	TBDs (ECF, Anaplasmosis, Babesiosis, Cowdriosis)
Rabies	<i>Rabies</i>	<i>Rabies</i>	<i>Rabies</i>
		<i>Bovine TB,</i>	
	<i>LSD</i>	<i>LSD</i>	<i>LSD</i>
Contagious ecthyma (orf)		<i>Contagious Ecthyma (orf)</i>	
Rift Valley fever (RVF)			RVF
		<i>Besnoitiosis</i>	

Note 1: CCPP, PPR, SGP, LSD, and CBPP are notifiable diseases through ADNIS.
 Note 2: The lists show priority diseases per country which goes beyond notifiable diseases and TADs.

Annex 2: Vaccination calendar for the Karamoja cluster member countries

Seasons	Dry			Wet						Dry				Kenya	
	Dry			Wet						Dry				South Sudan	
	Dry			Rainy Season		Dry	Wet			Dry				Uganda	
						Dry			Little rain		Dry				Ethiopia
Diseases	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
CCPP	Yellow	Yellow	Yellow			Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue		Kenya	Yellow
				Green	Green									Ethiopia	Green
	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey		Uganda	Grey
	Blue	Blue	Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	South Sudan	Blue
PPR	Yellow	Yellow	Yellow			Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue		Kenya	
	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		Ethiopia	
				Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey		Uganda	
	Blue	Blue	Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	South Sudan	
SGP						Yellow	Yellow	Yellow						Kenya	
				Green	Green									Ethiopia	
	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey		Uganda	
						Blue	Blue	Blue						South Sudan	
Anthrax														Kenya	
														Ethiopia	
														Uganda	
						Blue	Blue							South Sudan	
Black Quarter			Yellow	Yellow	Light Blue									Kenya	
						Grey	Grey							Ethiopia	
			Green	Green							Green	Green		Uganda	
	Blue	Blue	Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	South Sudan	
LSD						Yellow	Yellow							Kenya	
			Green	Green										Ethiopia	
			Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey		Uganda	
	Blue	Blue	Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	South Sudan	
CBPP												Yellow	Yellow	Kenya	
				Green	Green									Ethiopia	
			Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey		Uganda	
	Blue	Blue	Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	South Sudan	
FMD			Yellow	Yellow	Yellow			Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Kenya	
														Ethiopia	Not for free

Vectors		Other		
Contact with wild species				
Unknown or inconclusive				

Annex 4: Disease surveillance and animal health information sharing in the Karamoja cluster.

Status of collection of animal health information at the border districts, counties or regions.

- Data collection tools are generally inadequate.
- The little data available is not being shared formally among member states
- Owing to limited resources in terms of personnel, infrastructure and finances animal health information sharing across the border districts of the Karamoja cluster is mainly crisis driven.
- There is no centralized database.
- South Sudan does not have a mobile data collection and analysis system.
- There is no uniform data collection tool thus making harmonization of information difficult.

For effective control of priority diseases and to augment the livestock production in the Karamoja cluster, critical information on Animal Health and Sanitary measures will be shared among partner states as outlined below.

Animal Health information	Sanitary Measures
Disease outbreaks	Risk analysis data/risk hotspots
Disease outbreak investigation results	Vaccination data
Migratory routes/transhumance protocols	Biosecurity measures
Vaccination calendars, Vaccination reports	Quarantine and inspection facilities
Livestock population (est)	Lab facilities and capacity
Emerging and re-emerging diseases	Holding grounds
Research findings	Animal check points
Intervention options	procedural and institutional frameworks
Meteorological information, (rangeland information, weather forecasting etc....)	Legal frameworks
Animal health facilities	

References

1. Animal health surveillance, Terrestrial Animal Health Code (2023). Chapter 1.4
2. Livestock Diseases Surveillance & Early Warning Systems Guidelines Handbook A Reference Manual for Animal Health Workers in South Sudan. A Publication of Vétérinaires sans Frontières Suisse (VSF Suisse) South Sudan Program. 2018
3. A field manual of animal diseases syndromes with emphasis on Transboundary Animal Diseases, 2nd Edition, Dr Corrie Brown, 2016 (ISBN: 978-0-9898395-0-1).