



Lessons Learned

from a Cross-Border Field Simulation Exercise
between Kenya and Tanzania



Namanga, 11th to 14th June 2019 - Testing regional preparedness and response capacities
to a fictitious outbreak of Rift Valley Fever in Kenya and Tanzania



East African Community

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Abbreviations and Acronyms

| | |
|-----------|--|
| AU CDC | African Union CDC |
| BNITM | Bernhard-Nocht-Institute for Tropical Medicine |
| DTRA | US Defense Threat Reduction Agency |
| EAC | East African Community |
| ERF | East Rift Fever |
| EMG | Exercise Management Group |
| EOC | Emergency Operations Centre |
| FAO/ECTAD | United Nations Food and Agriculture Organization Emergency Centre for Transboundary Animal Diseases |
| FLI | Friedrich Loeffler Institute for Research on Animal Health |
| FSX | Field Simulation Exercise |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH |
| IHR | International Health Regulations |
| KfW | German state-owned Development Bank |
| OIE | World Organisation for Animal Health |
| POE | Ports of Entry |
| PMO | Prime Minister's Office |
| RCC | Risk and Crisis Communication |
| RRT | Rapid Response Team |
| RVF | Rift Valley Fever |
| SG | Steering Group |
| SOP | Standard Operating Procedures |
| TTX | Table Top Exercise |
| WHO | World Health Organization |

Foreword



Infectious diseases have always been a stumbling block to human progress, and they continue to foment massive loss of lives and livelihoods and disrupt economic and social lives across the world. Humanity can't forget the effects of the Spanish flu epidemic (1918 to 1919), the worst in history that caused an estimated 50 million deaths. The Ebola

epidemic in West Africa in 2014-2016 took the lives of more than 10,000 people and more than 30,000 were infected.

The EAC Secretariat convened this cross-border Field Simulation Exercise (FSX) at a time when the Ebola epidemic in the Democratic Republic of Congo (DRC) stands at the threshold of the EAC and presents a major challenge to the health and socio-economic wellbeing of the people of East Africa. However, this epidemic is only the tip of the iceberg. The EAC region has experienced outbreaks of Ebola, Rift Valley, Marburg and Crimean Congo Hemorrhagic fevers, of Cholera, Polio and Plague among others in the last two years.

Therefore, we continuously need to test and improve our status of pandemic preparedness to even better prevent the spread of diseases and minimise effects on public health, economic stability and livelihoods.

While the response to an outbreak of an infectious disease in one of the Partner States is in the responsibility of that country, the EAC Secretariat has a coordinating mandate when an outbreak affects two or more Partner States.

We have learned important lessons from the Ebola epidemic in West Africa, where about 500 East African experts fought the disease together with their West African sisters and brothers. Their experience has influenced this simulation: For the first time, we applied the multi-disciplinary and multi-sectoral One Health approach that involves those key stakeholders in disease prevention and response that are affected by an outbreak and can contribute to preventing and responding to it, like agriculture, trade or tourism. For the first time we also have the military, media and civil

society on board and apply the concept of risk and crisis communication, which proved crucial in turning the tide of infections in West Africa.

The EAC region has convened table top exercises, drills and even cross-border field simulations before, but this is by far the largest exercise the region has ever seen. It will help us to assess our pandemic preparedness status and to identify existing gaps that compromise our efficiency in prevention, response and mitigation. The outcomes will allow us to facilitate practical corrective actions at all levels and will significantly influence the way we protect our people in the region and beyond from future health security threats of infectious nature.

I would like to extend my gratitude to the governments and people of the Republic of Kenya and the United Republic of Tanzania for hosting this important exercise and thank all those who contributed to planning, preparing and realising this FSX. This includes our partners from the Support to Pandemic Preparedness in the EAC Region project, which the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements on behalf of the German Government and from KfW, which facilitates the Regional Network of Reference Laboratories Programme with technical support from the German Bernhard Nocht Institute for Tropical Medicine.

I would also like to thank the World Health Organization for their technical lead in the process and last but not least I would like to thank all those other regional and international institutions and organisations that partnered in this exercise.

With this FSX we set an example for regional and international cooperation, integration and utilisation of synergies. Let it not be a once off, but rather the starting point for joining forces in the fight of infectious diseases for the sake of the people in the EAC and beyond. These lessons learned are meant to share our experiences with other countries in the region and beyond.

Hon. Bazivamo Christophe
EAC Deputy Secretary General
(Productive and Social Sectors)

September 2019

Setting the scene: An introduction



The cows coming home as dusk falls. Copyright (for all pictures used in this report unless otherwise specified) GIZ/Light in Captivity

As dusk gathers, the cows kick up clouds of dry, red dust as they make their way home to Parksanka boma, on the edge of Kenya's Amboseli national park. Tall, young Moran (warriors) wearing beads, red shukas (blankets) and rubber sandals made of tyre off-cuts supervise the herd as it makes its way into a kraal, encircled by thorn tree branches and the Maasai's mud houses.

"Do you have any cows?" asks 11-year old Grace, as she waves away the flies. "No", I reply. "Do you have any goats?" "No", I reply once more. "What about sheep?" "No". A look of incredulity and pity crosses her face: I must be terribly poor. For Maasai pastoralists their animals represent wealth and everything depends upon their herds.

By local standards the head of the household, Jackson Ntipapa, with his 450 cows, 300 goats, 500 sheep and 20 donkeys, is a rich man. He has special dispensation to graze his animals in the nearby Amboseli national park. When the pastures are bad, he drives them south across the nearby border to Tanzania, like generations of Maasai have done before him. For them the border is an artificial construct, and largely meaningless.



Ntipapa is worried some of his cows may have Rift Valley Fever

Today he's worried that some of his returning cattle appear to be sick, and he suspects they might have Rift Valley Fever, a mosquito-borne disease that is endemic in the area during the rainy season and can have devastating effects on the herds, causing abortions and death. As he's examining the cows, daughter-in-law brings him a sick child who has been complaining of a headache and fever. They decide to report the sick animals to the veterinary centre in Namanga, the nearest town that straddles the Kenya/Tanzania border, and his daughter-in-law says she will take the child to the health centre.



A child also has a fever and headache

These are very genuine concerns for the Maasai, but today - for once - they are not real. Ntipapa and his family are key players in a four-day cross-border Field Simulation Exercise (FSX) to test preparedness for and response to outbreaks of infectious diseases of public health concern. It is the largest exercise of its kind ever to be held in the region. The exercise starts here on Ntipapa's farm in Kenya and is replicated on a similar homestead just across the border in Tanzania.



Maasai pastoralists Jackson Ntipapa in Kenya and Alatat Naback in Tanzania are two of the key players in the four-day simulation exercise

The scenario being tested during the exercise is based on a theoretical outbreak of a Rift Valley Fever (RVF) - like disease, which has started after a heavy rainy season. The fever first infects animals and then humans as well. It will evolve into a new pathogen called East Rift Fever (ERF) that - unlike RVF - also spreads from human-to-human. The exercise is designed to test preparedness and responses not just for RVF, but for ANY epidemic. Viruses - just like Ntipapa's cows - don't need visas to cross borders, so it is vital that the countries in the East African Community (EAC) region are alert and prepared and know how to respond to contain any infectious diseases emergency.

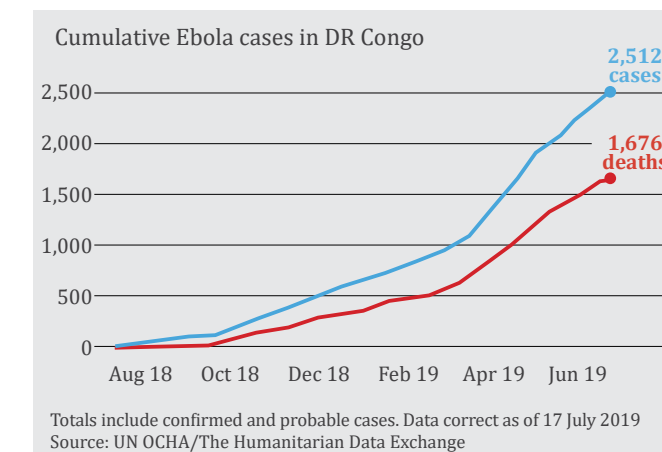
This cross-border exercise has been convened by the East African Community (EAC) Secretariat with assistance from GIZ on behalf of the German Government's Support to Pandemic Preparedness in the EAC Region (PanPrep) project. PanPrep contracted the World Health Organization (WHO) to take the technical lead in line with its mandate and, for the first time, several other regional and international partners also cooperated in such an exercise.

The simulation could not be timelier. The World Health Organization recently declared the Ebola crisis in the Democratic Republic of Congo (DRC) a "public health emergency of international concern" - the highest level of alarm that has only been declared four times previously - but stopped short of calling for borders with neighbouring countries to be closed.

"It is time for the world to take notice, WHO Director General Dr Tedros Adhanom Ghebreyesus told a news conference in Geneva on 17th July 2019 at which the public health emergency was declared.

The Ebola outbreak in DRC, the second largest in history, started in August 2018. At the time of writing (1 August 2019) more than 2,700 people have been infected and two-thirds of them have died, with the figures still rising. It took 224 days for the number of cases to reach 1,000, but just a further 71 days to reach 2,000. About 12 new cases are being reported every day.

More than 1,600 people have died since August 2018



On-going conflict and threats to health workers in the DRC have made containment very difficult, and there is a real threat that Ebola could spread to other countries in the East African region too. The virus has already spread across the border into southern Uganda, where two people died after crossing the border from DRC to seek treatment. Three further cases have been identified in Goma, home to more than a million people on the DRC-Rwanda border, and on 1st August Rwanda temporarily closed its border with the DRC to prevent further spread of the disease.

Although the Ebola Haemorrhagic Fever is the most immediate threat, there are other diseases such as Yellow Fever, Marburg, Crimean Congo or RVF which are also a serious public health concern and can also have a devastating impact on lives and livelihoods and economies.

"God has been graceful to us in that Ebola has not spilled over [into Tanzania] yet - but we do not need to just sit and wait. Caroline Wambua, Acting Principal Administration Officer of the EAC Secretariat.

This report documents the cross-border Field Simulation Exercise to test preparedness for and responses to such infectious disease threats, held across the Kenya/Tanzania border from 11th to 14th June 2019. It will describe in detail the planning and preparation for the exercise, the implementation process and finally, the outcomes and lessons learned for future preparedness and responses.

Background

Why did the EAC Secretariat convene the Field Simulation Exercise?

The East African Community (EAC) Secretariat has a coordinating and advisory role for the EAC Partner States (Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda) in preparedness for and response to infectious disease outbreaks that jeopardise public health. As long as an outbreak is restricted to one Partner State, response and mitigation measures are the responsibility of that country. However, once a disease has crossed borders and spreads to another Partner State or occurred simultaneously in more than one of these countries, the coordination of the response becomes the EAC Secretariat's responsibility.

Staff at both country level and at the EAC Secretariat level need continuously to train and test their response ability, knowledge and roles. Consequently, the "East African Community Regional Contingency Plan for Epidemics due to Communicable Diseases, Conditions and other Events of Public Health Concern 2018 – 2023" (Regional Contingency Plan¹), the policy framework for the prevention and control of disease outbreaks in the region, requires the holding of frequent field simulation exercises to test these responses and responsibilities. Such simulations play a key role in identifying the strengths and gaps in capacities and can facilitate practical corrective actions needed to develop and implement preparedness and response capacities at all levels (national, regional, community and global).

The decision to convene a FSX at Namanga dates back to 2015, when the EAC Sectoral Council of Ministers of Health, the highest ranking health decision-making body in the region, directed the EAC Secretariat to conduct a cross-border simulation exercise at the border between the Republic of Kenya and The United Republic of Tanzania. The FSX held between 11th and 14th June 2019 puts this decision into practice. It was the third cross-border simulation convened by the EAC Secretariat but by far the largest ever held in the region.

“The EAC Secretariat wanted to hold this exercise to assess our preparedness in the region for any potential outbreak, which could quickly spread across the region and across borders. We also wanted to test regional and national contingency plans, our regional risk

and crisis communication strategy and Standard Operating Procedures to see where the gaps are, Dr Michael Katende, Acting Head of Health Department at the EAC Secretariat.

“We are on high alert,” says **Dr Aragaw Merawi**, Acting Head of Emergency Preparedness Response for the Africa Union CDC. “But so far we haven’t been able to do any exercises of this kind. This is a very critical milestone in our emergency preparedness. It will enable us to see how our systems work and where the bottlenecks are in our logistics and budget. It has thrown up lots of challenges, but not doing it is not an option.”

“A new phase of epidemics”

The World Health Organization (WHO) recently warned that the world is entering a new phase of high impact epidemics that go far beyond Ebola. In an interview with the BBC², **Dr Michael Ryan**, the Executive Director of the WHO’s Health Emergencies Programme said that the world is “seeing a very worrying convergence of risks” such as climate change, newly emerging diseases, large and highly mobile populations, global trade and tourism, weak health systems and governments and conflicts which make outbreaks of diseases more likely to occur and more likely to be bigger than before.

“I don’t think we’ve ever had a situation where we’re responding to so many emergencies at one time. This is a new normal, I don’t expect the frequency of these events to reduce,” he said. As a result, he urged countries and other bodies to “get to grips with readiness [and] be ready for these epidemics”.

Meeting international obligations

The International Health Regulations (IHR) were adopted by the 58th World Health Assembly in May 2005 and entered into force on 15 June 2007. These regulations aim to prevent, protect against, control and respond to the international spread of diseases and to avoid unnecessary interference with international traffic and trade in an increasingly globalised world. All WHO member states, including the six EAC Partner States have signed and are legally bound by these IHR. They are obliged to establish a minimum core capacity and to respond to emergencies in their countries.

Despite making significant progress since 2016, especially in surveillance, setting up laboratories, conducting immunisation campaigns etc., no country in Africa has so far fully met these International Health Regulations.

“Compared to other parts of the world, Africa has some way to go,” says **Dr Mary Stephens**, from WHO’s AFRO Regional Office Health Emergency Programmes.



Africa still has “some way to go” to meet International Health Regulations, says Dr Mary Stephens

Partner States of the East African Community have already experienced several outbreaks of infectious diseases including Ebola, Rift Valley Fever, Marburg and Crimean Congo haemorrhagic fevers, Cholera, Polio, Hepatitis A and B and others. Many of these are zoonoses - diseases that are transmitted between animals and humans. More than 80% of the public health emergencies observed in Africa region are due to infectious diseases, of which up to 75% originate from the human-animal-environmental interface³.

Recognising this link between human and animal health, the World Organization for Animal Health (OIE)’s “Tool for the Evaluation of Performance of Veterinary Services, 2013” aims to improve governance of veterinary services to enable them to contribute effectively to achieving the priorities of national governments and to help improve animal health and welfare and human health globally.

In the EAC the key instrument in outbreak prevention is the Regional Contingency Plan, which requires the EAC Secretariat to conduct regular simulation exercises following a One Health approach.

Preparation is the key to managing pandemics

“I am very worried about Ebola, both personally, for my family, and for my country. The world has become a global village, so it has become a big concern for us.



Lilian Anyango Ousa, Public Health Officer for Port Health at Namanga on the Kenyan side of the One Stop Border Post (OSPB), seen here checking the temperature of a passenger crossing the border during the exercise.

Preparation is the key to preventing and managing pandemic outbreaks that could not only result in the loss of many lives, but also jeopardise public health, economic stability and the lives and livelihoods of millions of people in the East African region and beyond.

Preparedness is the ability to effectively anticipate, respond to, and recover from the negative impacts of a wide range of public health threats. This can be achieved through a combination of planning, resourcing, training, exercising, and organising to build, sustain, and improve operational capabilities.

There’s no doubt, many lessons have been learned since the Ebola outbreak of 2014 -16, especially when it comes to preparedness and response, building core capacities and investment in strengthening surveillance and reporting and emergency plans. Simulation exercises are one way of assessing these capacities and are an important component of the WHO IHR Monitoring and Evaluation Framework, endorsed by the World Health Assembly in 2016.

These exercises can take different forms – from more theoretical table-top exercises, to functional drills and field simulation exercises, which are the most complex to organise and require a lot of resources, time and money. All these types of exercises have an important role to play in analysing pandemic preparedness and response capacities.

Building on lessons learned in West Africa

The FSX built on lessons learned and key recommendations from East African experts who fought the Ebola epidemic in West Africa, that were identified during the Nairobi conference of 2017 and documented in “Lessons for the Future – What East African Experts learned from fighting the Ebola Epidemic in West Africa³”.

¹ EAC Regional Contingency Plan for Epidemics due to Communicable Diseases, Conditions and other events of Public Health Concern 2018 – 2023 <https://www.eac.int/documents/category/regional-national-strategies-and-plans>,

² Dr Michael Ryan interview with BBC on 7th June 2019 - <https://www.bbc.co.uk/news/health-48547983>

³ Keynote speech by Dr Tigest Ketsela Mengestu, Country Representative of WHO Tanzania, at the FSX opening ceremony in Namanga on 11 June 2019

Briefly, the key recommendations from that conference were that the EAC Secretariat should:

- Utilise the highly valuable experiences and knowledge of the deployed experts
- Develop regional and national One Health contingency plans, equip them with adequate funds and materials and test them regularly in practice
- Institutionalise the One Health approach at regional and Partner State level and include key professions focusing on public health
- Engage the military in response training measures
- Engage communities in planning, setting-up and maintaining health services for developing preparedness and response strategies
- Engage the media from the start and at all levels of any epidemic to enable appropriate crisis communication.

As a consequence of these recommendations, in 2018 the East African Community incorporated the One Health approach (see below) in disease management in the revision of the Regional Contingency Plan and developed jointly with the Partner States a Regional Risk and Crisis Communication (RCC) Strategy and Standard Operating Procedures (SOPs) to facilitate putting the Strategy into practice. Community awareness as part of risk and crisis communication had proved crucial in “turning the tide” of the Ebola epidemic in West Africa at the height of the outbreak.

“Community mobilisation and engagement was one of the pillars of the Ebola response in Liberia and proved to be a valuable and cost-effective intervention. Through such engagement,



communities set up monitoring systems which resulted in an increase in safe burials, prompt notification of suspected cases, early health

care seeking behaviours and eventually contributed to the control of the epidemic,
Liliane Luwaga from Uganda spent almost three years in Liberia working as a community engagement and risk and crisis communication expert.

A One Health approach to integrated disease management

Without a strong health system and an inter-disciplinary approach, it is difficult to respond to an emergency. There is a huge amount to lose by not being prepared for such epidemics.

However, outbreaks affect many more disciplines and sectors of society than just human and veterinary medicine. Therefore, the EAC Secretariat and Partner States planned the FSX around the One Health approach. This involves different disciplines and sectors in pandemic preparedness and response that can be affected by an outbreak and can also contribute to preventing it and to mitigating its impact on society. This includes, amongst many other things, elements like cross-border security and threats to travel and trade (affecting both air links and road borders).

One Health recognises that there is a clear link between health and the economy: When people fall sick, there is a fall in economic output and trade. The 2006/7 outbreak of Rift Valley Fever and resulting trade ban, for example, is estimated to have resulted in losses of 149 billion Tanzanian shillings (around 67 million US Dollars), and the 2018 bird flu epidemic in Uganda, cost the region around 50 million Kenyan Shillings (almost half a million US dollars).

“The One Health approach makes a lot of sense as most of the public health problems have their origin not only in humans, but in human and animal interaction and they are influenced by the climate. Public health events affect agriculture, trade, tourism and wildlife. Therefore, if we have public health threats, it’s important for all stakeholders to work together to prepare for and respond to such events. In the exercise the cooperation between different sectors was very good, right from the start and from the composition of the Exercise Management Group. And during the exercise all key sectors were well represented,

Dr David Balikowa, Senior Livestock Officer for the EAC Agriculture Department and a member of the EAC Emergency Operations Centre (EOC) during the FSX.

Testing pandemic preparedness in the EAC

Months of planning

The Support to Pandemic Preparedness (PanPrep) project aims to improve the health of the people in East Africa. It supports the EAC Secretariat in strengthening its advisory and coordinating role for pandemic preparedness in the Partner States. Together with the EAC Secretariat and representatives from Partner States the project facilitated the implementation of the Regional Contingency Plan and the development of the Regional Risk and Crisis Communication Strategy and of SOPs to put the plan and strategy into practice. Project activities comprise their testing in simulation exercises.



The first joint FSX planning meeting of the SG and EMG in December 2018

“We need to be well prepared and vigilant if we want to protect the citizens of the EAC region as best as we can,



Dr Irene Lukassowitz,
Project Manager of the EAC/GIZ Support to Pandemic Preparedness project in the EAC region

The FSX was the culmination of eighteen months of intense preparation, starting with a planning workshop in February 2018 and followed by two stakeholder workshops and no fewer than 15 preparatory meetings. The results of each meeting were summarised in a report with recommendations for the Sectoral Council of Ministers of Health. The latter accompanied and approved the process at the highest political level for health in the EAC and made the results available to all six EAC Partner States.

A **Steering Group (SG)** and an **Exercise Management Group (EMG)** were established to support the design and implementation of a Table Top Exercise held in Arusha in September 2018 (see below) and subsequently the FSX in June 2019.

The Steering Group oversaw the planning processes, liaised with all stakeholders and participants (from the Presidency to local communities), approved the One Health scenarios of both exercises and the venues for the FSX, nominated roles and responsibilities, distributed information about the FSX and contributed to the post-FSX evaluation.

The Exercise Management Group developed the purpose, scope and objectives, scenario outline and storyline for the FSX and identified the One Health participants and assisted in coordinating the simulations.

The SG and EMG comprised representatives from the EAC Secretariat, the Eastern, Central, Southern Africa Health Community; the Kenyan and Tanzanian Ministries of East African Affairs, the Office of the President, Ministry of Health, Directorate of Veterinary Services and Ministry of Defence Kenya, the Prime Minister’s Office, President’s Office, Ministry of Health, Community Development, Gender, Elderly and Children, Ministry of Livestock and Fisheries and People’s Defence Force Tanzania; OIE, United Nations Food and Agriculture Programme (FAO), the German Development Bank (KfW) and the German Bernhard Nocht Institute for Tropical Medicine (BNITM), WHO, GIZ and EPOS Health Management. Membership of the SG and EMG groups was continuously adapted throughout the process.

See **Annex 1** for a full list of SG and EMG members in the FSX Background Paper, and **Annex 2** for the terms of reference for the two groups.

⁴ Lessons for the Future
<https://www.eac.int/147-health/901-lessons-for-the-future---what-east-african-experts-learned-from-fighting-the-ebola-epidemic-in-west-africa>
Fighting Ebola: Voices from the Frontline
https://health.bmz.de/what_we_do/Epidemic_preparedness/Fighting_Ebola_-Voices_from_the_Frontline_V1.pdf



Introductory site visit to the Tanzanian homestead



The EMG made a courtesy visit to the Joint Cross Border Coordination Committee



The EAC Secretariat, WHO and GIZ briefed the media at Namanga on the upcoming FSX in May 2019

“It was a challenge to select the right people for the planning process, people who were willing to commit themselves,

Mary Makata, Tanzanian Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC), Emergency and Response Unit, and a member of the FSX Steering Group.

“Exercises are a continuous process. What we normally do is start off with a rather simple exercise. The Table Top Exercise would be the first step, then make it more complex and end up with the Field Simulation, which is a far more complex exercise. Without a TTX first, people do not get an opportunity to develop material and start the thinking processes that helps them to make more success of a field simulation exercise,

says Allan Bell, WHO Consultant, Exercise development and implementation.

Holding a Table Top Exercise



Participants at the Table Top Exercise held in September 2018 (above and right)

A **Table Top Exercise (TTX)** was held in September 2018 at the Mount Meru Hotel in Arusha as the first part of the two-tier simulation. It was attended by approximately 100 representatives from EAC Partner States and regional and international institutions and organisations. Reflecting the One Health approach, these included representatives from Ministries of East African Affairs, human and animal health, agriculture, tourism, trade, environment and defence; community and religious leaders and the media, as well as East African experts who fought the Ebola epidemic in West Africa. A full report on the TTX can be found on the EAC website⁵.



In the months after the TTX the planning process for the FSX continued, with preparatory meetings, training sessions on WHO's exercise tools, sensitisation meetings on plans and strategies, site visits and courtesy meetings with various bodies at different political levels closer to the FSX. The briefing document for the FSX is attached as **Annex 3**, The Concept Note can be found on the EAC website⁶.

A press briefing was held and a **press release** was issued (see **Annex 4**) as part of a comprehensive communications concept aimed at informing the public about the exercise in time to avoid rumours and panic. Banners and posters were displayed at all FSX sites and at the One Stop Border Post (OSBP) in Namanga in English and Swahili language. Flyers were handed out to every passenger at immigrations on both sides of the OSBP so that the public was well informed about what was going on.

Objectives

The objectives of the FSX were to:

- Assess the use of early warning and event detection mechanisms at ports of entry with emphasis on the Namanga border area between Kenya and Tanzania;
- Assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres)
- Assess the deployment of national Rapid Response Teams (RRT);
- Validate the activation and deployment of two mobile laboratories;
- Assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large-scale outbreak of a RVF-like virus;
- Practise regional SOPs for cross-border pandemic preparedness and risk & crisis communication including community engagement;
- Evaluate selected preparedness and response measures at Jomo Kenyatta International Airport (JKIA) and Kilimanjaro International Airport (KIA);
- Capture best practices and ensure transfer of lessons learned to the EAC community and other regional economic communities and to African regions.

An overview on **key functions** to be tested during the FSX is attached as **Annex 5**.

The exercise scenario



Scenery at the One Stop Border Post

The cross-border field simulation exercise focused primarily on the Namanga border crossing between Kenya and Tanzania, but also involved various sites all over Kenya and Tanzania (from Dodoma and Arusha to Nairobi and from Kajiado and Longido up to Namanga) and all political levels from local to district and from national

Designing the Field Simulation Exercise

The FSX built on the experiences collected during the TTX and the previous simulations held in the region. It was designed to be implemented under everyday conditions and to test coordination and communication mechanisms at the local, national and regional levels, with participation from the district/sub-county and regional/county levels and the EAC Secretariat. It aimed to build capacity and strengthen participants' familiarity with existing national and regional policies, contingency plans and strategies and SOPs for preparedness and response. During the simulation the various administrations, organisations and sectors involved at different levels should be able to practice their roles and responsibilities, channels of cooperation and communication and identify gaps and weaknesses.

⁵ Exercise Report for Cross Border Table Top Exercise and **videos** of the TTX <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>

⁶ FSX Concept Note - <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>

governments and regional East African Community level. It also included the two main international airports in Nairobi and Kilimanjaro.

The exercise simulated a typical chain of events in a RVF outbreak with surveillance and meteorological reports, dry season, heavy rainfall/floods, animal abortions and deaths, restricted animal movement and bans on trade of animal and animal products followed by first human infections and fatalities, resulting in public anxiety and rumours, intense media interest and the need for inter-sectoral coordination.

This fictitious scenario was chosen, because the RVF pathogen poses a real and significant risk to the region and there are frequent outbreaks of this and other zoonoses. Not only do such zoonoses impact on vital agriculture and trade, they can also affect tourism because ruminants in the national parks can also be affected. Such outbreaks result in huge economic losses almost every year, so provide an ideal scenario to test the One Health multi-sectoral approach. The fact that humans can fall sick some weeks after the first animals get infected also leaves an important window for risk and crisis communication.

In the FSX scenario, the fictitious RVF outbreak evolves into a newly emerging pathogen that causes a fictitious disease called East Rift Fever (ERF). Different to Rift Valley Fever, this disease can be transmitted between humans so that the exercise can also test responses to any infectious disease that can be transmitted from human to human, such as the Ebola Virus Disease.

The scenario was built and implemented around three phases namely:

- (1) Preparedness and early warning,
- (2) Outbreak in animals (initially domesticated ruminants, but spreading to wild animals) and
- (3) Response to animal and human cases.

For a **full programme** of the four-day exercise see **Annex 6**. For a list of the **key reference documents** for the FSX see **Annex 7**.

“This was a long and sometimes cumbersome process and more than once we were asked if in the future we could not immediately start with an FSX. However, we are all convinced that the preparation process has been as important as the exercise itself. It was a steep capacity building learning curve for all participants, Dr Irene Lukassowitz, Project Manager of the EAC/GIZ PanPrep project.

Who took part?

Almost 300 participants took part in the FSX, including participants from Kenya and Tanzania as well as observers from the EAC Partner States Burundi, Rwanda, South Sudan and Uganda, from the Southern African states Lesotho, Malawi, Mozambique and Zambia and from 16 regional and international institutions and organisations. Reflecting the One Health approach, these included representatives from Ministries of East African Affairs, Health, Agriculture, Tourism, Trade, Environment and Defence; from tourism, trade and business; public laboratories and health facilities; slaughter houses; Ports of Entry; community and religious leaders; as well as East African public health experts who fought the Ebola epidemic in West Africa.

“The challenge was getting the participants together – they are all busy people.” says **Edward Komba**, Coordinator for Health Issues at the EAC Ministry of Foreign Affairs and member of the EMG. “We needed to start by sensitising top management in the ministries and other organisations so that they realised the importance of holding the FSX and released the key participants to take part.”



The FSX also involved the military and police

The FSX also involved, for the first time in such a regional exercise, the military and police who, as lessons learned from the West Africa Ebola crisis and other health emergencies clearly demonstrated, have a key role to play in ensuring law and order, security and logistics in any emergency response and have a mandated role within the context of emergency management.

“This is the first exercise of this kind the military has been involved in, although we do other joint military exercises with other members of the



EAC. We are not a separate entity but play an important role in an outbreak response. In an emergency, the military can bring

and equipment like tents, vehicles, trucks and ambulances. It is important to have the military involved in a response from an early stage, Major Enock Kasyombe Mwakyusa, Defence Head Quarters Command in Dar es Salaam and a member of the EMG.

The media were kept informed and involved throughout the FSX, which was also an opportunity to test risk and crisis communication and community engagement strategies that have been developed by the EAC and countries in the region in the last two years since the Nairobi conference to document the lessons learned during the Ebola crisis in West Africa⁷.

“In Guinea the epidemic was very rough and in general the community was not participating in the management of the epidemic. That’s why it took so long to bring it under control. I believe if there had been proper community sensitisation, participation and government involvement, we would have been able to control the epidemic much quicker,



Emmanuel Ejoku a laboratory technician from Western Uganda who volunteered through the African Union to be deployed to West Africa.

Besides the EAC Secretariat, GIZ and WHO, participants from regional and international organisations included representatives of the

- African Union CDC,
- Chemonics HRH2030 programme,
- US Defense Threat Reduction Agency (DTRA),
- United Nations Food and Agriculture Organization Emergency Centre for Transboundary Animal Disease (FAO/ECTAD),
- East, Central and Southern Africa Health Community (ECSA-HC),
- EPOS Health Management,
- German Federal Friedrich Loeffler Institute for Research on Animal Health (FLI),
- Kenya Red Cross (KRC),
- German Development Bank (KfW),
- Bernhard Nocht Institute for Tropical Medicine (BNITM),
- World Organisation for Animal Health (OIE),
- One Health Central and Southern Africa (OHCEA).

It was the first time that so many regional and international agencies joined forces in a cross-border field simulation exercises following an invite by the EAC-GIZ PanPrep project. This added the opportunity to test the coordination and cooperation of regional and international organisations in an emergency.

Video and photography crews and the “Lessons Learned” author also supported the FSX.

A detailed list of participants and observers can be found in the FSX report on the EAC website⁸.

“I’m glad to see observers from other countries here for the FSX. That’s how you learn. They will take this information back to their own countries and trigger follow up activities that go far beyond the exercise itself,

Dr Klaas Dietze, Friedrich Loeffler Institute for Animal Health based in Germany (on the right of the photo).



⁷ EAC One Health Regional Risk and Crisis Communication Strategy (2018/19 - 2022/23) <https://www.eac.int/documents/category/regional-national-strategies-and-plans>

⁸ Cross Border Field Simulation Exercise at Namanga, 11-14 June 2019, EAC Report of the FSX <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>



Dr Michael Katende, the EAC Secretariat's Acting Head of Health Department, reminded participants that the FSX was taking place at a time of high alert

Implementation of the FSX

Day 1, 11th June

Launch ceremony at the Namanga One Stop Border Post

The four-day field simulation exercise began on the morning of 11th June 2018 with an opening ceremony held at the One Stop Border Post in Namanga attended by Ministers and other government officials from different sectors, participants and observers.

In his welcoming address to participants, **Dr Michael Katende**, the EAC Secretariat's Acting Head of Health, said the purpose of the exercise was to assess and further enhance pandemic responses in the region using the One Health approach and to identify areas of strengths and weaknesses. He reminded participants that the exercise was taking place at a time of high alert, with the second largest Ebola outbreak ever taking place in neighbouring DRC: "We hope it will help to strengthen the response in these countries and the region as a whole."

He thanked the numerous partners and organisations supporting the FSX and reaffirmed the EAC's commitment to strengthening pandemic preparedness and response in the region before wishing participants a productive exercise.



Preparing for the FSX was a "steep learning curve", says **Dr Irene Lukassowitz**, Project Manager of the EAC/GIZ PanPrep Project.

On behalf of German Government, **Dr Irene Lukassowitz**, GIZ's Project Manager to Support Pandemic Preparedness in the EAC Region, welcomed participants to the start of the cross-border field simulation exercise.

"This Field Simulation Exercise is the culmination of one and a half years of joint hard work towards this goal," said Dr Lukassowitz. "It all started with a planning workshop for our [PanPrep] project in February 2018 in Arusha. We reached out to other regional and international partners working towards similar goals and see if we could join forces and received positive feedback."

"Together with our partners from the EAC Secretariat and EAC Partner States, we revised the Regional Contingency Plan to include the One Health approach and here you are: Representatives from health, animal health, agriculture, trade and tourism, environment, military, civil society and media. We also developed a Regional Risk and Crisis Communication Strategy and Standard Operating Procedures to implement both. The road was sometimes bumpy, but to walk it together was at least as important as this FSX will be. It has been a steep learning curve for all of us." (For the full text of Dr Lukassowitz's speech see **Annex 8**.)

Dr Richard Banda, WHO's Country Representative in Kenya, welcomed the participants of the FSX to the event. He said that this is a very special occasion to WHO "mainly because this is the first time that we participate in a simulation exercise of this magnitude and scope."

In her keynote speech **Dr Tigest Ketsela Mengestu**, WHO's Country Representative in Tanzania, said she was very excited to be in Namanga to witness the start of this unique and complex exercise. "This is truly One Health in action and highlights the importance of multi-sectoral collaboration and coordination in all responses to public health events."

Dr Mengestu said that there is increasing recognition of the threat epidemics and other public health emergencies pose to global health security and to people's livelihoods that goes far beyond their impact on human health. Emerging and re-emerging threats with pan-

demical potential continue to challenge fragile health systems in Africa, imposing a huge human and economic toll. This, she said, was largely due to the growth of cross-border and international travel, increasing human population density and growth of informal settlements. Other factors included climate change, the changes in the way humans and wild animals interact and changes in trade and livestock farming.

Infectious diseases were not only spreading faster, said Dr Mengestu, they appeared to be emerging more quickly than ever before. For example, in 2007 a RVF outbreak in Kenya and Tanzania, resulted in more than 1000 cases and 300 deaths. At the same time, the region had to deal with the growing burden of non-communicable diseases such as cardiovascular diseases, diabetes, cancers and road traffic accidents. Consequently, she said, "East Africa is experiencing a general lack of preparedness to deal with public health emergencies occurring across international borders" even though it is legally required to prevent, detect and respond to public health events of potential international concern under the WHO's International Health Regulations.



Dr Tigest Ketsela Mengestu, WHO's Country Representative in Tanzania

Dr Mengestu stressed the need for effective country and regional preparedness plans and timely responses to minimise the impact of public health threats on lives and livelihoods. The EAC cross-border field simulation exercise, said Dr Mengestu, would be "a unique opportunity to test our collective public health preparedness and response capacities, clarify roles and responsibilities between different sectors and agencies and learn from each other." She urged participants to embrace this opportunity to learn together and strengthen partnerships and the public health emergency preparedness and response capacities of countries in the East African region. (For the full text of Dr Mengestu's speech see **Annex 9**.)

The keynote speech was followed by welcoming remarks of the Deputy Governor **Hon. Martin Moshisho** on behalf of Hon. Joseph Ole Lenku, Governor of Kajiado County, Kenya, and of the District Commissioner of Longido, **Hon. Frank Mwaisumbe** on behalf of Hon. Mrisho Mashaka Gambo, Regional Commissioner, Arusha Region, Tanzania, who said: "It is good to prepare ourselves before we head for a disaster, which would bring all sorts of problems. We need an awareness and understanding of how to react and how to fight in this kind of disaster."



The Hon. Christophe Bazivamo thanked all participants for joining the FSX

On behalf of the EAC Secretary General, the **Hon. Christophe Bazivamo**, the EAC's Deputy Secretary General for Social and Productive Sectors, welcomed all the participants to Namanga for the launch of the field simulation exercise "whose outcomes will significantly influence the way we protect our people in the region and beyond from future health security threats."

He stressed that whilst the initial response to an outbreak of an infectious disease in any EAC Partner State was the responsibility of that country, the EAC Secretariat had a coordinating mandate when an outbreak affected two or more Partner States. He said that the EAC had recently approved a Regional Contingency Plan for such an event, and the FSX would show if it was user-friendly in an outbreak scenario and if the Standard Operating Procedures that had been developed between the EAC Secretariat and the Partner States over the last few months were robust enough for a targeted response.



Hot off the press: The Regional Contingency Plan

Hon. Bazivamo said that the region needed to test and improve its pandemic preparedness. "We have learned important lessons from the Ebola epidemic in West Africa, where about 500 East African experts fought the disease together with their West African sisters and brothers. Their experience has influenced this simulation: For the first time we also have the military, media and civil society on board and are applying the concept of risk and crisis communication, which proved crucial in turning the tide of infections in West Africa."

He concluded by thanking all the partners who had contributed to planning, preparing and realisation of the exercise. He hoped the exercise would not be a one-off event but rather a starting point for joining forces in the fight of infectious diseases for the sake of the people in the EAC and beyond.



Hon. Adan Mohammed said that the FSX is a golden opportunity to assess the multi-sectoral response

Participants were also addressed by **Hon. Adan Mohammed**, Cabinet Secretary for East African Community and Northern Corridor Development, Kenya, who said that the FSX was a clear demonstration that the EAC was a “golden opportunity to assess the multi-sectoral response needed to protect not only the people in countries affected, but globally as well.”

Hon. Stella Alex Ikupa, Deputy Minister in Tanzania’s Prime Minister’s Office said it was her sincere hope that the exercise would enhance preparedness cross borders, making the region safer for the people. **Hon. Abdullah Ulega**, Tanzania’s Deputy Minister of Livestock and Fisheries, welcomed the One Health approach of the FSX, pointing to the “overwhelming” magnitude of emerging zoonoses that have a huge impact on animal and human health as well as the economies in the region.



Hon. Umyy Ali Mwalimu was the Guest of Honour

Hon. Umyy Ali Mwalimu, Tanzania’s Minister of Health, Community Development, Gender, Elderly and Children officially launched the exercise, by pledging that the Government of Tanzania would analyse and act upon lessons learned from the exercise.

After the opening ceremony, the Ministers briefed the media in a well-attended press conference.



Media briefing during the opening of the FSX

Sally Serem, Facility Manager of the Namanga One Stop Border Post and Head of Customs Kenya Revenue Authority, then invited all VIPs on a guided tour of the OSBP. “It was good to have Ministers involved in the FSX Opening ceremony because they control the purse strings,” she subsequently commented.

The VIPs also visited the Mobile Laboratory stationed at the Namanga Health Facility on the Kenyan side. **Dr Florian Gehre** and **Dr Mona Affara**, from the Bernhard Nocht Institute for Tropical Medicine on behalf of the German Government and the German Development Bank (KfW) explained the purpose and functions of the mobile laboratories that were being used for the first time in an operational setting (for more on these mobile laboratories, see Scenario 5).

Simultaneously, **Frederik Copper**, WHO Coordinator of the FSX, briefed the participants and regional and international observers about how the field simulation exercise would be conducted over the next three and a half days.

The start of the exercise

At 2pm on Day 1 of the FSX, the Exercise Control Room activated the start of the cross-border field simulation exercise.

01-Start **All**

EAC CROSS BORDER SIMULATION EXERCISE

TIME: 0800
Date: 12 June, 2019

Start Exercise

This is a general start message

If you are not already at your start position, go there immediately.

If you do not know your start position, speak to a facilitator.

SIMULATION - SIMULATION - SIMULATION

Coordinating a complex operation

Situated in a room at the One Stop Border Post on the Kenyan side of the border, the Exercise Control Room is the planning and coordination hub for the exercise.



The Exercise Control Room coordinates the complex operation

Charts and aerial photographs line the walls of the Control Room, depicting the sites across Kenya and Tanzania participating in the FSX, including the Emergency Operations Centres (EOC) of the EAC Secretariat temporarily set up at the One Stop Border Post in Namanga, the Public Health EOCs in Dodoma, Nairobi and Arusha, the district EOCs in Longido (Tanzania) and Kajiado (Kenya) and the international airports at Kilimanjaro and Nairobi. Many of the activities are planned to take place in and around the OSBP as well as a range of facilities in Namanga, including health facilities and dispensaries, slaughter houses, and two mobile laboratories which are activated at Arusha and after arrival are stationed at the Kenyan health facility and at a school in the proximity of the Tanzanian health dispensary (see scenario 5).



Frederik Copper, WHO's exercise coordinator discusses details of the exercise with communications controller Denis Charles

EAC CROSS BORDER SIMULATION EXERCISE, NAMANGA 2019

LOCATION GUIDE

Day One - Assessments

Location Description for Day One

Start and End Point: Namanga Border Crossing (Exercise Control)

Field Locations: Rural Agricultural households (Kenya), Longido (TZ) and Kajiado (Kenya)

Day 3 - Field Exercise

Day 3 Locations to include

- Field Locations Based on the Starting Border crossing, Namanga
- Local Medical Clinics, Particularly Kenyan Side Sites
- Customs and Quarantine Facilities at the Onset
- Inclusion of border control posts at Kilimanjaro Airport and Jomo Kenyatta Airport

Start and End Point: Namanga Border Crossing (Exercise Control)

Field Locations: Local to Namanga with some limited coordination points

| Location | Personnel | Material |
|-----------------------|--|--|
| Exercise Control Room | Control Room, Communications, Quarantine | Exercising Control Room |
| Kenyan EOC | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Tanzanian EOC | Field Controller (Kenya) | EOC as required, Emergency Control Room, Emergency Response Unit |
| Health Facility | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Mobile Lab | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Community | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Health Centre | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Quarantine | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Exercise Control Room | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |

Day 2 - Functional Exercise

Day 2 Locations to include

- Field Locations around Namanga including Slaughter Houses and Medical Clinics
- EOC Locations in Nairobi and Dodoma on the Kenyan side
- Inclusion of border control posts at Kilimanjaro Airport and Jomo Kenyatta Airport
- EAC control room

Location Description for Day Two

Start and End Point: Namanga Border Crossing (Exercise Control)

Field Locations: Local, District and National offices

| Location | Personnel | Material |
|-----------------------|--|--|
| Exercise Control Room | Control Room, Communications, Quarantine | Exercising Control Room |
| Kenyan EOC | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Tanzanian EOC | Field Controller (Kenya) | EOC as required, Emergency Control Room, Emergency Response Unit |
| Health Facility | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Mobile Lab | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Community | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Health Centre | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Quarantine | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |
| Exercise Control Room | Field Controller, Quarantine | EOC as required, Emergency Control Room, Emergency Response Unit |

Poster showing aerial pictures of the FSX sites

20

Lessons Learned from a Cross-Border Field Simulation Exercise Between Kenya and Tanzania 21



Members of the ExCon checking timetables and sites

Not only is the simulation by far the largest ever conducted in Africa, it is also for WHO the biggest and most complex which they led, involving two countries, different sectors plus the regional aspect of the EAC as convenor. Although WHO has conducted over 100 exercises all over the world, most of these (around 70%) have been table top exercises, and around 25% are drills (trailing people doing their jobs). Functional and field exercises like this one only account for around 5%.

“The biggest challenge is that the exercise is so broad in its scope involving multiple sectors, countries and stakeholder,” says **Frederik Copper**, WHO’s Exercise coordinator. “We are working at 23 different locations over three days – mostly in a 20-30 km radius of the border at Namanga. So, logistics, communication and coordination will be fundamental to the smooth running of the FSX and successful outcomes.”

Communications are another challenge, with limited Wi-Fi and mobile phone coverage (Kenyan networks do not

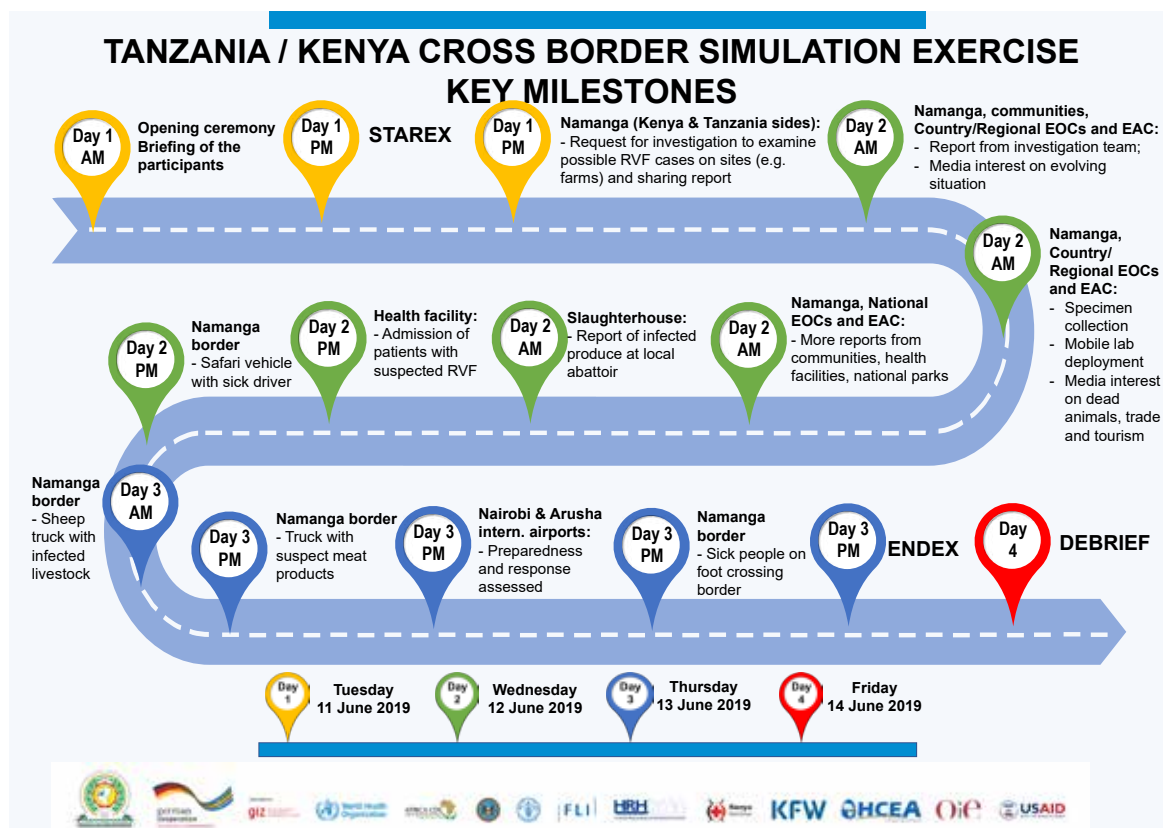
necessarily work on the Tanzanian side of the border and vice versa), so before and during the exercise WHO consultant **Denis Charles** is busy charging back-up two-way radios and pagers and setting up communications networks between the Control Room and exercise locations. All email correspondence from different participants - clearly labelled as an “exercise” drill to avoid any possible confusion - is copied to the Control Room and displayed on an overhead projector so that they can be logged and evaluated.



Together with the SG and EMG, Allan Bell designed many of the exercise scenarios

Scripting the exercise scenarios

The “script” of the FSX scenarios, jointly compiled by WHO consultant **Allan Bell** and the members of the SG and EMG, is complex, and increases in complexity over the three days of the field exercises, using a building-block approach. It covers a range of fictional disease scenarios as listed in the **key milestones chart** below.



All details of the scenario per day and site are included in the “**Master Sequence of Events List**”, which is available as **Annex 10** along with the **Exercise Management Guide** in **Annex 11**.

Before and during each exercise scenario, participants receive information and messages (known as “injects”) from the exercise control/facilitators and are expected to respond in line with their own policies and procedures. These injects come in various forms and at different times, including:

- Written information bulletins
- Phone calls and emails
- Actors playing a specific role (e.g. sick patients)
- Information they discovered as part of their investigations
- Risk and crisis communication materials, including print and video material



Inject Day 1 Kenya OSBP

For **examples of the Injects** used during the FSX see **Annex 12**.

The exercise participants are expected to react and communicate as they would in a real-life setting and as part of their normal work procedures and responsibilities, using existing contingency plans, SOPs and equipment.



Exercise facilitators and evaluators identified by high visibility vests

Each exercise location has a facilitator, evaluator and observer and in some cases a safety/liaison officer

(identified by different coloured high visibility vests). For the purposes of the exercise participants are also asked to communicate their activities to the facilitators at each location at every turn, so that these can then be recorded and evaluated.

Most of the exercise scenarios are replicated on both sides of the border, both to test local and national responses and the communication and collaboration between the two countries. However, for reasons of space, only one example will generally be described in detail below.

Scenario 1: On a Maasai boma in Tanzania

The simulation exercise begins with a press release (see Annex 13) issued by the EAC Secretariat informing the public about expected heavy rainfalls that might increase the risk of an outbreak of mosquito-borne RVF. In the past, this disease has caused serious losses among ruminants and also claimed human lives and slaughter and trade bans have had serious effects on the economy. Shortly after the press release is issued, suspected disease outbreaks among animals on two Maasai homesteads on either side of the Kenya-Tanzania border are reported.



Alatat Naback and his family are taking part in the FSX on the Tanzanian side of the border

Alatat Naback wears a red shuka draped across his broad shoulders, and waves insects away with a fly whisk. He lives in a substantial gated house surrounded by smaller mud huts, some with shiny new corrugated roofs. In the centre of the boma is a large kraal for the cows. His homestead in northern Tanzania - like Ntipapa’s just across the border in Kenya (see introduction above) - is one of the curtain-raising scenarios of the FSX: A large number of animals are suffering from spontaneous abortion of fetuses. At the same time, some of his family members are experiencing severe headaches and fever.

After Alatat has notified the local veterinary office, a Rapid Response Team (RRT) consisting of a multi-disciplinary team of vets and medical experts, arrives at



The Rapid Response Team arrives at Alatat's homestead

the homestead to conduct joint risk assessments on the severity of the outbreaks and report back to the District Health and Animal Health Offices. The RRT suspects that the animals may have RVF. And there are concerns that some of the Maasai may have also been infected. The team asks Alatat and other members of the community questions, take notes and, donning protective gloves and boots, take samples from animals and people to be sent away to be analysed in a laboratory. With the women, wearing brightly coloured kangas and Maasai beads,



Exercise facilitator Dr Benezeth Lutege Malinda

lined up on one side of the kraal and the men on the other, the response team then gives information to the community about how to protect themselves.

The entire exercise is also monitored by evaluators wearing yellow vests taking notes about what is said and done.

Finally, wearing an orange vest that says he's the exercise facilitator, **Dr Benezeth Lutege Malinda**, *Ministry of Livestock and Fisheries in Tanzania* reminds the watching crowd that it is just an exercise, and not for real. "I'm from the Veterinary Department and I'm guiding the response team to perform their job in the correct way and respond correctly in a real emergency." He says he's attended training seminars before the FSX so knows what to do.

After the exercise, the facilitator holds a "hotwash" debriefing for all the participants so that they can give their immediate impressions about how the exercise has gone, whether the correct procedures have been followed and what could be done better.



The exercise facilitator holds a "hotwash" debriefing

Back at Namanga at the Exercise Control Centre, the participants hold a further debriefing session and compile their evaluation report. "It was a good first day," says WHO's Exercise Coordinator Frederik Copper. "People were a bit unsure at the beginning, but now they are beginning to get the hang of the exercise."

Day 2, 12th June

The second day of the FSX builds in complexity with a series of scenarios and events taking place simultaneously at various different sites, on both sides of the Kenya-Tanzania border.

Scenario 2: Reporting to the local authorities

At Kajiado County Offices in Kenya, the multi-disciplinary members of the Emergency Operations Centre have rapidly convened and are analysing the report of the Rapid Response Team that visited Ntipapa's homestead, along with the laboratory results that confirms an outbreak of RVF. A similar scenario is simultaneously



The Emergency Operations Centre at the County Offices in Kajiado, Kenya

played out at the District Offices in Longido, across the border in Tanzania.

According to the Regional Contingency Plans and Standard Operating Procedures that have recently been put in place, the local EOCs in turn, inform the regional authorities and – in the event of case of a cross-border outbreak - also the EAC Secretariat's Emergency Operations Centre.



The Kajiado County Commissioner, Kenya

Scenario 3: EAC Emergency Operations meeting

For the purposes of the exercise, a temporary EAC Secretariat Emergency Operations Centre has been established at the One Stop Border Post in Namanga in response to the escalating crisis (normally the EOC would be based at the EAC's headquarters in Arusha). Composed of a multi-disciplinary team of officials including administration, health, agriculture, trade, tourism and risk and crisis communications, they discuss their responses and strategies to contain the outbreak and how to respond to media enquiries and rumours. The EAC response team continues to sit throughout the three-day exercise and responds to events as they unfold.

As the scenario develops, through phone calls and further injects, EAC and national Emergency Operations Centres receive more reports on further human infections in communities and health facilities and more dead

animals are reported on a number of farms and national parks. A Journalist approaches the regional government and inquiries about the cause of death of the animals and about a possible link to the human cases. Media reports on the outbreak of RVF in ruminants emphasise the potential economic and trade losses.

The EAC Emergency Operations Centre place conference calls with national offices; inform partners and donors such as GIZ's Pandemic Response Unit. They also issue a press release informing the public of actions being taken and hold a mock press conference at the end of the day.

One immediate problem is that by the end of the day, the EAC response team has not received official notification/request from either Kenya or Tanzania asking for assistance. Without this, they are not mandated to act.



The temporary EAC Emergency Operations Centre



The Namanga Health Centre, Kenya, and the Health Dispensary, Tanzania

Scenario 4: At the health facility

The crisis escalates with reports of human-to-human transmissions taking place, suggesting that the health teams are now dealing with something much more serious than the initial RVF outbreak, with a haemorrhagic-type pathogen (such as Ebola) affecting people. Three patients have so far presented at the health centre in Namanga, on the Kenyan side of the border, and the same scenario is being played out at the health dispensary on the Tanzanian side. Patients display a

high fever, are bleeding from the nose and appear to be deteriorating fast. Medical staff do not yet know what they are dealing with. The Maasai Mara and Serengeti Parks' authorities report further abortions and deaths in ruminant animals.

The health centre has requested support from the district hospital and is waiting for the Rapid Response Team to arrive.



Medical staff on both sides of the border do not yet know what they are dealing with

Dr Lyndah Makayoto, from the *Ministry of Health Kenya Disease Surveillance and response Unit* is the exercise facilitator at the health facility at the Kenyan side of the border post. She says that the exercise is assessing the preparedness and response of the staff and facility to such an outbreak. There is no isolation unit, so staff quickly close one of the wards and turn it into an isolation unit for infection prevention and control. They also work as a team and hold meetings to decide about the best course of action for case management and contact tracing.



The FSX is a "golden opportunity" for staff to activate SOPs, says Dr Makayoto

Scenario 5: Mobile laboratory

For the purposes of the FSX two mobile laboratories are set up, one in a small room at the health facility in Kenya, and another one on the Tanzanian side of the border in a school room (because there is no room at the health dispensary). These mobile laboratories analyse mock samples from patients and initial results suggest the presence of the RVF virus.

These mobile labs are part of a three-year project funded through KfW Development Bank on behalf of the German Government to provide nine mobile laboratories to East Africa and train staff how to set them up and use them. The project is still in the initial roll-out training

As previously noted, one of the main objectives of the FSX is to test the Standard Operating Procedures that were developed at national level after the Ebola outbreak in West Africa in 2014-16. However, Dr Makayoto notes that she hasn't seen the SOPs displayed anywhere at the health facility, although they should be, and that staff have not used personal protective equipment, even though they should have – "perhaps because they think it is just an exercise."

Despite these shortcomings, the simulation is a "golden opportunity" for staff to practise procedures, she says, so it is a very useful exercise: "We have many SOPs, so it's a chance to activate them."

phase, so this is the first time, trained staff have had a chance to set up and use them in the field.



A mobile laboratory technician examines specimens in a glove box

Wearing a blue gown and protective clothing, a laboratory technician examines a specimen in a glove box, equipped with special filters. It takes ten minutes to inactivate the sample and make it safe. Safety is paramount because in a real-life scenario he could be handling very infectious organisms such as Ebola or Marburg viruses.

The equipment for the lab is stored in 15 hard black boxes that can be transported in one large vehicle, and it takes around three hours for the laboratory team to set everything up. The boxes contain everything they need, from cables to sockets for connecting directly to electricity supplies, as well as back-up generators to ensure there is no disruption in power supplies that could endanger staff handling infectious samples.

"It works very well. It is very safe, and the lab staff are kept safe too," says participant **Abdi Roba**, a medical technologist from the National Public Health Laboratory in Nairobi. Under the German Development KfW-funded project he received training in Hamburg for one month, and then further follow-up training in Kenya. The equipment is low maintenance, and the project is training engineers to maintain the lab. They can also be used by veterinary services.



This mobile laboratory was set up at the health facility on the Kenyan side of the border

"It's a huge advantage to have it on site," says **Dr Lyndah Makayoto**, the Exercise facilitator at the health facility. "Otherwise samples would have to be sent to Nairobi, and it would take four hours to get there and four to six hours for the results to come through." In a genuine emergency, such a delay could be critical in containing an outbreak. **Felix Zelote**, from the Regional Laboratory in Arusha agrees: "The lab is usually the first point for diagnostics, but for anything complicated we have to send to Dar es Salaam – and that can take up to two weeks. So, mobile labs would be very useful for speeding this process up."



The mobile labs speed up diagnostics

Meanwhile, in the simulation, laboratory results from patients indicate that what initially seems to be RVF virus is now showing some significant genetic variation and appears in fact to be an unusual and novel virus. The scientists refer to this emerging disease as East Rift Fever. It shares many of the characteristics of RVF, such as rapid onset, fever and haemorrhagic symptoms. There are growing concerns that this new virus is capable of human to human transmission and there is anecdotal evidence that this has already started to happen, but the means of transmission are still unknown. A patient admitted to a health facility in Kenya with the suspected ERF virus variant dies soon after admission.

The number of cases now starts to escalate rapidly in the area, as more reports came in of people infected with the disease who have had no contact with animals. There are also reports of health care workers being infected, and this is causing fear and panic and putting immense strain on local resources. All this suggests human-to-human transmission, and local and international media interest escalates.

WHO requests information from the governments of Kenya and Tanzania about the outbreak and the cases of suspected human-to-human transmission. WHO's regional office asks whether the countries are declaring a public health emergency and what support is required.

Scenario 6: At the slaughter house



There are reports of contaminated meat reaching the abattoir

At the Namanga slaughter house, workers in white overalls are sluicing down the floor after their early morning's work. There are now reports of contaminated meat reaching the abattoir, and the manager of the slaughterhouse is concerned about the welfare of his staff and has contacted the District Authority asking for public health advice. A district RRT inspection team arrives at the slaughter house to conduct a risk assessment on the meat, how it is being processed and how the workers can be protected from RVF infections. Will the slaughter house have to be shut down? What will this mean for supplies of meat in the town? And how can any controls put in place to prevent the spread of infection be enforced, given that the border is so porous?



Dr Wakhungu (on right of the picture) says the porous border is a challenge

Dr James Wakhungu, a veterinary officer for the Namanga Directorate of Veterinary Service in real life, and a member of the EMG, is the facilitator for today's exercise. "We are testing co-ordination and response mechanisms in the EAC Contingency Plan," he says. Pointing to a hut a hundred yards away he says: "That's in Tanzania. This is a very porous border, so it is a serious challenge to prevent the spread of diseases, whether in animals or humans." Under a Memorandum of Understanding between Kenya and Tanzania, local people are allowed to move freely across the border up to a certain distance to conduct their daily activities without

hindrance. Dr Wakhungu says it is important to have co-ordinated control systems for joint control of diseases: "If I do vaccinations on the Kenyan side, but they are not done on the Tanzanian side, we will have a problem."

In the next stage of the exercise, the Food and Agriculture Organisation (FAO) and the World Organisation for Animal Health (OIE) receive reports of an RVF outbreak in southern Kenya and northern Tanzania. They request an update on the situation from Kenya, Tanzania and the EAC Secretariat and ask for further information from further EAC Partner States on possible cases.

The national authorities receive information on the outbreak through the media and other sources. They ask the Rapid Response Teams to provide an update on the situation and to come up with an action plan.

Scenario 7: At the One Stop Border Post

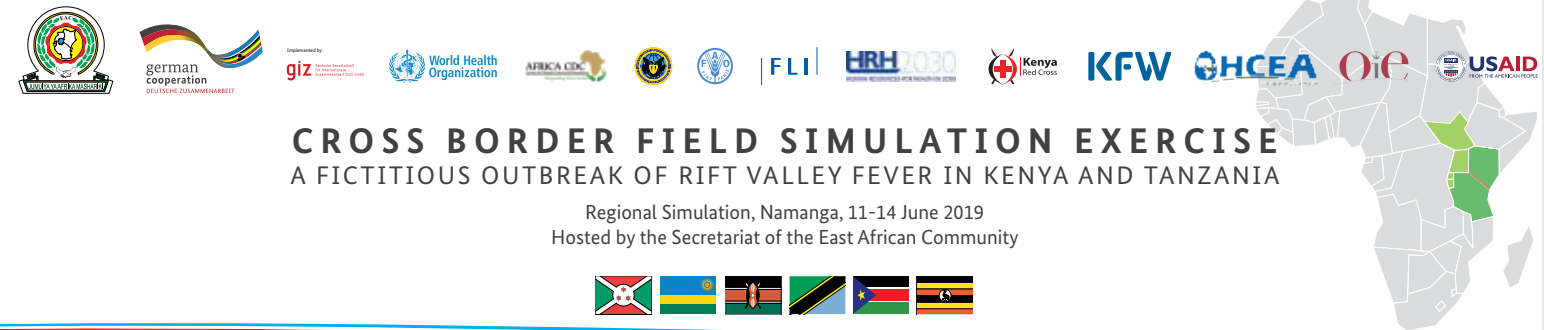


The One Stop Border Post at Namanga



Temperature screening at the One Stop Border Post immigration check

Many of the exercise scenarios take place in and around the One Stop Border Post (OSBP) that was established at Namanga in 2016 and officially opened in December 2018. Two new, identical Chinese-built buildings sit on either side of the border, as customs and immigration officials process the long queue of trucks and passenger vehicles waiting to cross the border. The new system is designed to simplify and coordinate border procedures and formalities.



CROSS BORDER FIELD SIMULATION EXERCISE A FICTITIOUS OUTBREAK OF RIFT VALLEY FEVER IN KENYA AND TANZANIA

Regional Simulation, Namanga, 11-14 June 2019
Hosted by the Secretariat of the East African Community



"The One Stop Border Post has helped to break down barriers. Now the FSX will allow us to test our Standard Operating Procedures and see if communications from different sides of the border will work seamlessly to tackle the problem,"
Caroline Wambua, Acting Principal Administration Officer, EAC Secretariat and member of the EMG.

Throughout the FSX, routine border activities continue as normal and care is taken not to disrupt the OSBP's work. Here, as in all the exercise sites, the EAC/GIZ PanPrep project have prepared posters and banners in both Kiswahili and English to inform the public about the FSX, and participants are clearly identified by badges and high visibility jackets explaining their exercise role.



Exercise scenario involving a safari vehicle crossing the border

The final exercise of the second day of the FSX involves a safari vehicle crossing through the OSBP with four tourists on board. One tourist, who has visited Maasai communities in the infected area, is sick with what appears to be symptoms of East Rift Fever. The other passengers, including the driver, appear healthy but have been in close contact with the infected person for the past two weeks. The tourists are on their way to catch a flight from Kilimanjaro Airport to Jomo Kenyatta Airport in Nairobi.

"Port Health is an important entity, because it plays a big role in infection prevention, and reducing the spread of infectious disease from place or country to another. Here at Kilimanjaro Airport during high season we have 1,5 Million passengers, but during low season between 750 and 850 passengers arriving from different areas of the world,"
Charles Mwaipopo, Port Health Officer at Kilimanjaro International Airport in Tanzania.

OSBP staff check the vehicle and question the tourist about her symptoms. Aware that they may now be dealing with a highly infectious pathogen, staff call for medical back up, and a team arrives wearing full protective clothing of masks and boots. They take samples from the loudly protesting tourist and take her to the isolation unit. Her fellow passengers are asked to give their contact details and advised to seek medical assistance immediately if they start to show any signs and symptoms.

The scenario is watched by a large group of Japanese tourists passing through passport control. Unable to read either the English or Swahili information about the FSX, they appear alarmed by the sight of officials in full protective gear until they are reassured that it is all just an exercise.

The national authorities now send a case definition and guidance to the Namanga Joint Border Management Co-ordination Committee (JBMCC). District governments on both sides call for an emergency meeting of the JBMCC to discuss the evolving situation in the border area.



Namanga Joint Border Management Coordination Committee (JBMCC) meeting



Police stops a truck which tries to smuggle goats over the border

Continuing the scenario, news media reports now focus on the risk to tourism in Kenya and Tanzania due to the outbreak and dying animals in the national parks and elsewhere. They estimate that this will result in a 10 to 15% fall in visitor numbers over the next six months. The Ministries of Health request the deployment of the national Rapid Response Teams to investigate the situation in southern Kenya and northern Tanzania. They sign a decree to activate the RRTs.

One of the liveliest scenarios of the FSX takes place at the OSBP as Maasai herdsman Jackson Ntipapa and some of his family try to take seven goats from an infected area in Kenya across the border to Tanzania in a pick-up truck. They are stopped by the police for not having the right paperwork. As the bemused and uncharacteristically quiet goats look on, the police play their role very seriously: A “scuffle” breaks out as they try to handcuff the Maasai. Ntipapa tries to run away, but he’s caught by the police and “arrested”.

Day 3, 13th June

On the third and final day of the field exercise most of the scenarios again take place in and around the OSBP, although they also expand to two airports (see Scenario 11).

Scenario 8: Importing live animals

03-2 TIME: 0800
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Script
Driver
What you will tell the customs people

- I am the owner of these sheep/goats
- I bought the animals from a Maasai herdsman yesterday near Amboseli and collected them today
- I was bringing the animals back to my farm in Mbuguni, Tanzania
- I was taking a back track as the Amboseli road is really bad at the moment due to the rain and this track is better
- I have legally bought the animals
- I am here with my brother

Information that only you know but you can divulge if pressed

- You will not tell them where you bought the animals. If pressed tell them it was a farm near Amboseli, but not from where.
- I know that this area is in the middle of a disease outbreak and I know that it is probably illegal to move the animals without a permit from the infection zone
- I got the animals really cheap. I think there is a problem on the farm, but I didn't ask any questions
- I was using the back road to avoid the border and it was bad luck that I ran into the police
- My brother owns half the consignment and it's going to another farm near Arusha

Things you are trying to do

- I want to get out of here as fast as possible
- I will tell them anything in order to cross the border and escape with my animals
- I don't want the animals placed in quarantine
- I want the border people to pay for anything they make me do
- I have no money to pay for anything. I spent my money on the animals and the truck and fuel

Example of Inject for Day 3



Jackson Ntipapa is “arrested” for taking his goats from an infected area across the border

Although there are signs and banners around in both Kiswahili and English informing the public about the FSX, and all the participants wear badges, the whole scenario is so realistic that the facilitators have to remind the gathering crowd that it is an exercise and that the participants are just acting.

The police then call the veterinary officers to come and check whether the goats are infected, and Port Officers from both Kenya and Tanzania inspect the paperwork and their animals, which are tested and put in quarantine for 14 days. The vets also call Nairobi for further advice, and the consignment is not allowed into Tanzania and returned to Kenya. If the tests are negative, the goats will ultimately be returned to Ntipapa.



Veterinary officers on their way to check the goats



Dr Stéphane de La Rocque, Head of WHO's veterinary One Health team helped design the scenario

Observer **Dr Stéphane de La Rocque** is in charge of the veterinary One Health team at WHO in Geneva and contributed to the development of this scenario. He says the exercise is about building capacity, testing responses at local and national levels and seeing whether the relevant SOPs are applied. He says that although the methodol-

ogy used for the exercise scenario is complex, “the fact that it is a real exercise really enables us to see things in practice and respond to the challenges. Plus, the exercise has an impact on those who see and participate in it, so they can also benefit. Having an action plan is one thing, implementing it is another.”



A passenger matatu is searched for contaminated meat

Scenario 9: Passenger vehicle with smuggled meat

In another entertaining role-playing scenario, the OSBP has to deal with a passenger-mMatatu or bus crossing the border carrying “infected meat and milk” (a cardboard box labelled as infected meat). Despite protests from the “passengers”, the bus is searched and the meat and milk confiscated using the appropriate seizure forms. One unhappy woman complains vociferously that she will have nothing to feed her children with. Another tries to run away.



Taking the passengers' details for contact tracing



Lilian Anyango Ousa, the Public Health Officer at the OSBP, attends the exercise debrief

“If the passengers protest, we need to call security and staff wearing protective clothing to seize the products and take contact details from the passengers in case further action has to be taken,” says **Lilian Anyango Ousa**, the Public Health Officer for Port Health on the Kenyan side of OSBP. If the tests prove positive, the products will be destroyed in the on-site incinerator. They also take the passengers’ details and inform the local health centre of the incident, in case anyone has been infected and comes looking for treatment later.

After the exercise, Lilian Anyango Ousa says the first responders were initially unprepared and overwhelmed by the scenario, since they thought the exercise would involve a truck rather than a passenger vehicle. “We need to think outside the box and act quickly. We need to be top-notch and have plans in place that allow for all possible scenarios. We need to be able to communicate with staff quickly and work with all the relevant government agencies – such as the veterinary services and the trade department if the meat is for sale - to ensure we have quick cooperation”.



Observers discussing the scenario

Scenario 10: Community engagement

“Diseases begin in communities and end with communities,
Peter Kibor, Red Cross Kenya.

One of the key lessons that emerged from the West Africa Ebola outbreak of 2014-16 is that community trust and engagement is critical in any emergency response. In the early days of the epidemic there, frightened and confused communities turned on health workers and stormed isolation facilities, placing health workers in danger and jeopardised the overall response.

“We faced a lot of resistance in the communities. I remember a couple of times I was threatened by the communities when we were trying to take suspected patients to isolated units. The communities didn’t like that and were saying that we were the ones who had brought Ebola to their village. They actually wanted to kill us, to burn our car and us inside of the car,

Dr Landry Mayigane, a Rwandan medical epidemiologist who worked as the African Union’s Operations Coordinator in Guinea during the Ebola crisis.



Dr Mayigane training communities in West Africa about infection prevention and control (Photo © Dr Landry Mayigane)

The importance of community engagement and support has also been reinforced during the last year in the DRC, where responding to the Ebola outbreak has been complicated by conflict, violence and mistrust, especially of foreigners from outside the local area. Since January, there have been 198 attacks against healthcare workers or Ebola treatment facilities leading to seven deaths and 58 injuries. The distrust of health workers also means that people are not seeking treatment and about a third of the deaths take place in the communities rather than in specialist isolation centres, further increasing the risks to relatives and neighbours.

These experiences show that community awareness measures and clear, timely and accessible/appropriate risk communication with communities are essential in gaining trust and cooperation. Engaging traditional and religious leaders and key influencers in a community is one important way of getting prevention messages across.

As a result, the FSX includes a community engagement scenario in two locations in Kenya and Tanzania. It involves some of the local Maasai women whose livelihood depends on selling their handmade jewellery to passengers and tourists crossing the border, raising fears that the disease might spread through contact between passengers and traders. The Port Health authorities ask the chairperson of the border trade association to explain the risks to the women and explain why they should stop trading until they are advised that the outbreak is under control. This kind of effective and timely risk communication is critical in any response to prevent the spread of diseases.



Local Maasai women are asked to stop trading at the border during an outbreak

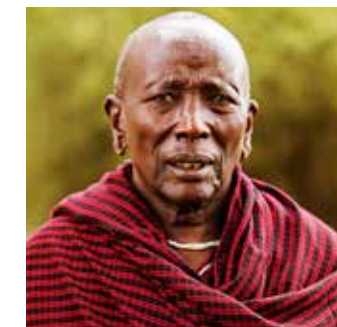
The Rapid Response Teams also identify community and religious leaders from the affected communities on both sides of the border and ask for help with mobilisation and raising awareness about the outbreak. These leaders are known to and accepted by the community, so are likely to be listened to. The RRT experts inform the leaders about the likely cause of the outbreak and discuss with them preventive measures. These are shared with the community by community leaders, who also invited the RRT experts to address the gathering.

The Kajiado health centre sits in a grove of tall trees at the end of a dusty path on the Kenya side of the border. In another scenario as part of the community engagement exercise, actors serving as community members sit on plastic chairs scattered in the shade next to the health centre. Standing among them, participants practising their community engagement skills share information about the fictitious outbreak and answer questions posed by farmers and others in the community. Given the severity of the outbreak and its impact on humans and animals, the community members are understandably concerned.

The task of the actors serving as community engagement experts is to practice key elements of risk communication, active listening and two-way communication. Risk communication and community engagement require building trust and consensus, through words, attitude, and body language. This requires experts to meet people at risk - emotionally, educationally, physically, and linguistically - with empathy and understanding. All participants take their tasks seriously. The actors who serve as community members pose important questions.

The actors serving as experts respond to questions thoughtfully and accurately, to reassure the community members that authorities and experts share their concerns and are seeking solutions to the outbreak.

“As a community leader my primary responsibility is to maintain peace in the community among my people,”



Leaders such as Thomas Ngulipa have a powerful role to play in engaging communities

says **Thomas Ngulipa**, a Community Leader in Longido District, Tanzania. “As a leader I am also a teacher to my people, especially the children. I show them what to do and always live by example. When it comes to disease outbreaks, I promptly inform those in authority, especially the technical officers in human health or veterinary health, depending on the situation. During disease outbreaks, it is always my duty to bring the people together in a community meeting. I inform them of what has befallen us and make them understand and appreciate the magnitude of the problem. Depending on the nature of the concern I caution them on refraining from eating uncooked meat, drinking un-boiled milk, and urge them to sleep under mosquito nets to prevent or stop further spread of the disease.”



Rapid Response Team experts address a community meeting



Bernhard Bett regards community members as key stakeholders in any disease outbreak

Robert Bett from the Kenyan Red Cross Health Department works in emergency health and disease control and attended the FSX as an observer. He said it had been particularly interesting to see how communities responded to the exercise, and to hear the talk of setting up early warning systems in communities. “Community engagement is crucial for sustainability in any response. They are the key stakeholders in any disease control.”

Scenario 11: At the airports



The exercise also involved the airports in Nairobi and Kilimanjaro

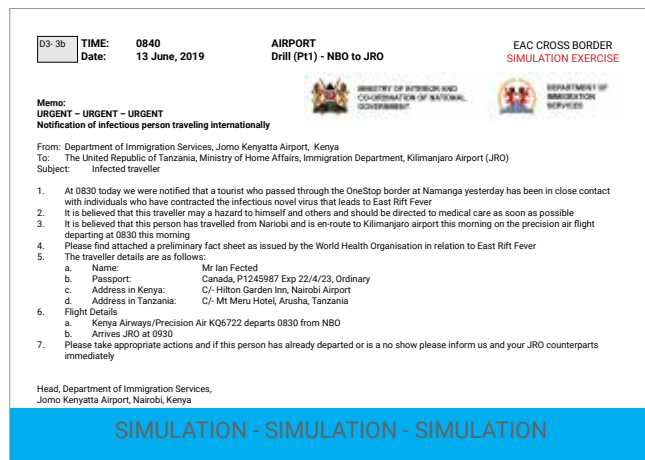
Airports are important hubs for travel and trade. At Kilimanjaro’s small international airport some 700 passengers arrive and depart every day, and the numbers can double in the high tourist season. With flights arriving from countries with ongoing outbreaks, such as DRC, there is an increased risk of spreading infectious diseases. Just as the OSBP in Namanga, infection prevention and control measures at these Points of Entry are therefore especially important for pandemic preparedness and response.

However, at the airports, the exercise scenario is being conducted discreetly, so as not to interrupt the airport routine and to avoid causing panic among passengers. It includes infection prevention and control measures without the actual involvement of passengers.

The scenario is based on real flight schedules and a pretend scenario of a suspected infected passenger being on board a Precision Air flight between Kilimanjaro and Nairobi, and vice versa. The aim is to test how the airport authorities respond to and coordinate with their counterparts in Kenya or Tanzania.



Port Health plays an important role in infection prevention says Charles Mwaipopo



In one part of the scenario, the airport authority in Dar Es Salaam informed the authorities in Nairobi that a suspect case was on the way to Jomo Kenyatta International Airport. The Kenyan Ministry of home affairs requested the airport authorities to get ready for the arrival of this traveler. They then role-play taking him off the plane on arrival. When the scenario is played in reverse however, Nairobi takes a slightly different approach and Port Health officials meet the arriving plane with a sign with the suspected passenger’s name on, so as not to alarm other passengers. When the passenger is a “no show” they contact Kilimanjaro to ask why the passenger is not been on board and ask them to start investigations and contract tracing.



The airport exercise was based on real flight schedules

Day 4, 14th June

Analysing the exercise

The final day the exercise took place at the Longido District Council Hall and was dedicated to the debriefing and evaluation of the exercise.



Systematic evaluation of every stage of the exercise

Systematic exercise evaluation was conducted by the Exercise Management Group and WHO during the planning stage, the actual conduct of the exercise and on the final day of the FSX using feedback received from the facilitators, participants, observers and assessors drawn from different international organisations, subject matter experts, SG and EMG members. The FSX evaluation was a systematic process of observing and recording all exercise activities, comparing performance and outcomes against exercise objectives, and identifying strengths and weaknesses.



Toba Nguvula, District Administrative Secretary of Longido District

Toba Nguvula, District Administrative Secretary, welcomed the participants to Longido. The District Executive Director, **Juma Mhina**, expressed his gratitude to see so many participants attending the debriefing session and emphasised the importance of the exercise for improving preparedness and response to outbreaks in the region.

Frederik Copper led the participants through the agenda of the day. He highlighted that the debriefing was the most important day of the exercise, as this would identify what had worked well and where there are still challenges.



Frederik Copper addressing participants during the debriefing process

David Knaggs, WHO consultant, explained that the rationale of the evaluation was to assess whether the objectives of the exercise had been met, and identify areas that need further improvement. Participants were divided into eight break-out groups to discuss specific topics and evaluate the strengths and weaknesses of the different scenarios in both Kenya and Tanzania and the response of the EAC Secretariat. Observers were also invited to join the groups.



WHO consultant David Knaggs (standing, centre) led the evaluation process

The participants’ group evaluation reports identified major strengths and gaps in preparedness and response: Some of the strengths that were highlighted:

- Response and reporting procedures were well known at all levels.
- Guidelines and SOPs for rumour management were in place.
- There was a database of skilled, multi-sectoral personnel in place at national level.
- A Public Health Emergency Operations Centre was in place and SOPs had been developed for its activation.
- Overall at the key points of entry (airports and border crossing) the key stakeholders in the One Health approach (security, animal health, human health, and immigration) were reasonably prepared, and early warning systems were functional.
- Emergency plans and SOPs were available and used during the exercise at the airports and are tested frequently.



Evaluating the outcomes of the exercise

Some of the weaknesses the groups identified:

- Partner States did not know about the EAC reporting mechanism and there was no clear contact person.
- The Emergency Operations Centres did not work properly either at local or regional/EAC level.
- Human resources for coordination and response to public health emergencies were inadequate and unskilled at both regional and district levels.
- The One Health approach did not work well at sub-national levels.
- There was no up-to-date and operational contingency plan or SOPs for RVF.
- There needed to be better knowledge and application of SOPs at the One Stop Border Post.
- The airport ambulance at Kilimanjaro International Airport was out of order and there was no ambulance at the Namanga OSBP.
- There were no provisions for isolating animal products at the airports or border post and the isolation unit at Kilimanjaro airport needed modifications.
- There was a lack of personal protective equipment for animal health personnel at all Ports of Entry.
- There was no crowd management equipment (e.g. megaphones) at all Ports of Entry.



More ambulances needed

A summary of strengths and weaknesses⁹ of the FSX scenarios identified during the participants' debriefing session can be found in the FSX report on the EAC website.

Participants were also asked to vote using hand-held electronic devices on how they felt the FSX had been organised and conducted. These votes were anonymous and instantly shared using an overhead projector.

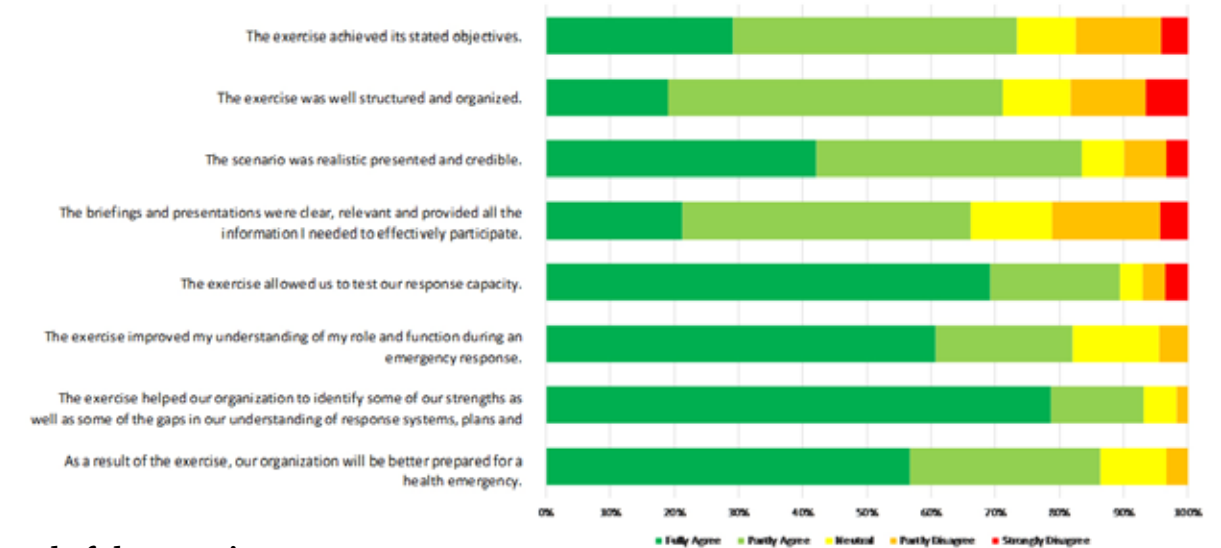


Participants give feedback on the FSX using hand-held electronic voting devices

Asked if they felt that the FSX had been well structured and organised, 71 % agreed either fully or partly, 11% were neutral, and 18% disagreed partly or strongly. Virtually all the participants felt the FSX had allowed them to test response capacities and identify strengths and weaknesses, and most felt that the exercise had helped them to understand their role and function during an emergency. The majority of the participants felt that the scenarios had been realistic and credible, but 35% of them felt that the briefings and information they received during the course of the FSX had not been sufficiently clear. Over 85% of the participants felt that their organisation is now better prepared for a health emergency as a result of the exercise.

Feedback collected at the end of the participants' debrief session on Friday 14th June 2019 in Longido, Tanzania

A total of 121 participants, control team members and international observers participated in the survey (including 46 from Kenya, 47 from Tanzania, and 6 from the EAC Secretariat)



The end of the exercise

At the closing of the FSX held in Longido on the afternoon of 14th June, **Dr Michael Katende** of the EAC Secretariat said: "I know everyone is tired as we come to the end of this very exciting simulation, but I would like to take a few minutes to thank all of you for the commitment, hard work and support you have shown during this exercise." He thanked all the partners who had made the FSX possible, especially the GIZ's PanPrep project and WHO for their support, adding: "This has been a wonderful exercise – it has taken a lot of brain work and preparation."



Dr Katende thanked all the partners who made the FSX a "wonderful exercise"

He also expressed appreciation for all the other partners who had contributed, especially KfW for supplying the two mobile laboratories, and all the other regional and international partners who had contributed to the success of the exercise.

He thanked the local governments and people of Namanga, Longido and Kajiado in Kenya for their cooperation, and especially Dr James Wakhungu, Veterinary Officer Namanga Directorate of Veterinary Services, and Toba Nguvila, District Administrative Secretary of Longido District, who he said had made a major contribution to the success of the FSX. He also thanked the inter-

national observers for taking part. He concluded by saying that he hoped that the participants would all take back what they had learnt to their own countries and Partner States. "This should not be the last FSX – share your experiences with your teams as you prepare other exercises."

To conclude the exercise, Dr Katende presented all the participants with certificates of appreciation.



Dr Katende presents certificates of appreciation to all participants

The report on the FSX, which was finalised and signed by all EAC Partner States, includes recommendations for the next Sectoral Council of Ministers of Health meeting, scheduled for October 2019.

Further evaluation of the FSX

A final meeting of the FSX Steering Group and Exercise Management Group took place on 17th and 18th June 2019 in Arusha, Tanzania, to evaluate the cross-border field simulation exercise among those who planned and implemented it and to develop further recommen-

⁹ Cross border Field Simulation Exercise, 11-14 June 2019, EAC Report on the FSX <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>

dations for the Sectoral Council of Ministers of Health based on their practical experience.

WHO Consultant David Knaggs presented the following preliminary findings, which were afterwards discussed:

Strengths

- Sound regional and multi-sectoral goodwill and coordination was evident throughout the exercise.
- Cross-border cooperation through the Joint Border Management Coordination Committee was strong and effective in coordinating the response to health emergencies.
- Accurate assessment team reports were produced and disseminated to the appropriate authority in a timely manner.
- The EAC Secretariat provided a framework for the coordination of responses from Tanzania and Kenya.

Gaps

- Coordination between levels of the response (district/county through national) needs to be rationalised and SOPs developed and validated for each level.
- The poor flow of operational information between regional, national and district/county levels resulted in delays and disruption to the response. A direct

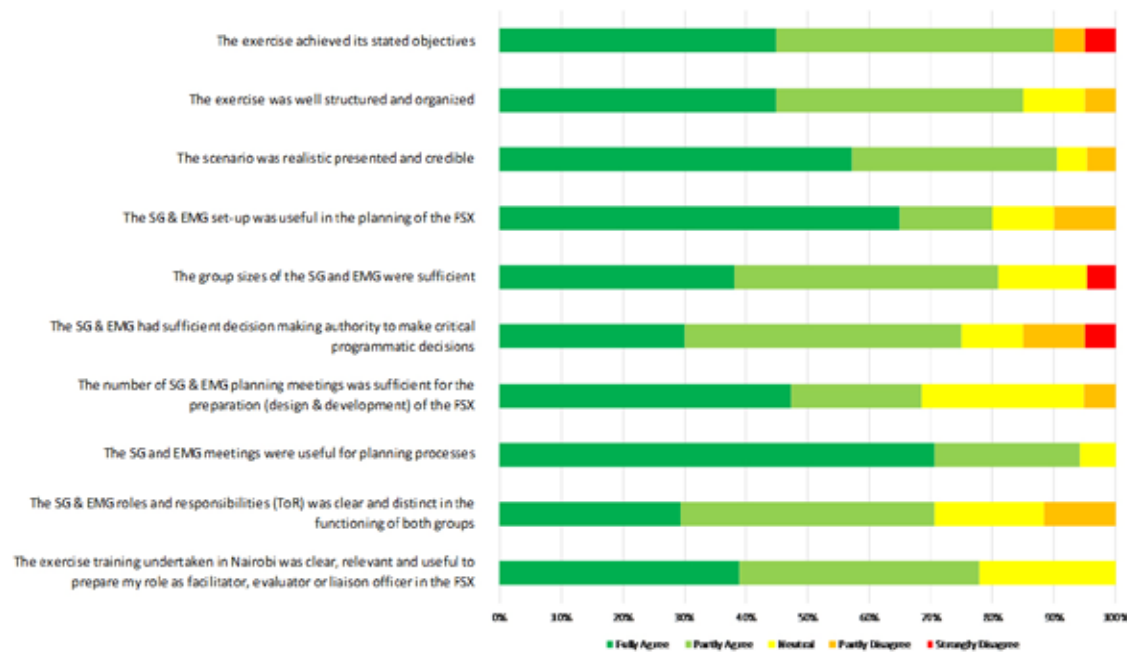
channel is needed.

- National and regional Public Health Emergency Operations Centres have not yet properly adopted and embedded the Incident Management System (operationalized.)
- Emergency response plans and operating procedures are at varying stages of development and were often not available for reference by responders.
- Errors made in collecting/labelling blood samples suggest that procedures need to be reviewed.
- Procedures for working with suspected infected animals and the putting on/taking off Personal Protective Equipment should be reviewed and regularly practised (exposure to contamination).
- Rapid Response Teams should
 - be assembled from a register of experts at the national, and sub-national levels,
 - be properly trained and
 - respond according to a validated and practised procedures.
- Discussion/operations-based exercise programmes should be institutionalized at all response levels to ensure a state of readiness.
- Need for multi-sectoral contingency plans and procedures (One Health approach).

In another voting session, the SG and EMG members came up with these results:

Feedback collected during the EMG & SG debriefing meeting on 17-18 June 2019

A total of 21 participants (9 from the SG and 12 from the EMG) participated in this survey



For the FSX Project Management Review held in Arusha on 17th June, including the functions of the Steering Group and Exercise Management Group, see Annex 14. The report on this meeting is available on the EAC Website¹⁰

The recommendations to the Sectoral Council are available in an overview on pages 69-70 of this report. The recommendations from the WHO's Post Exercise Evaluation Report are provided in an overview on pages 64-68. The report will also be made available on the EAC website (Sectors/Health/Pandemic Preparedness).

¹⁰ 5th Joint Steering Group and Exercise Management Group Meeting to Evaluate the Cross Border Field Simulation Exercise held at Namanga, 17 - 18 June 2019, EAC Meeting Report - <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>

What Participants said about the FSX



*“The lessons that are drawn from this FSX will save many lives,
Hon. Adan Mohammed, Cabinet Secretary for East African Community and Northern Corridor Development, Kenya.*

“After a long journey of 18 months preparing for the FSX I am happy with its outcomes: It identified some of the strengths and weaknesses that we have as a region, which we need to address in the shortest possible time for us to be able to respond effectively to disease outbreaks,

Timothy Wesonga, regional advisor for EPOS Health Management at the EAC/GIZ Pan-Prep project says weaknesses exposed by the FSX need to be urgently addressed.



*“Having an action plan is one thing. Implementing it is another,
Dr Stéphane de La Rocque, head of the veterinary One Health team at WHO and an international observer at the FSX.*

“Going through this process has made people aware of what it takes to protect their country. So, I think it was a good activity and I am happy that I was part of it,

Dr Athman Mwatondo, Ministry of Health, Kenya, Zoonotic Disease Unit.



*“The exercise is supposed to help us fill in all these gaps and put measures in place to respond better,
Lilian Anyango Ousa, Public Health Officer for Port Health on the Kenyan side of the One Stop Border Post at Namanga.*

*“Even the planning process for the FSX enabled us to start drafting a contingency plan – we didn't have one before – as well as drawing up SOPs for a health emergencies. This FSX is helping us to draw up policies and structures that will help us to control emergencies, and reinforce our SOPs that might otherwise just sit on a shelf,
Sally Serem, Chairperson of the Joint Border Management Coordination Committee.*



“The FSX was a useful reminder for every day procedures...It will be important to see what happens in Kenya and Tanzania after the FSX – will they share what they have learned from the exercise and apply it in the future? There is still some work to do, international observer **Patrick Bastiaensen**, Programme Officer from the World Organisation for Animal Health.



“We came into the simulation prepared, but this exercise also stimulated and motivated us and we are now eager to work together across different sectors and apply our plans and SOPs effectively, **Mary Makata**, from the Emergency Preparedness and Response Section of Tanzania's Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC).

“There's a lot I can take home with me to help with emergency response. But the key responsibility rests with the government, says **Robert Bett**, Kenyan Red Cross Health Department.



“Seeing all these people coming together from all these sectors and all these communities is amazing and together we can achieve more. I spoke to colleagues from Southern Africa and Rwanda and they said that this is great and they would wish to could have such simulations at many more African borders. They felt they would gain a lot and not just for emergencies, **Jemimah Mwakisha**, WHO Communications Officer, Kenya Country Office.

“This field simulation exercise has been an eye opener and it provided opportunity to reassess and to evaluate the progress made, especially with regards to the documents developed and human resource capacities, in terms of outputs and collaboration and coordination between sectors and between partnering states and actors. The biggest challenge I have seen – and that was obvious – was coordination. However, this is usually also the case in real scenarios, unless you plan very well, do drills again and again and evaluate and re-evaluate, **Fasina Folorunso**, FAO/Emergency Centre for Transboundary Animal Diseases, Team Leader Tanzania



“The work is just starting... We have many borders and people might read the reports, but it is different if you actually take part in an exercise. I would gladly pass on my lessons learned to the preparation of future simulations, **Pauline Kituyi**, from the Ministry of East Africa Community and Regional Development Authority in Kenya.

Lessons Learned from the FSX

The FSX was undoubtedly a tremendous learning experience for all the countries and participants involved. It implemented important lessons learned from East African experts who fought the Ebola epidemic in West Africa, that were identified during the Nairobi conference of 2017¹¹ and it also illustrated the huge strides that have been made towards implementing a One Health approach in recent years.

An exercise of this size, scope and complexity is neither supposed nor expected to go perfectly – we will learn from our mistakes and from an open and honest appraisal of what went well and what could have been done better so that we can address the weaknesses in our preparedness and response.

Many lessons have been learned from the preparation for and holding the FSX. Some of the main lessons are:

- A cross-border Field Simulation Exercise requires detailed preparation, which itself already has a training effect. It is therefore meaningful to carry out a table top exercise or smaller, targeted drills beforehand.
- Coordination and communication are of utmost importance in disease control.
- Disease outbreaks affect various sectors, ranging from human and animal health, trade, tourism and the military sector to civil society and beyond, and all have an important role to play in containing the outbreaks.
- The field simulation exercise marked the end of a long preparation process but was only the beginning of extensive implementation. Now the weaknesses identified need to be addressed to ensure that the region really is better prepared for an emergency in the future.

The EAC's coordination role

The EAC Secretariat has a clear coordinating mandate in pandemic preparedness and response when outbreaks of infectious diseases affect more than one country. The Regional Contingency Plan with its clear emergency structure is the policy framework. Together with existing SOPs it should guide the Secretariat's response and a regional Emergency Operations Centre should enable a coordinated response and proper, timely and effective flow of communication during a crisis.

The FSX demonstrated that the political status of national and regional levels needs to be clearer defined when it comes to providing resources for outbreak response, roles and responsibilities and where ultimate political power resides. This led to confusion and ambiguity in the FSX scenarios. The simulation also revealed a lack

of information, especially at Partner States level, about procedures used to communicate with, report to or activate the EAC Secretariat.

Under the terms of the EAC's Contingency Plan and SOPs, the Secretariats' EOC needs to be officially notified by Partner States about an outbreak of an infectious disease. In the FSX however, the Secretariat initially received no official notification from the two countries involved in the exercise. “It is important that Partner States know that each time there is an outbreak, they need to notify the EAC Secretary General to activate the regional response team,” says **Dr Michael Katende**, Acting Head of Health Department of the EAC Secretariat. “There is a weakness in the notification channels.”

Essential resources needed for implementing the SOPs, and most importantly the budgetary allocations specified in the Contingency Plan – are still not available. As a result, the permanent EAC emergency structure envisaged in the regional Contingency Plan has not been established, although a Contingency Plan budget of around \$8.6 million over five years has already been approved and further funding is being sought to set up a permanent regional EOC. Consequently, the EAC emergency response is convened on an ad hoc basis and there is no clearly defined contact person in an emergency. As a result, most of the continuous outbreak preparedness tasks specified in the Plan were not allocated or fulfilled during the FSX.

What are the lessons learned?

- Notification procedures and activation of assistance requests between the Partner States and the EAC still need to be clarified.
- An EOC at the regional level is necessary and should be established as soon as possible to enable implementation of the EAC Contingency Plan's emergency structure.
- Sufficient resources need to be available to ensure that it is fully-staffed, fully-functioning and properly funded.
- An emergency response team needs to be established urgently.
- The team will need further training especially on crisis communication and on how to deal with the media so as to ensure the proper, timely and effective flow of communication during a crisis.
- There needs to be a clearly defined contact person in the EOC for countries to call in an emergency.
- The EAC should play a more proactive role in encouraging transparent reporting, in order to enhance mutual accountability and information sharing between Partner States.

¹¹ [https://www.eac.int/health/Lessons for the Future – What East African Experts learned from fighting the Ebola Epidemic in West Africa](https://www.eac.int/health/Lessons%20for%20the%20Future%20-%20What%20East%20African%20Experts%20learned%20from%20fighting%20the%20Ebola%20Epidemic%20in%20West%20Africa)

The importance of cross-border collaboration

Under the Regional Contingency Plans and SOPs, mechanisms exist to support cross-border coordination and communication during a major disease outbreak. But while guidelines and SOPs are in place, awareness needs to be created among the actors and documents operationalised for the smooth running and timely response to outbreaks. Cross-border collaboration is especially important at the Points of Entry (PoE), such as the One Stop Border Post at Namanga or the international airports in Nairobi and Kilimanjaro.

At Namanga, for example, the Joint Border Management Coordinating Committee (JBMCC) brings together the heads of different agencies such as immigration, the Bureau of Standards, trade, agriculture, police, customs, port health and plant inspectorate on both sides of the border. The committee meets routinely every quarter and more often if necessary. **Sally Serem** says this multi-agency approach “enables us to escalate issues and share challenges. The setting up of the OSBP at Namanga has also helped cross-border collaboration she says: “We all sit in one site, so communication is easier.” The committee also makes recommendations to national bodies and the EAC Secretariat.

Although these mechanisms exist to support cross-border coordination during a major disease outbreak, the activation criteria are still unclear and here are frequent communication delays and bottlenecks, which can delay timely response. These problems – especially when it comes to livestock movements - are compounded by porous borders and insufficient enforcement and monitoring.

“It is critical that at the PoE we are able to deal with any outbreaks of infectious diseases that have been reported for purpose of containment and scaling up and management of the outbreak”, says **Sally Serem**, “as this is a common area of crossing for both, people and cargo. At Namanga the border is porous. We have the one stop border post, but the rest of the border is just open. So, it is possible that the people with small trucks will be able to cross the border without detection.”

“Port Health is an important entity, because it plays a big role in infection prevention, and reducing the spread of infectious s from place or country to another”, says **Charles Mwaipopo**, Port Health Officer at the Kilimanjaro International Airport (JRO) in Tanzania, one of the main PoEs for tourists arriving in the region. “Here at JRO during high season we have 1,5 Million passengers and during low season between 750 and 850 passengers arriving from different areas of the world. We know where people are coming from. We are using the pas-

senger manifest and passport control and we have the information from the airline.”

“My most important lesson is that we need to be prepared all the time and to be able to respond professionally in disease emergencies to secure the public and also your own health”, says **Jeoffrey Kebaki**, Port Health Officer at Jomo Kenyatta International Airport in Kenya. “As a take away, we need to continuously train our work force so that they are prepared to detect outbreaks in good time. We also need to work closely with our counterparts, for example the Kilimanjaro airport who also participated in this exercise, by sharing information, because information is power. If we share information in good time, we will be able to prevent some of these health threats.”

Veterinary border inspector at Namanga and member of the Exercise Management Group, **Dr James Wakhungu**, Veterinary Border Inspector at Namanga for the Ministry of Agriculture, Livestock and Fisheries, Kenya, says: “We can carry forward the skills which we have gained in this FSX and eventually help our institutions and our country putting in place mechanisms that will help us handle public health emergencies at the Points of Entry. Having gone through this process for the entire planning period has put us in a better position to execute some of the programmes we are putting in place for better preparedness and response.”

What are the lessons learned?

- It is vital for countries to collaborate across borders. Countries need to talk to and collaborate with their neighbours, even beyond the EAC, to contain diseases at source.
- Activation criteria and procedures need to be clarified, both between countries and between the EAC and Partner States.
- Ports of Entries are the main border crossing points for people and animals and goods. Therefore, the capacities and skills of staff and cross-border mechanisms in place are crucial in outbreak prevention and response.
- Staff at PoEs should receive thorough training on contingency plans and SOPs and have regular drills on their procedures.
- Facilities at PoEs need to comply with existing plans and SOPs and provide the necessary features.

The need to disseminate plans and SOPs more widely

All active participants in the FSX should have known the regional and national contingency plans and SOPs by heart. Prior to the exercise the EAC Secretariat and

Partner States should have distributed these documents and ensured effective training had taken place to familiarise people with them. This was one of the key recommendations that came out of the Table Top Exercise held in September 2018 and one of the specific aims of the large-scale FSX held at Namanga was to test these in operation under as realistic conditions as possible.

However, not all SOPs have been approved and many participants and international observers noted that one the biggest gaps revealed during the FSX was the participants’ lack of familiarity with the contingency plans and those SOPs that have already been approved.

Dr Christian Janke is a global public health consultant working for EPOS, a German health management company that implements parts of the PanPrep project. He was strongly involved in the development of the regional SOPs together with the EAC Secretariat and Partner States and was keen to test them in the simulation. Dr Janke felt that the design of the FSX had taken insufficient account of the stated aim of testing the implementation of the existing SOPs. As a result, the SOPs had rather been used on an ad hoc basis than systematically. He saw the need for short and simple summaries of the SOPs made available for easy reference and distributed more widely. However, these 1-pager “check-lists” should not be developed at the expense of familiarisation with the full documents “because emergencies are inherently complex”.

Observer **Patrick Bastiaensen** cautioned that “peace time is not war time” and questioned how much the way people responded during the FSX was due to the exercise and did not necessarily reflect how they would react under normal circumstances. From his experiences of working in East Africa, he said that, for example, procedures for sampling and quarantining of animals were often not followed in real life. “Kenya, for example, is one of the few countries in the region that already has a SOP framework for what to do in the event of an outbreak of RVF”, said Bastiaensen. Drawing up this framework involved all the relevant ministries, but observers noted that during the FSX officials at district office did not refer to the framework or mention the SOPs.

The FSX also illustrated that SOP are no panaceas: “You need to stay flexible and cope with sudden changes and might not always have an answer in your SOP”, says **Larissa Duddeck**, an observer from the German government’s Rapid Response Team (SEEG). The exercise showed, she says, that further training is necessary, on many things: from clarifying an organisation or individual’s role and responsibility, organising transportation and “knowing by heart” how to use personal protective equipment.

Dr Athman Mwatondo observed that “at the national level we have contingency plans and strategies developed, but they are not shared with and customised to the lower levels. So, we need to do this, borrow from the national level plans and develop the local ones contextualized to the area. Even more importantly, we need SOPs and check lists for the people on the ground so that they know what to do and when.”

“My main lesson learned is to follow up with my country counterparts on each agreed plan and SOP we developed to make sure that they are taken down to the implementers,” says **Dr Grace Saguti**, Officer for health emergencies at the WHO Country Office Tanzania. “They need to understand them well in order to use them for their daily activities in preparedness.”

“One of the key lessons is that we need to disseminate the SOPs more widely and conduct more training,

Dr Michael

Katende, Acting Head of Health Department from the EAC Secretariat.



- Available SOPs are still not widely known and there has been insufficient training to familiarise staff with them, especially at the EAC Secretariat level. Staff and responders at all levels need to be much more familiar with existing national and regional contingency plans and operating procedures.
- The EAC Secretariat and the respective Ministries in the Partner States need to lead this process and disseminate these documents as widely as possible. One of the key lessons identified by many participants is that Governments and Ministries now need to take ownership of the process.
- The existing documents need to be amended by a one-pager easy-reference document, but people still need to be familiar with the full documents.

“I have gone through many SOPs and as an administrator this has been a great experience for me. My most important lesson learned is that as a country, an agency, a department, we should have SOPs in place for every task that we undertake. They help the country to develop a plan and to apply a certain operational procedure that makes it easier to avoid casualties or fatalities. The Contingency Plan and these SOPs will not only help my country but also others to respond better to emergencies in the future. All countries including mine should have simplified rules and procedures for emergencies in order to be able to respond faster. The practices we have in our countries take too long. If we want to make this world one integrated village then these are the things that we should look at, Stephen Mule Komora, Assistant County Commissioner, Ministry of the Interior, Kenya, working at the Namanga border.



should be there in advance and built into existing budgets. It is a matter of countries getting their priorities right, Caroline Wambua, Acting Principal Administration Officer, EAC Secretariat.

What are the lessons learned?

- Partner States need to make a clear financial commitment to their responsibilities for pandemic preparedness.
- A regional emergency fund is a prerequisite for the EAC Secretariat fulfilling its role; it needs to be established as soon as possible.
- The money needs to be available in advance and be built into existing budgets – rather than waiting for an emergency to happen.

Further strengthen the One Health approach

Health is closely related to and influenced by various sectors of society and there is a clear link between health and the economy. Therefore, the EAC Secretariat and Partner States planned the FSX around the One Health approach, to include different disciplines and sectors in pandemic preparedness and response. The exercise scenarios were meant to test the strengths and weaknesses of the One Health approach in action.

Overall the FSX showed great advances in the understanding and implementation of the One Health approach. “However, there were still many challenges involved in bringing the different disciplines together so that they see and appreciate their roles in a simulation exercise”, says **Timothy Wesonga**. Despite these challenges “initial doubts and resentments were quickly overcome. However, we need to develop a mechanism or strategy for interdisciplinary working. I’d recommend we come up with a One Health strategy as a framework to facilitate this cooperation. Some Partner States already have One Health strategies, but we do not have it at the regional level.”

“The most important lesson I picked from this exercise is that multi-disciplinary collaboration between sectors and professions can work effectively,” says **Fasina Folorunso**. “But each and every role player needs to commit to making it work. During this exercise we have seen our actors from the different backgrounds and fields work together, coordinating effectively and implementing the project in the field. Where there were challenges you found that they were able to trouble-shoot jointly and also to provide solutions or at least feedback to help improve the system. This was a big lesson learned. It shows that when you talk of One Health and multi-disciplinary and inter-sectoral collaboration it is possible.”

Funding an emergency response

There are budgetary requirements in the national and regional Contingency Plans and SOPs to ensure proper dissemination and training and establishing the permanent EAC Emergency Operations Structure and EOCs at all levels.

However, the FSX clearly demonstrated that critical resources and budget lines specified in the contingency plans and SOPs have not yet been put in place.

“You cannot say you are prepared to fight an epidemic unless you have something to do it with. An epidemic will not wait for a donor to look through their purse to find money. We MUST set up reliable funding for an emergency response. The money

“I can confirm that in the exercise the cooperation between different sectors was very good, right from the start and from the composition of the exercise management group and during the exercise all key sectors were well represented. But both at regional and at the national level coordination of the one health sectors is still not well done. Therefore, we need deliberate efforts to enhance the cooperation between the sectors, Dr David Balikowa, EAC Senior Livestock Officer and in the FSX a member of the EAC Emergency Operations Centre.



Dr Athman Mwatondo feels that the One Health approach had worked “very well” at the national level in Kenya. However, the FSX had illustrated the gaps at county and local level, where the approach was less understood or structures for working together were not in place. “What came out strongly from the FSX is the need to bring together people from different agencies and sectors and make them feel they belong. That for me is important. We had people from health and trade and tourism and immigration and many more. They were invited and they came, but not all of them seemed to feel already how much he or she was needed. Bringing people together is not easy.” He said that roles and responsibilities for different sectors and people need to be more clearly defined to strengthen outbreak preparedness and response.

The simulation included many different sectors and disciplines – from animal to human health, from customs inspectors to community leaders, and - for first time in an exercise of this sort - the military and police.



Police is cordoning off the scene at Namanga

“I benefitted both personally and as a soldier. I gained experience in preventing illnesses and enabling people to survive during disease outbreaks. I found the exercise very relevant as it inspires us in the military to work with civilians in the community. This enables both the military and the civilian population to collaborate when responding to disease outbreaks affecting the citizens ...Being involved as the military in such a simulation was important and very meaningful, Major Enock Mwakuyusa, a Health Officer with Military Headquarters in Dar es Salaam.



The police played an active role in the scenarios

Colonel Patrick Nyakundi is seconded from the Kenya Defense Force to the National Disaster Operations Centre in Nairobi. He describes the exercise as an “eye opener” to the military and society as a whole. “It went on well”, he says “and the planning was well detailed.” Senior Superintendent of Police Elija Mwangi says that the police had not only guaranteed the safety of all the participants during the FSX, but also participated in some of the exercise scenarios. As a result, he said “we expect to improve on areas we have learned from.”

FSX Observer **Gladys Mahiti** is a Lecturer in One Health policy at the University of Muhimbili of Health and Allied Sciences in Dar es Salaam, Tanzania. “I plan to take back what I have learnt here to teach my students,” she says. “One Health is the right way to go because it brings in lots of different specialities in a response.”

Dr Stéphane de La Rocque says that the FSX adopted an excellent approach with different sectors really working together and understanding the One Health approach. He thinks that capacity training has been effective in Kenya and Tanzania, and that the issue now is to make sure that this knowledge is retained and applied.

However, “there is still some work to do”, says Dr de la Rocque to improve organisational capacities and define responsibilities and roles because the exercise has also “illustrated gaps where local and national levels did not know how to work together.”



Dr Stéphane de La Rocque, head of WHO's veterinary One Health team thinks there's “still work to do”

“At the border crossing point the multi-sectoral approach was one of the strongest pillars which actually held that border together,” says **Dr James Wakhungu**, an EMG member and facilitator in the FSX. “The existence of the border management committee which brings on board many of the stakeholder is one of the strongest pillars which we have at the point of entry. So, to a great extent, especially at Namanga, the One Health approach was extremely well executed”.

What are the lessons learned?

“My main lesson learned is that in the case of an outbreak all agencies - even beyond those involved in One Health - need to come together and deal with the situation. If you don't deal with it as a coordinated group, organisation or team you are not going to be able to control that outbreak. It is important that every sector is involved and assist where it can, if it is a real emergency, **Pauline Kituyi** from the Ministry of East Africa Community and Regional Development Authority in Kenya.

- The One Health approach is vital for outbreak responses and can work effectively, provided all the sectors understand the need for it and are committed to working together.
- The EAC region now needs to develop a mechanism and framework to make working together under the One Health approach easier.
- The role of each sector and discipline in outbreak preparedness and response needs to be clearly defined and elaborated
- Further capacity building is needed to ensure that knowledge of working together under One Health is retained and applied and that responsibilities are clearly defined.
- The One Health approach needs to be further promoted and more trainings and exercises should be developed to enhance readiness of Partner States to respond to emergencies that have an impact across borders.
- Involving stakeholders in a simulation under a One Health approach makes it easier for them to understand their role in preparedness and response to disease outbreaks.

Communicating risks and raising community awareness

“I think the biggest lesson from what happened in Sierra Leone is that the power to control an outbreak is in the hands of the local people. That's the key. Without the people in that country, the people in that community, the people in that village or district, you can't do anything. The reason the West African outbreak went out of control is because the people who owned the problem at the time didn't do much about it. All they needed was a push to know what to do, and they could then control the outbreak,

(**Rebecca Apolot** from Uganda was deployed to Sierra Leone between October 2014 and April 2015 where she worked as a field epidemiologist and public health officer.)



The FSX aimed to embrace this lesson from West Africa by including – for the first time in a simulation of this sort – a risk and crisis communication and community engagement component.



Kenneth Byoona participated in the EAC Emergency Operations Centre scenarios

Kenneth Byoona, PanPrep's Risk and Crisis Communications Adviser who also participated in the EAC Emergency Operations Centre during the simulation says the simulation included a strong community engagement component. Risk communicators from the EAC Risk and Crisis Communication (RCC) Strategy and SOP sub-working group manned posts in Nairobi, Dodoma, and Namanga during the FSX. They received injects via email, prompting them to take action, using risk communication SOPs that were developed throughout 2018 in workshops and trainings conducted in Kenya, Tanzania, and Uganda. In addition to the community engagement activities, the risk communicators participating in the FSX collected information from experts, identified audi-

ences and channels, prepared key messages, and wrote press releases to inform and update the public. They were required to coordinate risk communication efforts at the local level, country level, and regional level. They also engaged with the media throughout the exercise, to try to manage unfounded rumours and give the public timely, accurate and reassuring information about the unfolding emergency and how to protect themselves.

However, the FSX also highlighted the need for further risk and crisis communication and media training, especially at the national and regional EAC response level.

The simulation scenarios especially illustrated the value of community engagement in preparedness and response. According to **Suzanne Kerba**, a risk communications expert who attended the FSX as an observer, the community engagement sessions “clearly showed how the honest and open exchange of information build trust. The activities encouraged community members to see the experts as partners in the response and to understand the value of collaboration between every stakeholder.” Following the activities, the actors serving as community members noted that an honest exchange of ideas supported a sense of partnership. The actors serving as experts said that the questions posed by the community members were authentic and pushed them to actively listen and respond with care.

“Most important is awareness creation, the issue of information and communication when we have an outbreak”, says the **Hon. Christophe Bazivamo**, EAC's Deputy Secretary General Productive and Social Sectors, “so that the people have this information and can intervene at the right time.”



Community engagement builds trust

Thomas Ngulipa, is a community leader in Longido District, Tanzania and says he personally learned a lot from taking part in the exercise: “As a leader I am also a teacher to my people, especially the children. I show them what to do and always live by example.... I realised how important it is to always engage the community when a disease outbreak occurs.” One lesson in particular made a deep impression – the importance of involving women in a response. “Among the Maasai, in the past women

were not considered as equal. However, when fighting diseases they always have a big role to play, especially in disease prevention. They prepare meals at home and also take care of the children. These roles, if not handled well, can be a source of disease transmission. I will share these lessons with my people to ensure they prevent disease outbreaks or enable them respond promptly in case of outbreaks.”



Communities are key in every response

Jemimah Mwakisha says: “As the communities are key in every response, they should have featured much stronger in the FSX. I spoke to most of the communities after the FSX and they have ideas and know what should happen or have happened. We should listen to their solutions. My recommendation would be that every simulation exercise would need to engage the community strongly. And then we should identify and train some community leaders so that we know who to approach in case of an outbreak. Here I also see a role for WHO. Risk communication and community awareness should become inherent parts of every exercise and exercise tool. If the EAC Secretariat under the next PanPrep phase tries to institutionalise RCC and also engage communities, I would support this by reaching out to our country representatives and sensitise them on the importance of supporting it at the national levels, because it is key.”

“The Namanga area is a Maasai community and we were able to bring them in. The Maasai participated fully and are now aware that they for example need a vet to check whether meat is alright for consumption. Those who participated are now able to sensitise their own relatives and neighbours. So, we were able to build capacity in the communities,



Pauline Kituyi feels that it was very important for the FSX to involve the Maasai community.

FSX Observer **Gladys Mahiti** would like to have seen a stronger gender element in the community engagement scenarios of the FSX. Some cultural and behavioural issues had not been addressed – for example in the Maasai homestead, the rapid response teams had addressed most of their comments to Ntipapa and Alatat and the other men, whereas “it is the women doing the work.” The majority of participants in the community awareness sessions at the health facilities were also male, she noted, adding “This is clearly an area with room for improvement.”

Risk and crisis communication proved more challenging when it dealt with conflicting interests. For example, at the OSBP, the Maasai women trade their handmade jewellery to the tourists crossing the border in safari cars and buses. This is their lifeline and the Cross Border Women Traders’ Association represents their interests. In an outbreak scenario, this trade puts tourists and Maasai women equally at risk. The close body contact, even if it happens only through a bus window, can easily contribute to spreading an infectious disease into so far unaffected communities or to tourists on their way to embarking on a plane to another country in the region or even abroad. Here, risk and crisis communication is essential and at the same time needs to weigh up the balance carefully between commercial interests and disease prevention.

“With regard to risk and crisis communication, we should not depend on one channel only”, says **Bridget Mutwihi**, a Public Health Officer at Kadjiado County. “In a community where the use of social media is rapidly growing, we cannot overlook any rumour that is being spread on the social media. But before we respond to the media or to any involved level, we need to verify the content of a rumour as fast as possible and try to minimise more rumours from spreading.”

During the FSX participants on both sides understood that interventions were necessary to protect the people involved, but that they would only be temporary. Engaging the women traders directly in the FSX as role players enhanced their understanding of the situation and also increased their willingness to cooperate. The FSX demonstrated that clear communications with those involved increases their willingness to cooperate – but also the importance of communications in local languages.



Local traders also took part in the FSX

What are the lessons learned?

For risk and crisis communications, participants and experts identified the following lessons learned:

- Risk and Crisis Communication should be strongly incorporated in the EAC Secretariat structures.
- The need for further risk and crisis communications coordination at local, national and regional levels in alignment with the One Health approach requires further RCC communication and media training, especially at the national and regional EAC response level and improved messaging through formative research and social science-based interventions.
- Trained risk communicators should be included on EOCs and rapid response teams.
- There needs to be better regional coordination for consistent messaging between different countries and organisations so that they are able to speak with “one voice” in a crisis.
- Tools and capacities should be developed for social media monitoring and response in alignment with SOPs on rumour management.
- Future RCC training efforts should focus on the use of plain language to convey complex information.
- The RCC SOPs need further refinement through capacity-building workshops and more detail focus on EAC and Partner State coordination.
- A simulation exercise should be conducted exclusively for risk and crisis communications.
- It is important to involve communities and community leaders in a response from an early stage.
- Involving community leaders and members in exercise scenarios increases understanding about the importance of preparedness and prevention.
- Clear communications with those involved increases the willingness to cooperate. This however needs to happen in the local language.
- More women need to be directly involved in community engagement efforts, especially where cultural factors usually inhibit their participation.
- Just like community leaders, religious leaders should be strongly engaged as messengers and mediators between the community and the technical people. This is in line with serving the community and they are highly respected. They accepted their role easily and as an honour and a privilege because they were saving lives.

The importance of speedy diagnostics

One of the main lessons to emerge from the Ebola crisis in West Africa is the importance of diagnosing pathogens quickly and safely in an outbreak and then ensuring that the results are made available in a timely manner to the authorities that need to coordinate a response. Delay causes unnecessary deaths and poor facilities put laboratory staff at risk when dealing with deadly pathogens. As a result, the FSX was designed to

test – for the first time in operation - two of the nine new mobile laboratories that are being rolled out in East Africa, with funding from KfW on behalf of the German Government and technical training assistance from specialists from the Bernhard Nocht Institute for Tropical Medicine (BNITM).

The use of two mobile laboratories during the FSX demonstrated the importance of speedy diagnostics and properly trained staff in an outbreak. It was a huge advantage to have the mobile labs available and on site at the Health centre in Kenya and dispensary in Tanzania during the exercise scenarios. Samples would otherwise have to be sent to Nairobi or Dar es Salaam, taking many hours or days before a diagnosis could be made and slowing down the emergency response.

“We have of course public health services and infrastructure”, says the **Hon. Christophe Bazivamo**, “but this is not enough. This infrastructure is not mobile, and we have long and porous borders. Mobile laboratories can help wherever a problem occurs.”



The FSX highlighted the importance of speedy diagnostics

What are the lessons learned?

- Mobile laboratories are an effective way of speeding up essential diagnoses in outbreaks.
- Properly trained laboratory technicians are essential in any response.
- Governments need to take ownership of the process once the German-funded project concludes to ensure that equipment is properly resourced, maintained and utilised.

Good coordination is critical in any outbreak scenario

Participants of the FSX agreed that without good coordination it will be difficult, if not impossible, to respond effectively and efficiently to an outbreak of an infectious disease of public health concern. This was already one of the main lessons of the Ebola response in West Africa,

where coordination was one of the weakest links. However, the FSX showed that this is easier said than done in an environment with many different players and under high pressure to succeed. Having the right people with the right skills in the right places is key for successful coordination and collaboration.

“The biggest challenge I have seen – and that was obvious, was coordination”, says **Fasina Folorunso**. “However, this is usually also the case in real scenarios, unless you plan very well, do drill again and again and evaluate and re-evaluate.”

Edward Komba from the Ministry of East African Affairs (MEACA) Tanzania saw it as a big challenge to get the right people together. “Here, we as representatives from the coordinating MEACAs also need to improve our processes.”

“My important lesson as a regional actor is that for successful regional events coordination is paramount. It relies on efficient information between the actors”, says **Dr David Balikowa**. **Timothy Wesonga** agrees that coordination is critical in responding to disease outbreaks, both between the governance levels and across the disciplines and **Dr Vida Mmbaga** from the Ministry of Health (MOHCDGEC) in Tanzania, who was a facilitator in the FSX, adds that the linkages to the regional bodies, like the EAC Secretariat, also need to be strengthened.



Good coordination is critical

Generally, participants felt that there had been good collaboration and coordination between different disciplines involved.

In this regard, Senior Superintendent of Police **Elija Mwangi** commended the organisers and participants for the way they had conducted the exercise and said it had not resulted in any disruptions to the regular operation of the border.

“We were able to see exactly what would happen during an outbreak and there are many gaps that need to be looked at. Communication was not flowing well. Preparing a field simulation exercise needs the same people on board constantly and the different Ministries hopefully took this away as a lesson learned from the exercise, Pauline Kituyi from the Ministry of East Africa Community and Regional Development Authority in Kenya.”

What are the lessons learned?

- A successful FSX and any outbreak response depends on good planning and coordination between all the partners and participants involved.
- This needs thorough training and continuous exercising with a focus on information flow among and between different levels and evaluation and re-evaluation.
- It is important that people with the right skills are in the right places and that there is commitment and consistency in key personnel.
- It takes time to build up relationships, especially for complex cross-border and multi-disciplinary operations.

Logistics are key to any emergency response

Without adequate logistics, supplies and organisation, chaos will ensue, whether it is a real life emergency or an exercise. This was one of the key messages from the experiences of East African health workers who volunteered to work in West Africa during the 2014-16 Ebola epidemic¹². Some described long delays in being properly deployed once they reached West Africa, sometimes sitting in their hotels or accommodation for weeks after their arrival, while people were dying on the streets around them. They also felt their lives had been put unnecessarily at risk by lack of basic logistics such as supplies of food, water and protective clothing. This had made it very difficult and frightening for them to do their jobs properly.

The challenge of adequate logistics was likewise felt during the FSX. There were times, especially in the beginning of the exercise, when the logistics problems of transporting participants and observers around 23 different sites at 16 different locations, and communications issues threatened to overwhelm the exercise itself. However, these eased when the activities were concentrated around the One Stop Border Post on days two and three and participants understood more about the processes and practicalities.

“It is equally important during an FSX and for a real outbreak that everybody knows his or her role, where they are supposed to be at any given time and what resources they need.” says **Hilary Njenge**, Simulations Project Officer for WHO’s Tanzania office and a member of the EMG. “The biggest challenge was the big number of people taking part at different sites in both countries. We had to ensure that every person was at the right place at the right time doing the right thing. This was a logistical nightmare.”

Apart from the basic logistical issues of “who, what, when, where” - which to some extent might be expected in an exercise of this scale and complexity - there were other unforeseen difficulties: If, as the saying goes, an army marches on its stomach then so does a successful emergency response. A serious bout of food poisoning which affected many participants and their performance on the third day could easily have scuppered the entire exercise. More importantly, this could well have proved critical if it had happened in the middle of a genuine emergency epidemic response: Sick first responders cannot do their jobs properly or look after critically ill patients in a rapidly evolving emergency.

This unfortunate episode illustrates the fundamental importance of ensuring that key response workers are properly protected and looked after – both physically and mentally during an emergency. Another key lesson that emerged from experiences in West Africa is that health care workers facing daily death and trauma need proper psycho-social care both during and after a response. Obviously, participants were not facing such traumas during the FSX, but this is something that needs to be considered and planned for in a genuine emergency.

One important lesson from the FSX in this regard was that the logistics, including the on-site organisation of the FSX itself should be coordinated by one entity, ideally that of the convener. It needs comprehensive regional experience and on-site availability of reliable providers to facilitate a smooth simulation. Otherwise in an FSX, just like in any other area of life, “too many cooks can easily spoil the broth”.



The right equipment and drugs need to be available

The FSX also illustrated the fundamental importance of logistics across all sectors in a multi-disciplinary response: Weak links in one part of the logistics chain can undermine the entire response. “I realised that in a real outbreak logistics becomes a critical element in the whole operation.” says **Timothy Wesonga**. “The right equipment, drugs and commodities being in the right places at the right time can save the whole country, can save the whole region. You can know what to administer, but when it’s not available, the issue of time is critical. Therefore, even experts from other disciplines should have a minimum knowledge of logistics.”



Ensuring every participant was in the right place at the right time was a logistical challenge

“We have managed to identify a lot of gaps and there are a lot of areas we need to work more on... For me, the main issue was the logistics and transport – getting all the participants to the right place at the right time to take part. Another thing – information was sent by emails and not everybody was able to check their emails, so it was difficult to know when and where you were meant to be doing the exercise, Edward Komba from the Ministry of East African Affairs Tanzania”

¹² See “Voices from the Frontline”, http://health.bmz.de/what_we_do/Epidemic_preparedness/Fighting_Ebola_-_Voices_from_the_Frontline_V1.pdf

What are the lessons learned?

- Logistics management is one of the key functions in any FSX and outbreak scenario and is closely linked to coordinating it. Without sound logistics the capacity of responders cannot be utilized to the full extent.
- Well-skilled logisticians with strong management skills need to be part of rapid response teams.
- In a FSX and in any outbreak everybody needs to know his or her role, where they are supposed to be at any given time and what resources they need
- The right equipment, drugs and commodities need to be in the right places at the right time and in sufficient quantities.
- Participants in a FSX and key response workers in an outbreak need to be properly protected and looked after – both physically and mentally.
- Logistics, including the on-site organisation of a FSX, should be coordinated by one entity with local experience.

Organising a cross-border field simulation exercise

The majority of participants fully agreed that all the different stages of the interactive FSX were successfully carried out and objectives met, including the involvement of key One Health participants exercising their roles and responsibilities during an outbreak of RVF. However, as much as the FSX was unique it was also very challenging, because it was so large, ambitious and complex, not only cross-border between two countries but also regional in scope, involving a great deal of human resources, time and money.

“We had planned this FSX for over a year and have put a lot of time and resources in it. Nevertheless, there are always challenges and these challenges were real. It has been a very interesting learning curve for WHO as well,” says **Frederik Copper**, WHO’s Exercise Coordinator.

Was the FSX too big and ambitious?

The organisers of the FSX aimed high with the exercise, which was the largest in the region if not on the African continent and the largest ever conducted by WHO, but some participants questioned whether it might have been better to focus energies on a smaller and more specific exercise.

“The lesson here is that we need to think about alternatives to big FSXs, where logistics take over from the exercise itself,” says **Patrick Bastiaensen**. He wondered, for instance, whether in an age of e-learning, using online films or computer-generated images and training modules might have been just as efficient – although he admits that this would have excluded the evaluation process, which was also important.

“An exercise of this magnitude is an organisational and logistical effort, trying to bring different organisations and stakeholders together, especially as these stakeholders are from different sectors, human health, animal health, trade, military. But I think the exercise clearly showed that it was worth the effort and how these different sectors have a role to play in a disease outbreak,

Larissa Duddeck from the German government’s Rapid Response Team (SEEG)



However, most people on the ground had different views. **Dr Vida Mmbaga** is very excited about what happened during the FSX, because it was a big lesson and they realized many gaps. “We did many table top exercises in the past where we sat around a table and discussed what to do. But when you really need to do it in a FSX, it is something different. For me these field simulations and drills for specific functions are very, very important, because they really test the systems at the various levels and pave the ground for improvements. I think this FSX was worth it and I highly recommend to conducting such an exercise at least every two years.”

Timothy Wesonga agrees. He acknowledges the many challenges and gaps that the FSX highlighted, particularly regarding logistics and communications, but still thinks that it was worth conducting the FSX on such a large scale. “Personally, I would still involve all the sites, because it reflects the real situation – that’s what a simulation is: Trying to push ourselves to the limit to reflect reality. Above all”, he says, “the FSX highlighted the need for further exercises to be held, maybe not of this magnitude, but we need more Table Top Exercises or drills to help to keep us well prepared, because they push the system to improve preparation”.

“As emergency response officers in Kenya we have learned a lot, especially how to conduct a field simulation exercise. We identified areas which we could improve even when planning for future simulation exercises”, says **Dr Lyndah Makayoto** from the Ministry of Health in Kenya, who was part of EMG and a facilitator in the FSX. “Were we to plan the FSX again we would make it cheaper and have a smaller number of injects. For example, at the health facility, instead of coming up with so many injects we could have had the initial scenario of the presentation of a sick patient and then let

things unfold as they would in a real emergency. Having so many injects and having different people coming into the scenario at different points in time, interferes with the flow of information and the system.” Still for her the exercise was an eye opener: “Even without complex emergencies or big outbreaks that require complex responses, we could actually use field simulation exercises as evidence-based assessments to pick the gaps in the systems so that we can improve our capacity to respond to emergencies as a country.”

For **Mary Makata** the main challenge was to select the right people for the planning process, people who were willing to commit themselves to the process. **Bridget Mutwihi** agrees: “During the exercise you could find that people were representing a team who were not the actual people who act on the ground.”

For **Dr Grace Saguti** the FSX is a big lesson learned for the country and neighbouring countries in order to strengthen preparedness and response for highly infectious diseases in the region. It is key to work together instead of just one country preparing itself and then they don’t know what the neighbours are doing.

“Retrospectively looking at the exercise I think it was worth it”, says **Fasina Folorunso**. “From my view this was one of the biggest exercises I have known of on the African continent. You were able to test a lot of objectives and there were challenges. But it also came out clear that you have strengths in certain areas and weaknesses in others. The good thing is that based on the feedback provided in this exercise, future activities are being developed and this is an obvious advantage for the different countries including the observers. It is like having developed a road map.”

“What I learned is that it is important to first have a table top exercise. It helps you to understand the need of the country and it gives you room to improve on before the actual FSX. My main lesson is that we need to spend enough time planning such an exercise. We need to do enough dry runs and we need to build the capacity of the people who we are going to be working with, so that they are able to deliver the key outcomes of the exercise, says **Hilary Njenge**, Simulations Project Officer for WHO Tanzania



“Myself, I am generally very happy with the exercise itself. I thought we got some good results out,” says **Allan Bell**, as WHO Consultant in charge of exercise development and implementation, “it was as much of a learning exercise for us as it was for anybody. These kinds of exercises are challenging because we deal with different cultural aspect, different groups and rules and regulations, different ways of thinking.

“Seeing all these people coming together from all these sectors and all these communities is amazing and together we can achieve more”, says **Jemimah Mwakisha**, “I spoke to colleagues from Southern Africa and Rwanda and they said that this is great, and they would wish they could have such simulations at many more African borders. They felt they would gain a lot and not just for emergencies.”

What are the lessons learned?

- A table top exercise and drills should always precede an FSX to build the necessary capacities and get clarity on countries needs
- Field simulations are crucial instruments for building preparedness and response capacities because they test the whole system and “real” conditions.
- Cross-border exercises are important tools for enhancing regional capacities and cross-border collaboration and understanding.
- An FSX does not always need to be conducted on such a large scale. Smaller, more targeted exercises and drills also have an important role to play – even though a full FSX on this scale gives a fuller picture of strengths and weaknesses.
- It is most important that the right people are selected for the planning process with the required skills for their roles in the exercise and they should be on board throughout planning and implementation. This also requires clear outlined terms of reference for the planning team.

Stronger emphasis on regional and national plans and SOPs

Although participants felt that, overall, the design of the FSX scenarios – which were complex and grew in complexity throughout the exercise - generally worked and enabled them to test their roles and responsibilities in an outbreak response, there were many important lessons to be learned about specific areas of the exercise design.

One of the biggest criticisms made by many participants was that although for the EAC Secretariat the main purpose of the exercise was to test regional and national contingency plans and SOPs, this had not been given sufficient priority in the design and planning process for the FSX.

Dr Christian Janke, Consultant Global Public Health, on behalf of EPOS Health Management believes that the Regional Contingency Plan and SOPs were not sufficiently taken into consideration in the execution of the exercise. The exercise evaluation sheets drawn up by WHO, for example, made no reference to the algorithms defined by the SOPs. He says that although, in theory, the exercise scenarios should have been an opportunity to test the all-out activation and coordination of EAC emergency procedures and responses, the Secretariat's Emergency Control Centre was given "no meaningful role on the first and third day of the FSX." Furthermore, he felt that the scenarios had not allowed a sufficient "role" for other important institutions, such as the Cross-border Surveillance Committee or the Joint Border Coordination Management Committee, which were not linked to or integrated in the FSX design framework. "It seemed," says Dr Janke, "as if the exercise design, while considering the WHO International Health Regulations – rather neglected the specific EAC conceptual framework."

Members of the EMG shared his concerns and felt that WHO had put more emphasis on testing the implementation of the IHR and assessing their own exercise tools than focusing on the main objectives of the FSX, which were to assess the national and regional plans and SOPs.

In addition, Dr Janke felt that the chosen communication framework for the FSX, in which participants communicated information and requests for support from real institutions in emails labelled "EXERCISE" had led to some confusion and missed feedback and meant that the Exercise Control Room could not always influence or direct the unfolding scenarios. As a result Dr Janke suggests that a closed communications system should be considered for future exercises. However, other participants felt that this works well for small scale exercises but not for simulations at multiple locations.

What are the lessons learned?

- Future exercises should focus specifically on the stated objectives of the exercise – in this case testing the regional and national contingency plans and SOPs.
- In order to do this effectively, participants need to be much more conversant with the plans and SOPs that are being tested.
- Scenarios need to test the coordination between institutions and countries more rigorously.

Building local capacity

The FSX provided a great opportunity for building national exercise project management capacity, mainly through the members of the SG and EMG. They were trained on exercise management skills, in particular on their role as facilitators, evaluators or liaison/safety officers at the various exercise sites in Nairobi, Kenya, ahead of the FSX. The various planning meetings as well as the exercise training was critical to ensure nation-

al ownership of the FSX and build national exercise management capacity. Tanzanian EMG members could test their enhanced skills during a series of exercises in August 2019. The TTX and drills aimed to test and enhance their Ebola preparedness and response capacity. The exercises showed the added value the FSX had for building and promoting national and local capacity for simulations.

During the FSX a so called 'Exercise Simulation Cell' was set up in the Control room. Here, two nationals from both participating countries were represented and simulated various functions during the FSX. However, in this regard the opportunity for local capacity building during the FSX was limited, as the Control Room was mainly operated by WHO staff. Participants felt that it would have been crucial to learn how to control an exercise, as they are the ones to organise and hold future simulations and respond in a genuine emergency. They felt this was an opportunity missed.

"In this particular FSX there were only two national representatives in the main exercise control room. But in the future, we would like to have more people from the Partner States involved so that they can learn how one actually runs a Control Room," says **Hilary Njenge**. "The main lesson is that we need to build the capacity of the people who we are going to be working with, so that they are able to deliver the key outcomes of the exercise."

What are the lessons learned?

- Exercises should be used for capacity building of local staff, even if that means that not everything might be perfect. However, it is the local staff that will prepare and conduct the future exercises and deal with real emergencies.

More context for more pointed observation and better evaluation

Some participants and the international observers in particular said they were lacking sufficient information on the scenarios and injects which left them struggling to know what was going on and to find their individual roles and come up with sound evaluation results. As most conversations between participants took place in Kiswahili, the language barriers contributed to this feeling (Had a movement ban been put in place for animals before the Maasai goat scenario?). They said they needed more context to be able to understand the process and evaluate the exercise scenarios properly.

Since the exercise was supposed to be assessing how well the regional and national plans and strategies and related SOPs were being applied, it would also have been useful to have these documents for reference, ideally already ahead of the exercise, and for evaluation forms to have been more specifically tied to them.

What are the lessons learned?

- Key reference documents – such as plans and SOPs should be made available in advance of an FSX to give more context.
- The storyline and further information used in the FSX need to be shared more widely so that especially observers and evaluators can get more out of the scenarios.
- The number of injects for an individual part of the scenario should provide enough opportunity for activities to flow
- There needs to be information in local languages for participants, and more translation of what is happening for observers and participants who may not speak the local language (such as Maa or Kiswahili)

Value for money?

Field simulation exercises are expensive and cross-border ones even more so due to their complexity. Therefore, the EAC Secretariat had invited regional and international partners to join the exercise and to utilise synergies and join forces.

The overall budget for the FSX was more than US \$1 million with more than \$400,000 funded by German Development through the GIZ PanPrep project, and over \$400,000 contribution from WHO. The rest was made up either through financial or in-kind contributions by the other international organisations and institutions partnering in the exercise.

This added to the complexity of the operation and revealed problems of coordinating different budgetary procedures and bureaucracies, but that would be true in a real emergency too – so did the FSX provide value for money?

"The FSX was expensive and a lot of effort went into it. However, it was worth it. We were able to identify a lot of gaps, which we now need to close," says **Edward Komba**.

Dr Athman Mwatondo agrees: "We've come a long way, we had many meetings. For me it was the first real field simulation exercise. I did not know how much it takes, so this has been a real learning lesson. It has cost a lot of money, but most participants appreciated the effort because they learned a lot. And many participants see the need to have this being done more frequently. Also, the timing was very good. Right now, we have this Ebola alert coming through Uganda and Kenya is on alert phase too. Going through this process has made people aware of what it takes to protect their country. So, I think it was a good activity and I am happy that I was part of it.

While **Dr Grace Saguti** shares the need for further simulation exercises of this kind, she strongly recommends including government contributions to these exercises "because they are benefitting. "I think the Partner States should look into it and also give that contribution just like the donors and prepare such exercises together. We need

strong ownership by the countries and especially by the governments to make this happen."

What are the lessons learned?

- Pandemic preparedness costs money and requires investment from both governments and partners.
- Exercises do not always need to be so complex and expensive – smaller, less costly scenarios also have an important role to play, even if they are not as comprehensive as a full FSX.

Evaluating the evaluation

International risk and crisis communicational consultant **Suzanne Kerba** made the following observations about the evaluation process:

"In many ways, the exercise was a great success. I observed participants who were – without exception – engaged, committed, and actively working to perform their roles and tasks with diligence and responsibility. On Friday, 14 June, there was a palpable sense of excitement in the room as the day began. People were engaged and excited, talking about their experiences and what they learned. The group work produced compelling discussions – far beyond superficial takeaways – that were really exciting to see.

Thus, it was disappointing to watch the event devolve and end rather anticlimactically, without an opportunity for participants to share the work they had produced in their groups. More than one person approached me and remarked that they found it strange that there was no opportunity to talk about what they had done during the group work. It seemed as if many new discoveries had been made, and participants were anxious to share them. Unfortunately, that opportunity did not present itself.



RCC consultant Suzanne Kerba discusses FSX outcomes with observer Dr Christian Janke

Finally, the end-of-day survey seemed designed to simply reflect only that certain boxes on an imaginary evaluation list had been checked off. The questions were superficial and shallow, which the FSX was not. The participants deserved better, and their voices are not reflected in the results of the survey. That time would have been better spent with the participants actually driving a conversation about the discoveries they made and the lessons they learned during the FSX."

What are the lessons learned?

- Learning together and exchanging ideas and information in an FSX can improve knowledge, commitment and enthusiasm – all of which are vital in any pandemic response.
- Sufficient time should be allowed in a simulation for a genuine and in-depth evaluation of those experiences.

Regional and international organisations and donors

First and foremost, the responsibility for outbreak preparedness and response is in the hands of the individual Partner States and regional communities. However, this FSX relied heavily on international organisations and external donors. “Fourteen regional and international partners followed our call to join the FSX together with WHO, and the simulation could not have taken place on this scale without all their support”, says PanPrep Project Manager **Dr Irene Lukassowitz**. She highly appreciated the cooperation of so many organisations and institutions in the exercise and hoped that this was only a first step and the beginning of fruitful closer cooperation between regional and international partners.



In cooperation with:



Dr Lukassowitz says the exercise also exposed real challenges of working together. There were for example no easy ways of pooling financial contributions so that the organisation of the FSX could be coordinated by one entity, and bureaucratic processes, particularly the ones for procurement took far too long for a quick response.

Frederik Copper agrees: “This is close to reality. In a real emergency, partners come in with their own agendas, priorities and ways of working, their own rules and regulations which often challenge coordination. This can be a challenge when we are not flexible enough to adapt quickly and overcome these coordination issues.” There’s no easy answer to this, he says, because we cannot reinvent the existing humanitarian landscape, “but we all need to look at our systems and look at how we complement each other better instead of competing.”

Many observers and participants from different organisations agreed that this is going to take a concerted effort.

*“We all have our different budgets, plans and Memoranda of Understanding and we all want to follow our own rules and regulations. So, we need to establish basic logistical and bureaucratic arrangements – this is very important. We need a common budget to overcome stringent accounting systems. African Union CDC is trying to get its own Foundation to mobilise resources and loosen bureaucracy, says **Dr Merawi Aragaw**, Acting Head of Emergency Preparedness Response for Africa CDC*



Slimmed-down and uniformed emergency procedures for all international partners would be important steps in the right direction, says **Dr Lukassowitz**. However, donor contributions to simulation exercises should rather be the exception than the rule: The main responsibility for outbreak preparedness and response rests with individual Partner States and regional communities.

“Process are always challenging”, says **Fasina Folorunso**, “Different organisations have different rules and procedures and you need to be aware of that. But I feel that with collaboration and relationships like this, you tend to get better, because for example, if I see where my organisation’s processes are becoming cumbersome and affecting other organisations, by providing feedback to my organisation, they might think about improving the system. At the beginning of this process it was for example a lot more challenging, then where we are now at the end of this process.

What are the lessons learned?

- The exercise highlighted the urgent need for regional and international organisations to work closely together in any emergency response and to simplify and unify their ways of working and financing emergency responses.
- International organisations need to establish basic logistical and bureaucratic arrangements and a common budget to overcome stringent accounting systems.

- Slimmed-down and uniformed emergency procedures for all international partners would be important steps in the right direction.
- Individual Partner States and regional communities should shoulder their responsibilities for outbreak preparedness and response. Donor contributions to simulation exercises should rather be the exception than the rule.

Applying the lessons learned to other disease outbreaks and future exercise

Dr Irene Lukassowitz, one of the key instigators of the FSX, hopes that the participants will continue to work together after the simulation and apply what they have learned. The FSX scenario envisages that the RVF outbreak would escalate rapidly, first with animal-to-human infections and then with human-to-human infections as the outbreak evolves into an unknown pathogen. Therefore, the lessons learned from the exercise scenarios are not disease specific but can be applied to other diseases too. “What we were testing was the capacity of people to respond to outbreaks and implement contingency plans and standard operating procedures.”

The element of transferability came through in the leadership speeches during the opening ceremony, and less strongly during the exercise itself, as participants were obviously acutely aware of the current threat from Ebola in the DRC.

“I think it [the FSX] has really brought home the threat that these highly infectious diseases are right next to us. The fact that there are currently Ebola cases in Uganda made the exercise more serene and practical”, says **Diane Sibi**, a Public Health Officer at Kajiado.

The lessons learned from the Namanga FSX are also applicable for other future exercises, even if they are not necessarily on such a scale. **Mathew Tut M. Kol**, Director for Emergency Preparedness and Response at South Sudan’s Ministry of Health, and his colleague **Mary Obat**, Director of Health Promotion, attended the FSX as



Representatives from EAC Partner States attended the FSX as observers

international observers and said they would be taking many lessons back from Namanga about the planning and implementation of a smaller cross-border simulation exercise between South Sudan and Uganda that EAC Ministers have instructed the Secretariat to conduct in 2020.



South Sudan’s Director of Emergency Preparedness will take “many lessons” for the next exercise planned with Uganda in 2020

What are the lessons learned?

- It is important to keep reminding participants that the procedures tested during the FSX apply to other disease outbreaks too, not just RVF or Ebola.
- The EAC Secretariat needs to carry this process forward by refresher training and dissemination of SOPs.
- The EAC also needs to plan for other simulations, not only between South Sudan and Uganda but on other borders too and consider what happens on borders where relationships are more strained.

The way forward

Many strengths and weaknesses were identified during the cross-border field simulation exercise between the Republic of Kenya and the United Republic of Tanzania. However, the real success of the exercise will depend on the degree of implementation of the lessons learned and recommendations derived from it.

“Our Ministry is a coordinating Ministry” says **Pauline Kituyi**, “in this role we have to be on top of everything in case of an emergency and to work fast and in a timely manner. We have written reports and developed recommendations. They need to be implemented and not put on a shelf. Gaps have been identified and now they need to be closed. The FSX was not an end, the work is just starting. This exercise should not be a singular event but should be repeated, even at Partner States level. We have many borders and people might read the reports, but it is different if you read or if you exercise. I would gladly pass on my lessons learned to the preparation of future simulations.”

“This exercise is like a guide. It showed us our gaps and thus gave us the opportunity to be better prepared in the future” says **Mary Makata**. “Our unit has a coordinating function and I will make sure that we cooperate even stronger with other units in the future. We will review our plans and update them if necessary and sensitise our stakeholders so that experts at all levels up to the leadership are aware of these plans and procedures. We came into the simulation prepared, but this exercise also stimulated and motivated us, and we are now eager to work together across different sectors and apply our plans and SOPs effectively. This exercise made us work together as one entity.”

As a way forward **Kenneth Byoona** appeals to the EAC Secretariat to establish positions for RCC at the Secretariat. “This is the only way to make RCC sustainable at the regional level.”

“It would be great, if the participants of this exercise, who gathered experience as facilitators or in other roles, could pass on their lessons learned to the preparation process for the next FSX between Uganda and South Sudan and could improve the preparation”, say **Dr Vida Mmbaga**.

Timothy Wesonga adds: “Now we need to develop proper action plans to make sure that we address and implement all these issues in the region”

“We will put the findings of the FSX after the evaluation and the report to use”, says **Dr Lyndah Makayoto**. “For the identified gaps we will develop plans and put them into place to strengthen the system. We will pick best practices and look for ways to sustain the lessons learned. We are in the process of sensitizing the leadership, senior management and policy makers on the importance of having some of our bureaucracy reduced in outbreak scenarios, as emergencies don’t wait for anybody, but it will still take time. However, I hope that it will happen.”

And **Dr James Wakhungu** adds: “We will put a proper dissemination plan in place that will help us to pick up the lessons learned, put them in place, cascade and move forward the public health agenda so that we can spread the knowledge and skills learned to our colleagues who were not part of the exercise.”

Veterinary Officer at the Directorate Veterinary Services, Ministry of Livestock and Fisheries, Kenya, **Dr Geoffrey Mukora** enjoyed the exercise. “I liked how it was organized. The whole thing was successful and with proper follow up we will make sure that the gains are not lost. But it needs follow up, as we are humans and tend to lose focus otherwise. So, once in a while pop in as PanPrep and look what progress we have made. I would also appreciate it, if other donors could support us with closing the identified gaps. Identify a specific part of the system and address it fully and someone else comes in with another area and we are able to synchronise these approaches. We will be there, and we will be better prepared to deal with health emergencies in the future, not only in the region but also beyond.”

“Based on the field activity and based on the field simulation exercise which we just concluded, I come to the conclusion that there is a lot of capacity at the district level and at the sub-national level which are yet untapped and effectively utilised”, says **Fasina Folorunso**. “So, the national governments will need to think of a strategy to incorporate [this capacity] and collaborate with the sub-national governments to maximise and optimise the potential that is there at the lower level.”

Toba Nguvula, District Administrative Secretary of Longido District says: “We as a district and I as a participant have learned a lot. The exercise exposed a big picture of what we face as a challenge especially at the lower levels. We therefore need to let our people understand these challenges. Undoubtedly, we had a good exercise and training with good facilitators. Now we need to implement what we have learned and also share with our colleagues at work.”

“I will share these lessons with my people”, says **Thomas Ngulipa**, “to ensure they prevent disease outbreaks or enable them to respond promptly in case of outbreaks. I would also like to use this opportunity to appeal to the governments to seriously consider engaging communities to prevent and respond to disease outbreaks. Furthermore, it is important to strengthen the health facilities with health workers, transport and training to enable them respond to disease outbreaks promptly.”

Lessons learned from the cross-border field simulation exercise at a glance

Main lessons from preparing and holding a cross-border field simulation

- A cross-border Field Simulation Exercise requires detailed preparation, which itself already has a training effect. It is therefore meaningful to carry out a table top exercise or smaller, targeted drills beforehand.
- Coordination and communication are of utmost importance in disease control.
- Disease outbreaks affect various sectors, ranging from human and animal health, trade, tourism and the military sector to civil society and beyond, and all have an important role to play in containing the outbreaks.
- The field simulation exercise marked the end of a long preparation process but was only the beginning of extensive implementation. Now the weaknesses identified need to be addressed to ensure that the region really is better prepared for an emergency in the future.

EAC’s coordination role

- Notification procedures and activation of assistance requests between the Partner States and the EAC still need to be clarified.
- An EOC at the regional level is necessary and should be established as soon as possible to enable implementation of the EAC Contingency Plan’s emergency structure.
- Sufficient resources need to be available to ensure that it is fully-staffed, fully-functioning and properly funded.
- An emergency response team needs to be established urgently.
- The team will need further training especially on crisis communication and on how to deal with the media so as to ensure the proper, timely and effective flow of communication during a crisis.
- There needs to be a clearly defined contact person in the EOC for countries to call in an emergency.
- The EAC should play a more proactive role in encouraging transparent reporting, in order to enhance mutual accountability and information sharing between Partner States.

The importance of cross-border collaboration

- It is vital for countries to collaborate across borders. Countries need to talk to and collaborate with their neighbours, even beyond the EAC, to contain diseases at source.
- Activation criteria and procedures need to be clarified, both between countries and between the EAC and Partner States.
- Ports of Entries are the main border crossing points for people and animals and goods. Therefore, the capacities and skills of staff and cross-border mechanisms in place are crucial in outbreak prevention and response.
- Staff at PoEs should receive thorough training on contingency plans and SOPs and have regular drills on their procedures.
- Facilities at PoEs need to comply with existing plans and SOPs and provide the necessary features.

The need to disseminate plans and SOPs more widely

- Available SOPs are still not widely known and there has been insufficient training to familiarise staff with them, especially at the EAC Secretariat level. Staff and responders at all levels need to be much more familiar with existing national and regional contingency plans and operating procedures.
- The EAC Secretariat and the respective Ministries in the Partner States need to lead this process and disseminate these documents as widely as possible. One of the key lessons identified by many participants is that Governments and Ministries now need to take ownership of the process.
- The existing documents need to be amended by a one page easy-reference document, but people still need to be familiar with the full documents.

Funding an emergency response

- Partner States need to make a clear financial commitment to their responsibilities for pandemic preparedness.
- A regional emergency fund is a prerequisite for the EAC Secretariat fulfilling its role; it needs to be established as soon as possible.
- The money needs to be available in advance and be built into existing budgets – rather than waiting for an emergency to happen.

Further strengthen the One Health approach

- The One Health approach is vital for outbreak responses and can work effectively, provided all the sectors understand the need for it and are committed to working together.
- The EAC region now needs to develop a mechanism and framework to make working together under the One Health approach easier.
- The role of each sector and discipline in outbreak preparedness and response needs to be clearly defined and elaborated.
- Further capacity building is needed to ensure that knowledge of working together under One Health is retained and applied and that responsibilities are clearly defined.
- The One Health approach needs to be further promoted and more trainings and exercises should be developed to enhance readiness of Partner States to respond to emergencies that have an impact across borders.
- Involving stakeholders in a simulation under a One Health approach makes it easier for them to understand their role in preparedness and response to disease outbreaks.

Communicating risks and raising community awareness

- Risk and Crisis Communication should be strongly incorporated in the EAC Secretariat structures.
- The need for further risk and crisis communications coordination at local, national and regional levels in alignment with the One Health approach requires further RCC communication and media training, especially at the national and regional EAC response level and improved messaging through formative research and social science-based interventions.
- Trained risk communicators should be included on EOCs and rapid response teams.
- There needs to be better regional coordination for consistent messaging between different countries and organisations so that they are able to speak with “one voice” in a crisis.
- Tools and capacities should be developed for social media monitoring and response in alignment with SOPs on rumour management.
- Future RCC training efforts should focus on the use of plain language to convey complex information.
- The RCC SOPs need further refinement through capacity-building workshops and more detail focus on EAC and Partner State coordination.
- A simulation exercise should be conducted exclusively for risk and crisis communications.
- It is important to involve communities and community leaders in a response from an early stage.
- Involving community leaders and members in exercise scenarios increases understanding about the importance of preparedness and prevention.
- Clear communications with those involved increases the willingness to cooperate. This however needs to happen in the local language.
- More women need to be directly involved in community engagement efforts, especially where cultural factors usually inhibit their participation.
- Just like community leaders, religious leaders should be strongly engaged as messengers and mediators between the community and the technical people. This is in line with serving the community and they are highly respected. They accepted their role easily and as an honour and a privilege because they were saving lives.

The importance of speedy diagnostics

- Mobile laboratories are an effective way of speeding up essential diagnoses in outbreaks.
- Properly trained laboratory technicians are essential in any response.
- Governments need to take ownership of the process once the German-funded project concludes to ensure that equipment is properly resourced, maintained and utilised.

Good coordination is critical in any outbreak scenario

- A successful FSX and any outbreak response depends on good planning and coordination between all the partners and participants involved.
- This needs thorough training and continuous exercising with a focus on information flow among and between different levels and evaluation and re-evaluation.
- It is important that people with the right skills are in the right places and that there is commitment and consistency in key personnel.
- It takes time to build up relationships, especially for complex cross-border and multi-disciplinary operations.

Logistics are key to any emergency response

- Logistics management is one of the key functions in any FSX and outbreak scenario and is closely linked to coordinating it. Without sound logistics the capacity of responders cannot be utilized to the full extent.
- Well-skilled logisticians with strong management skills need to be part of rapid response teams.
- In a FSX and in any outbreak everybody needs to know his or her role, where they are supposed to be at any given time and what resources they need.
- The right equipment, drugs and commodities need to be in the right places at the right time and in sufficient quantities.
- Participants in a FSX and key response workers in an outbreak need to be properly protected and looked after – both physically and mentally.
- Logistics, including the on-site organisation of a FSX, should be coordinated by one entity with local experience.

Organising a cross-border field simulation exercise

- A table top exercise and drills should always precede an FSX to build the necessary capacities and get clarity on countries needs.
- Field simulations are crucial instruments for building preparedness and response capacities because they test the whole system and “real” conditions.
- Cross-border exercises are important tools for enhancing regional capacities and cross-border collaboration and understanding.
- An FSX does not always need to be conducted on such a large scale. Smaller, more targeted exercises and drills also have an important role to play – even though a full FSX on this scale gives a fuller picture of strengths and weaknesses.
- It is most important that the right people are selected for the planning process with the required skills for their roles in the exercise and they should be on board throughout planning and implementation. This also requires clear outlined terms of reference for the planning team.

Stronger emphasis on regional and national plans

- Future exercises should focus specifically on the stated objectives of the exercise – in this case testing the regional and national contingency plans and SOPs.
- In order to do this effectively, participants need to be much more conversant with the plans and SOPs that are being tested.
- Scenarios need to test the coordination between institutions and countries more rigorously.

Missed opportunity for local capacity building

- Exercises should be used for capacity building of local staff, even if that means that not everything might be perfect. However, it is the local staff that will prepare and conduct the future exercises and deal with real emergencies.

More context for more pointed observation and better evaluation

- Key reference documents – such as plans and SOPs should be made available in advance of an FSX to give more context.
- The storyline and further information used in the FSX need to be shared more widely so that especially observers and evaluators can get more out of the scenarios.
- The number of injects for an individual part of the scenario should provide enough opportunity for activities to flow
- There needs to be information in local languages for participants, and more translation of what is happening for observers and participants who may not speak the local language (such as Maa or Kiswahili)

Value for money?

- Pandemic preparedness costs money and requires investment from both governments and partners.
- Exercises do not always need to be so complex and expensive – smaller, less costly scenarios also have an important role to play, even if they are not as comprehensive as a full FSX.

Evaluating the evaluation

- Learning together and exchanging ideas and information in an FSX can improve knowledge, commitment and enthusiasm – all of which are vital in any pandemic response.
- Sufficient time should be allowed in a simulation for a genuine and in-depth evaluation of those experiences.

Regional and international organisations and donors

- The exercise highlighted the urgent need for international organisations to work closely together in any emergency response and to simplify and unify their ways of working and financing emergency responses.
- International organisations need to establish basic logistical and bureaucratic arrangements and a common budget to overcome stringent accounting systems.
- Slimmed-down and uniformed emergency procedures for all international partners would be important steps in the right direction.
- Individual Partner States and regional communities should shoulder their responsibilities for outbreak preparedness and response. Donor contributions to simulation exercises should rather be the exception than the rule.

Applying the lessons learned to other disease outbreaks and exercises

- It is important to keep reminding participants that the procedures tested during the FSX apply to other disease outbreaks too, not just RVF or Ebola.
- The EAC Secretariat needs to carry this process forward by refresher training and dissemination of SOPs.
- The EAC also needs to plan for other simulations, not only between South Sudan and Uganda but on other borders too and consider what happens on borders where relationships are more strained.

Recommendations from regional observers

A number of further observations and recommendations were made by regional observers attending the FSX and these are briefly summarised below.

Robert Bett and **Peter Kibor** from the **Kenya Red Cross Society** made the following specific recommendations after observing some of the scenarios:

- Further strengthen community participation in disease detection and possible correlation with risk factors (for example the correlation between above-average rainfall and possible RVF outbreaks, building on past experiences and encouraging community-based surveillance).
- Strengthen channels for collaboration and information sharing between community members and operational-level staff working in health and veterinary services.
- Establish cross-border committees that can aid in monitoring unusual events across border communities and exchange information that enhances early warning and reporting for prompt response.
- In border communities, there is also a need to collaborate with traders involved in livestock and livestock products so that they have a basic understanding about disease transmission and also know how they can work with veterinary services to improve reporting of diseases.
- Establish proper isolation units at Ports of Entry and the OSBP and enhance temperature screening checks during high alerts.
- Provide psycho-social support personnel from the rapid response teams at the isolation units as an integral component of the response.



Proper isolation units should be established

- Enhance the basic understanding of security authorities, especially those manning border points, of disease transmission and provide more personal protective equipment (PPE) for use during an infectious disease outbreak.
- Ensure that emergency medical services are properly trained in handling patients suspected to be harbouring infectious diseases.



More PPE is needed and proper training for its use

The team of observers from the four Southern African Partner States **Lesotho, Malawi, Mozambique and Zambia** made the following recommendations:

- Strengthen communication mechanisms at the One Stop Border Post between the health authorities from the two countries in order to facilitate better collaboration at the border and beyond.
- Give further attention to infection prevention and control measures at the health facility including the correct procedures for putting it on and taking off personal protection equipment and make SOPs available as a reference.
- Establish signs or posters/visual reminders of correct procedures to reinforce learning and practices of health care workers. For example, counter-measures after self-contamination should be clearly displayed on the wall.
- Add printed material to verbal behavioural change communication messages and share with the community members to enhance information sharing as well as reinforcing lessons learned.
- Make guidelines and scenarios for the simulations available for actors, facilitators, evaluators and observers to enhance understanding and the evaluation process.
- Design a specific exercise to strengthen cross-border collaboration.
- Assign a communication specialist to communicate messages to different players.



Responders need to know the correct procedures for using PPE

Key findings and recommendations from the Post Exercise Evaluation Report in an overview

This section presents in an overview the key findings relating to strengths and weaknesses revealed during the exercise and recommended actions to be taken to improve readiness and response capabilities as contained in the Post Exercise Report¹³. Both reports should be read jointly for a full picture of the cross-border field simulation exercise conducted at Namanga.

These key exercise findings have been compiled from a review of the exercise documentation including:

- Completed Exercise Evaluation Forms
- Observers Comments
- Participants Debrief
- SG & EMG Management Debrief

Early warning and event detection

Strengths

- The communication channels from the community to local authorities were clear, with MOH and veterinary services and the teams conducting investigation quite conversant in process including investigation, engaging communities and sample collection for transportation to reference laboratories for confirmation.

Weaknesses

- Current channels for passing information through multiple levels of government seem inefficient. There was often no clear role for regional/ county agencies, and this was reflected in Kajiado's unitary approach.
- Assessment reports were general and lacking specific details. While the exercise imposed time constraints within an artificial environment, sufficient information was provided to enable proper assessments and notifications.

Recommendation:

1. A standardised format/template for Initial Assessment Reports be developed and adopted by response agencies.

Coordination mechanisms, command and control systems and information sharing

Strengths

- Cross-border cooperation through the Joint Border Management Coordination Committee (JBMCC) was strong and effective in coordinating the response to health emergencies.
- The EAC Secretariat provided a useful framework for the coordination of responses from Tanzania and Kenya.
- Both Partner States had Rift Valley Fever contingency plans in place and were able to activate and operate their national PHEOCs in a timely manner.

Weaknesses

- The poor flow of operational information between regional, national and district/county levels resulted in delays and disruption to the response. Direct channels need to be established and tested.
- National and regional PHEOCs have not yet properly adopted and 'operationalized' the Incident Management System (IMS).
- The arrangements between the EAC Partner States in a joint response to an outbreak seem to be ambiguous in terms of resources, outbreak response roles, responsibilities and sovereign power to the EAC Secretariat. This has led to confusion and ambiguity of roles.
- Triggering action at the EAC sometimes seemed challenging. The EAC should be able to take action to encourage closer cooperation between Partner States but the mechanism to achieve this appeared to be unclear or poorly understood.
- There is need to strengthen communication mechanisms between the health authorities from the two Partner States at the OSBP in order to facilitate better collaboration at the border and beyond.

Recommendations:

2. Review emergency specific contingency plans and procedures (eg. Rift Valley Fever Plan), to include multi-sectoral aspects (One Health approach) for consistency and completeness. Review to include sensitization and familiarization of how these plans and procedures relate to all levels of government and consider simplification of reporting structures.
3. Activation triggers for EAC involvement in emergency response be more clearly defined and widely promulgated.
4. Institutional framework for Cross-border Integrated Disease Surveillance and Response in the East African Community Region be promulgated and implemented.

Deployment of Rapid Response Teams

Strengths

- Rapid Response Teams (RRT) were on call, well-equipped and deployed in a timely manner (activation).
- Accurate assessment team reports were produced and disseminated to the appropriate authority in a timely manner.
- Standardised templates were used, reflecting recent training initiative.

Weaknesses

- Rapid Response Teams were generally disorganised and communication between the different RRT levels was poor.
- There was no evidence of set, practised procedures, nor of a register.
- No formal procedure followed in composition and dispatch of RRT.

¹³ East African Community Cross-border Field Simulation Exercise, 11-14 June 2019, Post Exercise Report <https://www.eac.int/health/pandemic-preparedness/cross-border-field-simulation-exercises>

Recommendations:

5. Rapid Response Teams should (i) be assembled from a register of experts at the national, and sub-national levels (ii) be properly trained and (iii) respond in accordance with validated and practised procedures.
6. A regional pool of rapidly deployable experts be established and operationalised.

Activation and deployment of selected mobile laboratories**Strengths**

- Mobile laboratories were staffed, equipped, and deployed in a sufficient manner.
- Laboratory staff were properly trained and had the required skills to operate the mobile laboratory.

Weaknesses

- Errors were made in the collection/labelling and safe transport/storing of blood samples.
- It is unclear how mobile laboratories are formally activated (SOPs) and what the relationship is between the national and private laboratories.

Recommendations:

7. Procedures for the collection, labelling, transport and storage of blood samples be reviewed and regular drills conducted to ensure standardization and quality assurance.
8. Procedures for activation of the mobile labs be developed.

Animal and human cases investigation & management and functionality of selected veterinary and health facilities in the border area**Strengths**

- Demonstrated experience of the two sectors in working together, including joint field investigation during which respective roles and responsibilities are known and appropriately implemented;
- Good knowledge of the sector-specific procedures (including of the international standards to be followed for transboundary challenges and for disease reporting) and also of the joint procedures ensuring coordination during zoonotic event management
- Appropriate sharing of information and collaboration between the sectors.

Weaknesses

- Safe procedures for working with suspected infection of humans and animals, including the donning/doffing of Personal Protective Equipment (PPE), were often not carried out correctly (resulting in exposure to contamination).
- There is a need for properly equipped isolation units as well as support in human resources to monitor health situations during periods of high alerts. Isolation units should also be provided with psychosocial support personnel as part of the response teams and knowledge transfer to human health and veterinary officers on psychosocial support as integral components of the response especially where cases have been isolated
- Security authorities, especially those manning border points, should have a better understanding of the threat of an infectious disease outbreak and measures required to control it.
- In border communities, there is need for coordination and collaboration with the traders involved in livestock and livestock products to ensure they have basic understanding on disease transmission and also how best they can collaborate with the veterinary services to improve reporting of diseases that enhance response.
- Infection prevention and control measures at health facility will require some attention as healthcare workers were not well guided by means of SOPs for easy reference in the PPE donning and doffing areas (e.g. counter measures after self-contamination could be clearly posted on the wall).
- Structures for handling animals are missing at the border. The quarantine facility at the border is incomplete.

Recommendations:

9. A review of operational training for staff of public health posts at points of entry (particularly patient identification, use of PPE and patient management) be conducted.
10. Coordination and collaboration with traders involved in livestock and livestock products be established to ensure they have basic understanding on disease transmission and on how best they can collaborate with the veterinary services to improve reporting of diseases.
11. Procedures for the donning and doffing of PPE be reviewed and promulgated for health workers.
12. Animal handling structures be constructed.
13. Quarantine facility at the Namanga border to be completed.

Regional SOPs for preparedness and risk & crisis communications**Strengths**

- The need for SOPs and contingency plans is well understood and steps are being taken to complete response plans and SOPs.
- The EAC Secretariat group effectively utilised the existing SOPs and understood them on an ad-hoc basis.
- Both Partner States, as well as the EAC Secretariat were familiar with the International Health Regulations (IHR 2005) and compliance requirements.

Weaknesses

- At many sites, hard copies of regional risk and crisis communication SOPs were not known and available for reference.
- Despite the fact that SOP existed at the EAC, they were not widely known by the EAC team.
- National public health emergency response plans and emergency operating procedures were at varying stages of development and not always available for reference by responders.
- Regional coordination and communication between Partner States and the EAC Secretariat was a challenge.
- Communications caused difficulties, particularly reliance on mobile phones when contacting the local level. Need for capacity building at the local level.

Recommendations:

14. Regional plans and procedures for responding to public health emergencies be harmonized, validated and approved for each level of the response.
15. Regional collaboration in provision of emergency medical services be strengthened, including procedures for the transfer of (suspected) patients.
16. EAC Secretariat to sensitize and familiarize Partner States at the national and district levels on the regional preparedness and risk and crisis communications SOPs.

Preparedness and response measures at the Nairobi (NBO) and Kilimanjaro (JRO) International Airports**Strengths**

- Emergency Plans and SOPs were made available at both Nairobi (NBO) and Kilimanjaro (JRO) airports during the exercise. They are tested frequently in collaboration with relevant airport stakeholders.
- Nairobi Port Health staff provide a wide range of public health services to the airport (food and potable water inspections) which support routine IHR core capacities.
- The airports' Port Health teams include clinicians, nurses and Port Health Officers and in Nairobi, the service is available 24 hours per day. Teams are well equipped and assessment and isolation space is available onsite (NBO). Staff have received recent, up to date training.

Weaknesses

- The ambulance at JRO was unserviceable. The transport vehicle at NBO had limited equipment.
- Regional collaboration in provision of emergency medical services, including the transfer of patients suspected to be harbouring infectious diseases, needs improvement.
- Notification of events between airports is generally poor. There appears no formal communication system between Port Health at NBO, JRO and OSBP and vice versa. It was not clear who staff should contact to notify each other of potential health threats and provide early warning. Air Traffic Services, which is part of the formal notification services for air transport, relayed confused and delayed messages during the exercise.

Recommendation:

17. The SOP for notification of public health events at airports should be reviewed and tested with regularly scheduled drills; drills should include Air Traffic Services and airport emergency management committee. Port Health at EAC international airports to establish and regularly update communication protocols to support early notification.

Capture best practices and ensure transfer of lessons learned to the EAC and other regional economic communities and African regions

Strengths

- There was a high degree of interest and engagement by stakeholders at all levels which ensured mutual accountability, trust and sharing of lessons and experience.
- National exercise facilitators, evaluators and liaison/safety officers were trained and gained experience in exercise management principles, including planning, conduct and evaluation.
- A photographer team, a video team and a lessons-learned writer were contracted to capture best practices and ensure wider transfer of lessons learned to the region and the EAC.

Weaknesses

- Insufficient time was available during the Management Debrief to complete the root cause analysis of the weaknesses found.

Recommendation:

18. A Working Group be formed to finalise action plans to implement these exercise recommendations arising from the Root Cause Analysis carried out by the Breakout Groups during SG and EMG meeting held on 17-18 June 2019.

Exercise Design and Conduct

Strengths

- Sound regional and multisectoral goodwill and coordination was evident throughout the exercise.
- The exercise was conducted in facilities designated for coordination/management of a real event, so the available tools and technologies could be used and evaluated.
- The exercise gave the Kenyan and Tanzanian PHEOCs the first opportunity to practise response roles and responsibilities in a realistic, multi-national, high-pressure environment.

Weaknesses

- Many participants, unfamiliar with operations-based exercises, were initially seeking guidance from exercise control before responding rather than taking action on the information provided by the injects.
- The chosen communication design (i.e. that FSX participants communicated situational information and requests for support with real world institutions (labelled EXERCISE EXERCISE EXERCISE)) led to some confusion, missed feedback and an unfolding of events that could not be influenced and directed by Exercise Control. A closed communication system for upcoming exercises should be considered.
- The conduct of regular simulation exercises is an essential discipline for achieving emergency preparedness. Recurring discussion-/operations-based exercise programmes should be institutionalised at all response levels to ensure a state of readiness.
- Given the size and complexity of this exercise, participants (both players and exercise facilitators) would have benefited from more pre-exercise training on the exercised plans and procedures. The need for a multi-year training and exercise programme cycle to be developed, coordinated and institutionalised by PHEOCs at the regional, national and district/county levels was evident. Training must include staff across the board, including administrative, logistical and support staff, many of whom are lower grade and would benefit from formal inclusion.
- The number of observers attending the exercise proved difficult to manage, especially given the widespread exercise venues. This often interrupted exercise activities and created confusion for the participants.

Recommendation:

19. A cyclic programme of discussion/operations-based exercises, including regular exercise drills, be institutionalized at all response levels to ensure an ongoing state of readiness.

Key recommendations from the EAC

Many of the lessons learned outlined and recommendations from participants in the FSX listed above have already been addressed by the EAC Secretariat as recommendations for the Sectoral Council of Ministers of Health in the official FSX report¹⁴ and in the report of the Steering Group and the Exercise Management Group evaluation meeting held in Arusha on 17th and 18th June¹⁵. They will be submitted for the next meeting scheduled for October 2019:

Field Simulation Exercise Report:

- Focus more strongly on the evaluation of the implementation of the regional and national plans and SOPs than on the implementation of international guidelines in future simulations;
- Ensure that in future simulations sufficient information, clear guidance and tools are provided to all participants;
- Sufficiently brief and sensitise all participants (including the observers and international advisors) before the start of a field simulation;
- Urge Partner States and EAC departments to develop short summaries of the available SOPs and disseminate them widely (One-page check lists, diagrams and flow charts);
- Urge the Partner States to identify and develop additional relevant SOPs and finalise the existing ones including approval;
- Fast track the development of the technical report to inform the actions at regional, national and sub-national levels aimed at improving preparedness and response;
- Urge the partner States and the EAC departments to adequately sensitise the participants ahead of a field simulation exercise;
- Officially inform the Republic of South Sudan and the Republic of Uganda about the scheduled FSX in 2020 and urge them to initiate preparations.

Report of the Steering and Exercise Management Group meeting:

- Direct the EAC Secretariat to work with Partner States to address the gaps identified in the Namanga cross-border field simulation exercise;
- Urge the Partner States to address the identified gaps in a timely manner and in line with existing national plans;
- Urge Partner States to mobilise resources to implement the necessary measures and activities resulting from the gaps identified in the FSX;
- Direct the EAC Secretariat to strengthen multi-sectoral collaboration and coordination through the One Health approach by developing a regional strategy to guide the process by June 2021;
- Urge Partner States to further promote and strengthen interdisciplinary collaboration to embrace the One Health approach in preparedness and response;
- Urge Partner States to conduct drills and table top simulation exercises annually and a field simulation at least every three years, but in accordance with the provisions of the national contingency plans.
- Urge Partner States to cater for simulation exercises in the annual budgets;
- Direct the EAC Secretariat to mobilise funds for conducting further simulation exercises in line with Regional Contingency Plan and subsequently addressing the gaps that will be identified;

¹⁴ <https://www.eac.int/documents/category/cross-border-field-simulation-exercise-documents>
Cross Border Field Simulation Exercise at Namanga, 11-14 June 2019 | Report of the FSX

¹⁵ Report of the fifth joint Steering Group and Exercise Management Group to evaluate the cross-border field simulation exercise held at Namanga from 11-14 June 2019

- Planning, organisation and logistics of any further simulation exercise should be managed by the convener and at the regional level;
- Contributions from regional and international partners should go into a “basket” of other applicable fund dedicated to covering expenses related to the simulation;
- Urge Partner States and direct the EAC Secretariat to consider applying leaner procedures in an emergency that allow for a quick response;
- Direct the EAC Secretariat and urge the Partner States to develop dissemination plans for the FSX report and action plans for implementing the recommendations;
- Urge the Partner States and direct the EAC Secretariat to invest in establishing and strengthening EOCs at all levels;
- Direct the EAC Secretariat to strengthen the currently understaffed EAC Health Department to be able to perform its duties effectively by December 2019.

Conclusion

“If we had an emergency a week from today, we would be far better prepared, so this has been a very beneficial exercise. An emergency is not just a departmental thing,

Sally Sarem, Chairperson of the Joint Border Management Coordination Committee.



The main conclusion that **Frederik Copper** takes from the FSX is that there needs to be national and regional ownership to ensure follow up, build capacity and strengthen preparedness: “Ownership of the process is key in any sustainable response.”

Ministers have already instructed the EAC Secretariat to conduct another, smaller cross-border field simulation exercise between the Republics of South Sudan and Uganda and this is scheduled for 2020. Observers from the Ministry of Health in South Sudan attended the FSX as international observers and say the experience has been both helpful and inspirational: They will now take many lessons back from Namanga about the planning and conduct of the 2020 simulation exercise and its importance.

“The EAC Secretariat realises that there is much work to be done to improve preparedness and is committed to taking on board

the lessons learned from the FSX and adopting the recommendations made by the participants. The FSX was the beginning of a process, not the end, says **Dr Michael Katende**.



Many of the lessons that were learned and recommendations that were made from both the outcomes and processes of conducting such an ambitious cross-border and regional field simulation exercise are summarised in this report. The scale, size and scope of the FSX were unprecedented and the organisers and participants are to be congratulated on the successful implementation and conclusion of such an ambitious exercise. However, the exercise was designed to expose both the strengths and weaknesses of the region’s pandemic response preparedness and the recommendations above suggest there is much work still to be done.

A big question is how the EAC Secretariat, countries and participants involved take lessons from this exercise and build on them for the region’s best interest. Can countries learn from this large-scale FSX and maybe conduct further simulations, even if on a smaller scale, in the future?

Annex 1: FSX Background Paper including composition of FSX Steering Group and Exercise Management Groups



East African Community

THE FIELD SIMULATION EXERCISE AT THE NAMANGA BORDER ON 11th – 14th JUNE 2019

Background Paper

EAC SECRETARIAT
P.O. BOX 1096
ARUSHA, TANZANIA

May, 2019

1.0 Introduction

The “International Health Regulations (IHR)”, adopted by the 58th World Health Assembly in May 2005 entered into force on 15 June 2007. They are legally binding and aim to prevent, protect against, control and respond to the international spread of diseases and to avoid unnecessary interference with international traffic and trade in a globalised world. The “OIE Tool for the Evaluation of Performance of Veterinary Services (PVS), Version 2013” aims to improve governance of veterinary services to enable them to contribute effectively to achieving the priorities of national governments and to help improve animal health and welfare and human health globally. In the EAC the key instrument in outbreak prevention is the “East African Community Regional Contingency Plan for Epidemics due to Communicable Diseases, Conditions and other Events of Public Health Concern 2018 – 2023” (“regional contingency plan”).

2.0 Rationale for conducting a cross-border field simulation exercise (FSX)

Simulation exercises play a key role in identifying the strengths and gaps in capacities and can facilitate practical corrective actions needed to develop and implement preparedness and response capacities at all levels (national, regional, community and global). The exercises contribute to a culture of continuous learning and improvement, and through the sharing of results can build mutual accountability and transparency between Partner States. The 11th Ordinary Meeting of the EAC Sectoral Council of Ministers of Health held on 24 March 2015, directed the EAC Secretariat to conduct a cross-border simulation exercise at the Namanga border between the Republic of Kenya and the United Republic of Tanzania (**EAC/ Health/SCM-11/ Decision 021**). In the same report, the Sectoral Council urged Partner States to establish and/or strengthen the Port Health Services on the “One Health” approach at the Points of Entry based on the internationally recommended standards (**EAC/ Health/ SCM-11/ Decision 019**).

Regular simulation exercises following a One Health approach are also enshrined in the regional contingency plan. Against this backdrop, the EAC Secretariat convened a table top exercise (TTX) on 4-5 September 2018 as the first part of a two-tier simulation with support from GIZ on behalf of the German Government (Support to Pandemic Preparedness in the EAC Region (PanPrep) project) and the World Health Organization (WHO). A cross-border field simulation exercise (FSX) will follow from 11-14 June 2019 at Namanga. Both exercises involve representatives from the EAC Partner States and follow the One Health approach.

The PanPrep project aims at improving the health of the people in East Africa. The project supports the EAC Secretariat in strengthening its advisory and coordinating role for pandemic preparedness in the Partner States. Together with the EAC Secretariat and representatives from Partner States the project facilitates the implementation of the regional contingency plan and of the regional risk and crisis communication strategy and the development of SOPs to put plan and strategy into practice. Project activities comprise their testing in simulation exercises.

3.0 Purpose of the cross border field simulation exercises

Field simulations build and enhance teamwork and essential relationships, self-confidence and competence, communication and interagency and/or multi-jurisdictional harmonization and coordination. The planned simulation will build on the experiences collected during the TTX and the previous simulations. Its main purpose is to assess the regional crisis response capacity and status of implementation of IHR and PVS in practice and further enhance the level of outbreak preparedness in the EAC. National emergency preparedness and response plans, the regional contingency plan with its emergency structure, the regional risk and crisis communication strategy and the respective SOPs as well as the public health capacities in the Partner States including Points of Entry (PoEs) will this time be assessed under everyday conditions and persisting gaps identified. The knowledge of roles and responsibilities, the cooperation ability of multiple stakeholders and logistical and administrative processes will also be tested.

3.1 Operationalisation of the exercise

On 6-7 September 2018, right after the TTX, the members of the task-based Steering (SG) and Exercise Management Groups (EMG) met for their 3rd (combined) meeting and evaluated the exercise internally. They reviewed both, the SG and the EMG and recommended to add further members from the military and Offices of the President (Kenya), Prime Minister’s Office and President’s Office (Tanzania) in order to ensure smooth preparations of the field simulation exercise at Namanga. They confirmed the tasks of both groups as follows:

Main tasks of the task-based SG are to:

- Oversee the process
- Liaise with all relevant stakeholders
 - upwards (all the way up to the presidency) and downwards (all the way down to the communities);
- Convey content and process information;
- Nominate and involve people distributing roles and responsibilities;
- Approve the proposed One Health scenario;
- Approve the venues for the field simulation exercise;
- Approve the purpose and scope of the FSX;
- Contribute to and approve the evaluation of the FSX.

Main tasks of the EMG are to:

- Develop the scenario;
- Plan the simulations in detail;
- Identify active participants;
- Assign roles and responsibilities;
- Manage procurement, logistics, admin & finance;
- Coordinate and implement the simulations;
- Prepare the venues;
- Brief the participants.

A stakeholder meeting that took place on 11-12 October 2018 in Nairobi, Kenya, kick-started the preparations for the FSX. On 6-7 December 2018, the task-based SG and EMG had their first joint FSX planning meeting in Arusha, Tanzania, in their final compositions. It was the first of a series of planning meetings of both groups in the run-up to the field simulation in June 2019.

The EMG members held a meeting in Arusha, Tanzania, on 24-25 January 2019. During the two-day meeting, they reviewed the final concept note, developed a list of FSX participants, materials and equipment, identified FSX sites, drafted the initial FSX scenario and storyline and a hand book for exercise participants. On 19/20 February 2019 the 2nd joint Steering Group and Exercise Management Group meeting took place in Arusha. Its main objective was to plan the Field Simulation in detail, develop scenario and injects and clarify roles and responsibilities of all participants.

The 2nd EMG meeting followed from 12-15 March 2019 at Namanga. The main objectives of this meeting were to familiarise the EMG members with the location and sites around the border, do courtesy calls and sensitise the Border Management Committee. Other than that, the participants continued with the planning process for the cross-border field simulation. They further developed the FSX scenario and the pieces of information (“injects”) that detail the scenario (“storyline”). They reviewed and finalised the field simulation participants’ profiles list and the list with FSX material and equip-

ment, updated the SG and EMG road map and assigned roles. The 3rd joint FSX SG and EMG meeting continued with the planning process for the field simulation exercise and also included a training session on the WHO simulation exercise methodology. The 3rd and 4th EMG meeting will refine the plans, identify and train role players. The 4th joint SG & EMG will finalize the onsite plans and set the stage for the simulation exercise

4.0 Objective of the meeting

- The main objective is to conduct a cross border simulation exercise and test the national, regional plans and the regional crisis management structure

5.0 Expected outcomes

The main outputs of the simulation exercise will be the following:

- Identification of gaps and weaknesses in the contingency plans and the SOPs
- Understanding of roles and responsibilities of the respective stakeholders
- Recommendations and corrective measures to improve the national regional plans and strategies and SOPs

6.0 Participants

The participants will include the Partner States of Participants of the SG and EMG meeting are the nominated members of the groups as listed in Annex I of this background paper.

7.0 Date and Venue

The cross Border Filed Simulation Exercise will take place from 11th to 14th June 2019 at Namanga on the Kenya- Tanzania border.

Further meetings of the SG and EMG are planned for the following dates:

- **08 – 10 June 2019:**
4th joint SG and EMG on-site preparatory meeting
- **11 – 14 June 2019:**
Field Simulation Exercise
- **17 – 18 June 2019:**
5th joint SG and EMG meeting for the evaluation of the Namanga Field Simulation Exercise

Arusha, May 2019

Annex I: Current list of SG and EMG members (as of 7 December 2018)

| S. No | Name and contacts of Steering Group (SG) | Institution |
|--|--|----------------------------|
| Convener of FSX and project management: EAC Secretariat Acting Head of the Health Department | | |
| EAC Secretariat | | |
| 1. | Damascent Kabanda Trade Economist EAC Directorate of Trade Email: Dkabanda@eachq.org Tel: +255 766 373 851 | EAC Trade |
| 2. | Fahari Gilbert Marwa Principal Agricultural Economist East African Community Secretariat Email: fmarwa@eachq.org Tel: +255 272 162 100 | EAC Agriculture |
| 3. | Dr Michael Katende Principal HIV and AIDS Officer/Coordinator EAC Integrated Health Programme (EIHP) EAC Health Department Email: mkatende@eachq.org Tel: +255 272 504 253/8; +255 763 152 492 | EAC Health |
| KENYA | | |
| 4. | Pauline Nandako Nafula Kituyi Ministry of East African Community Affairs Namanga Email: nafula.pauline@gmail.com Tel: +254 707 112 750/ +254 718 625 380 | MEACA |
| 5. | Dr Athman Juma Mwatondo (Dr Caroline Nasimiyu Wanyonyi) Medical Epidemiologist Zoonotic Disease Unit, Ministry of Health Email: amwatondo@yahoo.com Tel: +254 721 579 276 | MoH |
| 6. | Dr Geoffrey Gitau Mukora Veterinary Expert, DVS Kabete Email: mukoragg@gmail.com Tel: +254 723 585 800 | Veterinary Services |
| 7. | Colonel Dr Justino M Muinde Military National level Email: drjmuinde@gmail.com Tel: +254 722 317 101 | Military |
| 8. | Stephen Komora Office of President Email: mulekomora@gmail.com Tel: +254 716 013 522 | Office of President |
| TANZANIA | | |
| 9. | Edward A. Komba Ministry of East African Community Affairs Email: kombsed@yahoo.com Tel: +255 757 144 444 | MEACA |

| | | |
|------------------|--|----------------------------|
| 10 | Mary Archson Makata (Elias Kwesi) Ministry of Health, Community Development, Gender, Elderly and Children Email: marymakata2@gmail.com Tel: +255 713 253 939 | MOHCDGEC |
| 11 | Dr Benezeth Lutege Malinda Directorate of Veterinary Services Ministry of Livestock and Fisheries Email: benlutege@gmail.com Tel: +255 754 816 967 | Mo Livestock and Fisheries |
| 12 | Captain Mtanda Rashid Abdallah Tanzania People's Defense Force Headquarters Email: mtrash46@gmail.com Tel: +255 783 282 661 | Defense Force |
| 13 | Harrison Chinyuka One Health Coordinator Disaster Management Department Email: Harrison.chinyuka@pmo.go.tz Tel: +255 767 497 772 | Prime Minister's office |
| 14 | Vones Zakaria Uiso (Isaya Nangay) President's Office Regional Administration and Local Government Authority Regional Commissioner, Arusha Email: voneszakaria@yahoo.com Tel: +255 686 774 720 | President's Office |
| WHO | | |
| 15 | Frederik Copper Department of Country Health Emergency Preparedness & IHR World Health Organization Email: copperf@who.int Tel: +41 792 021 826 | WHO |
| OIE | | |
| 16 | Dr Thomas Dulu Programme Officer World Organization for Animal Health Sub-Regional Representation for Eastern Africa Email: t.dulu@oie.int Tel: +254 721 276 508 | OIE |
| KfW/BNITM | | |
| 17 | Dr Florian Gehre Technical Consultant to the EAC Mobile Laboratory Programme Email: gehre@bnitm.de ; fgehre@eachq.org Tel: +255 685 481 240 | KfW/BNITM |
| GIZ | | |
| 18 | Dr Irene Lukassowitz Project Manager Support to Pandemic Preparedness in the EAC Region project (PanPrep) Email: irene.lukassowitz@giz.de Tel: +255 757 288 562 | GIZ/PanPrep |

| S. No | Name and contacts of Exercise Management Group (EMG) | Institution |
|-------|---|-----------------------------------|
| | EAC | |
| 1 | Florian Mutabazi Communications Officer EAC Corporate Communications Email: FMutabazi@eachq.org Tel: +255 785 288 428 | EAC Communica-tions |
| 2 | Dr David Balikowa Senior Livestock Officer EAC Agriculture Department Email: dbalikowa@eachq.org Tel: +255 788 736 025 | EAC Agriculture |
| | ECSA-HC | |
| 3 | Dr Willy Were (Benedict Mushi) Medical Epidemiologist ECSA-HC Email: werew@ecsa.ortz Tel: +255 787 548 393 | ECSA HC |
| | Kenya | |
| 4 | Pauline Nandako Nafula Kituyi Ministry of East African Community Affairs Namanga Email: nafula.pauline@gmail.com Tel: +254 707 112 750; +254 718 625 380 | MEACA |
| 5 | Dr James Nyongesa Wakhungu Veterinary Officer Namanga Directorate of Veterinary Services Email: jameswakhungu@gmail.com Tel: +254 721 766 361 | Veterinary Services |
| 6 | Dr Lyndah Makayoto Medical Epidemiologist Ministry of Health - Disease Surveillance and Response Unit Email: makayotto@gmail.com Tel: +254 720 257 691 | MoH |
| 7 | Major Dr Mary W. Njoroge Public Health Expert/Epidemiology Ministry of Defense Email: njoroge.warigia@gmail.com Tel: +254 721 627 175 | Military |
| | Tanzania | |
| 8 | Edward A. Komba Ministry of East African Community Affairs Email: kombsed@yahoo.com Tel: +255 757 144 444 | MEACA |
| 9 | Dr Vida Mmbaga (Dr George Cosmas Kauki) Medical Doctor, Epidemiologist Ministry of Health, Community Development, Gender, Elderly and Children Email: makundiv@yahoo.com ; cgkauky@yahoo.com Tel: +255 754 760 732/+255 764 627 034/+255 767 026 332 | MOHCDGEC |
| 10 | Dr Emmanuel Senyaeli Swai (Dr Makungu Selemani) Department of Veterinary Services Ministry of Livestock and Fisheries Email: esswai@gmail.com Tel: +255 754 816 967 | Mo Livestock and Fisheries |

| | | |
|----|---|----------------------|
| 11 | Major Enock Mwakyusa Tanzania People's Defense Force Headquarters Email: enokyusa@gmail.com ; enokyusandwisi@gmail.com Tel: +255 716 432 744 | Defense Force |
| | WHO | |
| 12 | Hilary Kagume Njenge Simulation Project Coordinator World Health Organization Email: njengeh@who.int Tel: +255 767 274 952/+254 726 977 738 | WHO |
| 13 | Dr Grace Elizabeth Bai Saguti (Dr Allan Mpairwe/Dr. Nollascus Ganda) Disease Prevention and Control Officer World Health Organization Tanzania Email: sagutig@who.int Tel: +255 754 287 875 | WHO |
| | FAO/ECTAD | |
| 15 | Dr Fasina Folorunso (Niwael Mtui Malamsha) ECTAD Country Team Leader Food and Agriculture Organization of the United Nations Email: fasinafo@gmail.com / folorunso.fasina@fao.org Tel: +255 686 132 852 | FAO/ECTAD |
| | GIZ | |
| 16 | Timothy Wesonga (Kenneth Byoona) Preparedness and One Health Advisor Support to Pandemic Preparedness in the EAC Region project Email: Timothy.Wesonga@epos.de Tel: +254 757 983 804 | GIZ/EPOS |

Annex 2: Terms of Reference for SG and EMG Steering Groups

Steering Group

- Oversee the process;
- Liaise with all relevant stakeholders;
 - upwards (all the way up to the Presidency or Prime Minister);
 - and downwards (all the way down to the communities);
- Convey content and process information;
- Nominate and involve people distributing roles and responsibilities;
- Approve the proposed One Health scenario;
- Approve the venues for the field simulation exercise;
- Approve the purpose and scope of the FSX;
- Contribute to and approve the evaluation of the FSX.

Exercise Management Group

- Planning and material development: Scenario; injects;
- Identify active participants;
- Assign roles and responsibilities;
- Manage procurement, logistics, administration and finance;
- Coordinate and implement the simulations;
 - Prepare the venues, test equipment, print materials; Brief the participants, observers and assessors;
 - Guide and facilitate participants during simulation;
- Evaluate and debrief of FSX.

Annex 3: EAC Cross Border Field Simulation Exercise Briefing Document



Version: 20-2-2019

EAC Cross Border Field Simulation Exercise (FSX) Briefing Document Namanga, 11-14 June 2019

Background

The East African Community (EAC) region has experienced an increasing number of infectious disease outbreaks in the past, including Ebola, Rift Valley, Marburg and Crimean-Congo Haemorrhagic Fever, etc. In this regard, the EAC Secretariat is convening a cross-border Field Simulation Exercise (FSX) on 11-14 June 2019 at the border between Tanzania and Kenya (Namanga). The FSX is based on an EAC Sectoral Council of Ministers of Health decision¹, taken in March 2015.

The FSX is supported by the “Support to Pandemic Preparedness in the EAC Region” (PANPrep) project that the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements on behalf of the German Government. The World Health Organization (WHO) has been selected to lead and coordinate the planning, design, organisation, implementation and evaluation of the FSX.

What is the purpose of the cross-border field simulation exercise?

The purpose of the cross border FSX is to assess and further enhance multi-sectorial outbreak preparedness and response in the EAC region under a multi-sectorial One Health approach. It will test the operational capability of the regional and national contingency plans and standard operating procedures (SOPs) and will allow participants to familiarize themselves with the roles and responsibilities of stakeholders from different sectors and backgrounds who are involved in preparedness, mitigation and response. Furthermore, the FSX will be used to assess and identify strengths and weaknesses in coordination and collaboration mechanisms, emergency response deployment, logistics and administrative processes, risk and crisis communication (RCC) as well as emergency management and leadership. Findings from the FSX will be used to further improve preparedness and response capacities in the EAC region.

What are the objectives of the cross-border field simulation exercise?

The FSX will be characterized by actual response, mobilization of equipment and resources and commitment of staff. The FSX at Namanga will be conducted in a setting developed to be as realistic as possible, while ensuring a safe learning environment for all participants. It will include the actual deployment of resources required for coordination and response.

The objectives of the FSX are to:

1. Assess the use of early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania;
2. Assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres)

3. Assess the deployment of national rapid response teams (RRT);
4. Validate the activation and deployment of selected mobile laboratories;
5. Assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large scale outbreak of a RVF-like virus;
6. Practise regional SOPs for cross-border pandemic preparedness and risk & crisis communication including community engagement;
7. Evaluate selected preparedness and response measures at the Jomo Kenyatta International Airport (JKIA) and Kilimanjaro International Airport (KIA);
8. Capture best practises and ensure transfer of lessons learned to the EAC community and other regional economic communities and to African regions;

Which scenario will be used in the cross-border field simulation exercise?

The selected scenario will simulate a cross border Rift Valley Fever-like virus outbreak, aggravated by environmental factors and with impact on humans and animals, lives and livelihoods, agriculture, trade and tourism, peace and security and the economy as a whole. Early warning, infections and deaths in animals and human beings will trigger the reporting and activation of national and regional preparedness and response mechanisms emphasising the importance of the One Health approach and of appropriate risk and crisis communication as well as cross border collaboration.

Based on the recent need to prepare EAC Partner States for Ebola due to the current outbreak in Democratic Republic of Congo, the fictitious component will feature a RVF virus that will mutate into a pathogen that can be transmitted between humans causing severe haemorrhagic fever resulting in increased numbers of cases and deaths. This will allow assessing and building EAC Secretariat's and Partner States' capacities to prepare and respond to an Ebola-like situation using the One Health approach.

The scenario will be built and implemented around three stages namely:

- (1) Alert;
- (2) Event detection;
- (3) Response.

Who will be participating in the cross-border field simulation exercise?

The FSX is primarily targeted at 150 individuals from the EAC Secretariat and Partner States. This would primarily include individuals from EAC Secretariat (8), as well as Tanzania (65) and Kenya (65) from different levels including: Namanga as well as from national/regional levels who would perform the routine functions and tasks which they would perform during a real emergency response. Involved Partner States representatives from Burundi, Rwanda, South Sudan and Uganda will be participating as observers (12 in total, 3 per country). Furthermore, some international organisations and specialized institutions will support with the conduct and evaluation of the FSX, in order to identify strengths and weakness and to ensure broader lesson learning and sharing of best practises across the region.

For more information, please visit the EAC website: <https://www.eac.int/health/disease-prevention>

¹ EAC/Health/SCM-11/Decision 021

Annex 4: Press Release issued during a sensitisation meeting aimed to informing the public about the exercise

Addressing the challenge of cross border disease outbreaks using the ‘One Health’ Approach

East African Community Headquarters, Arusha, 21st May, 2019: The East African Community (EAC) Secretariat will convene a cross border field simulation exercise (FSX) at the Namanga border between the Republic of Kenya and the United Republic of Tanzania from 11th to 14th June 2019 as directed by the EAC Sectoral Council of Ministers of Health in 2015. The FSX aims to enhance the status of preparedness for and response to infectious disease outbreaks in the EAC, thereby making the region safe for the people and businesses in the region. While the majority of the estimated 250 participants will come from the two Partner States, stakeholders from the Republics of Burundi, Rwanda, South Sudan and Uganda and representatives from regional, supra-regional and international institutions and organisations will also participate. Not all the participants will be at Namanga, but work from their usual work places in Dar Es Salaam and Dodoma, Arusha and Nairobi, Longido, Kajiado and in the border area. Only the EAC Secretariat will have its operations centre at the One Stop Border Post (OSBP).

Seventy-five percent of infectious diseases are transmitted between animals and humans. Outbreaks affect agriculture, trade and tourism and the lives and livelihoods of the people. Involving these sectors in prevention, response and mitigation reflects what is called the “One Health” disease management approach. The EAC region has experienced cases of Ebola, Rift Valley, Marburg and Crimean Congo Hemorrhagic fevers, Cholera, Polio and Plague among others. The current Ebola Virus Disease outbreak in the Democratic Republic of Congo, which has so far caused over 1,600 human cases and more than 1,000 deaths, remains a major threat to the health and socio-economic wellbeing of the people of East Africa. Therefore, the region needs to be prepared and the ongoing efforts to operationalize national and regional contingency plans need to be strengthened. In this regard, the planned cross-border Field Simulation Exercise aims to strengthen the capacities of all people involved in preventing and responding to infectious disease outbreaks across different professions and sectors of society.

An FSX is an interactive instrument to evaluate the status of preparedness for and response to disease outbreaks of organisations or other entities in the EAC region. It simulates a situation under real conditions which could occur at any time. The FSX allows participants to identify strengths and weaknesses and can facilitate practical corrective actions at all levels. It will be used to assess coordination and collaboration mechanisms, emergency response deployment, logistics and administrative processes, risk and crisis communication as well as emergency management and leadership. Findings from the FSX will be used to further improve preparedness and response capacities in the EAC region and beyond.

The scenario of the exercise will mimic a cross border disease outbreak, aggravated by environmental factors and with impact on humans and animals, agriculture, trade and tourism, and the economy as a whole. Early warning, infections and deaths in animals and human beings will prompt the reporting and activation of national and regional preparedness and response mechanisms emphasising the importance of the One Health approach and of appropriate risk and crisis communication as well as cross border collaboration.

Based on the recent need to prepare EAC Partner States for Ebola due to the current outbreak in DRC, the fictitious component will feature a virus that will mutate into a pathogen that can be transmitted between humans causing severe fever and bleeding resulting in increased numbers of cases and deaths. This will help in assessing and building EAC Secretariat’s and Partner States’ capacities to prepare and respond to an Ebola-like situation.

With this press release, the EAC Secretariat informs the public and especially the communities in the border area about the exercise. Around Namanga, selected health facilities, slaughter houses and farms on both sides of the border, military and police, the media and last but not least the public will participate in the FSX. The main focus will be on the One Stop Border Post as the main crossing point for people and goods between the two countries.

Preparations for the Field Simulation Exercise are already ongoing and will be in full swing between 8th and 11th June 2019, ahead of the expected start of the FSX on 11th June 2019.

The exercise is planned and organized in a way that ensures minimal disruption of normal activities traffic at the OSPB and other simulation sites. All sites will be well marked and passengers will be informed about the exercise so that passers-by will know what is going on, when they see the military, ambulances and people in protective gear and can thus behave accordingly and contribute to the success of the exercise.

The cross-border field simulation exercise is supported by the “Support to Pandemic Preparedness in the EAC Region” project, which the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements on behalf of the German Government and the EAC. The World Health Organization is providing technical support throughout the planning and implementation of FSX in line with its mandate of implementing the International Health Regulations globally.

-ENDS-

For more information, please contact:

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EAC Secretariat
Arusha, Tanzania
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Email: Oothieno [at] eachq.org

Annex 5: Key functions to be tested in the FSX

| Geographic area | Function to be tested | Comments |
|-----------------|---|---|
| Local (Namanga) | Early warning and surveillance systems | Including triggers from Meteorology, human and veterinary laboratories |
| | Risk communication and community engagement (cross cutting at all levels) | Should involve people/institutions which are influential in the community such as cultural, religious and community leaders as well as other group leaders and local media |
| | Field animal and human sample collection, storage, packaging and safe and timely transportation | Veterinary and human health facilities |
| | Outbreak response, including farm level, and prevention of further spread; Development / preparation of holding / isolation points and treatment centers for confirmed and suspected animal and human cases | Human and animal health, agriculture, biosafety As far as these holding facilities are present |
| | Preparedness of selected health and animal holding facilities in the Namanga region | Adherence to infection, prevention and control (IPC) of RVF-like virus by health workers, veterinary workers, community, slaughterers, livestock keepers etc. Case management, emergency treatment centres, infections within hospital facilities and triage of simulated patients |
| | Case management & vector control | Infection Prevention and Control by local health/veterinary workers Contact tracing and deployment of active case search |
| | Multisectoral coordination in operations; border management committee | Planning, One Health and coordination Need to observe if different disciplines are collaborating |
| | Transboundary movements of animals/human/trade/tourism | Trade, tourism Check for animal movement permits Responsible: Ministry of Health and Livestock (certification and trace back) |

| Geographic area | Function to be tested | Comments | |
|---|--|--|--|
| National (Kenya & Tanzania) | Risk assessment and development of action plans | Implementation of rapid risk assessment and development of action plans Involvement of One Health Desk (Ministry of Health and Livestock) | |
| | Preparedness and response measures at the JKIA and KIA | Airport public health authority Functions evaluated, no simulation, (silent observation: about 2-5 individuals per airport) Evaluate passenger screening measures, health facility and animal holding facility, customs screening particularly animal products (certification) | |
| | Rapid Response Team (RRT) mobilization | National task force for mobilization and deployment Mobilized by Lead Ministry; different multi-disciplinary committees involved | |
| | Mobile laboratory deployment and activation | Trigger, time to arrive, operation set up, and possible receipt of samples from remote areas KfW Development Bank / Bernhard-Nocht-Institute for Tropical Medicine (BNITM) | |
| | Activation of incident management system and emergency operations center | National crisis management structure and set-up Coordination between Chief Medical Officer and Chief Veterinary Officer | |
| | Risk and crisis communications; assess information flows and feedback from all levels | Partner States in line with the One Health approach, media and communities | |
| | Local level laboratory diagnosis of animal/human sample and procedures for international laboratory confirmation | Testing of SOPs for sending laboratory samples out of the country and timeliness | |
| | Regional (EAC) | Coordination and regional advice | Inter-sectorial and regional communication and collaboration |
| | | Implementation of available documents (e.g. regional contingency plan, regional SOPs for pandemic preparedness and risk & crisis communication) | Testing of emergency response instruments including financing mechanisms |
| Risk and crisis communication ahead and during the response | | EAC / Technical risk & crisis communication sub-working group | |

Annex 6: Programme of the cross-border Field Simulation Exercise at Namanga, 11-14 June 2019



CROSS BORDER FIELD SIMULATION EXERCISE IN JUNE 2019

Agenda (as of 10.6.2019)

The EAC region has experienced a number of outbreaks of infectious diseases in the past. These include Ebola, Rift Valley, Marburg and Crimean Congo Haemorrhagic fevers, Cholera, Polio, Anthrax, Plague and many more. 6 out of 10 are zoonosis, diseases which are transmitted between animals and humans. In order to prevent outbreaks that can jeopardize public health, economic stability and the lives and livelihoods in the EAC region, Partner States need to be prepared. Simulation exercises play a key role in analysing the state of pandemic preparedness and response capacities. They help to identify strengths and weaknesses and the necessary corrective actions. The 11th Ordinary Meeting of the EAC Sectoral Council of Ministers of Health held on 24 March 2015, directed the EAC Secretariat to conduct a cross-border simulation exercise at Namanga (**EAC/Health/SCM-11/Decision 021**).

Against this backdrop, the EAC Secretariat in collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH through the "Support to Pandemic Preparedness in the EAC Region" (PanPrep) project will convene a cross-border Field Simulation Exercise (FSX) planned for June 2019 at Namanga. The exercise involves representatives from the EAC Partner States and follows the One Health approach. The simulation is facilitated by GIZ on behalf of the German Government through PanPrep. The World Health Organization (WHO) leads and coordinates the implementation process. Further regional and international institutions and organisations partner in the exercise and support it financially or with in-kind contributions.

Where Namanga and further sites in Kenya and Tanzania

When 11-14 June 2019

Who Up to 250 participants will participate in the FSX. The majority will come from the two actively participating EAC Partner States Kenya and Tanzania. In detail, participants in the FSX will comprise:

- About 35 nominated members of the SG and EMG as listed in Annex I of this background paper;
- A total of 130 (2x65) nominated experts from national and regional/district and local levels from Kenya and Tanzania as listed in Annex II of this background paper;
- Around 10 representatives from the EAC Secretariat as listed in Annex III;
- A total of 8 (4x2) representatives from Burundi, Rwanda, South Sudan and Uganda;
- 4 representatives from the Southern African countries of Lesotho, Malawi, Mozambique and Zambia;
- 4 (2x2) representatives from Academia from Kenya and Tanzania;
- Staff of the mobile laboratories engaged in the FSX
- Representatives from regional and international institutions and organisations.

Facilitation: The meeting will be jointly facilitated by WHO and GIZ. It will follow the financial rules and regulations of the US Defense Threat Reduction Agency (DTRA) which is a partner in the FSX.

Objectives of the FSX

The main objectives of the cross-border Field Simulation Exercise are to:

- Assess the use of early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania;
- Assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres)
- Assess the deployment of rapid response teams;
- Validate the activation and deployment of selected mobile laboratories;
- Assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large scale outbreak of a RVF-like virus;

- Practise regional SOPs for pandemic preparedness and risk & crisis communication including community engagement;
- Evaluate selected preparedness and response measures at the Jomo Kenyatta International airport (JKIA) and Kilimanjaro International airport (KIA);
- Capture best practises and ensure transfer of lessons learned to the EAC community and other regional economic communities and African regions;

Expected outcomes

The main outputs of the FSX will be the following:

- Early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania are assessed and evaluated;
- Coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management

- systems and relevant emergency operations centres) have been tested and evaluated;
- Rapid response teams have been deployed;
- Selected mobile laboratories were activated and deployed;
- Animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large-scale outbreak of a RVF-like virus are assessed and evaluated;
- Regional SOPs for pandemic preparedness and risk & crisis communication including community engagement were assessed under outbreak conditions;
- Selected preparedness and response measures at the Jomo Kenyatta International airport (JKIA) and Kilimanjaro International airport (KIA) were assessed and evaluated;
- Best practises are captured and ensure transfer of lessons learned to the EAC community and other regional economic communities and African regions;

Programme details:

Field Simulation Exercise (FSX)

Day 1, 11 June 2019 Launch Ceremony at the Namanga One Stop Border Post

| | |
|---------------|--|
| 08:00 – 10:00 | Registration |
| 10:00 – 10:15 | EAC Anthem and National Anthem of Kenya |
| 10:15 – 10:30 | <p>Welcoming remarks</p> <p>Master of Ceremony - Juma Wakhungu, Ministry of East Africa Community and Regional Development Kenya</p> <ul style="list-style-type: none"> ■ Overview of the simulation exercise (7 Minutes) EAC Secretariat – Dr Micheal Katende ■ Remarks by GIZ (5 Minutes) Dr Irene Lukassowitz, GIZ Project Manager Support to Pandemic Preparedness in the EAC Region |
| 10:30 – 10:55 | <p>Key note speech by WHO</p> <p>Infectious diseases of public health concern – A real threat to lives and livelihoods in the EAC region (20 Minutes) Dr Tigest Ketsela Mengestu, Country Representative WHO Tanzania</p> |

| | |
|---------------|---|
| 10:55 – 12:00 | <ul style="list-style-type: none"> ▪ Welcoming Remarks by Deputy Governor of Kajiado County <i>Hon. Martin Moshisho (5 Minutes)</i> ▪ Remarks by District Commissioner of Longido <i>Hon. Frank Mwaisumbe (5 Minutes)</i> ▪ Speech by EAC Deputy Secretary General Productive and Social Sectors <i>Hon. Christophe Bazivamo (10 Minutes)</i> ▪ Speech by Cabinet Secretary for East African Community and Regional Development <i>Hon. Adan Mohammed (5 Minutes)</i> ▪ Speech by Deputy Minister in Tanzania’s Prime Minister’s Office <i>Hon. Stella Alex Ikupa (5 Minutes)</i> ▪ Speech by Deputy Minister for Livestock and Fisheries United Republic of Tanzania <i>Hon. Abdullah Ulega (5 Minutes)</i> ▪ Official Launch of the FSX by the Hon. Minister for Health, Community Development, Gender, Elderly and Children United Republic of Tanzania <i>Hon. Umyy Ali Mwalimu (10 Minutes)</i> |
| 12:00 – 13:00 | Press Briefing <i>EAC Secretariat</i> |
| 12:00 -13:30 | Health Break |
| 12:30 – 13:30 | Briefing of participants and of regional and international observers on the FSX <i>Fred Copper, WHO</i> |
| 13:30 – 14:30 | Guided tour of the OSBP for invited guests (VIP) <i>Sally Selma</i> |
| 14:30 | Start of FSX (announced by the Exercise Control Room) |
| 18:00 | FSX paused until next day (announced by the Exercise Control Room) |
| 18:00 – 18:30 | Participants’ initial feedback on Day 1 by facilitators for all participants at all respective locations |
| 18:30 | End of Day 1 |

Day 2 – 12 June 2019 – Continuation of FSX

| | |
|---------------|---|
| 08:00 | Start of the second day of the FSX |
| 13:00 - 14:00 | Lunch boxes available at the OSBP and selected locations |
| 18:00 | FSX paused until next day |
| 18:00 – 18:30 | Participants’ initial feedback on Day 2 by facilitators for all participants at all respective locations |
| 18:30 | End of Day 2 |

Day 3 – 13 June 2019 – Continuation of FSX

| | |
|---------------|---|
| 08:00 | Start of the second day of the FSX (announced by the Exercise Control Room) |
| 13:00 - 14:00 | Lunch boxes available at the OSBP and selected locations |
| 17:00 | FSX paused until next day (announced by the Exercise Control Room) |
| 17:00 – 17:30 | Participants’ initial feedback on Day 3 by facilitators for all participants at all respective locations |
| 17:30 | End of Day 3 |

Day 4, 14 June 2019 – FSX debriefing and way forward at Longido Council Authority

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|---------------|--|
| 08:00 – 08:30 | Debriefing of the FSX: Introduction to the methodology <i>By Denis Charles (WHO) and David Knaggs (WHO)</i> |
| 08:30 – 09:30 | Group work 1: Review of the FSX <ul style="list-style-type: none"> ▪ What was in place? ▪ What happened during the FSX? |
| 09:30 – 10:00 | Plenary: Compilation of group work 1 <i>By Denis Charles (WHO)</i> |
| 10:00 – 10:30 | Health Break |
| 10:30 – 12:00 | Group work 2: What went well, what was challenging and what were the contributing factors? |
| 12:00 – 12:45 | World café: Sharing and validating results of group work 2 <i>By David Knaggs (WHO)</i> |
| 12:45 – 13:00 | Individual work: Objectives-based evaluation form <i>Introduced by Denis Charles (WHO)</i> |
| 13:00 – 14:00 | Lunch Break |
| 14:00 – 15:00 | Group work 3: What can we do to improve for next time |
| 15:00 – 15:45 | World café: Sharing and validating results of group work 3 <i>By David Knaggs (WHO)</i> |
| 15:45 – 16:00 | Individual work: Prioritization of activities by each participant <i>Introduced by Denis Charles (WHO)</i> |
| 16:00 – 16:30 | Health break |
| 16:30 – 17:30 | Plenary: Validation of the action plan and way forward <i>David Knaggs (WHO)</i> |
| 17:30 – 18:00 | Closing remarks and hand-out of certificates of participation <i>By EAC</i> |

Day 5

| | |
|---------------|--|
| 08:30 – 12:00 | Report writing and signing <i>EMG Rapporteurs and representatives from Partner States</i> |
|---------------|--|

Departure: 15 June 2019,
16 June 2019 for participants involved in writing and signing the report

The FSX will be followed by the 6d joint SG and EMG meeting on 17th and 18th June 2019 in Arusha

Annex 7: Key reference documents for the FSX

The following documents were identified as key references for the FSX:

National level Kenya and Tanzania

- National Contingency Plan for Rift Valley Fever
- All Hazard Public Health Emergency Preparedness and Response (PPR) plan from Tanzania and the draft PPR version in Kenya
- National Disaster Management Act
- Animal Disease Act
- Namanga Points of Entry SOPs

EAC regional level

- The East African Community Regional Contingency Plan for Epidemics Due to Communicable Disease, Conditions and Other Events of Public Health Concern 2018-2023
- EAC SOPs (Pandemic preparedness, rapid deployment, risk and crisis communication)
- EAC Regional Strategy on Prevention and Control of Transboundary Animal and Zoonotic Diseases.

International level

- International Health Regulations 2005;
- Integrated Disease Surveillance and Response guidelines;
- Relevant chapters in the OIE Terrestrial Animal Health Code and OIE Manual for diagnostic tests and vaccines;
- OIE tool for Evaluation of Performance of Veterinary Services, 2013;
- Global Early Warning and Response System for Major Animal Diseases including Zoonoses (GLEWS-Tripartite)
- Tripartite providing multi-sectoral collaborative leadership in addressing health challenges 2017
- WHO Simulation Exercise Manual, 2017.

Annex 8: Full text of opening speech by Dr Irene Lukassowitz, GIZ Project Manager Support to Pandemic Preparedness in the EAC Region.

- Honorable Ministers of the Republic of Kenya and of the United Republic of Tanzania
- Representatives from the EAC Partner States and from Southern African States
- Representatives from regional and international institutions and organisations
- Honourable DSG,
- Dear EAC partners
- Ladies and Gentlemen

On behalf of the “Support to Pandemic Preparedness in the EAC Region”, project and the German Government I would like to welcome you to the start of this cross-border field simulation exercise, which is facilitated by GIZ in cooperation with the World Health Organization and other regional and international partners..

It is an honour and a great pleasure to be here today! This Field Simulation Exercise is the culmination of 1.5 years of joint hard work towards this goal.

It all started with a planning workshop for our project in February 2018 in Arusha. We reached out to other regional and international partners working towards similar goals and see if we can join forces - and we received a positive feedback.

Together with our partners from the EAC Secretariat and EAC Partner States, we revised the regional contingency plan to include the One Health approach and here you are: Representatives from health, animal health, agriculture, trade and tourism, environment, military, civil society and media. We developed a regional risk and crisis communication strategy and standard operating procedures to implement both of them and now a group of risk and crisis communication experts is among us.

In June last year, WHO joined us as the technical lead for this FSX. A stakeholder workshop and a series of working meetings followed to prepare for the EAC Table Top Simulation Exercise in September last year, the first part of the two-tier exercise between Kenya and Tanzania. Immediately after, in October 2018, we started to plan and prepare for this cross-border Field Simulation with another stakeholder workshop and 8

working meetings. The road was sometimes bumpy, but to walk it together was at least as important as this FSX will be.

It was a steep learning curve for all of us and a lot of capacity was built. Over time, the teams of the FSX Steering Group and of the Exercise Management Group grew together to a family that will hopefully stay close and pass on their knowledge and expertise across the EAC region and beyond.

Throughout the whole process you impressed me with your dedication and commitment and willingness to achieve our joint goal. Many thanks to all of you who made it possible that we are here today. The time is too short to mention all of you individually. Let me just name four people representative for all of you. They probably shouldered the heaviest workload: James Wakhungu from Kenya and Toba Nguvila from Tanzania, our WHO colleague Hilary Njenge and my dear colleague Timothy Wesonga. You were and are a wonderful team and together you can achieve a lot!

Honourable Ministers, I congratulate you on such experts!

I am also grateful that so many regional and international partners followed our invitation and joined us in the exercise. Let it not be the last time, as in emergencies we need to stand together and pursue a joint goal.

Last but not least, I would like to take the opportunity to thank my small but great team – very well done! Now we need to take one more important step: Let’s tackle it as successfully as the ones before and let’s jointly make this FSX a success for the health and the well-being of the EAC people, for their livelihoods and for the economy as a whole in the region.

Honourable Ministers,

we are grateful for your support, please carry on like this, we need your continuous backing in the fight against infectious diseases. Asante sana!

Annex 9: Full text of key note speech by Dr Tigest Ketsela Mengestu, Country Representative of WHO Tanzania.

Ladies and Gentlemen,

Good morning and a very warm welcome to all of you on this beautiful day here in Namanga.

I am very excited to be here with you to witness the kick-off of this unique and complex exercise.

First, I would like to extend my sincere thank you to the governments of Tanzania and Kenya for their leadership and commitment to global health security along with the EAC for coordinating this important work.

All of us being here today at the launch of this Field Simulation exercise (FSX) represents the culmination of over 10 months of intense work bringing together five key sectoral Ministries (Health, Livestock, Tourism, Trade, Defence/Security and State) from both countries along with twelve international organizations for a common purpose – to better protect the health of people. This is truly One Health in action and highlights the importance of multi-sectoral collaboration and coordination in all responses to public health events.

There is an increasing recognition of the threat epidemics and other public health emergencies pose to global health security and to the livelihoods of people, beyond their impact on human health.

Every one of the 47 countries within the World Health Organization's (WHO) African Region is at risk of health security threats. Emerging and re-emerging threats with pandemic potential continue to challenge fragile health systems on the continent, creating enormous human and economic toll.

Every year the region records more public health emergencies than what is recorded in other WHO regions. A recent evaluation of temporal trends indicates that the risk of emerging infectious diseases has risen.

This is largely attributed to the growth of cross-border and international travel, increasing human population density and growth of informal settlements. Other factors include climate change, the changes in the way humans and wild animals interact and changes in trade and livestock farming.

There is an acute public health event reported every four days, equating to more than 150 acute public health events annually. More than 80% of the public health emergencies observed in the WHO African region are due to infectious diseases, of which approximately

75% originate from the human-animal-environmental interface. Consequently, there is a need to develop and implement strategies that address the human animal interface.

Public health threats continue to challenge the world. A clear example is the ongoing Ebola virus disease outbreak in the Democratic Republic of Congo that is threatening lives and livelihoods and the economy of the DRC and the entire EAC region as a whole. Infectious diseases are not only spreading faster, they appear to be emerging more quickly than ever before. Since the 1970s, newly emerging diseases have been identified at an unprecedented rate of one or more per year and during the last five years. WHO has verified more than 1100 epidemic events worldwide; seventy five percent (75%) of all emerging infectious diseases have a zoonotic origin.

The East African Community (EAC) partner states (Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan) share a similar disease profile. Communicable diseases remain a major public health problem in the region, with HIV/AIDS, malaria, tuberculosis, respiratory infections, and diarrheal diseases continuing to cause high morbidity and mortality. The communicable disease burden in the region is challenging because some disease outbreaks, like the viral haemorrhagic fevers, cross-geopolitical borders of the EAC partner states. For example, in 2007 a Rift Valley fever outbreak was reported in Kenya and Tanzania, resulting in more than 1000 cases and 300 deaths. Nevertheless, the region has to deal with another epidemic due to non-communicable diseases such as cardiovascular diseases, diabetes, cancers and road traffic accidents.

Many countries in the region lack incentives and resources to invest in cross-border interventions; and border areas tend to be inhabited vulnerable populations, including migrants and refugees. The latter is compounded by inadequate mechanisms for a regional effort to the prevention and control of communicable and non-communicable diseases. Consequently, East Africa is experiencing a general lack of preparedness to deal with public health emergencies occurring across international borders because interventions are fragmented.

The current Ebola Virus Disease outbreak in the Democratic Republic of Congo, which has so far infected over 1,900 people and caused more than 1,300 deaths, remains a major threat to the health and socio-economic wellbeing of the people of East Africa. Therefore, the

region needs to be prepared and the ongoing efforts to operationalize national and regional contingency plans need to strengthen.

Involving all sectors in the prevention, response and mitigation of health security risks, using a "One Health" approach is essential.

Minimizing the transmission and impact of infectious diseases is a core function of public health authorities and institutions clearly defined legal frameworks and legislations required to provide an enabling environment to prevent, promptly detect and respond to outbreaks and other public health emergencies of national and international concern.

The International Health Regulations 2005 (IHR), which entered into force in June 2007, require every country to develop the capacity to prevent, detect and respond to public health events of potential international concern. Further Member countries of the Organisation for Animal Health (OIE) have a responsibility to comply with the OIE international standards to prevent the movement of animal pathogens and diseases (including zoonoses) across countries. The OIE Performance of Veterinary Services (PVS) Pathway assesses the quality of national veterinary services in complying with these international standards.

In 2004, OIE and FAO established the Global Framework for the Progressive Control of Transboundary Animal Diseases to support regional efforts to prevent, control and eliminate priority animal diseases in each region, including major zoonoses. **While the responsibility to maintain and exercise these competencies of public and animal health surveillance and response must rest with each individual Member State, sub-regional and regional surveillance networks can also contribute to the objectives of early detection and control of transboundary threats at source.**

In 2010, FAO, OIE, and WHO signed a tripartite agreement to augment their collaborative efforts for the prevention, detection and control of disease arising at the human animal-environmental interface.

Country and regional preparedness plans are required for timely response to minimise the impact of public health threat to lives and livelihoods of our people. Communication and collaboration between human, animal and environmental health sectors is essential for ensuring the health of our populations, the safety and security of our food supply, and the economies and livelihoods of all people.

Preparedness is the ability to effectively anticipate, respond to, and recover from the negative impacts of a wide range of public health threats. It is a state achieved through a combination of planning, resourcing, training, exercising, and organizing to build, sustain, and improve operational capabilities.

Simulation exercises play a key role in the preparedness phase. They contribute to ensuring that public health emergency response systems are in place and can be operationalized during a real emergency. Simulation exercises are an important component of the WHO IHR Monitoring and Evaluation Framework, endorsed by the World Health Assembly in 2016.

Focusing on shared challenges and opportunities in the Eastern Africa Region can allow a better understanding of the extent and nature of the public health threats, the conditions under which they are likely to appear or are exacerbated, and the most effective approaches to prevention, early detection, and prompt effective response in any context. Often, this work must involve multiple sectors.

In this light, the regional EAC cross border field simulation exercise is a unique opportunity to test our collective public health preparedness and response capacities, clarify roles and responsibilities between different sectors and agencies and learn from each other. The exercise will help us identify weakness and areas for further improvements in our response system. The Simulation Exercise will equally help us identify the strengths that need to be sustained.

WHO is very pleased to see this simulation is taking place at this time, and I encourage you all to embrace this opportunity for us to trial and learn together. At the debrief meeting on Friday, I look forward to seeing the ideas and opportunities for improvement that you generate through participation in this simulation.

Finally, I would like to conclude by thanking again the governments of Tanzania and Kenya and the EAC Secretariat for their leadership in planning this exercise and all the partner organizations for investing your time and resources, now, to ensure we are all better prepared for the future.

I wish you all a successful exercise, and I am optimistic that this exercise will further strengthen our partnership and ultimately the public health emergency preparedness and response capacities in our respective countries and in the region.

Thank you for your attention.

Annex 10: Master Sequence of Events List

Day One - Commencement time: 1400 - Location: Multiple

Preparatory Material

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Resources Required | Expected Action | Time to Completion |
|--|---------|----------------|-------------------------------|-------------------------------------|---|-------------------|----------------------|---|---------------------------------|--|---|
| Pre-exercise Briefing | StartEx | National PHEOC | Early Warning | Printed Material and briefing notes | Provide meteorological data indicating a strong likelihood of infectious disease outbreak in southern Kenya, Northern Tanzania. | ExCon (Hydro Met) | All | All | Paper based reports Translators | Early warning and surveillance systems should be activated. PHEOC can describe approach to the problem with facilitation team and evaluators | Briefing notes for the exercise |
| Prepositioning of Assessment Teams in Namanaga | StartEx | OneStop | Formation of Assessment Teams | Printed Material and briefing notes | Districts will be informed that there is a likelihood of an RVF outbreak and they should inform local assessment team members that they shall report to the OneStop at 1400 on exercise day one | Excon | District authorities | District Authorities District RRT members | Paper based reports Translators | District Authorities will select staff to participate in the assessment of farms in both Tanzania and Kenya to investigate a possible disease outbreak | To be present at 1400 hours at Namanaga border crossing |

Exercise Commencement - Day One

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Resources Required | Expected Action | Time to Completion |
|---------|------|------------------------|---|---------------|---|---|--|---------------------------------|--|--|---|
| StartEx | 1400 | OneStop | StartEx | Start Message | Reports of an unknown outbreak affecting animals and humans in the border areas of Kenya and Tanzania | ExCon | All | All | Communications including email and phone | District Teams will notify: 1. District RRT 2. Regional Authorities | Immediate Notification. Excon to be notified with phone calls |
| D1-1a | 1400 | OneStop (Site 1) | Formation Assessment Team at a local level to investigate potential outbreaks | Phone call | Reports of an unknown outbreak affecting animals and humans in the border areas of Kenya and Tanzania | SimCELL (ExCon) | Local Veterinary Office, Namanaga, Kenya | Local Assessment team personnel | Phone Printed Injects | Participants should refer to pre-exercise briefing materials Veterinary Officer should alert and mobilise Assessment Team Composition Assessment team will review material and depart for the farm location in Kenya Pre-meeting of the assessment team (planning meeting before deployment) | 30 Minutes |
| D1-1b | 1400 | OneStop (site 2) | Formation Assessment Team at a local level to investigate potential outbreaks | Phone call | Reports of an unknown outbreak affecting animals and humans in the border areas of Kenya and Tanzania | SimCELL (ExCon) | Local Veterinary Office, Namanaga, Tanzania | Local Assessment team personnel | Phone Printed Injects | GRID -2.5380/36.9472 Veterinary Officer should alert and mobilise Assessment Team Composition Assessment team will review material and depart for the farm location in Kenya Pre-meeting of the assessment team (planning meeting before deployment) | 30 Minutes |
| D1-2 | 1430 | OneStop (site 1 and 2) | Assessment Teams deployment | Phone Call | Message from District County Office requesting the assessment team be sent to identified farm locations to investigate severe outbreaks | SimCELL (ExCon as District/County Office) | Local Assessment Teams, Namanaga, Kenya and Tanzania | Local Assessment team personnel | Communications | GRID -2.5931/36.7547 Dispatch assessment team immediately | 10min |

| | | | | | | | | | | | |
|-------|------|---------------------------|---------------|----------------|---|------------------------------|---------------------------|-------------------------------|---|---|--------------------|
| D1-3a | 1530 | Farm KN (site 3) | Investigation | Role Play | The outbreak is unusually large and there are a number of aborted and dead young animals. The farmer reporting the incident believes that up to 3/4 of his pregnant livestock may have aborted. Some family members are sick Assessment team to visit farm and carry out rapid assessment TIMED INJECT -45 MINUTES TO COMPLETE | ExCon (Vet report), Kenya | Vet team/ Assessment team | Assessment team Actors | Communications Assessment team On site actors | Assessment team should notify county office of the outbreak and approve the deployment of the assessment team to specific locations Assemble Equipment and materials identify location Define scope of assessment Define scope of outbreak Develop appropriate SOPs | 60 min |
| D1-3b | 1530 | Farm TZ (site 3) | Investigation | Role Play | The outbreak is unusually large and there are a number of aborted and dead young animals. The farmer reporting the incident believes that up to 3/4 of his pregnant livestock may have aborted. Some family members are sick Assessment team to visit farm and carry out rapid assessment TIMED INJECT -45 MINUTES TO COMPLETE | ExCon (Vet report), Tanzania | Vet team/ Assessment team | Assessment team Actors | Communications Assessment team On site actors | Assessment team should notify county office of the outbreak and approve the deployment of the assessment team to specific locations Assemble Equipment and materials identify location Define scope of assessment Define scope of outbreak Develop appropriate SOPs | 60 min |
| D1-4 | 1645 | OneStop (site 1 and 2) | Return | Return Message | Return to Namanga for assessment debrief and compilation of the reports On Arrival at the One Stop, a report will be shared from the Namanga Hospital. Teams MUST not go to the hospital as this will be investigated on day two | ExCon | Assessment teams | Assessment team | Communications | Teams to return from the field | 15 + 60 min travel |
| D1-5 | 1700 | OneStop (site 1 and 2) | Notification | Notification | Message requiring assessment teams to complete Rapid Assessment and send to EXCON (District Commissioners Office) by 1800 Both teams may meet and work together to produce a joint report PauseEx Day 1 - Allow for delay | ExCon | Assessment teams | Assessment team | Communications Forms Internet and Laptop | Prepare detailed report of the assessment and submit to ExCon | 60 min |
| D1-6 | 1800 | OneStop (site 1, 2, 3, 4) | HOTWASH | End day One | | HOTWASH | All | All | Meeting space, facilitators, evaluators | HotWash for participants of Day One | |

Day One Mobile Laboratory Setup Drill

RRT as defined on day One to be in Namanga at 0800 next day for StartEx of Day 2. This is the RRT as defined following the HOTWASH

| | | | | | | | | | | |
|------|------|-------------------|-----------------------|--|-----------------------------|----------------|-------------|-----|--------------------|-----|
| D1-1 | 1400 | Health Centre, KN | Mobile Lab Activation | Request from District to activate the mobile lab at the Namanga Hospital | ExCon (District Government) | GIZ Mobile Lab | Lab and GIZ | Lab | Depart for Namanga | Day |
|------|------|-------------------|-----------------------|--|-----------------------------|----------------|-------------|-----|--------------------|-----|

Colour Code Key

- PHEOC and OneStop
- Tanzania
- Kenya
- Media
- Nudge Injects

Day Two - Commencement time: 0800 - Location: Namanga

Preparatory Material

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Onsite Control Team | Resources Required | Expected Action | Time to Completion | Health and Safety /Risk Analysis |
|---|---------|--|-------------------------|-------------------------------------|---|---------------------------|------------|--------------|--------------------------------|---|--|-----------------------------------|----------------------------------|
| Pre-positioning: 1. District Rapid Response Teams in Namanga 2. EOC Staff at National, Regional and District Level 3. EOC staff in Kisumu (district and regional) to preposition in one location (regional EOC HQ) 4. EAC staff to preposition in Namanga at the OneStop designated location 5. All facilitators and Evaluators to provide 'READY' message | StartEx | National, Regional and District PHEOC's or Offices plus Namanga One Stop (site 5, 6, 7, 8 9, 10, 11, JBMC) | Organisation of PHEOC's | Printed Material and briefing notes | All PHEOC's to activate and prepare for StartEx | Excon | All | All | ExCon Simulation Briefing team | Paper based reports Communications Translators | PHEOC's and District Offices will activate according to SOP's Staff of EOC's and coordination staff will prepare for emergency response District RRT will muster at the OneStop and Prepare for activation | To be operational by 0800 StartEx | |
| Pre-exercise Briefing | StartEx | All start locations (all 1 to 23) | StartEx | Notification | StartEx Message Message will contain: 1. Overview of the current situation 2. Assessment report from Day One 3. Fictitious assessment reports from other fictitious assessment teams in the field 4. Phone call for StartEx and short message emphasising the brewing crisis | ExCon playing local teams | All | All | ExCon Simulation Briefing team | Paper based reports Communications Translators | PHEOC's and District Offices to activate and commence response coordination activities according to Standard Operating Procedures | Briefing and StartEx | |

Coordination Stream

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Onsite Control Team | Resources Required | Expected Action | Time to Completion | Health and Safety/Risk Analysis |
|-----------------|------|--|---|---|---|--|--|---|---|---|---|--------------------|---------------------------------|
| StartEx D1-1 | 0800 | All PHEOC's (site 5, 6, 7, 8, 9, 10) | StartEx Risk Communications | StartEx Rumors and Reports - News Items/Social Media | StartEx Unconfirmed and unsubstantiated reports of a strange disease outbreak among animals in the Namaga Area. Disease shows indications of Rift Valley Fever. 2 x News Stories 2 x Social media publications with multiple posts | ExCon Exercise Control Press Social Media Posts | All PHEOC's District and County Operations | All National PHEOC District and County Authorities | All ExCon Kajiado Team Mr. Geoffrey Kebaki (F) + Ms. Pauline Kitanyi (E) + Dr. Lyndah Makoyoto (LJ) + Mary Stephen (adv) Longido Team Dr. Vones Zakaria Uiso (F) + Ms. Mary A. Maketa (E) + Maj. Erick K. Mwakiyusa (LJ) + Dr. Grace Saguti (adv) | Communications Ability to receive emails | To evaluate the SOP on 'How to manage rumours'. | | |
| D2-2a | 0830 | County and District Operations Local Assessment teams (site 6, 8, 10, 11, 13, 15, 16) | Analysis of reports and additional material | Reports via email | 3 x Artificial assessment team reports 1 x Actual report from Day 1 | ExCON as assessment teams | County Operations Kajiado cc: National PHEOC Kenya | County Operations team | Mr. Geoffrey Kebaki (F) + Stephen Komora (E) + Gladys Mahit (adv) | Email reports | Log new material Evaluate reports Activate and apply SOP's as applicable Prepare for emergency response as pre agreed procedures Stand up appropriate staff | | |
| D2-2b | 0830 | County and District Operations Local Assessment teams (site 5, 7, 9, 12, 14) | Analysis of reports and additional material | Reports via email | 3 x Artificial assessment team reports 1 x Actual report from Day 1 | ExCON as assessment teams | District Operations Longido cc: National PHEOC Tanzania | County Operations team | Dr. Vones Zakaria Uiso (F) + Edward Komba (E) + Mr. Toba A Ngavila (LJ) + Robinson Mdegele (adv) | Email reports | Log new material Evaluate reports Activate and apply SOP's as applicable Prepare for emergency response as pre agreed procedures Stand up appropriate staff | | |

| | | | | | | | | | | | | | |
|-------|------|---|----------------------------------|------------|--|-----------------------------|---|----------------------------------|--|------------|---|--|--|
| D2-3a | 0900 | Kajiado County Office (site 10) | Management of confirmed material | Email | Initial laboratory reports are suggesting the presence of RVF which is consistent with clinical indicators. However, there is something unusual about these specimens and they have sent some specimens to the national reference laboratory for confirmation. At this time only indicating animal cases. Human cases yet to be confirmed. | District Laboratory (ExCon) | Assistant County commissioner Kajiado | District Government | Nolascus Ganda (F) Geoffrey Kebaki (Ev) | Lab report | Communicate results to all levels Expect notification to international bodies by National government (WAHIS for animal/EIS for human) WHO notification at country level | | |
| D2-3b | 0900 | Longido District Office (site 9) | Management of confirmed material | Email | Initial laboratory reports are suggesting the presence of RVF which is consistent with clinical indicators. However, there is something unusual about these specimens and they have sent some specimens to the national reference laboratory for confirmation. At this time only indicating animal cases. Human cases yet to be confirmed. | Kenyan Laboratory (ExCon) | Deputy Director, Longido District | District Government | Dr. Vones Zakaria Uiso (F) + Edward Komba (E) + Mr. Toba A Ngavila (LJ) + Robinson Mdegele (adv) | Lab report | Communicate results to all levels Expect notification to international bodies by National government (WAHIS for animal/ EIS for human) WHO notification at country level | | |
| D2-4a | 1000 | Kajiado County Office (site 10) | Media skills | Phone Call | Journalist requesting an update of the situation. The media has heard of an outbreak in the area of Namanga and is requesting further information. | ExCon (press) | Assistant County commissioner (District Officer Joseph Nkanatha - KN) | Media Liason or person in charge | Mr. Geoffrey Kebaki (F) + Stephen Komora (E) + Gladys Mahit (adv) | Phone call | County may take two strategies: 1. Ask the media to wait until there is further information 2. Provide comment to the press with incomplete information and saet that the situation is developing | | |
| D2-4b | 1000 | Longido District or Regional Office (site 7, 9) | Media skills | Phone Call | Journalist requesting an update of the situation. The media has heard of an outbreak in the area of Namanga and is requesting further information. | ExCon (press) | Assistant County commissioner (District Officer Joseph Nkanatha - KN) | Local administration and RRT | Dr. Vones Zakaria Uiso (F) + Edward Komba (E) + Mr. Toba A Ngavila (LJ) + Robinson Mdegele (adv) | Phone call | District may take two strategies: 1. Ask the media to wait until there is further information 2. Provide comment to the press with incomplete information and saet that the situation is developing | | |

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|---------------------------------|--------|---|--------------------------------------|------------------|---|----------------------------|---|------------------------------------|---|---|--|--|
| D2-4c | 1000 | EAC office, OneStop (site 11) | Media skills | Phone Call | Journalist requesting an update of the situation. The media has heard of an outbreak in the area of Namanga and is requesting further information. | ExCon (press) | Assistant County commissioner (District Officer Joseph Nkanabha - KN) | Local administration and RRT | Dr Stanley Sonoia (E) + Dr Mary Stephen (adv) + Christian Janke (adv) | Phone call | EAC should put the media on hold and investigate. | |
| D2-5 | pocket | ExCon | Media Feedback | Media report | Pocket Inject. This will be a summary of the material collected by the journalist during the initial interview | ExCon (press) | All | All | ExCon | Email reports Possible Video | This is to present the results of the interview with the media. | |
| D2-6 | 1030 | EAC Participating Group, Namanga One Stop (site 11) | Coordination | Memo Request | OIE and FAO are requesting information from the EAC | ExCon (as FAO/OIE) | EAC Secretariat | EAC Secretariat | Dr Stanley Sonoia (E) + Dr Mary Stephen (adv) + Christian Janke (adv) | Email Phone call | EAC to contact member states and obtain a briefing on the situation EAC should follow agreed protocol | |
| Kenya Team Operational Exercise | | | | | | | | | | | | |
| D2-7a | 1000 | County Office Kajado, KN (site 10) | | Phone Call | Telephone call from Health centre. Developing situation that requires investigation | ExCON (Namanga Hospital) | District Office | District RRT Local Assessment Team | Ms Pauline Kituyi (F) + Fasina Foloruso (E) (LJ) + Lisa Kramer (adv) | Phone | District Office to dispatch RRT to Namanga Hospital and investigate. | |
| D2-7b | 1030 | Namanga Hospital, KN (site 13) | | Role Play | 3 people who have been admitted to the clinic. These people have a high fever and bleeding from the nose. The onset of symptoms was very quick and one of the patients condition has deteriorated rapidly. The affected people stated that they had started to feel unwell the day before but went to the health clinic when their symptoms worsened. | Health Clinic on arrival | District Office | District RRT Local health clinic | Dr Lyndah Makenyoto (F) + Lt Col Dr Mary Njoroge (E) + Dr. Willy Were (LJ) + Dr Rajesh Sreedhran (adv) + Idowu Lateef (adv) | Health clinic Actors Part of the health centre suitable for exercise Provide actors with differing symptoms Cards detailing observable symptoms Envelope with extended symptoms obtainable through lab specimens Dummy specimens for lab analysis | District RRT to travel to Namanga Hospital and investigate. Patient management Safe handling of deceased individuals Isolation Diagnosis and treatment Notification Supply specimens to lab | |
| D2-7c | 1100 | Namanga Hospital (site 13) | Reminder to travel to slaughterhouse | Exercise Message | Go to slaughterhouse | ExCON via site facilitator | Assessment teams | Assessment Teams | Dr Lyndah Makenyoto (F) + Lt Col Dr Mary Njoroge (E) + Dr. Willy Were (LJ) + Dr Rajesh Sreedhran (adv) + Idowu Lateef (adv) | Communications/ Phone | Investigate source Finish Hospital Inject and go to slaughterhouse | |

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|------------------------------------|------|--------------------------------------|--|-------------------------|---|--------------------------|-----------------|------------------------------------|--|---|---|--|
| D2-7d | 1130 | Kenyan Slaughterhouse (site 15) | Inspection of food processing facility | Role Play | Inspection of Slaughterhouse facilities | ExCon (Via field Actors) | District RRT | District RRT | Dr James Wakhungu (F) + Fasina Foloruso (E) + Ms Pauline Kituyi (LJ) + Fredrick Kwarira (adv) + Dr. Klaas Dietze (adv) | Slaughterhouse drill Actors | Trouble shoot location Follow Standard Operating Procedure Take specimens Recommend actions Report findings Provide information to staff recommend disinfection of facility Possibly close facility | |
| D2-7e | 1230 | OneStop | Summarise information | Provide concise reports | Return to the OneStop and report on the situation at the hospital and the slaughterhouse | | | | | | District RRT to return to hospital and provide information to the public investigate. | |
| Tanzania Team Operational Exercise | | | | | | | | | | | | |
| D2-8a | 1000 | District Office Longido, KN (site 9) | | Phone Call | Telephone call from Health centre. Developing situation that requires investigation | ExCON (Namanga Hospital) | District Office | District RRT Local Assessment Team | Mr. Charles Mwaipopo (F) + Mr Charles Mwangi (E) (LJ) + Dr. Kunda John Stephen (adv) | Phone | District Office to dispatch RRT to Namanga Hospital and investigate. | |
| D2-8b | 1030 | Namanga Dispensary TZ (site 12) | | Role Play | 3 people who have been admitted to the clinic. These people have a high fever and bleeding from the nose. The onset of symptoms was very quick and one of the patients condition has deteriorated rapidly. The affected people stated that they had started to feel unwell the day before but went to the health clinic when their symptoms worsened. | Health Clinic on arrival | District Office | District RRT Local health clinic | Ms. Mary A Makata (F) + Maj. Enoch K Mwalayusa (E) + Edward Komba (LJ) + Dr Grace Siguti (adv) + Merawi Aragaw (adv) | Health clinic Actors Part of the health centre suitable for exercise Provide actors with differing symptoms Cards detailing observable symptoms Envelope with extended symptoms obtainable through lab specimens Dummy specimens for lab analysis | District RRT to travel to Namanga Hospital and investigate. Patient management Safe handling of deceased individuals Isolation Diagnosis and treatment Notification Supply specimens to lab Suspect human to human transmission Investigate source | |

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|--------|------|------------------------------------|--|-------------------------|---|------------------------------------|---|--------------------------------|--|------------------------------------|--|--|
| D2-8c | 1100 | Namanga Dispensary (site 12, 13) | Reminder to travel to slaughterhouse | Exercise Message | Go to slaughterhouse | ExCON via site facilitator | Assessment teams | Assessment Teams | Ms. Mary A Makata (F) + Maj. Enock K Mwakiyusa (E) + Edward Komba (LJ) + Dr Grace Saguti (adv) + Merawi Aragaw (adv) | Communications/Phone | Finish Hospital Inject and go to slaughterhouse | |
| D2-8d | 1130 | Tanzanian Slaughterhouse (site 14) | Inspection of food processing facility | Role Play | Inspection of Slaughterhouse facilities | ExCon (Via field Actors) | District RRT | District RRT | Dr. Benezech Lutge Malinda (F) + Dr. Emmanuel S Swai (E) + Dr. Stephen Mukora (LJ) + Dr. Stephane De la Roque (adv) + Mr. Patrick Bastiaensen (adv) | Slaughterhouse drill Actors | Trouble shoot location Follow Standard Operating Procedure Take specimens Recommend actions Report findings Provide information to staff recommend disinfection of facility Possibly close facility District RRT to return to hospital and provide information to the public investigate. | |
| D2-8e | 1230 | OneStop | Summarise information | Provide concise reports | Return to the OneStop and report on the situation at the hospital and the slaughterhouse | | | | Dr. Yones Zakaria Uiso (F) + Edward Komba (E) + Mr. Toba A Nguvila (LJ) + Robinson Mdegele (adv) | | | |
| D2-9a | 1200 | ExCon/Namanga (site 11) | Economic Assessment | email with mock reports | Reports from the National Parks Authorities on unexplained abortions and deaths in ruminant populations within the parks. | ExCon (as Kenya National Parks) | EAC Secretariat National PHEOC Kenya | EAC Secretariat National PHEOC | Dr Stanley Sonooya (E) + Dr Mary Stephen (adv) + Christian Janke (adv) | Provide mock reports | Expect communication flow internationally between Kenya and Tanzania facilitated by the EAC | |
| D2-9b | 1200 | ExCon/Namanga (site 11) | Economic Assessment | email with mock reports | Reports from the National Parks Authorities on unexplained abortions and deaths in ruminant populations within the parks. | ExCon (as Tanzania National Parks) | EAC Secretariat National PHEOC Tanzania | EAC Secretariat National PHEOC | Dr Stanley Sonooya (E) + Dr Mary Stephen (adv) + Christian Janke (adv) | Provide mock reports | Expect communication flow internationally between Kenya and Tanzania facilitated by the EAC | |
| D2-10a | 1200 | ExCon (site 6) | Media skills | Media report | Request from Media asking for information about the outbreak starting. Request asks the team to describe the situation and to provide updated information and an action plan. | Media (ExCon) | PHEOC, Nairobi | PHEOC, Nairobi | ExCon | Request memo and phone call | National PHEOC should gather information from across the system and prepare a media briefing | |

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|--------|------|----------------------------------|----------------|--|--|-------------------|----------------------|--|--|--|--|--|
| D2-10b | 1200 | ExCon (site 5) | Media report | Request from Media asking for information about the outbreak starting. Request asks the team to provide updated information and an action plan | Media (ExCon) | PHEOC, Dodoma | PHEOC, Dodoma | ExCon | Request memo and phone call | Regional Government should request the latest information from District Government and report this to National PHEOC | | |
| D2-11a | 1230 | Laboratory (site 6) | Information | Laboratory results coming in from patients over the past two days have indicated that this is an unusual and novel virus. Possible human to human transmission. WHO Fact Sheet and CDC report included | National reference Laboratory (Ex-Con) | PHEOC, Nairobi | PHEOC, Nairobi | ExCon | Reports | Immediate notification and development of emergency protocols | | |
| D2-11b | 1230 | Laboratory (site 7) | Information | Laboratory results coming in from patients over the past two days have indicated that this is an unusual and novel virus. Possible human to human transmission. WHO Fact Sheet and CDC report included | National reference Laboratory (Ex-Con) | PHEOC, Dodoma | PHEOC, Dodoma | ExCon | Reports | Immediate notification and development of emergency protocols | | |
| D2-12 | 1300 | Kenya Namanga Hospital (site 13) | Role Play Memo | 1 Tanzanian patient - Kenya Side with suspected ERF Contagious Variant Patient dies within 30 minutes of admission. | ExCon (Hospital) | County RRT cc EAC | Health Facility | Dr Lyndah Makotto (F) + Lt Col Dr Mary Njoroge (E) + Dr Willy Were (LJ) + Dr Rajesh Steedhran (adv) + Howes Lateef (adv) | Transport to the health facility | Isolation, admission, investigation, treatment. | | |
| D2-13 | 1330 | GIZ Comms Team (site 1) | Media Briefing | Government Press Conference | GIZ | EAC Secretariat | EAC Secretariat Team | GIZ Communications Team | Media briefing facility - laptops, printers, media management items. | Make inquiry from the affected Partner States about reports of dead animals in areas along the Kenya Tanzania border. Once information is obtained issue a Press Release from the region | | |
| D2-14 | 1330 | ExCon (site all) | video | News Inject | ExCon | All | All | ExCon | Generic news bulletin | To evaluate the SOP 'How to generate a Press Release and gain approval' Start the conversation about human cases | | |

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|--------|------|-------------------------------------|--|-----------------|---|------------------------------|--|--------------------------------|--|-------------------------------|---|--|--|
| D2-15a | 1400 | National PHEOC Nairobi, KN (site 6) | | Email and Phone | WHO IHR DO (Regional) requests information from the government of Kenya about the outbreak and the suspected human to human cases. | WHO DO (ExCon) | National Government (PHEOC) WHO IHR NFP and IHR DO teams | IHR National Focal Point (NFP) | KN Dr. Akhman Juma Mwatondo (F) + Col. Dr Justino Muinde (E) + Dr. Nolascaus Ganda (adv) +James Teprey (adv) | Phone and Email | Decision instruments Annex 2 IHR implemented Participant conversation will demonstrate decision making process. Should prompt declaring emergency Health EOC to notify JBMC and provide them with case definitions and advisory note Notification sent to EAC | | |
| D2-15b | 1400 | National PHEOC Dodoma TZ (site 7) | | Email and Phone | WHO IHR DO (Regional) requests information from the government of Tanzania about the outbreak and the suspected human to human cases. | WHO DO (ExCon) | National Government (PHEOC) WHO IHR NFP and IHR DO teams | IHR National Focal Point (NFP) | Tz Dr. Vida Mmbaga (F) + Mr. Charles Msangi (E) (LJ) + Dr. Elias Munda (adv) | Phone and Email | Decision instruments Annex 2 IHR implemented Participant conversation will demonstrate decision making process. Should prompt declaring emergency Health EOC to notify JBMC and provide them with case definitions and advisory note Notification sent to EAC | | |
| D2-16 | 1400 | OneStop | | Letter/ Email | Request for guidance from the local Pastoralist association | Local Pastoralists | JBMC | National Government JBMC | Tz Dr. Vida Mmbaga (F) + Mr. Charles Msangi (E) (LJ) + Dr. Elias Munda (adv) | Memo and follow-up phone call | Notification sent to EAC National PHEOC should prepare and send a case definition and guidance on managing infected cases. JBMC should be able to access this information and communicate this to local communities. | | |
| D2-17a | 1415 | Regional Office Arusha, TZ (site 7) | | Email | Cases suspected in Kajjido | Ex-Con (as Kajjido Hospital) | Regional Office | Regional Team | +James Teprey (adv) | Provide mock reports | Expect communication flow internationally between Kenya and Tanzania facilitated by the EAC PHEOC Should note the wide spread and allocate resources | | |

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|--------|------|---|--|---------------|---|--|--|---------------------------------------|---|----------------------|--|--|--|
| D2-17b | 1415 | County Office Kajjido, KN (site 8) | | Email | Cases suspected in Moshi | ExCon (as KCMC) | County Operations | County Operations team | Mr Geoffrey Kebaki (F) + Stephen Komora (E) + Gladys Mahit (adv) | Provide mock reports | Expect communication flow internationally between Kenya and Tanzania facilitated by the EAC PHEOC Should note the wide spread and allocate resources | | |
| D2-18 | 1430 | EAC Participating Group, Namanga One Stop (site 11) | | Letter/ Email | Offer of experimental vaccine from an international pharmaceutical company | EXCon (Novartis) | EAC | EAC | Dr Stanley Sonoiya (E) + Dr Mary Stephen (adv) +Christian Janke (adv) | Letter | Measure the decision making process for experimental medication | | |
| D2-19a | 1530 | Namanga Hospital, KN (site 13) | | Role Play | From the local community leaders: 1. Local community requests advice on how to protect their livestock and their families from this disease 2. Safe disposal of dead livestock 3. How to safely handle deceased persons 4. Government compensation for dead livestock | Community leaders, Religious leaders (ExCon) | Local Assessment Team and County RRT | Community (actors), Community Leaders | Actors Meeting room Location: Namanga Hospital | Actors Meeting room | Dissemination of appropriate messages Proper community entry strategy Proper community engagement | | |
| D2-19b | 1530 | Namanga Dispensary, TZ (site 12) | | Role Play | From the local community leaders: 1. Local community requests advice on how to protect their livestock and their families from this disease 2. Safe disposal of dead livestock 3. How to safely handle deceased persons 4. Government compensation for dead livestock | Community leaders, Religious leaders (ExCon) | Local Assessment Team and District RRT | Community (actors), Community Leaders | Actors Meeting room Location: Namanga Dispensary | Actors Meeting room | Dissemination of appropriate messages Proper community entry strategy Proper community engagement | | |

Role Play - TZ Side then Kenya Side

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|--------|------|-------------------|--|--------|---|--------|-------------------------------|---------------------------------------|---|---|--|--|--|
| D2-20a | 1430 | OneStop (site 18) | | Action | Safari vehicle arrives. 4 Tourists on board. One tourist is obviously sick with what appears to be ERF and had been visiting Masai communities in the infected area. All others including the driver are healthy inject points. | Actors | Tanzania to Kenya Immigration | Immigration, Health Screening Customs | Mr. Geoffrey Kebaki (F) + Stephen Komora (E) + (LJ) + Raphael Brodmiatowski (adv) +Susan Valerie Clay (adv) | Driver (green arm band) Tourists (green arm band) Sick tourist (red arm band) Safari vehicle or minibus | Managing expectations Managing tourists and tourist sensitivities (travel industry) Sick tourist to be taken to the Kenya Namanga Health facility. Managed screening of tourists. Decision on quarantine or transport of sick tourist - local or to Nairobi. | | |
|--------|------|-------------------|--|--------|---|--------|-------------------------------|---------------------------------------|---|---|--|--|--|

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|--------|------|-----------------------------------|--------|---|------------------------|----------------------------|-------------------------------------|-------|--|---|---------|
| D2-21a | 1600 | All Gov't Levels (site 6, 8,10) | memo | Provide a situation report for the prime ministers office | Prime Ministers Office | National/Regional/District | All Government levels including EAC | | Memo and follow-up phone call | Provide an accurate report for the prime minister. Report should be concise | 120.00 |
| D2-21b | 1600 | All Gov't Levels (site 5,7,9) | memo | Provide a situation report for the prime ministers office | Prime Ministers Office | National/Regional/District | All Government levels including EAC | | Memo and follow-up phone call | Provide an accurate report for the prime minister. Report should be concise | 120.00 |
| D2-22 | 1700 | National PHEOC KN/ TZ (site 5, 6) | action | Final Media Session: Prepare a media briefing that will explain to people what they should do and how the government is responding to the crisis. Briefing will occur at 1600 | Media (Ex-Con) | National Government | National Government | | Media briefing room at border Real Media | Provide concise briefing (no more than 30 minutes) to be delivered by regional or district officials at the OneStop briefing room | 60 prep |
| D2-23 | 1800 | OneStop | | EndEx and HOTWASH | ExCon | All | All | ExCon | Video conference (Zoom) Translator Meeting room | Link District, Regional and National PHEOC or Office via video/audio link for debrief | |

Continuation of Mobile Lab Operations - Namanga Health Centre

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|-----------|--|--|--|--|--|--|--|--|--|--|--------------------------|
| Lab setup | | | | | | | | | | | 60 minutes EndEx Day1 |
|-----------|--|--|--|--|--|--|--|--|--|--|--------------------------|

3.3 Objectives

The objectives of the FSX are to:

- I. Assess the use of early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania;
- II. Assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres)
- III. Assess the deployment of rapid response teams;
- IV. Validate the activation and deployment of selected mobile laboratories;
- V. Assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large scale outbreak of a RVF-like virus;
- VI. Practise regional SOPs for pandemic preparedness and risk & crisis communication including community engagement;
- VII. Evaluate selected preparedness and response measures at the Jomo Kenyatta International Airport (KIA) and Kilimanjaro International Airport (KIA);
- VIII. Capture best practises and ensure transfer of lessons learned to the EAC community and other regional economic communities and African regions;

Colour Code Key



Day Three - Commencement time: 0800 - Location: Namanga Border

Preparatory Material

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Resources Required | Expected Action | Time to Completion | Risk Analysis and Mitigation |
|---|----------|---------------------|---|-------------------------------------|--|--------------|----------------------|---------------------|---|---|--------------------|------------------------------|
| Pre-exercise Briefing | Start-Ex | Namanga OneStop | StartEx | Printed Material and briefing notes | Briefing for day three including health and safety briefing | ExCon | All | All | Public Address Equipment Translators | All staff briefing Briefing notes for the exercise | | |
| Prepositioning of teams to Namanga | Start-Ex | Namanga OneStop | Assessment of teams at border point for incident management | Assessment of teams | Teams to muster prior to StartEx | Excon | All | All | Public Address Equipment Translators | Teams to form up for briefing and initial start | | |
| Preparation for Airport Functional Exercise | Start-Ex | Namanga OneStop | StartEx | Preparation | Dummy profile of a tourist loaded into the integrated immigration database. Contact tracing protocol to be followed with training profiles added to the immigration database Mr Nam Training DOB 11/06/70, Dutch Passport E1234123 Exp 12/06/22) Traveling from Arusha to JRO Ms Anga Training DOB 12/06/70, German Passport E4321321 Exp 13/06/22) Traveling from Wilson to Arusha (KIL) | ExCon | Immigration database | Airport Authorities | Two dummy profiles of tourists loaded in the system. - Individual 1 cleared custom at Dar es Sallam Airport and will be boarding flight Precision Air- 4418 take off at 0850 from Dar arrival at 1010 in NBO - Individual 2 cleared custom at NBO in Nairobi and will be boarding flight KQ 426: take off at 1330 from NBO and arrival at JRO at 1430 | n/a | | |
| Prepare Isolation ward at Namanga Health Centre | Start-Ex | Kenya Health Centre | Setup of isolation ward | Health | Setup isolation ward. Demonstrate setup | ExCon | Health | Health | Isolation ward setup | Setup of isolation ward | | |

Practical Stream

| Inject | Time | Location | Objective Tested | Inject Type | Message | Message From | Message to | Participants | Resources Required | Expected Action | Time to Completion | Risk Analysis and Mitigation |
|--------|------|------------------------------------|--|-------------|---|--------------|------------------------|------------------------|---|---|--------------------|---|
| D3-1 | 800 | OneStop | STARTEX | | | | | | | | | |
| D3-2a | 0800 | OneStop (site 19) | Livestock Drill Kenya to Tanzania | Role Play | STARTEX First arrival Sheep truck with livestock arriving from an infected area. | Actors | Customs and Quarantine | Customs and Quarantine | Sheep truck containing actual sheep No symptoms apparent | -Use of border protocol and decision making systems to quarantine the truck -Check for animal movement permits -Customs staff should notify JBMC -JBMC to notify and request Animal Health RRT to come and inspect sheep and investigate origin of livestock - JBMC and RRT to agree on next steps - event properly reported In case quarantine recommended, Customs to describe process, not take livestock to a third site Describe any animal destruction required and where. NBO should check that the flight has departed and then will notify JRO that passenger is enroute -JRO finds dummy profile in database -JRO gets ready for identification of passenger at arrival | 90 mins | RISK - Ensure this is done first thing and enforce timing. Ensure animal welfare at all times. If animals become distressed this part of the exercise will cease immediately. If the owner request stop, activity to stop. If livestock is to be taken to Quarantine they are to notify the Controller and the exercise will stop with the words - "For the purpose of the exercise the livestock are to be taken to location X". There will then be a discussion of the pros and cons of moving livestock to other locations. This will be undertaken with the stock owner who will provide insight into livestock movement. |
| D3-3a | 0830 | Namanga OneStop (OSBP and site 23) | Airport Drill | email | Namanga One Stop notifies the team at NBO to notify them of the travel of an infectious person to JRO. Plane has just departed Email to airport authority of JRO from NBO saying Individual 1 is a suspect case and should be identified at arrival at JRO Flight KQ6722 operated by Precision Air departed 0830 Lands 0930 | Excon | NBO Authorities | NBO authorities | email with individual 1 details | | | |
| D3-3b | 0840 | NBO (site 22, 23) | Airport Drill | email | ExCon (Tanzanian MoH - the if procedure) | | JRO authorities | NBO authorities | email with individual 1 details | | 60 mins | |

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|----------------|------|---------------------------|---------------------|-----------|--|-----------------------|------------------------|------------------------|--|---|----------|--------------|
| D3-3c | 0900 | JRO (site 22, 23) | Airport Drill | email | JRO airport authorities to get ready for the arrival of possibly infectious travellers. - Message should specify that at this stage it's only about stepping up readiness - there are no ACTUAL passengers - Simulation conditions | ExCon (Tanzanian MoH) | JRO authorities | JRO authorities | - email to JKIA with case definition | Airport authorities establish SOP based on case definition, agreement on screening location an handling of suspect cases, briefing team, assembling equipment. Preidentified evacuation route for infected passengers to ensure there is no cross contamination | 120 mins | |
| D1-4a | 1000 | OneStop (site 19) | Meat products drill | Role Play | Second arrival: Meat products found on local transport - Matatu. Meat products are boxed and were obtained from the infected area just prior to the person boarding the vehicle (one hour ago). Another family member is carrying plastic packages containing unpasteurised milk. 10 people on the Matatu, only two people (the ones with the produce) are related | Actors | Customs and Quarantine | Customs and Quarantine | Matatu with simulated meat products Cards detailing load 10 people on the Matatu Maasai trinket sellers | - Inspection SOP's -Decision making and handling (destruction of load) as per SOP's - proper: reporting of the event - Provide detail to the controller in relation to how meat products will be handled Demonstrate proper PPE use when handling meat products for inspection Detail what they are looking for: - Quarantine and isolation. Case management at the border and contacts (identification of the 5 family members as direct contacts) -Referral to Health centre on Kenyan side (call for ambulance) and management of the sick person without ID papers -Transfer -Notification SOP's | 90 mins | Transit from |
| D3-5 | 1200 | OneStop (site 21) | Minibus Drill | Role Play | Third arrival. Small minibus arrives on from Kenya with 15 people on board Three people symptomatic with unknown illness Come from infected village Some women approach the bus to sell souvenirs, food or water | Actors | Customs and Quarantine | Customs and Quarantine | Minibus and 15 actors Three people symptomatic (Red arm bands) One of the symptomatic person is a Tanzanian who doesn't have any ID paper 12 other actors have no symptoms (green arm bands). But 5 of them are family members of the symptomatic people. | | | |
| D3-6a Spare | 1300 | OneStop (site 20 or 19) | Drug Supplies | Role Play | Representative from a drug company arrives at the OneStop with drug consignment which is not fully cleared. Exoerimental vaccines | Actors | Customs and Quarantine | Customs and Quarantine | Packs simulating drug consignment | Clearance of otherwise of drug consignment | | |
| D3-7a | 1410 | Namanga OneStop (site 22) | Airport Drill | email | Namanga One Stop notifies the team at JRO to notify them of the travel of an infectious person to NBO. Plane has just departed | Excon | JRO Authorities | JRO authorities | email with individual 2 details | JRO should check that the flight has departed and then will notify NBO that passenger is enroute | | |

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|-------|------|-------------------------|---|-----------|--|---------------------------------------|-------------------------|---------------------------------|-------------------------------------|---|----------|---------------|
| D3-7b | 1420 | JRO (site 22, 23) | Airport Coordination | email | Email to airport authority JRO notifies NBO saying Individual 2 is a suspect case and should be identified at arrival at NBO | ExCon (Kenyan MoH - the if procedure) | NBO authorities | JRO and NBO authorities | email with individual 2 details | -NBO finds dummy profile in database -NBO gets ready for identification of passenger at arrival | 60 mins | |
| D3-7c | 1510 | NBO (site 22, 23) | Airport Coordination | email | NBO airport authorities to get ready for the arrival of possibly infectious travellers. - Message should specify that at this stage, it's only about stepping up readiness - there are no ACTUAL passengers - Simulation conditions | ExCon (Kenyan MoH) | NBO authorities | NBO authorities | - email to NBO with case definition | Airport authorities establish SOP based on case definition, agreement on screening location an handling of suspect cases, briefing team, assembling equipment Preidentified evacuation route for infected passengers to ensure there is no cross contamination | 120 mins | |
| D3-7 | 1430 | OneStop (site 11) | Media Briefing | | Media briefing on the situation | Excon | EAC Secretariat | Actors/Media crew | Media Crew | EAC to brief the press on the current situation and point out border management | | |
| D3-8 | 1500 | OneStop (site 20 or 19) | Pedestrian traffic including infected individuals | Role Play | Fourth arrival People on foot requesting access across the border-Some displaying symptoms (Red arm bands) Crowd forms Send in in small groups POCKET INJECTS HOTWASH | 10-15 Actors | JBMC BOTH DIRECTIONS | JBMC Red and green arm bands | Actors (25-30) | -identification of symptomatic people crossing the border - crowd management - quarantine and isolation, contact tracing - notification and referral to health centre | 60 mins | Pocket Inject |
| EndEx | 1700 | OneStop | HOTWASH | HOTWASH | | Excon | All | All | Public Address Translators | Final Hotwash and introduction to the following day debrief | | |

DayThree Mobile Laboratory

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|--|-------------------|-------|---|-----------------|-------|-------------|------------------------------------|--|------------|
| | Health Centre, KN | Drill | Drill using dummy specimens to demonstrate analysis as requested from the OneStop | Assessment team | w/Lab | Lab and GIZ | Lab | Demonstrate correct testing procedure with dummy specimens | 60 minutes |
| | Health Centre, KN | Drill | Present results | Lab | ExCon | All | Dummy Specimens Printed results | Supply printed results | EndEx Day1 |

Colour Code Key

- PHEOC and OneStop
- Tanzania
- Kenya
- Media
- Nudge Injects

Annex 11: Exercise Management Guide



Full-Scale Exercise Management Guide

- Facilitators
- Evaluators
- Liaison/Safety officers
- Role Players/Actors
- International Advisors/Mentors

How to Use This Document

This document provides exercise management team members (including facilitators, evaluators, liaison/safety officers and mentors) with all information and materials needed to conduct key parts of the Namanga Cross Border Field exercise. Prior to the start of the exercise **Do the following:**

1. Read through the entire part of the exercise you are responsible for as well as the provided supporting materials.
2. Decide how to describe the scenario that effectively briefs the participants in a way that reflects likely challenges and tests participant skills and techniques.
3. Familiarize yourself with the flow of the exercise by thoroughly reviewing the simulation material and the supporting documents.
4. Familiarize yourself with your specific role in the exercise.
5. Use the annexes including Guidelines to conduct the exercise.

Purpose

The purpose of the cross border FSX is to assess and further enhance multi-sectorial outbreak preparedness and response in the East African region adopting a One Health Approach.

Objectives

The objectives of the cross-border Field Simulation Exercise are to:

- Assess the use of early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania;
- Assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres)
- Assess the deployment of rapid response teams;
- Validate the activation and deployment of selected mobile laboratories;
- Assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large-scale outbreak of a RVF-like virus;
- Practise regional SOPs for pandemic preparedness and risk & crisis communication including community engagement;
- Evaluate selected preparedness and response measures at the Jomo Kenyatta International Airport (JKIA) and Kilimanjaro International Airport (KIA);
- Capture best practises and ensure transfer of lessons learned to the EAC community and other regional economic communities and African regions.

Schedule

Day One: 11 June

- Opening and Briefing
- Limited scope Field Exercise
- Composition, capacity and activities of the assessment teams at farms

Day Two: 12 June

- Functional exercise with limited field components (e.g. health centres)
- Information management at multiple levels of government (e.g. PHEOC)

Day 3: 13 June

- Field exercise focused on the One Stop Border point
- Challenge participants with staged incidents

Day 4: 14 June

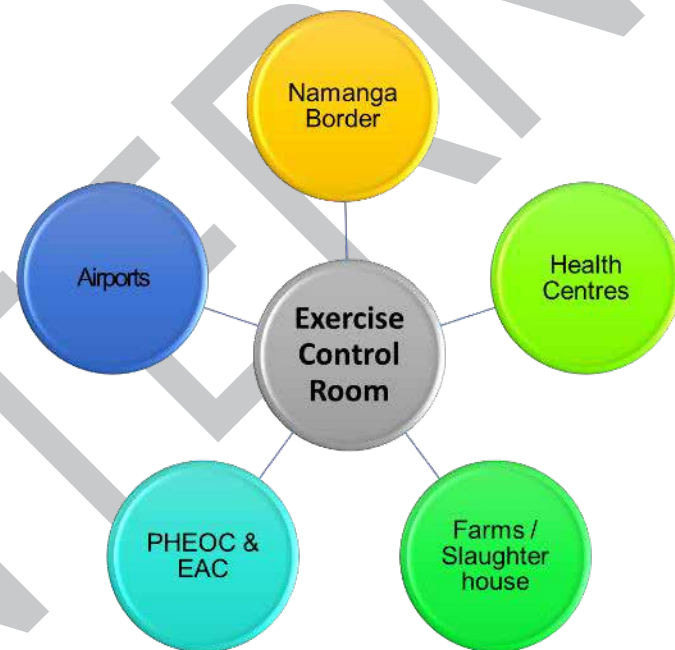
- Participant Debrief

Roles and Responsibilities of Exercise Management Team

1. Exercise Control

General

Exercise control maintains exercise scope, pace, and integrity during exercise conduct. The control structure in a well-developed exercise ensures that exercise play assesses objectives in a coordinated fashion at all levels and at all locations for the duration of the exercise. Control of the exercise is accomplished through an exercise control room structure; the framework that allows facilitators to communicate and coordinate with other facilitators at other exercise venues, and the central exercise Control Room to deliver and track exercise information. During the exercise all messages and instructions will be sent by the lead exercise controller from the control room. At each exercise site, the controller will have facilitators that will help in communication and support.



Exercise Control Room

The control room will be situated within the One-Stop Border Post at Namanga and will be overseeing all the scenes. Their contact details are:

Email address: eacexercise@gmail.com

Phones : Tanzania: +255 763523582

Kenya: +254 742460131

In all mail messages please always keep exercise control (eacexercise@gmail.com) in copy

Exercise Controller

The Exercise Controller will have several key responsibilities during the exercise. He/she will:

- Assign roles to exercise staff and brief them on the details of the exercise,
- Lead and guide the exercise by (i) presenting information at the Exercise Control Room; (ii) directing the Master Sequence of Events List (MSEL) to keep the exercise moving forward and (iii) providing messages to the exercise participants to ensure key decision points in the exercise are reached.
- Observe and coach. Observe the actions of exercise participants and be on the alert for potential safety issues. If the Exercise Controller observes a safety concern, he or she may need to intervene and/or stop the exercise.
- Intervene when the exercise need to be stopped due to a real emergency or event or redirect the exercise to keep it on track with the overall purpose and objectives

Exercise Management Team Staff Roles:

At each exercise site, there will be stationed:

- Facilitators: Help with control, communication, and support.
- Evaluators: Evaluate expected outputs
- Liaison/Safety Officer: Manage general public and audience (incl. observers & media).
- Role Players/Actors: Have a specific message/role to play (if applicable).
- Expert Advisors/Mentors: Mentor and provide advice and support where needed.

NOTE: Separate descriptions are provided below for Exercise Facilitator, Evaluator, Liaison/Safety Officer, Role play/actors and Expert advisors/mentors. Manpower constraints may require that some roles be combined at a location. However, one person should NEVER play all roles by themselves.

Locations of Exercise Management Team Members per site and information pack

A table showing the names and locations of the exercise management team per location is attached at Annex 1. Per site a pack with specific exercise material will be available including:

- MSEL for your specific location/function
- Printed injects (exercise messages) for handing out to participants and scripts for roles players/actors (if applicable)
- Contact card including emergency numbers
- Custom evaluation forms
- Attendance list
- Observation forms

2. Facilitators

Facilitators are the managers of their designated exercise sites and are in direct contact with the exercise control room. This contact may be through phone, mail or portable radio.

The Facilitator's roles are similar to those of the Exercise Controller, but they are carried out at a specified location in order to manage a specific part of the exercise. The Facilitator will:

- I. Set up his or her location. This includes placing the support material and equipment, placing victims, briefing actors and making the scene appear natural as well as functional for the participants. As near as possible the participants should feel that they are entering a real situation and understand the set-up and rules of the exercise (See Annex 2 for facilitation guidelines).
- II. Be responsible for informing the Exercise Controller that their part of the exercise is proceeding. They will inform Exercise Control of the following:
 - a. when they are ready to receive the participants (the site is prepared),
 - b. when the participants arrive,
 - c. when the participants depart, and
 - d. if there are any problems at any time the facilitator is on scene, including before and after the participants are working at the scene
- III. Lead and guide the exercise by presenting information (INJECTS) at the exercise location. He or she will provide messages to the exercise participants to ensure key decision points in the exercise are reached.
- IV. Observe, and may coach, the participants if they appear confused or unsure how to proceed. The facilitator may provide hints or suggestions through asking questions such as; "do you think you have done enough or is there something else you would consider?".

In this role, he or she will observe the actions of exercise participants and be on the alert for potential safety issues. If the Facilitator observes a safety concern, he or she may need to intervene and stop the exercise.

The Facilitator may also intervene to help the team members at the field location clarify their decision making by asking questions about their thought process and the factors they considered in making choices.
- V. The facilitator together with the evaluator will conduct a hot wash (debrief) on site. The purpose of the hot wash is to allow everybody to decompress and to give participants the opportunity to provide initial feedback on the exercise. It does not include evaluation of exercise outcomes, nor does it go into the level of detail planned for the main exercise debrief on 14 June.
- VI. The facilitator will wrap up the exercise, collect the filled registration form (annex 6), overseeing clean-up and ensuring that all Participants and volunteers are accounted for.

3. Evaluators

Exercise evaluators monitor and record exercise activities, compare the collective performance of the participants in achieving those exercise objectives, and identify strengths and weaknesses of the underlying processes. See Annex 3 for detailed evaluator guidelines.

Evaluation provides an opportunity to assess performance of critical tasks against capability targets.

The evaluation will identify:

- Whether the exercise has achieved its objectives.
- Needed improvements in the operating procedures, protocols or guidelines.
- Needed improvements in the management or coordination systems.
- Training and staffing needs and opportunities.
- Needed operational equipment.
- Need for additional exercising of operational plans and related response and management functions.

4. Liaison/Safety Officer

Every field location (Farm, One Stop Border Crossing, Health Centre, Slaughterhouse, etc) should have a Liaison/Safety Officer. This role may be performed by a Facilitator or Evaluator if staff is limited. Their role is to work with the community in which the exercise is being conducted. They may have several tasks, but primarily these will include:

- a. Sensitising the community about the exercise, answering questions and providing reassurance as some people observing an exercise may mistake the exercise for a real event,
- b. Monitoring the scene and informing the Facilitator of any safety issues that may arise,
- c. Ensuring that only authorised people are inside the exercise cordon at all times
- d. Manage observers and ensure the observers do not intervene/disrupt the exercise.
- e. Be focal point of any media/press related issues and refer all media entities to the head of EAC communication.
- f. Account for all Actors/Victims/Volunteers at the end of the session (if applicable).

Health emergency contact:

Kenya Red cross ambulance service
Johnson Wambugu Kinyua +254 737 754 677
Stephen Omondi Otieno +254 724 842 730

Security contacts:

Kenya:
Stephen Komora
Assistant County Commissioner (Kajiado)
+254 716 013522
mulekomora@gmail.com

Tanzania:
Toba A Nguvila
District Administration Secretary Longido)
+255 755 09 71 81
Nguvila.toba@yahoo.com

5. Actors/Role players

Actors/Role players will be required at some field locations. They will play numerous parts as described in the Scenario and MSEL that will detail all of the activities and timings for each field location. Actors/Victims/Volunteers may play one or more of the following roles using talking points or Victim Injury Cards (Annex 5).

- Pastoralists/farmers who own infected livestock,
- Family members of infected individuals
- Infected victims/patients
- Community members
- Health workers
- Border crossing staff
- Travellers, tourists and workers

6. Expert advisors/mentors

One of the key objective of this exercise is to build and enhance national exercise capacity in the region. In this regard, at each exercise site there will be 1-2 external experts that will provide advice and guide the exercise team members in their respective roles and responsibilities as described above. The experts will be supporting/mentoring the national exercise management team member in their function, role and responsibilities. If needed they can be in direct contact with exercise control for additional clarifications.

Annex 12: Injects for each day

D1-3a
Farm

KENYA

EAC CROSS BORDER
SIMULATION EXERCISE

DAY ONE GUIDE

LOCATION: Kenya Farm

Instructions: This is a role play exercise at this location. Actors will provide the bulk of the information through a question and answer session. You pack also includes photographs of sick and aborted animals that the assessment team could reasonably see on this site.

Pack Contents and timing:

Content

- Guidance document and site briefing
- Photos of sick livestock and aborted foetuses
- Inject 3a containing scripts of farmers for Facilitator Reference

Timing

- 1530 Hrs: Arrival of participants on site
- 1615 Hrs: Set Departure time - May be expected to be 15 minutes late
- 1630 Hrs: Latest departure time

SIMULATION - SIMULATION - SIMULATION

D1-3a
Farm

KENYA TIME: 1530
Date: 11 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

SITE BRIEFING - Give this to the assessment team when they arrive

You have now arrived at the farm and will now prepare to undertake your investigation.

Before we begin

- This is a working farm. Please stay within the outer boundary of the farm. There is no need to leave the outer boundary,
- You will not be required to handle livestock. If you wish to do so, please always ask permission from the farmer,
- Point out the pictures on the walls/posts that give an idea of what they would be looking at.
- You will not need to enter any building except the building designated as part of the exercise
- Always respect the owner of the farm and stop immediately if requested
- Follow instructions from the facilitator and the farmer
- Livestock, particularly cattle can be hazardous, always work closely with the farmer and the facilitator
- Stay together as your team, there is no need to split into smaller groups for this exercise
- Always explain to the facilitator what you will do before you do it and why,
- 45 Minutes to complete

What to do.

- Go to the designated locations as directed by the facilitator
- Describe what steps you will take in your investigation and show any SOP you may use,
- The farmer will show you his farm and he will attempt to answer any of your questions. He may not know all the answers, this is normal,
- Carry out a full investigation of the situation at this farm
- You will be required to complete a full report at the end of this assessment when you return to Namanga so take notes
- Only speak to people directed by the facilitator. Some people on site may not be anticipating the exercise and your facilitator will give you guidance.

Questions?

SIMULATION - SIMULATION - SIMULATION

D1-3a

NOTES

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitator Notes

1. Please enable the participants to walk freely around the farm. They should investigate the animal pens and they should speak to people on the farm. They will not need to leave the confines of the farm if they wish to go outside the out of fence of the farm please ask why they need to go there. If they wish to make further investigations from outside the farm perimeter please ask them to detail why they need to do this.
2. Point out photographs posted on walls/posts
3. The assessment team may request to take specimens from the animals and maybe from some family members. Do not permit the rapid response team to take actual specimens but supply the rapid response team with the pre-prepared specimens that you have in your kits
4. The participants should carry out a full investigation. They should ask about the number of sick animals, the type of animals that are sick and the symptoms that the sick animals are displaying.
5. They may take photographs.
6. The participants will not need to speak to anyone outside the perimeter of the farm and it is important that the participants do not speak to people not connected with the exercise.

Observers Notes

1. The Assessment Team should walk around and actively investigate. They should follow the following:
2. The Assessment Team should identify themselves to the farmer when they arrive
3. The Assessment Team should identify the person responsible for the management of the farm
4. The Assessment Team should have a predefined list of questions
5. The Assessment Team may have a standardised form to complete, note if this is completed or used
6. The Assessment Team should be able to provide accurate information to the farmer and his family
7. The Assessment Team should inform the family of what the next steps will be
8. The Assessment Team should follow a standard operating procedure

SIMULATION - SIMULATION - SIMULATION

D1-3a

Image Two, Sick Sheep

EAC CROSS BORDER
SIMULATION EXERCISE



SIMULATION - SIMULATION - SIMULATION

D1-3a

Image One, Sick Sheep following abortion

EAC CROSS BORDER
SIMULATION EXERCISE



SIMULATION - SIMULATION - SIMULATION

D2
TZ

Location: Tanzania

EAC CROSS BORDER
SIMULATION EXERCISE

DAY TWO GUIDE

LOCATION: Tanzania

Instructions: Give materials according to timing schedule unless advise by EXCON

SIMULATION - SIMULATION - SIMULATION

D1-Start

Tanzania

EAC CROSS BORDER
SIMULATION EXERCISE

TIME: 0800
Date: 12 June, 2019



Start Exercise

This is a general start message

If you are not already at your start position, go there immediately.

If you do not know your start position, speak to a facilitator.

SIMULATION - SIMULATION - SIMULATION

D2-1
Rumour

Rumour Management Inject D2-1
Date: 12 June, 2019

Time: 0800

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitators Briefing

1. Present the newspaper article and the LifeBook and Chirpy posts to the participants
2. Ask them how they react to this?
3. These are artificial social media posts that replicate actual social media sites – we can use the actual ones for copy-write and utilisation purposes

Facilitators Notes

1. Artificially created social media posts and news article
2. How do the participants react to this?
3. Ensure that the EOC Teams at all levels are given copies of these reports
4. Remind the EOC's that this is the information that they have for now, but assessment reports are being consolidated by teams in the field
5. How will the EOC's manage this situation

Observer Notes

Observe the following:

1. How do the participants react to this? These are rumours and vague reports. Do they take significant action based on spurious comment?

SIMULATION - SIMULATION - SIMULATION

D1-1
Rumour

Rumour Management Inject D2-1
Date: 12 June, 2019

Time: 0800

EAC CROSS BORDER
SIMULATION EXERCISE



NEWS REPORT
PRESS
GBC News
Strange Disease Outbreak Among Animals Sparks Concern
By GBC editor – 12 June 2019 at 08:00

Strange Disease Outbreak Among Animals Sparks Concern

East Africa, 11 June 2019 – Rumours are flying about an outbreak of a strange disease among livestock in the region. To date, the Ministry of Agriculture has not issued a report or responded to repeated inquiries.

According to sources, pregnant goats, sheep and cattle have been aborting, and young lambs are dying at a rapid pace. Farmers say very young animals are getting sick without warning, then dying quickly.

Reports on social media suggest that the Ministry of Agriculture is concealing information about the outbreak.

Some Twitter users say the outbreak is being caused by anger from ancestors, who feel disrespected by newly imposed restrictions on grazing.

The word on the street is that traditional healers are urging farmers to concoct a remedy made of Aloo Vera, onions, herbs, and maize.



SIMULATION - SIMULATION - SIMULATION

D1-1
Rumour

Rumour Management Inject D2-1
Date: 12 June, 2019

Time: 0800

lifebook

EAC CROSS BORDER
SIMULATION EXERCISE

LifeBook posts:

lifebook

Ya'll been hearing the rumours. Well, my uncle is a vet. He says they have confirmed the reports of dead animals in Tanzania and Kenya. He also says the son of one of his colleagues at the veterinary clinic is sick. What is wrong with this world? People getting sick from an animal disease?



lifebook

OMG. That neighbour said he lost all his calves, and people said he was crazy. Now my friend's uncle says it's all true about animals getting sick and dying near the border post. But can anybody say what is this disease?



lifebook

What is going on? I heard about some herds dying from the mystery disease. But I thought that was only on the other side of the border. Now I hear some farmers are sick over here by us too. My aunt works at the medical centre, and she's afraid to go to work.



SIMULATION - SIMULATION - SIMULATION



chirpy Can't trust the ministry! Nobody talking about all the animals getting sick and dying. #taifastars4ever
253 Retweets 404 Likes

chirpy What's making our farm animals get sick and die? My grand says it's the wrath of the ancestors. Stop taking our land. Happy herd = happy life.
253 Retweets 404 Likes

chirpy U heard it here first: disease outbreak teams are on their way to the border. Sick animals on both sides. Still no official news from our elected officials. No surprise there.
253 Retweets 404 Likes

SIMULATION - SIMULATION - SIMULATION

D3 Day Three Combined

DAY THREE GUIDE

LOCATION: All
Instructions: This is a role play exercise at multiple locations

Pack Contents and timing:

Content

Timing

SIMULATION - SIMULATION - SIMULATION

D3 Combined

TIME: 0800
Date: 13 June, 2019



Start Exercise

This is a general start message

If you are not already at your start position, go there immediately.

If you do not know your start position, speak to a facilitator.

SIMULATION - SIMULATION - SIMULATION

D3-2 OS ONE STOP Livestock Drill - Tanzania (From KN)

TIME: 0800
Date: 13 June, 2019

SITE BRIEFING - Give this to the assessment team when they arrive

You have now arrived at the farm and will now prepare to undertake your investigation.

Before we begin

1. This is a working border point
2. Take care while working on this site. Ensure that all people on the site are aware that heavy vehicles, light vehicles and members of the public are also utilising this space.
3. Ensure that cordons are properly in place
4. Ensure you have clearly identified where the action will take place and if the vehicle is to be moved as part of the exercise, ensure the arrival point is identified (for instance if the vehicle is to be moved from the reception point to a customs point).

Facilitators Briefing

1. Ensure the area is clear of bystanders when the truck arrives. Direct your team for support
2. Direct the truck to the parking position and ensure the engine is off and the truck is safely parked before it is approached by the participants
3. Ensure that the vet on standby has clear view of the truck. The vet is responsible for animal welfare and at any time the vet has the authority to stop the exercise on animal welfare grounds. If this occurs notify ExCON immediately
4. The participants will direct the truck. If they ask you when to take the truck tell them to move the truck to where they would normally direct such a vehicle – it is the decision of the participant
5. Under no circumstances are animals to be unloaded from the truck unless they can be contained
6. If the participants state that they will move the animals to quarantine, have them detail the steps they will take, including who they will notify and then conclude this part of the exercise
7. At the conclusion the truck will be released, and the animals returned to the owner.
8. Neither the driver nor the assistant are sick

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800 ONE STOP
Date: 13 June, 2019 Livestock Drill - Tanzania (From KN)

EAC CROSS BORDER
SIMULATION EXERCISE

Setup

- Equipment:
 - Police/customs/border control vehicle
 - Light good truck containing sheep/goats
 - Bill of sale indicating that the sheep/goats have been purchased at a nearby farm
 - Two actors – driver and assistant with Identity documents
- Support:
 - Owner of the sheep
 - Vet on standby
 - Catch team in case of animal escape
- Location:
 - Marked inspection location undercover at inspection point. To be determined by participants – they will have the choice of open air in the muster yard or in the undercover customs inspection shed
 - Both locations to be signposted and highlighted

Plan

- Vehicle with livestock will be escorted to the head of the truck muster yard and the escort will alert the customs inspection team
- The escort will inform the customs of the following:
 - The truck is coming from Kenya and driving to Tanzania
 - It contains sheep/goats that have been purchased that morning from a nearby farm within the contaminated area
 - The driver was checked by police as he tried to take the animals along an informal crossing into Tanzania.
 - His destination is Mbuguni in Tanzania
 - The police will then produce the papers showing sale of the animals
- The exercise will then begin

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800 ONE STOP
Date: 13 June, 2019 Livestock Drill - Tanzania (From KN)

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitator Notes

- Exercise starts with the arrival of the police and the truck. It will park at the head of the truck park and the participants will approach the truck. The exercise will then start
- Customs can use any method at their disposal as they would in real life
- They can refer to any guidance
- They can notify others, such as the RRT, JBMC, etc and ask for any assistance (within the confines of the exercise)
- The exercise ends when a recommendation is made to move the animals off site and clearance is given to move the animals
- It also ends if the animals are released from the One-Stop (if the owners talk their way out of the situation).

Observers notes

- There should be a very clear management of this incident.
- The truck should be suitably parked and inspected
- Participants should use a clearly defined set of guidelines to deal with the situation, guidelines that are backed up in law
- The exercise will end when the truck is either cleared, quarantined or the truck is removed in order to (simulate) destroy the animals

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Script

Driver

What you will tell the customs people

- I am the owner of these sheep/goats
- I bought the animals from a Maasai herdsman yesterday near Amboseli and collected them today
- I was bringing the animals back to my farm in Mbuguni, Tanzania
- I was taking a back track as the Amboseli road is really bad at the moment due to the rain and this track is better
- I have legally bought the animals
- I am here with my brother

Information that only you know but you can divulge if pressed

- You will not tell them where you bought the animals. If pressed tell them it was a farm near Amboseli, but not from where.
- I know that this area is in the middle of a disease outbreak and I know that it is probably illegal to move the animals without a permit from the infection zone
- I got the animals really cheap. I think there is a problem on the farm, but I didn't ask any questions
- I was using the back road to avoid the border and it was bad luck that I ran into the police
- My brother owns half the consignment and it's going to another farm near Arusha

Things you are trying to do

- I want to get out of here as fast as possible
- I will tell them anything in order to cross the border and escape with my animals
- I don't want the animals placed in quarantine
- I want the border people to pay for anything they make me do
- I have no money to pay for anything. I spent my money on the animals and the truck and fuel

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Passenger

What you will tell the customs people

- We bought the animals from a Maasai herdsman yesterday near Amboseli and collected them today
- I am bringing the animals back to my farm near Arusha, Tanzania (note this is different from what your brother will say)
- We were taking a back track as this track is shorter
- We have legally bought the animals
- I am here with my brother

Information that only you know but you can divulge if pressed

- You will not tell them where you bought the animals. If pressed tell them it was a farm near Amboseli, but not from where.
- I own half the animals and we are going to drop my half off near Arusha on the way home
- They were really cheap. I think they are infected or from the infection zone but I know they will be okay for next year
- I know that I shouldn't be taking them over the border

Things you are trying to do

- I want to escape from here as soon as possible with the animals. I will tell the customs people anything to get away
- I want compensation for any loss or costs incurred

Police

Things you will tell customs

- We found this truck on a back road coming from Kenya and noticed it had Tanzanian number plates
- We stopped it and found they were transporting live animals
- We directed them to this location for inspection. We returned from the border as they had not yet crossed and brought them here.
- We have their identification, but don't know anything else about them
- They are not very cooperative but said they bought the animals from a Maasai farm but would not tell us where.

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Script

Driver

What you will tell the customs people

1. I am the owner of these sheep/goats
2. I bought the animals from a Maasai herdsman yesterday near Amboseli and collected them today
3. I was bringing the animals back to my farm in Mbuguni, Tanzania
4. I was taking a back track as the Amboseli road is really bad at the moment due to the rain and this track is better
5. I have legally bought the animals
6. I am here with my brother

Information that only you know but you can divulge if pressed

1. You will not tell them where you bought the animals. If pressed tell them it was a farm near Amboseli, but not from where.
2. I know that this area is in the middle of a disease outbreak and I know that it is probably illegal to move the animals without a permit from the infection zone
3. I got the animals really cheap. I think there is a problem on the farm, but I didn't ask any questions
4. I was using the back road to avoid the border and it was bad luck that I ran into the police
5. My brother owns half the consignment and it's going to another farm near Arusha

Things you are trying to do

1. I want to get out of here as fast as possible
2. I will tell them anything in order to cross the border and escape with my animals
3. I don't want the animals placed in quarantine
4. I want the border people to pay for anything they make me do
5. I have no money to pay for anything. I spent my money on the animals and the truck and fuel

SIMULATION - SIMULATION - SIMULATION

D3-2 TIME: 0800
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Passenger

What you will tell the customs people

1. We bought the animals from a Maasai herdsman yesterday near Amboseli and collected them today
2. I am bringing the animals back to my farm near Arusha, Tanzania (note this is different from what your brother will say)
3. We were taking a back track as this track is shorter
4. We have legally bought the animals
5. I am here with my brother

Information that only you know but you can divulge if pressed

1. You will not tell them where you bought the animals. If pressed tell them it was a farm near Amboseli, but not from where.
2. I own half the animals and we are going to drop my half off near Arusha on the way home
3. They were really cheap. I think they are infected or from the infection zone but I know they will be okay for next year
4. I know that I shouldn't be taking them over the border

Things you are trying to do

1. I want to escape from here as soon as possible with the animals. I will tell the customs people anything to get away
2. I want compensation for any loss or costs incurred

Police

Things you will tell customs

1. We found this truck on a back road coming from Kenya and noticed it had Tanzanian number plates
2. We stopped it and found they were transporting live animals
3. We directed them to this location for inspection. We returned from the border as they had not yet crossed and brought them here.
4. We have their identification, but don't know anything else about them
5. They are not very cooperative but said they bought the animals from a Maasai farm but would not tell us where.

SIMULATION - SIMULATION - SIMULATION

D3-STOP TIME: 0900
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

STOP Message

This is a general STOP message

Participants are to complete tasks. This drill is now concluded as time has expired.



SIMULATION - SIMULATION - SIMULATION

D3-3a AIRPORT
Drill (Pt1)

TIME: 0830
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Airport Drill - NBO to JRO Setup

Equipment

1. Dummy training profile to be inserted into the EAC immigration system
2. Email message to Jomo Kenyatta (NBO) airport stating that an infectious traveller has boarded a plane to JRO
3. Plane has just departed and is in the air – using real flight number.
 - a. Kenya Airways/Precision Air KQ6722 departs 0830 from NBO
4. This is a timed exercise. Equipment must be in place at JRO before the flight arrives at 0930 so the notification must be sent quickly.
5. Ensure that the participants prioritise the notification to JRO
6. Note the time the notification is sent to JRO
7. NOTE: The facilitation team in JRO has an inject for the team there should the notification not be received in time.

Facilitators Briefing

1. This is a notification from Namanga that an infectious person is on the flight from NBO to JRO
2. The notification is timed to ensure that the person will have already left on the flight
3. The team at NBO should log the notification and then follow a protocol to inform JRO to prepare for the arrival of the infected individual
4. This part of the inject is to test how NBO notifies their counterparts at JRO

SIMULATION - SIMULATION - SIMULATION

D3-3a

**AIRPORT
Drill (Pt1)**

**TIME: 0830
Date: 13 June, 2019**

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitator Notes

1. Ensure that the team at NBO receive this notification at precisely 0830
2. This is a simulated event – there is no Mr Ian Fected, he is a training profile on the system for this exercise
3. If the flight is late (it happens), ask the team in NBO what they will do
4. Ask the team what they would do in the event of a 'no show' where the person does not present for the flight
5. If asked, this person is highly infectious with East Rift Fever and point out the fact sheet

Observers notes

1. Note how long it takes for the team in NBO to send a notification to JRO
2. Note how they solve the other problems of a no-show or if they catch the aircraft before departure.

SIMULATION - SIMULATION - SIMULATION

D3- 3a

**Time: 0800
Date: 13 June, 2019**

EAC CROSS BORDER
SIMULATION EXERCISE



Fact Sheet East Rift Fever

Key Facts

1. At present very little is known about East Rift Fever
2. East Rift Fever has only just been identified, but is thought to be a mutation of the virus that causes Rift Valley Fever
3. East Rift Fever appears to infect mammals, but so far recorded cases have only been identified in ruminants and humans
4. East Rift Fever appears to be infectious between people but initial observations indicate that the infection rate is low and that the virus is still not well adapted to people
5. The virus in people appears to cause a very high fever with some people developing a haemorrhagic illness. The haemorrhagic form appears fatal in some cases.
6. The method of transmission is still unknown. Rift Valley Fever is transmitted by insects as well as direct contact with infected material. It is believed that East Rift Fever may also be transmitted in a similar manner. It is also possible that East Rift Fever is transmitted through direct contact with other infected people and there are reports of people in the same household becoming infected.

Symptoms

Those infected develop a disease characterised by a feverish syndrome with sudden onset of flu-like fever, muscle pain, joint pain and headache. Some patients appear to develop a form of haemorrhagic fever but the rate is presently unknown. This is characterised by bleeding around the nose or gums, blurred or decreased vision, intense headache, disorientation, lethargy and coma. Rare symptoms may also include vomiting blood, passing blood in the faeces, a purpuric rash or ecchymoses (caused by bleeding in the skin). There is not enough data to fully understand the fatality rate but based on current reports it could be as high as 24% for the haemorrhagic form.

Treatment and vaccines

At present there is no known treatment and infected patients have been receiving general supportive therapy.

WHO Response

The Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), and WHO are coordinating on animal and human health and will be providing additional support to Kenya and Tanzania for the outbreak response.

SIMULATION - SIMULATION - SIMULATION

D3-3a

**AIRPORT
Drill (Pt1) - NBO to JRO**

**TIME: 0830
Date: 13 June, 2019**

EAC CROSS BORDER
SIMULATION EXERCISE



MINISTRY OF INTERIOR AND
CO-ORDINATION OF NATIONAL
GOVERNMENT



DEPARTMENT OF
IMMIGRATION
SERVICES

**Memo:
URGENT – URGENT – URGENT
Notification of infectious person traveling internationally**

From: Department of Immigration Services, Namanga One Stop, Kenya
To: Department of Immigration Services, NBO Airport, Nairobi, Kenya
Subject: Infected traveller

1. At 0815 today we were notified that a tourist who passed through the One-Stop border yesterday has been in close contact with individuals who have contracted the infectious novel virus that leads to East Rift Fever
2. It is believed that this traveller may be a hazard to himself and others and should be directed to medical care as soon as possible
3. It is believed that this person intends to travel from Nairobi to Kilimanjaro airport this morning on the precision air flight departing at 0830 this morning
4. Please find attached a preliminary fact sheet as issued by the World Health Organisation in relation to East Rift Fever
5. The traveller details are as follows:
 - a. Name: Mr Ian Fected
 - b. Passport: Canada, P1245987 Exp 22/4/23, Ordinary
 - c. Address in Kenya: C/- Hilton Garden Inn, Nairobi Airport
 - d. Address in Tanzania: C/- Mt Meru Hotel, Arusha, Tanzania
6. Flight Details
 - a. Kenya Airways/Precision Air KQ6722 departs 0830 from NBO
 - b. Arrives JRO at 0930
7. Please take appropriate actions and if this person has already departed or is a no show please inform us and your JRO counterparts immediately

Head, Department of Immigration Services,
Namanga, Kenya

SIMULATION - SIMULATION - SIMULATION

D3- 3b

**AIRPORT
Drill (Pt1) - NBO to JRO**

**TIME: 0840
Date: 13 June, 2019**

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitators Briefing

1. Use this inject at 0845 if no message has been received from NBO
2. This inject is a reflection of the inject sent to NBO to inform JRO of a traveller flying to JRO who has been in contact with confirmed East Rift Fever patients
3. Explain that they may still receive a notification from the team in NBO.
4. They can commence working on this problem NOW

Facilitator Notes

1. Ensure that the team at JRO receive this notification at precisely 0845 if no notification has been received yet from NBO
2. Note the time any notification is received from NBO
3. If no notification is received, note this fact
4. This is a simulated event – there is no Mr Ian Fected, he is a training profile on the system for this exercise
5. If the flight is late (it happens), ask the team in JRO what they will do. This is an actual flight.
6. This is a timed exercise. When the flight arrives, this should be noted, and it should also be noted how the team copes with the time constraints. If they are not ready for the aircraft arrival, note this and how it affects the response.
7. Ask the team what they would do in the event of a 'no show' where the person does not present for the flight or is not on the flight when it arrives
8. If asked, this person is highly infectious with East Rift Fever and point out the fact sheet
9. Talk through any quarantine procedures that are suggested.
10. They should not need to inconvenience passengers from the plane. They may want to use passive methods, and these can be encouraged.
11. They are welcome to bring in people from Kenya Airways, but it is IMPORTANT to inform them that this is an exercise

Observers notes

1. Note how long it takes for the team in NBO to send a notification to JRO
2. Note how they manage arrivals
3. Note how they solve the other problems of a no-show or if they catch the aircraft before departure.

SIMULATION - SIMULATION - SIMULATION

D3-3b **TIME: 0840**
Date: 13 June, 2019

AIRPORT
Drill (Pt1) - NBO to JRO

EAC CROSS BORDER
SIMULATION EXERCISE



MINISTRY OF INTERIOR AND
CO-ORDINATION OF NATIONAL
GOVERNMENT



DEPARTMENT OF
IMMIGRATION
SERVICES

Memo:
URGENT – URGENT – URGENT
Notification of infectious person traveling internationally

From: Department of Immigration Services, Jomo Kenyatta Airport, Kenya
To: The United Republic of Tanzania, Ministry of Home Affairs, Immigration Department, Kilimanjaro Airport (JRO)
Subject: Infected traveller

1. At 0830 today we were notified that a tourist who passed through the OneStop border at Namanga yesterday has been in close contact with individuals who have contracted the infectious novel virus that leads to East Rift Fever
2. It is believed that this traveller may be a hazard to himself and others and should be directed to medical care as soon as possible
3. It is believed that this person has travelled from Nairobi and is en-route to Kilimanjaro airport this morning on the precision air flight departing at 0830 this morning
4. Please find attached a preliminary fact sheet as issued by the World Health Organisation in relation to East Rift Fever
5. The traveller details are as follows:
 - a. Name: Mr Ian Fected
 - b. Passport: Canada, P1245987 Exp 22/4/23, Ordinary
 - c. Address in Kenya: C/- Hilton Garden Inn, Nairobi Airport
 - d. Address in Tanzania: C/- Mt Meru Hotel, Arusha, Tanzania
6. Flight Details
 - a. Kenya Airways/Precision Air KQ6722 departs 0830 from NBO
 - b. Arrives JRO at 0930
7. Please take appropriate actions and if this person has already departed or is a no show please inform us and your JRO counterparts immediately

Head, Department of Immigration Services,
Jomo Kenyatta Airport, Nairobi, Kenya

SIMULATION - SIMULATION - SIMULATION

D3-3b **Time: 0800**
Date: 13 June, 2019

AIRPORT
Drill (Pt1) - NBO to JRO

EAC CROSS BORDER
SIMULATION EXERCISE



Fact Sheet East Rift Fever

Key Facts

1. At present very little is known about East Rift Fever
2. East Rift Fever has only just been identified, but is thought to be a mutation of the virus that causes Rift Valley Fever
3. East Rift Fever appears to infect mammals, but so far recorded cases have only been identified in ruminants and humans
4. East Rift Fever appears to be infectious between people but initial observations indicate that the infection rate is low and that the virus is still not well adapted to people
5. The virus in people appears to cause a very high fever with some people developing a haemorrhagic illness. The haemorrhagic form appears fatal in some cases.
6. The method of transmission is still unknown. Rift Valley Fever is transmitted by insects as well as direct contact with infected material. It is believed that East Rift Fever may also be transmitted in a similar manner. It is also possible that East Rift Fever is transmitted through direct contact with other infected people and there are reports of people in the same household becoming infected.

Symptoms

Those infected develop a disease characterised by a feverish syndrome with sudden onset of flu-like fever, muscle pain, joint pain and headache. Some patients appear to develop a form of haemorrhagic fever but the rate is presently unknown. This is characterised by bleeding around the nose or gums, blurred or decreased vision, intense headache, disorientation, lethargy and coma. Rare symptoms may also include vomiting blood, passing blood in the faeces, a purpuric rash or ecchymoses (caused by bleeding in the skin). There is not enough data to fully understand the fatality rate but based on current reports it could be as high as 24% for the haemorrhagic form.

Treatment and vaccines

At present there is no known treatment and infected patients have been receiving general supportive therapy.

WHO Response

The Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), and WHO are coordinating on animal and human health and will be providing additional support to Kenya and Tanzania for the outbreak response.

SIMULATION - SIMULATION - SIMULATION

D3-3c **AIRPORT**
Drill (Pt1) - NBO to JRO

TIME: 0930
Date: 13 June, 2019

EAC CROSS BORDER
SIMULATION EXERCISE

Facilitators Briefing

1. Use this inject at 0930
2. Aircraft with infected passenger arrived at 0930, Precision Air/Kenya Airways from Nairobi
3. Commence working on this problem NOW

Facilitator Notes

4. If the flight is late (it happens), ask the team in JRO what they will do. This is an actual flight.
5. This is a timed exercise. When the flight arrives, this should be noted, and it should also be noted how the team copes with the time constraints. If they are not ready for the aircraft arrival, note this and how it affects the response.
6. Ask the team what they would do in the event of a 'no show' where the person does not present for the flight or is not on the flight when it arrives
7. If asked, this person is highly infectious with East Rift Fever and point out the fact sheet
8. Talk through any quarantine procedures that are suggested.
9. They should not need to inconvenience passengers from the plane. They may want to use passive methods, and these can be encouraged.
10. They are welcome to bring in people from Kenya Airways, but it is IMPORTANT to inform them that this is an exercise

Observers notes

1. Note how long it takes to screen passengers
2. Note how they manage arrivals
3. Note how they solve the other problems of a no-show or if they catch the aircraft before departure.

SIMULATION - SIMULATION - SIMULATION

D3-3c **TIME: 0930**
Date: 13 June, 2019

AIRPORT
Drill (Pt3) - NBO to JRO

EAC CROSS BORDER
SIMULATION EXERCISE

0930 - Your aircraft from Nairobi has just arrived



SIMULATION - SIMULATION - SIMULATION

Annex 13: EAC Press release on expected heavy rainfalls to start the FSX on 11th June 2019.

EAC Secretariat alerts Partner States on an increased risk for disease outbreaks due to above normal rainfalls

East African Community Headquarters, Arusha, Tanzania, 5th March, 2019: Above normal rainfall is expected in the East African region over the next few months, a scenario that could expose the region to increased risks of disease outbreaks.

This forecast is based on the regional climate outlook for the March to May 2019 long rainfall season provided by the Greater Horn of Africa Climate Outlook Forum held in Entebbe, Uganda.

Mr. James Kivuva, the Senior Meteorologist, who represented the East African Community Secretariat at Forum warned that the higher than normal rainfall would increase the risk for outbreaks of infectious diseases. Mr. Kivuva urged EAC Partner States to be on the alert, inform the public, and put preparedness and mitigation measures in place while closely monitoring the rainfalls.

Between October and December 2018 parts of the region experienced a late start and early end of rains. However, above to near normal rainfalls were experienced in parts of Tanzania and in the Western parts of the region. Burundi, Rwanda and Uganda even reported flooding with landslides that impacted on some communities in the Eastern region where some lives were lost.

For March to May the climate predictions indicate an increased likelihood of above to near normal rainfalls over much of the equatorial sector. “Most parts of the region are likely to have an earlier seasonal rain onset, but the rains will also end earlier than usual,” said Mr. Kivuva.

“There is an increased chance for flash and riverine flooding mainly in the flood prone areas of the EAC Partner States, which might trigger landslides, mudslides and enhance the risk for outbreaks of infectious diseases with consequences for sectors such as health and agriculture including livestock,” he added.

The officer warned that flooding was likely to cause mass mosquito breeding that can transmit Malaria in humans and Rift Valley Fever (RVF) in animals and humans. “Already, the first cases of RVF in animals and humans have been reported from Kenya. Flooding increases the risk for diarrheal diseases, like cholera, especially in low laying areas,” said Mr. Kivuva.

On a positive note, the rain falls are good for the crop, if they are not excessive, and also for the pastoralist’s prospects. There is also a likelihood of a reduction in fall army worm infestation, as high rains are unfavorable for their multiplication.

“This would increase food security. The expected enhanced rains would also bring some relief, especially in areas that suffered from low rain falls and even droughts in the past season.”

In an effort to prevent and mitigate disease outbreaks in the region, Mr. Kivuva urged Partner States to undertake with the following precautionary measures:

The animal and human health disease surveillance units should actively monitor the disease trends in the affected areas;

- Citizens should protect themselves and especially children against mosquito bites. Adequate measures are the use of impregnated mosquito nets, personal insect repellents, if available light coloured clothing (long-sleeved shirts and trousers) and avoiding outdoor activities at peak biting times of mosquitos.
- Livestock farmers should contact the veterinary services for early information on vaccinating their animals against RVF.
- People in contact with ruminants should practice hand hygiene, wear gloves and other appropriate individual protective equipment when handling sick animals or their tissues or when slaughtering animals;
- In case of an RVF outbreak, people should avoid consuming fresh blood, raw milk or animal tissue and products without thoroughly roasting them;
- The Ministries of Health should intensify social mobilisation and health promotion efforts with preventive messages that enable the public to manage the risks at hand.
- The Meteorology departments should continue to monitor and analyse the weather patterns and share information with other departments to plan and prepare for outbreaks of infectious diseases of public health concern.

The Climate Outlook Forum meets on a quarterly basis to formulate mitigation strategies for key socioeconomic sectors in this region, such as agriculture, health and infrastructure. The meetings provide a regional platform for decision makers, climate scientists, research scientists as well as users of climate information.

-ENDS-

For more information, please contact:

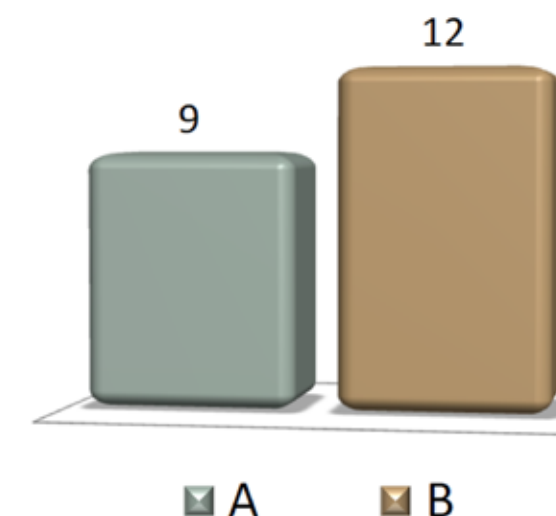
Mr Owora Richard Othieno
Head, Corporate Communications and Public Affairs Department
EAC Secretariat
Arusha, Tanzania
Tel: +255 784 835021
Email: Oothieno [at] eachq.org

Annex 14: FSX Project Management Review, including Steering Group and Exercise Management Group functioning, Arusha 17 June 2019



Please select which group you were member of:

- A. SG
- B. EMG



Exercise Objectives

- Assess the use of early warning and event detection mechanisms at points of entry with emphasis on the Namanga border area between Kenya and Tanzania,
- assess coordination mechanisms, command and control systems and information sharing channels between multiple sectors and countries; (e.g. activation of the EAC emergency structure, incident management systems and relevant emergency operations centres),
- assess the deployment of rapid response teams,
- validate the activation and deployment of selected mobile laboratories,
- assess animal and human cases investigation and management and functionality of selected veterinary and health facilities in the border area during a large-scale outbreak of a RVF-like virus,
- practise regional SOPs for pandemic preparedness and risk & crisis communication including community engagement,
- evaluate selected preparedness and response measures at the Jomo Kenyatta International airport (JKIA) and Kilimanjaro International airport (KIA), and
- capture best practises and ensure transfer of lessons learned to the EAC community and other regional economic communities and African regions.

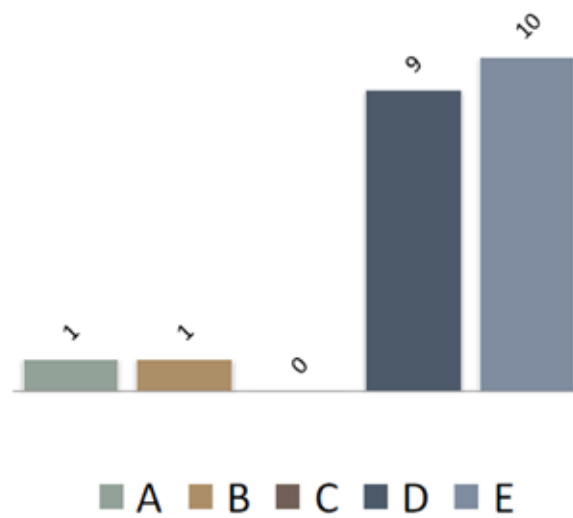
On a scale of A to E, select the letter where:

- A means you do not agree at all with the statement and
- E means you strongly agree with the statement.

Please evaluate the exercise based on the following questions

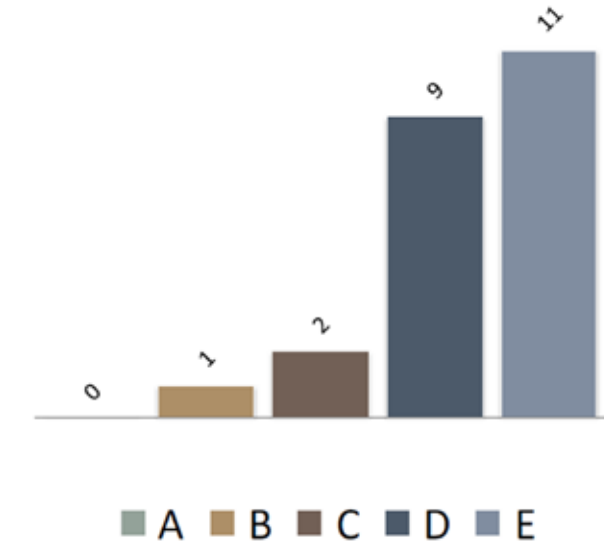
The exercise achieved its stated objectives

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



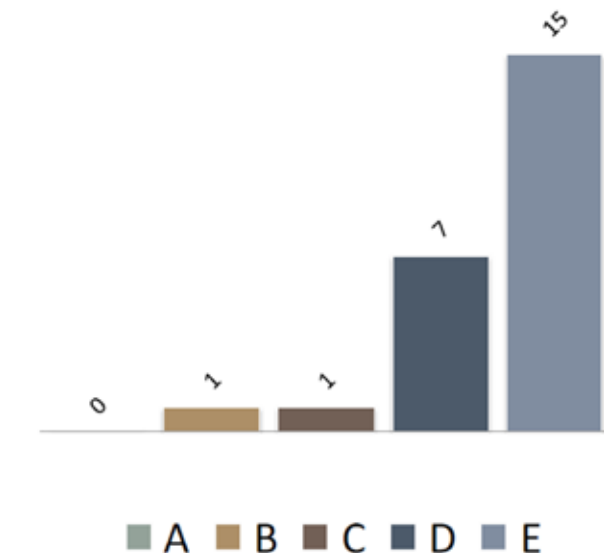
The exercise was well structured and organized.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



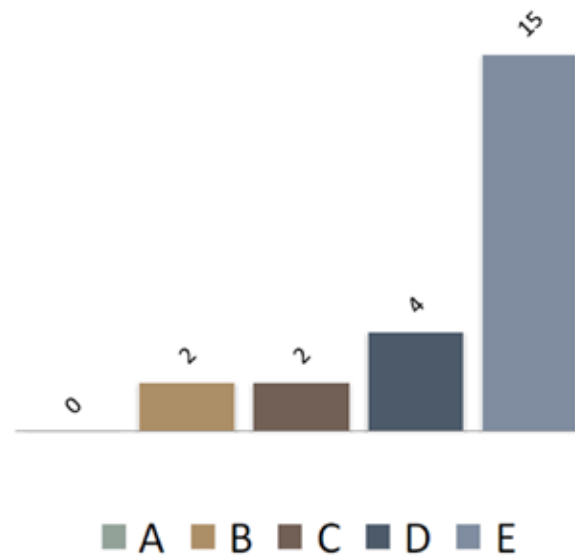
The scenario was realistic presented and credible.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



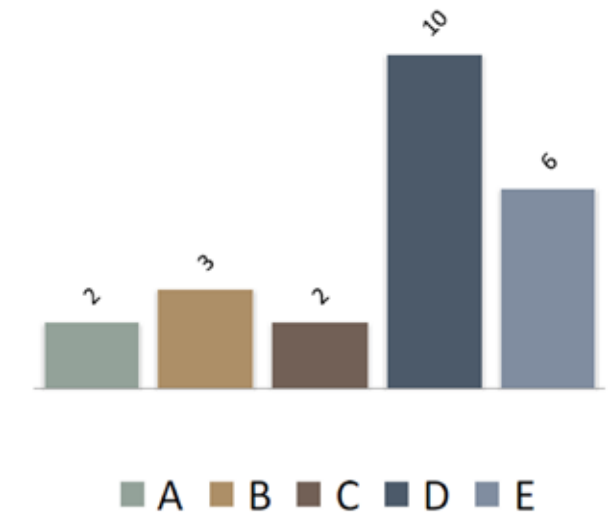
The SG & EMG set-up was useful in the planning of the FSX.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



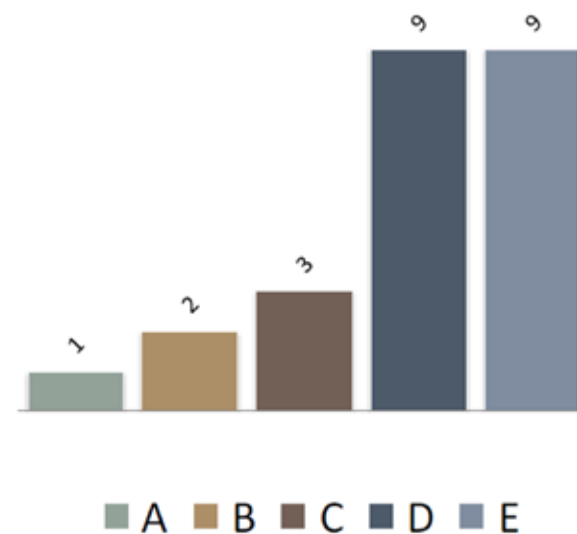
The SG & EMG had sufficient decision making authority to make critical programmatic decisions

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



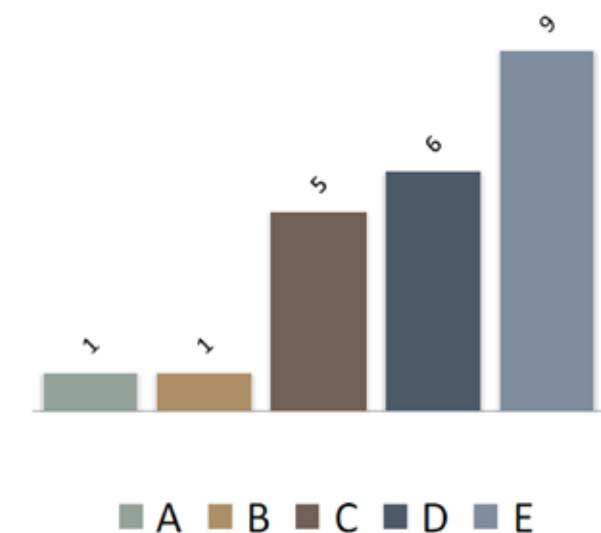
The group sizes of the SG and EMG were sufficient

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



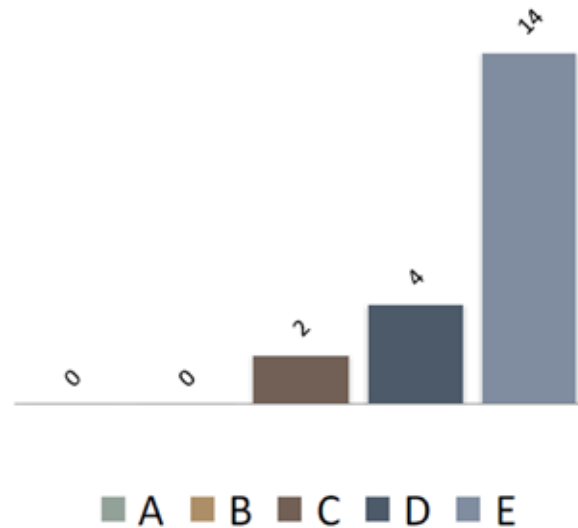
The number of SG & EMG planning meetings was sufficient for the preparation (design & development) of the FSX.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



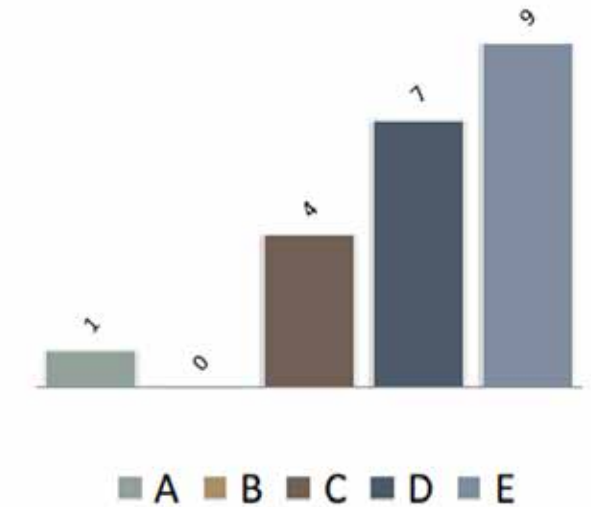
The SG and EMG meetings were useful for planning processes

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



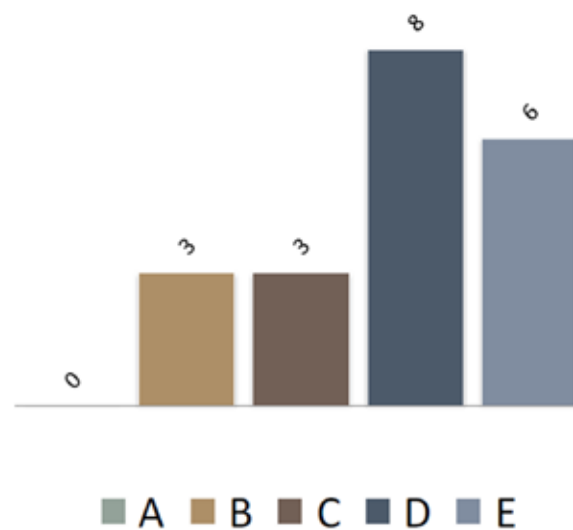
The exercise training undertaken in Nairobi was clear, relevant and useful to prepare my role as facilitator, evaluator or liaison officer in the FSX.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



The SG & EMG roles and responsibilities (ToR) was clear and distinct in the functioning of both groups.

- A. Strongly Disagree
- B. Partly Disagree
- C. Neutral
- D. Partly Agree
- E. Fully Agree



Acknowledgements

The East African Community Secretariat would like to thank all the participants and observers of the FSX who shared their experiences, observations and comments, either in interviews conducted or in their evaluations of the exercise. Without their enthusiastic participation and cooperation, this report would not have been possible, and their invaluable insights and experience would not be available to inform future emergencies.

This “Lessons Learned” report should be read in conjunction with the technical evaluation report of the FSX and recommendations for future responses, which can be found at www.eac.int.

The **Support to Pandemic Preparedness in the EAC Region project team** is to be congratulated on initiating, planning and facilitating the FSX, which involved gathering and coordinating participants not only from Kenya and Tanzania, but many other countries too.

The **World Health Organization** is to be congratulated for their technical lead in the exercise.

Thanks must also go to the regional and international partners who supported the FSX either financially or in kind:

- African Union Centres for Disease Control and Prevention (AU CDC);
- Chemonics HRH2030 Programme;
- US Defense Threat Reduction Agency (DTRA);
- EPOS Health Management;
- United Nations Food and Agriculture Organization Emergency Centre for Transboundary Animal Disease (FAO/ECTAD);
- East, Central and Southern Africa Health Community (ECSA-HC);
- German Federal Friedrich Loeffler Institute for Research on Animal Health;
- Kenya Red Cross;
- KfW German Development Bank;
- Bernhard-Nocht-Institute for Tropical Medicine (BNITM);
- One Health Central and Southern Africa (OHCEA);
- World Organisation for Animal Health (OIE);
- United States Agency for International Development (USAID)

All photos were taken by **Stephen Kariuki** and his team of Light in Captivity, Kenya, and are copyright EAC/Light in Captivity. More photos from the FSX can be viewed at www.lightincaptivity.com and are free to use as long as credited to EAC/Light in Captivity.

Video footage of the FSX and interviews with some of the participants recorded by **Amos Ochieng** and his team of MFC, Kenya and can be viewed at www.eac.int.

Special thanks must go to **Ruth Evans** the writer of this report (ruth@ruthgevans.com).

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