



**Regional Data Collection Survey and
Piloting of Proposed Activities aimed for
the Prevention of Infectious Disease
at Border Posts (BPs) in the EAC**

Final Report

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Japan International Cooperation Agency (JICA)

TA Networking Corp.

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Pictures during the Baseline Survey



Entrance to BP facility,
Namanga BP (Kenya)



Survey interviewer,
Namanga BP (Tanzania)



Portable handwashing station,
Taveta BP (Kenya)



Hand hygiene poster at handwashing facility,
Namanga BP (Kenya)



Portable handwashing station,
Holili BP (Tanzania)



Portable handwashing station,
Nimule BP (South Sudan)



Thermometer,
Mugina BP (Burundi)



Use of thermometer,
Nimule BP (South Sudan)



Awareness poster,
Rusumo BP (Rwanda)



Social distancing stickers,
Busia BP (Uganda)



Waste management,
Mugina BP (Burundi)



Driver interview,
Malaba BP (Uganda)

Pictures during the Pilot Activities



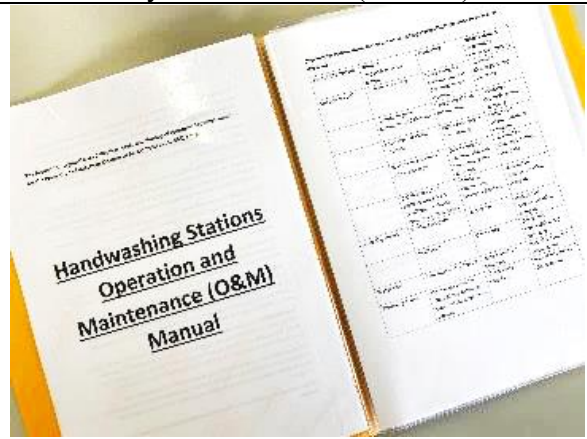
Training with Community Health Workers,
Kinyinya district (Burundi)



Hands-on training for handwashing,
Nyanza-lac district (Burundi)



New knee-press 4-sink handwashing station,
Taveta BP (Kenya)



Operation and maintenance manual for
handwashing stations, Illasit, Lwakhakha,
Nadapal, Suam, Taveta BPs (Kenya)



Sneeze guard utilization at Port Health,
Rusumo BP (Rwanda)



Installation of ward screens for Port Health
sample collection activities,
Rusumo BP (Rwanda)



IPC training for BP staff,
Nimule BP (South Sudan)



PCR training for lab technicians from nearby
health facilities, Nimule BP (South Sudan)



Using local radio stations to boost access to
COVID-19 information, Namanga BP (Tanzania)



Local theatre group (Emayan Vijana Kimoko)
singing about COVID-19 prevention and
vaccination, Namanga BP (Tanzania)



Psychosocial support training,
Elegu BP (Uganda)



Calibration of Thermal Scanners Training,
Mutukula BP (Uganda)

Abbreviations

AMREF	The Africa Medical and Research Foundation
AU	African Union
BMC	Border Management Committee
BP	Border Post
CBS	Community Based Surveillance
CDC	Centers for Disease Control and Prevention
CHD	County Health Department
CHW	Community Health Worker
COVAX	COVID-19 Vaccines Global Access
COVID-19	Coronavirus (SARS-CoV-2) disease 2019
DMO	District Medical Officer
EAC	East African Community
FGD	Focus Group Discussion
HCW	Health Care Worker
HPT	Health Promotion Technician
IASC	Inter-Agency Standing Committee
ICT	Information and Communication Technology
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education, and Communication
IHR	International Health Regulations
IOM	International Organization for Migration
IPC	Infection Prevention and Control
JBMCC	Joint Border Management Coordinating Committees
JICA	Japan International Cooperation Agency
KAP	Knowledge, Attitudes, and Practices
KEMRI	Kenya Medical Research Institute
KRA	Kenya Revenue Authority
MoH	Ministry of Health
NGO	Non-Governmental Organisation
O&M	Operation and Maintenance
OSBP	One-Stop Border Post
PCR	Polymerase Chain Reaction
PHCC	Primary Health Care Centre
PHEIC	Public Health Emergency of International Concern
PoE	Points of Entry
PPE	Personal Protective Equipment
RBC	Rwanda Biomedical Centre
RCCE	Risk Communication and Community Engagement
RDGIE	Rwanda Directorate General of Immigration and Emigration
RECDTS	Regional Electronic Cargo and Driver Tracking System
SADC	Southern African Development Community
SBCC	Social Behavioural Change Communications
SOP	Standard Operating Procedure
URA	Uganda Revenue Authority
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

Map of the East African Community



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Chapter 1 Introduction

1.1 Background

Following the worldwide expansion of the Coronavirus (SARS-CoV-2) disease 2019 (COVID-19) pandemic, it has since then cast a shadow on health systems, the economy, and society. During the outbreak of the pandemic, the movement of humans, goods, and services was restricted due to the closure of borders to prevent the further spread of the infection. However, this has affected normal operations due to various requirements such as submission of documents, quarantining, and testing upon entry at international borders.

The need for support to combat infectious diseases, even before the COVID-19 pandemic (due to prior Ebola outbreaks), was found to be quite high at the border posts (BPs) in the East African Community (EAC) Partner States: the Republic of Burundi, the Republic of Kenya, Republic of Rwanda, South Sudan, the United Republic of Tanzania, and the Republic of Uganda. One of the reasons includes the fact that the high utilization of overland transport, which is an efficient method for distribution of goods and services vital to the survival and economic growth of the region, makes human interaction and traffic at the BPs and its surrounding communities inevitable.

One of the eminent challenges is the gap in the standardization of responses to the spread of the disease. Some have prioritized the normal scale of distribution, some have strictly closed their borders, while others only respond at the point of necessity. COVID-19-related policies such as testing and quarantining requirements differ from country to country. The standardization of appropriate inspection capabilities and systems at BPs has become an important issue in improving the efficiency of the distribution of goods and services in the region. In response to the COVID-19 pandemic, EAC and the Southern African Development Community (SADC), which are regional cooperation frameworks, have developed guidelines and response plans, calling for regional standardization. In some borders of the region, the One-Stop Border Post (OSBP) has been introduced to promote the efficiency of border procedures even before the pandemic, and Japan International Cooperation Agency (JICA) has been offering related support since 2007.¹ Not only for the current COVID-19 pandemic, preparing for proper and standardized border response and infection control measures will help reduce the social, health, and economic impacts of future emerging or re-emerging infectious diseases.

Another challenge within BPs is the provision for utilities and facilities for usage among staff and users such as truck drivers and travellers. Water source, which is necessary for maintaining a sanitary environment, is not stable in some BPs. Provisions for spaces for waiting, lodging, dining, and isolation are problematic in most BPs; causing travellers to utilize spaces outside the BP which are also being utilized by local communities. From an infectious disease containment viewpoint, that is not quite an ideal setup. It is necessary to consider improvements in both tangible aspects such as water, and intangible aspects such as

¹ JICA, Project for Eastern Africa Regional Customs Capacity-building (2007–2009)

human resources to minimize the risk of infection.

The EAC Secretariat has emphasized that improvement in infectious disease countermeasures is a common issue in the region. It has also emphasized to the Partner States the importance of regional initiatives, including holding ministerial meetings with relevant sectors and creating EAC COVID-19 Response Plans. Although the materialization of measures is under the responsibility of ministries and agencies in each country, the EAC Secretariat needed to present a concrete model to the Partner States as a case study to aid in strengthening infectious disease control at borders and improve regional standardization.

The EAC Secretariat and JICA have built cooperative relationships through technical cooperation projects and the dispatch of individual experts. To respond to the current pandemic, the EAC requested JICA's support to prevent infectious diseases at BPs without succumbing to a complete halt in the distribution of goods and services. The EAC and JICA jointly decided to survey to further clarify the needs and conduct activities to address these needs.

1.2 Objectives

The purpose of this study is to confirm the needs of BP's government procedural facilities and related areas in the six EAC Partner States (Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda) to strengthen infectious disease control measures, to examine specific methods for strengthening measures, and to organize the issues and propose support proposals for strengthening BP's infectious disease control capabilities and regional standardization. JICA, the EAC Secretariat, member governments, international organizations, etc. shall be addressed to in the support proposals.

This survey has three main objectives.

- (1) To identify needs and challenges for strengthening infectious disease control at the EAC Partner State BPs and surrounding areas through a baseline survey
- (2) To examine specific model methods and measures to strengthen infectious disease control at the BPs through pilot activities
- (3) To organize issues regarding standardization of infectious disease response measures for the region

1.3 Overview of the Survey

The study was initiated with a “literature review” followed by “baseline survey” and “pilot activities” in the field, and then “knowledge sharing activities among member countries and proposed plans of action”.

1.3.1 Literature Review

Prior to the implementation of interventions, the Survey Team (hereinafter referred to as the ‘Team’) gathered the necessary information and assess the needs, in order to plan effective interventions. A literature review of existing documents related to COVID-19 control (EAC and government strategic plans, guidelines, reports, etc.), guidelines, reports, and materials of other development partners, as well as important secondary data that were made available and others that were accessible online, was conducted to identify the current situation and issues in the early stages of the pandemic, as well as progress, commonalities, and differences in COVID-19 control measures in each country. In addition, the information, data, and materials that need to be collected in the baseline survey were organized. A summary of the results of the review is provided in section 2.1.3; the documents reviewed for this survey are listed as Reference List at the end of this report. These documents were used not only in the formulation of the survey questions for the baseline survey, but also in the development of the pilot activities, plan of actions and policy recommendations.

1.3.2 Baseline Survey

Having identified the evolution of the COVID-19 response in each Partner State, along with commonalities and differences, it was decided to carry out a baseline survey to understand the needs of BPs and the issues on the ground, which would provide a benchmark for further consideration of the implementation of pilot activities. A meeting was then convened with EAC and JICA to agree on implementing a baseline survey and to deliberate the survey contents. Focal persons from each country were nominated in each Partner State to assist in planning and coordinating the baseline survey. The baseline survey was conducted in collaboration with local consultants from May to June 2021 through physical visits, telephone and online interviews, and questionnaires. The results of the baseline survey findings were validated with the stakeholders within EAC and the focal persons of each Partner State from July to October 2021. At the same time, short, medium, and long-term support measures/action plans were drafted based on the survey results.

1.3.3 Pilot Activities

The baseline survey findings became the basis for the formulation and prioritization of short-term

interventions (hereinafter referred to as ‘pilot activities’), which were stepping stones for determining models to address the needs that were identified in the baseline survey. The pilot activities were prioritized based on the survey results and needs of each country, national plans, and support from other donors. A total of 11 pilot activities were implemented in the 6 Partner States from October 2021 to January 2022.

1.3.4 Knowledge Sharing Activities and Proposal of Plan of Action

The activities, verification results, and lessons learned from each activity were explained and discussed through a knowledge sharing seminar (online) with the EAC Secretariat, JICA, national focal persons and other related parties. Based on the discussions and the results of the survey, a draft support/action plan for strengthening infectious disease control in BP and for standardization in the region was formulated and proposed. As for the issues that need to be addressed at the policy level, we summarized the recommendations as policy matters that should be considered by the EAC Secretariat and national governments, taking into account the strategies and trends in the region.

The purpose of this report is to share the findings and the analysis of the baseline study, to describe the pilot activities conducted, and to propose plans of action for the future.

Chapter 2 The Baseline Survey

2.1 Methodology of the Baseline Survey

2.1.1 Survey Design

For the baseline survey, 8 major survey themes shown below (Table 1) were constructed, and data was collected from a wider target using six types of survey tools or questionnaires (National Key-Informant Questionnaire, BP Manager Questionnaire, Port Health Questionnaire, Observation Checklist, Truck Drivers Questionnaire, and Community Questionnaires). Using these tools, the baseline survey employed both quantitative and qualitative survey approaches and was conducted in various methods. At the national level, the key-informant interview was conducted by face-to-face interview. On the other hand, data from BP were collected either by online/telephone or on-site visit. On-site visits were conducted in major BPs in terms of volume of traffic and its strategic position within the country. Observation checklist, truck drivers' questionnaire, and community questionnaire were only used during the on-site visits. It is also important to note that for the administration of this baseline survey (data collection and part of analysis) among the Partner States, the Team opted to utilize an online data collection platform – KoboCollect, a free and open-source software developed by the Harvard Humanitarian Initiative.²

A quick summary of the tools, themes, and methods of the survey can be seen below. In the 'addressing the issues' column, the scope of the Pilot Activities only includes capacity development, Infection Prevention and Control (IPC) measure strengthening, and awareness creation. Coordination of all activities during the baseline survey was supported by focal persons designated by the Partner States for this survey.

Table 1. Summary of the Survey Themes, Target Respondents, and Issues to be Identified and Addressed

BP COVID-19 Countermeasures Survey Themes	Identifying the issues						Addressing the issues		
	Baseline Survey						Intervention Methods	Pilot Activities	Proposals for Future Support
	Survey Methods		Tel/Online & On-site visit		On-site visit Survey				
Survey Tools	National Key-Informant Questionnaire	BP Manager Questionnaire	Port Health Questionnaire	Observation Check List	Truck Drivers Questionnaire	People in Transit (Community) Questionnaire			
1 National Policy	⊙						Policy Support and Recommendations	⊙	
2 Regional Coordination and Standardization	⊙	○			○			⊙	
3 BP Administration and Coordination		⊙	○	○			Capacity development (non-structural)	○	
4 Human Resource Management and Capacity development	○	⊙	○		○	○		⊙	
5 IPC including WASH				⊙	○	○	Strengthening IPC Measures (structural)	⊙	
6 Port Health	○		⊙	⊙	○	○		⊙	
7 BP Infrastructure and system	○	⊙		⊙	⊙	○		⊙	
8 Community awareness and engagement		○	○		⊙	⊙	Community Engagement	⊙	

Legend: ○ Expected to obtain data; ⊙ Expected to obtain a large amount of data

² KoBoToolbox, the Harvard Humanitarian Initiative (<https://www.kobotoolbox.org/>)

2.1.2 Sampling Method and Sampling Frame

The sample of this survey is all the official BPs in the EAC Partner States, namely, these listed 27 borders, which covers all the OSBPs, BPs planned to be OSBPs, and other BPs among the Partner States. The on-site survey was carried out at 11 borders (18 BPs), in consideration of the high traffic volume and balance between the Partner States as well as at the request of the EAC Secretariat and the Partner States. The name of the on-site visited BPs is presented in yellow cells in the table. All BPs were either approached via telephone, online, or other means. Additionally, some BPs that were not visited during the baseline survey were visited during the pilot activities. All results in this survey were obtained from 44 BPs in 26 borders (Lokiriama is not an official BP).

Table 2. List of land BPs among the EAC Partner States and the Sample Frame

	Country A	Country B	Name in Country A	Name in Country B	OSBP status	OSBP Type
1	Kenya	Tanzania	Taveta	Holili	Operational	Juxtaposed
2	Kenya	Tanzania	Isebania	Sirari	Not operational as OSBP	Juxtaposed
3	Kenya	Tanzania	Namanga	Namanga	Operational	Juxtaposed
4	Kenya	Tanzania	Lunga	Horohoro	Not operational as OSBP	Juxtaposed
5	Kenya	Uganda	Busia	Busia	Operational	Juxtaposed
6	Kenya	Uganda	Malaba	Malaba	Operational	Juxtaposed
7	Tanzania	Uganda	Mutukula	Mutukula	Operational	Juxtaposed
8	Burundi	Rwanda	Gasenyi	Nemba	Operational	Straddled
9	Burundi	Rwanda	Ruhwa	Ruhwa	Operational	Single Country (Burundi)
10	Burundi	Rwanda	Kanyaru	Akanyaru	Not Designed as OSBP	Juxtaposed
11	Rwanda	Uganda	Kagitumba	Mirama Hills	Operational	Juxtaposed
12	Rwanda	Uganda	Gatuna	Katuna	Construction	Juxtaposed
13	Burundi	Tanzania	Mugina	Manyovu	In design process	Juxtaposed
14	Burundi	Tanzania	Kobero	Kabanga	Operational	Juxtaposed
15	Rwanda	Tanzania	Rusumo	Rusumo	Operational	Juxtaposed
16	Uganda	South Sudan	Elegu	Nimule	Not operational as OSBP	Juxtaposed
17	Uganda	Rwanda	Cyanika	Cyanika	-	-
18	Uganda	South Sudan	Oraba	Kaya	-	-
19	Kenya	Uganda	Lwakhakha	Lwakhakha	-	-
20	Uganda	Kenya	Suam River	Suam	-	-
21	Uganda	Kenya	Lokiriama	Lokiriama	N/A (not official BP)	
22	Kenya	South Sudan	Nadapal	Nadapal	-	-
23	Burundi	Tanzania	Gahumo	Murusagamba	-	-
24	Kenya	Tanzania	Illasit	Tarakea	-	-
25	Tanzania	Uganda	Murongo	Kikagati	-	-
26	Tanzania	Burundi	Mabamba	Gisuru	-	-
27	Tanzania	Burundi	Kagunga	Kabonga	-	-

Legend:



Visited



Responded via telephone



Not responded

2.1.3 Data Collection Methods

2.1.3.1 Desk Review

For purposes of triangulation and identifying parameters for the baseline survey, a desk review was among the various methods employed for the survey. Firstly, the International Health Regulations (IHR 2005)³ provided an important guide to the formulation of the survey questions. The IHR 2005 provides an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders, and requires countries to designate a National IHR Focal Point for communications with WHO, to establish and maintain core capacities for surveillance and response at Points of Entry (PoE). In this study, the IHR 2005 sets out a set of requirements for PoE, including BPs, based on the required capabilities in the event of a Public Health Emergency of International Concern (PHEIC). The survey questions were designed to identify the challenges and needs of BPs in responding to COVID-19 and related policies, human resources, infrastructure and equipment.

The team also drew on the reports of the IHR Joint External Evaluation conducted between 2017 and 2018 in each Partner State, the issues of BPs identified in the reports, such as inadequate port health personnel and capacity, inadequate medical waste management, BP's own guidelines, SOPs and contingency plans, inadequate infrastructure, inadequate testing capacity, inadequate isolation facilities, porous borders and illegal border crossings, were used to set the parameters of the study. Moreover, the WHO's *Handbook for public health capacity-building at ground crossings and cross-border collaboration*⁴, which sets out the principles of strategic risk assessment for a more BP-specific preparedness and response was another important reference. In line with this handbook, *Controlling the spread of COVID-19 at ground crossings*⁵, which describes the response to COVID-19 in BP, suggests activities to strengthen preparedness and surveillance in BP and border communities that should be prioritised. From this literature, the research questions were finalised by gaining insights into the response to positive cases, the IPC measures and equipment needed in BPs, including water, sanitation, and hygiene (WASH), and cooperation with surrounding communities and neighbouring BPs across the border.

On the other hand, a great deal of information on COVID-19 preparedness and the latest developments implemented in the region so far was obtained from policy documents and press releases of the EAC and the Member States, reports and newsletters of government aid implementing agencies, press releases and news websites. More recent information from the field comes from the report on the COVID-19 preparation and response training at the OSBP conducted by the EAC and German International Cooperation Agency between September and December 2020, and from the report on the OSBP survey conducted by the EAC Secretariat in June 2020, which revealed problems with hand-washing facilities (equipment and water

³ WHO, *International Health Regulations (2005) Third Edition* (2005).

⁴ WHO, *Handbook for public health capacity-building at ground crossings and cross-border collaboration* (2020).

⁵ WHO, *Controlling the spread of COVID-19 at ground crossings* (2020).

supply), inadequate IEC materials, inadequate hand sanitisation and physical distancing of staff, and non-compliance with PPE use, as well as information on inconsistencies in border screening, differences in inspection capacity, and confusion in the field at national BPs.

In addition, the development of questions on WASH was based on the document of the WHO and the United Nations Children’s Fund (UNICEF) *Core questions and indicators for monitoring WASH in health care facilities in the SDGs*.⁶ The Knowledge, Attitudes and Practices (KAP) survey of truck drivers and community people was adapted from questionnaires used in COVID-19 KAP survey⁷ conducted by WHO, Johns Hopkins University, the Massachusetts Institute of Technology and others. Other resources are listed as references at the end of this report.

2.1.3.2 Key Informant Interviews

The purpose of the interview is to identify the policy and regulatory gaps, infrastructure, and capacity-building needs. The interview tools, which can be found in **Appendix 5**, were prepared for two types of targets; ministry in charge of health, usually the Ministry of Health (MoH) of each Partner State as a key ministry for national COVID-19 response and national revenue authority which often plays a critical role in terms of BP administration together with immigration service. For the ministry in charge of health, self-assessment of core capacity requirements for designated ground crossing/BPs stipulated in the IHR 2005 formed the first section followed by the section on ‘One Health’ as well as Port Health capacity-building. For national revenue authority, Implementation of EAC Target Actions for Regional Response to COVID-19 by the national task force and regional coordination and standardization in terms of border management were assessed. The list of key informants the Team interviewed is presented below.

⁶ WHO, and UNICEF, *Core questions and indicators for monitoring WASH in health care facilities in the SDGs* (2018).

⁷ John Hopkins Bloomberg School of Public Health’s Center for Communication Programs, Massachusetts Institute of Technology, https://p09qov156427uxhn213akhd0-wpengine.netdna-ssl.com/wp-content/uploads/2021/06/Global_Survey_Brief_Methods_Section.pdf (accessed on 27th February 2022)

Table 3. List of Key Informants

Country	Ministry	Name and Designation
Burundi	Ministry of Health	Dr. Liesse Iteka (Head of Service Operations, Public Health Operation Centre)
Kenya	Kenya Revenue Authority	Mr. John Karuga (Assistant Customs Commissioner)
		Mr. Joel Ndege (Manager Moyale Border Custom Station, Customs & Border control)
Rwanda	Rwanda Biomedical Centre	Mr. Muhammed Semakula (Senior Statistician and Health Scientific Innovation Analyst, Research Innovation and Data Science Division)
	Ministry of Health	Lt. Col. Dr. Louis Nzeyimana (Field Coordinator Point of Entry Health infrastructures/isolation Units and Treatment Centres)
South Sudan	Ministry of Health	Dr. Jacob Amanyanya (Director of Research)
Tanzania	Ministry of Health, Community Development, Gender, Elderly and Children	Dr. Khalid Massa (Deputy Director, Preventive Services)
		Dr. Remidius Kakuru (Manager, Port Health)
	Ministry of Foreign Affairs and East African Cooperation	Ms. Judith Ngoda (Senior Economist, EAC Health Sector)
Uganda	Ministry of Health	Ms. Harriet Mayinja (Research Officer, Department of Integrated Epidemiology, Surveillance and Public Health Emergencies)

2.1.3.3 Types of Questionnaires and Checklist

Data was collected from a wider target at BP using the following five types of questionnaires and checklist:

BP Managers Questionnaire

A questionnaire for BP managers was developed in order to understand the following topics:

- Basic BP Information
- BP Legislation, Administration, and Coordination for COVID-19 Prevention and Control
- BP Infrastructure: WASH
- IPC: Standard Operating Procedures (SOPs) and Training at the BP
- IPC: Personal Protective Equipment (PPE)

Port Health Questionnaire

A Port Health questionnaire was constructed to assess the following information:

- Port Health services including staffing and capacity
- Isolation/referral for people who have or may have COVID-19
- COVID-19 testing

Truck Driver Questionnaire

This questionnaire was designed for truck drivers and crew members to obtain information on their basic profile, travel route and purpose, COVID-19 test, perception toward COVID-19 related services provided by BP, their KAP toward COVID-19.

Community Questionnaire

This questionnaire was targeted at various individuals in the BP area including the small business traders, migrant workers, returnees, travellers, business persons and people from neighbouring communities. Like truck drivers, basic profile, travel route, and purpose, COVID-19 test, perception toward COVID-19 related services provided by BP, their KAP toward COVID-19 were assessed.

Direct Observation

Direct observation was conducted by the Team at visited BPs using an observation checklist to confirm the actual situation against what was reported by BP managers and Port Health staff on respective questionnaires in terms of BP infrastructure, available guidelines and equipment, PPE, and IPC practice.

2.1.4 Limitations

The relevant organizations in each country for the baseline survey were also the core organizations for infectious disease countermeasures and health crisis response. Due to the spread of the new coronavirus infection, it was difficult to coordinate the survey time. As a result, the period of the baseline survey was limited, which also affected the amount of information and data that could be collected. In addition, as described above, there are two types of data: one from physical on-site visits to BPs and another from online or telephonic interviews. For the telephonic interviews, as data collectors did not visit the site physically, they are unable to observe the actual situation of the BP facilities such as handwashing facilities functioning, placement of Information, Education, and Communication (IEC) materials, mask-wearing, etc. In the data from these online or telephonic interview sites, the possibility of bias among data cannot be confirmed. During on-site visits, it was confirmed that some staff had responded that there were existing handwashing stations regardless of whether they were non-functional. Although some BPs were not physically visited, field assessments of some of the BPs targeted in the pilot activities were conducted.

The data was collected from April to June 2021, and the survey results were confirmed by the EAC Secretariat and member countries in October 2021. The findings show the status of BP for that period and may not reflect changes that have occurred since that period

2.2 Key Findings of the Baseline Survey

This section presents the situation for the EAC region and each Partner State, based on the results of the baseline survey. Table 4 below shows the summary of the key findings in each Partner State, which are explained in detail through the narratives. Key findings are subcategorized into the national policies, regional coordination and standardisation, BP administration, human resource management, IPC and WASH measures, Port Health, infrastructures and systems, and community awareness, that were identified during the baseline survey in each of the Partner States. The colours (red, yellow, orange, green, dark green) in the tables in this section is explained below Table 4.

The findings of each country will be shown in 2.1.1, the regional analysis will be discussed in 2.1.2. BP scorecards (detailed scoring of the BPs evaluated using the themes used in the baseline survey (BP management, Human Capacity development, IPC, Infrastructure, and Port Health) can be seen in **Appendix 1**. The analyses of 10 major borders are displayed in **Appendix 2**.

The data were collected from April to June 2021, the findings were validated in October 2021. The findings are representative of the state of the BPs as of that period and may not reflect changes that have occurred after the period.


Table 4. Summary of Key Findings in each EAC Partner State


Themes	Indicators	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)	Notes
National Policies	National Plan Recognition at BPs	50%	100%	100%	100%	100%	90%	Unharmonised border screening protocols and capacities among the Partner States remains a challenge
Regional Coordination and Standardization	Perception of harmonisation of customs procedures with the EAC	60% agree	90% agree	100% agree	100% strongly agree	50% disagree	50% disagree	Use of the EAC regional Electronic Single Window platform was reported to improve cargo clearing and coordination; poor network at BP seem to affect perceived coordination at BPs
BP Administration and Coordination	Inter-departmental coordination mechanism for COVID-19 at BPs	100%	100%	100%	100%	100%	100%	Cost-sharing schemes by various ministries observed in Tanzania
	BPs with contingency plans for COVID-19	25%	80%	75%	None	40%	50%	
	Availability of SOPs/guidelines for COVID-19	38%	100%	75%	100%	90%	20%	Documents are mostly from the national level, but there is a need for the development of BP-specific guidelines as witnessed in Kenya
Human Resource Management and Capacity development	IPC Training in the past year	38%	70%	75%	None	100%	80%	Less training opportunities were reported among smaller BPs
	BPs with at least 50% of its staff trained in IPC	13%	40%	50%	None	70%	40%	
	Perceived adequacy of IPC capacity of BP staff	63%	50%	50%	50%	70%	70%	
	Capacity to conduct online trainings	13%	60%	75%	None	70%	40%	Responses were associated with internet connection stability or the lack thereof
	Presence of psychological support systems for staff	13%	None	50%	None	None	None	20%


IPC	BPs with either piped supply, borehole or tube well, or protected dug well as the water source		38%	70%	100%	50%	90%	80%	Half of BPs in Burundi reported no water, none of the BPs in South Sudan reported having piped water, all of the BPs in Rwanda reported having piped water
	Handwashing stations (count, how many percent functional)		28, 50%	35, 77%	28, 89%	5, 60%	32, 81%	52, 31%	Only Namanga BP (Kenya) and Elegu BP (Uganda) reported owning an incinerator, the Namanga incinerator was not being utilized
	BPs with good waste management (% responded with good or very good)		25%	20%	75%	50%	20%	30%	Mutukula BP (Uganda) reported not having waste management guidelines; there is a common need for incinerators within BP premises
	Did not experience PPE stockouts (past 2 months)		None (all experienced stockouts)	None	50%	None	60%	30%	Details on the availability of PPE per type (mask, gloves, and gowns) can be found in the regional analysis
	BPs with staff and users always practising mask-wearing		50%	50%	75%	None	50%	40%	Includes BP staff and users
Port Health	Port Health respondents		Burundi (n=8)	Kenya (n=10)	Rwanda (n=3)	South Sudan (n=1)	Tanzania (n=5)	Uganda (n=8)	Notes
	Isolation Rooms with adequate space and items		None	10%	67%	None	None	75%	Isolation rooms reported were mostly temporary holding rooms, not necessarily having proper quarantine functions such as ventilation, proper lighting, and bedding
	Port Health staffing	BPs with at least one nurse	100%	60%	100%	100%	20%	75%	
		at least one medical officer	75%	30%	33%	100%	20%	100%	
	Referral health facilities within 40 km		100%	100%	67%	100%	80%	13%	
	Adequate testing equipment for COVID-19		None	None	67%	None	80%	25%	Mutukula BP (Uganda) reported having a laboratory within BP premises


BP Infrastructure and System	RECDTS		None	90%	67%	None	None	88%	To know the percentage of truck drivers utilizing RECDTS, please refer to regional analysis
	Capacity for electronic submission of customs declaration documents		38%	60%	75%	50%	100%	70%	
	Power Source	Electrical Grid	63%	90%	100%	None	100%	70%	
		24-hr supply	50%	90%	100%	50%	100%	10%	Nimule BP (South Sudan) reported using a solar panel to generate electricity.
	Has backup generator	13%	90%	100%	None	90%	100%		
Community Awareness and Engagement	BPs conducting COVID-19 sensitization activities for cross-border traders		25%	80%	75%	50%	None	50%	
	IEC materials (COVID-19 prevention posters)		None in Kobero and Mugina BPs	100%	100%; fliers were also available	None in Nimule BP	None in Holili BP	100%; the need for translation to native languages	Issues on IEC materials include: availability, types, language, message
	Cross-border community members		Gaps in awareness identified	Generally aware of COVID-19, symptoms, and prevention; some gaps in the reliability of information sources identified	Sensitization activities implemented by the government; strict closures of borders have affected surrounding businesses	Generally aware of COVID-19 vaccination benefits	Gaps in the reliability of information sources identified; unproven COVID-19 prevention methods still exist	Lack of trust in efficacy and safety of vaccines, with low vaccine uptake; unproven COVID-19 prevention methods still exist	


Legend:


Indicative of areas needing improvement  Indicative of good practices

 At most 20% of the surveyed BPs reported 'presence'* of the indicator

 More than 20% but less than 50%

 At least 50% but less than 75%

 At least 75% but less than 100%

 All surveyed BPs reported the 'presence' of the indicator

* 'Presence' may be subjective (e.g., perceived adequacy, perceived capacity)

2.2.1 Key Findings from the Partner States

2.2.1.1 Burundi

National Policies

Following its first detected case in March 2020, the country restricted non-essential travel. Lockdown measures were only implemented in September 2020 and were strictly enforced. The Burundian government has required travellers to submit a negative test result within 72 hours before their departure. Since March 2020 all land and maritime border had closed except the movement of goods, the country reopened the Mugina BP in the southern province of Makamba, and the Kobero BP in the northern province of Muyinga, both with Tanzania, and Gatumba BP in Bujumbra Rural province with the Democratic Republic of the Congo in June 2021. The introduction of screening at the border was delayed, but the national response plan on COVID-19 was well implemented at various levels.

BP Administration and Coordination

Despite presence of inter-ministerial coordination and consultation through the National Committee on COVID-19, there is not enough inter-departmental coordination within the BP. Each department (mainly the Revenue Department and the Immigration Department) works independently. The work of Port Health mainly consists of taking body temperature and conducting rapid antigen tests; there is no public health officer and no counseling or awareness-raising activities are conducted.

BP Human Resource Management and Capacity development

About one-third of staff in the Kobero BP have been trained by the International Organization for Migration (IOM) in COVID-19 countermeasures. In other BPs, only 3 out of the 8 BPs interviewed, namely Gahumo, Gisuru, and Kabanga BPs reported having IPC training within one year, and participation was limited to a few representatives from each department. According to the results of the baseline survey, training was not done regularly, and the invitation of participants was limited. Psychological support systems were also unavailable in most (7 out of 8). Most BP staff reported that they live far away from the BPs and some may go home earlier or go to work late, resulting in shorter service times at the BPs.

IPC at BPs

The vast majority of the BPs did not have IPC guidelines or SOPs. There were handwashing stations at each BP, however, some were operational, while others were faulty or did not have water. There were no requirements to wear masks or to disinfect for trucks. Consequently, it was therefore observed that people were generally not conscious of physical distancing, wearing masks, and handwashing, as observed. Waste management was also a challenge, and cleaners were not located at the border. Toilets were unhygienic, as well as the environment in which they operate. There were PPE available in Kobero BP but are not supplied to border personnel, and as for the other BPs, there was a severe shortage.

Port Health at BPs

Among the challenges identified included: there was no functioning effective referral system and no laboratories on all the borders. Rapid antigen testing was only available in Mugina and Kobero BP. To address this, IOM has donated tents and containers for screening. Some BPs only check the body temperature using a non-contact thermometer without any examination or interview, so it cannot be said that proper screening is being done. Some equipment was available as part of the Ebola outbreak response. The screening room was devoid of equipment, and evidence-based information was insufficiently provided. No vehicles and ambulances were available. There is an isolation room in Kobero BP, but there were no physical distance guidelines.



Container (left), and a tent (right) donated by IOM for Port Health services, Mugina BP (Burundi)

Key informant interviews to assess Port Health at Burundi were conducted, where the interviewees had to rate themselves on a scale of 1 to 5. The interview was to assess the core capacities at BPs based on the IHR 2005. The following chart reveals their self-evaluation.

Table 5. Self-evaluation of BP Port Health in Burundi

Core capacity requirements for BPs	1	2	3	4	5
Ability and capacity to provide appropriate medical service including diagnostic facilities located so as to allow the prompt assessment and care of ill travellers		X			
Have adequate staff, equipment, and premises for infectious diseases detection, surveillance, and response at the BPs		X			
Access to equipment and personnel for the transport of ill travellers to an appropriate medical facility	X				
Adequate and well-trained personnel for the inspection of conveyances		X			
Adequate potable water supplies at the BPs	X				
Adequate Public washrooms for cross-border travellers	X				
Eating establishments/catering services for cross-border travellers	X				
Appropriate solid and liquid waste disposal services	X				
Adequate personnel for the control of vectors and reservoirs in and near PoE.	X				
Well established and maintained public health emergency contingency plan and a coordination team				X	
Appropriate space, separate from other travellers, for interviewing a suspect or affected persons				X	
Functional linkages with local medical and veterinary facilities for the isolation, treatment, and other support services that may be required for suspected travellers or animals	X				
Functional linkages with facilities away from the PoE for assessment and if need be quarantine of suspect travellers		X			
Adequate capacity to apply recommended measures to disinsect, derat, disinfect, decontaminate, or otherwise treat baggage, cargo, containers, conveyances, goods, or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose	X				
Access to appropriate PPE for handling of suspect cases				X	

BP Infrastructure and System

Ventilation (within containers), water supply, and electricity were problematic. Only Kobero BP had access to electricity, while some may have a solar or generator, but still would not have electricity for days. Wi-Fi is not available.

Community Awareness and Engagement

There were audio messages to spread to the public in Mugina BP, but these messages need to be strengthened and tailored to local needs. There were no awareness activities around the borders for people who live and work around the vicinity. None of the 15 community respondents from Burundi strongly agreed with the question ‘I have control over whether I will get COVID-19.’ There was an evident lack of awareness in COVID-19 in the surrounding community.

2.2.1.2 Kenya

National Policies

The government of Kenya has developed national guidelines for managing the COVID-19 after the identification of its first case in March 2020. Along with this, curfews were enforced, movement in and out of cities with high transmission rates was restricted, working places and schools were closed, public gatherings were prohibited, and hand hygiene and wearing of masks were promoted. Except for the movement of essential goods (food, water, medical supplies) and services (COVID-19 response related officials), the airports, sea ports, and land BPs were closed. With regards to crossing BPs, truck drivers with passengers must have a certification that they are COVID-19 free. For the baseline survey, Busia, Malaba, Namanga, and Holili BPs were physically inspected, and the others were interviewed via telephone.

BP Administration and Coordination

Each BP in Kenya reported having a Border Management Committee (BMC) which makes important decisions regarding the overall management of BP, including COVID-19 related plans. The BMC coordinates with various government departments such as immigration, customs, Port Health, national security/intelligence (including the police). The BMC is commonly chaired by the head of customs and consists of representatives from the departments abovementioned.

The requirement for the COVID-19 certificate for travellers crossing BPs in Kenya has complicated the clearance time during transit. Although COVID-19 testing at the Kenyan side of the BPs was reported to be free, complicated transits have occurred in many cases due to prohibitive testing costs in some countries such as Tanzania and Uganda, where it was reported that passengers move to Kenya illegally for testing before going back to be cleared.

A national meeting among all BP health officials was held in Kenya to develop guidelines for COVID-19 identification, prevention, and management of various BPs.

BP Human Resource Management and Capacity development

OSBPs supporting higher volumes of traffic such as Namanga, Busia, and Malaba have each received about 8 sessions of COVID-19 training supported by donors such as IOM, the Africa Medical and Research Foundation (AMREF), and the EAC. However, less busy and more remote BPs have not received such training for countering the transmission of COVID-19 across these borders.

IPC at BPs

Handwashing stations were available in relatively bigger and busier BPs. In smaller BPs, they were however insufficient, non-functional, or non-existent. It was reported that cleaning staff in BPs in Kenya

are usually outsourced, and IPC training for the cleaners has not been conducted in the BP.

Port Health at BPs

In Kenyan BPs, Port Health have been established before the COVID-19 pandemic except for relatively new BPs such as Lwakhakha and Suam BPs. Their main task is to prevent infectious disease transmission into Kenya. Port Health in each BPs in Kenya has been under the management of the MoH, although the BP facilities are managed by the Kenya Revenue Authority (KRA). Therefore, Port Health must report directly to the MoH in case a person with COVID-19 has been detected at the border.

There was a shortage of relevant staff and infrastructure to support effective case detection, management, and clearance of COVID-19-related protocols at the BPs. To address this, the World Bank has offered short-term contracts for laboratory and public health personnel. As for mental wellness, all BPs in Kenya reported lacking a psychosocial support consultation system.

In addition, not all BPs were found to have health facilities within their premises, so they have been likely dependent on a dispensary, sub-county, or county referral hospital. In case there is a need to refer a patient, BPs rely heavily on ambulances owned by these facilities. With regards to COVID-19 screening, BPs reported the capacity to conduct rapid antigen tests. For Polymerase Chain Reaction (PCR) testing, BPs reported having sample collection points, and the samples are transported to the main laboratory which can be hundreds of kilometres away. For example, samples from Isebania BP were transported to the Kenya Medical Research Institute (KEMRI)-Kisumu laboratory which is approximately 200 km away. Namanga BP, is an exception, as it reported having a mobile COVID-19 testing laboratory within their premises which can release results within the day.

Key informant interviews to assess core capacities at BPs based on the IHR 2005 were conducted, where the interviewees from the national government rated on a scale of 1 to 5. The following chart reveals the results of self-evaluation in Kenya.

Table 6. Self-evaluation of BP Port Health in Kenya

Core capacity requirements for BPs	1	2	3	4	5
Ability and capacity to provide appropriate medical service including diagnostic facilities located to allow the prompt assessment and care of ill travellers			X		
Have adequate staff, equipment, and premises for infectious diseases detection, surveillance, and response at the BPs			X		
Access to equipment and personnel for the transport of ill travellers to an appropriate medical facility			X		
Adequate and well-trained personnel for the inspection of conveyances			X		
Adequate potable water supplies at the BPs		X			
Adequate Public washrooms for cross-border travellers		X			
Eating establishments/catering services for cross-border travellers			X		
Appropriate solid and liquid waste disposal services		X			
Adequate personnel for the control of vectors and reservoirs in and near PoE.		X			
Well established and maintained public health emergency contingency plan and a coordination team			X		
Appropriate space, separate from other travellers, for interviewing a suspect or affected persons		X			
Functional linkages with local medical and veterinary facilities for the isolation, treatment, and other support services that may be required for suspected travellers or animals			X		
Functional linkages with facilities away from the PoE for assessment and if need be quarantine of suspect travellers			X		
Adequate capacity to apply recommended measures to disinsect, derat disinfect, decontaminate, or otherwise treat baggage, cargo, containers, conveyances, goods, or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose			X		
Access to appropriate PPE for handling of suspect cases		X			

BP Infrastructure and System

Most BPs did not have Information and Communication Technology (ICT) departments and ICT infrastructure for internet/Wi-Fi to support the staff and the customers.

Community Awareness and Engagement

Based on the community questionnaires, the majority of the residents in Kenya notice that only 5 out of 10 people follow physical distancing and wear masks in public. When asked about what they can recommend to the BPs in order to improve their COVID-19 prevention services, approximately 40% of them suggested the provision of masks or hand sanitisers for the community including drivers. Approximately 10% (10 out of 106) of the community members interviewed in Kenya have received a vaccination. Almost all of the respondents believed that COVID-19 can become a serious disease if they get infected. In general, community members believed that sufficient education is necessary, especially in the surrounding communities, and constant reminders for IPC such as wearing masks and maintaining physical distancing may be beneficial for the community.

Regarding information travel restrictions and border control measures, approximately 20% of the community members reported that they gather information via word-of-mouth, which may end up causing confusion at BPs when this information is unreliable or not updated.

2.2.1.3 Rwanda

Throughout the pandemic, the government of Rwanda has had strict rules, including various lockdowns which were imposed in March 2020, January 2021, and July 2021. Land borders only allowed passage for cargos and returning residents. With Uganda Kagitumba BP was the only land border to allow cargos as the other two borders were closed even before the COVID-19 pandemic due to political tensions. Therefore, traffic is concentrated in Kagitumba BP and Rusumo BP, which are the only borders with Tanzania. An exception can be seen in the border between the Democratic Republic of Congo, a non-EAC Partner State, as communities near the border were allowed to move across and conduct business. For the baseline survey, traffic-heavy BPs, namely Kagitumba and Rusumo, were physically inspected.

National Policies

The national response plan for COVID-19 in Rwanda has been disseminated to all BPs within the country. The Rwanda Biomedical Centre (RBC) has been in charge of the development and implementation of prevention measures, as well as the deployment of staff for testing and training. On a Likert scale of 1 to 5, a key informant performed a self-evaluation of how well the National Task force has met the requirements across all BPs in Rwanda based on the Key Interventions for EAC COVID-19 Response Plan. The following shows the self-evaluation score:

Table 7. Self-evaluation of BP National Task Force towards Response to COVID-19 in Rwanda

Target Action	1	2	3	4	5
Appropriate Risk Communication and BP Communities engagement on COVID-19				X	
Adequate access to IPC materials for BPs				X	
Adequate access to laboratory supplies and equipment			X		
Adequate capacity for COVID-19 surveillance and reporting at all key BPs				X	
Regional coordination of COVID-19 response				X	
Research and Development			X		
Resource's mobilization				X	

The key informant explained the key factors to achieving a 3 or higher among the above items. The reasons were as follows:

- The willingness of the Rwanda Government authorities to deal with the COVID-19 pandemic and protect its population
- Elaboration and approval of COVID-19 Strategic Response plan
- Availability of possible funds to support the Contingency plan
- Construction of WASH infrastructures composed of handwashing facilities, screening, and holding rooms, public toilets at 26 out of 31 BPs
- Installation of eleven (11) Thermal Imaging cameras at various PoE for COVID-19 fever screening
- Capacity-building of Health Care Workers (HCWs) for the operationalization of these infrastructures and assistance to travellers for IPC behavioural change (handwashing, use of face masks, physical

distancing, etc.)

- Decentralization of COVID-19 Joint Task Force up to District Level composed of all stakeholders
- Establishment of IPC team at each BP for the disinfection of all vehicles entering or exiting the country
- Initiation of quarantine sites, testing sites, treatment centres and home-based care systems
- Community Engagement to support the Government instructions and recommendations

BP Administration and Coordination

Every BP reported to having a committee that consists of representatives from immigration, customs, health, and security; the border manager, who is also the head of immigration at the BP, is the head of the BP. Land BP traffic, dictated by the overall number of cargo trucks, has reduced by 50% compared to the previous years (2019 and 2020). Per vehicle passing through the BP, there was a restriction of 2 persons at a time (this includes the truck driver). Restaurants exclusive for passengers were set up as a distancing measure to prevent transmissions between persons crossing and the BP personnel as well as community members.



Make-shift Restaurant for Cargo Track Drivers at Rusumo BP (Rwanda)

BP Human Resource Management and Capacity development

All BP staff reported that they have received training, thrice on average, on COVID-19 prevention. The RBC conducts reinforces the BPs with staff who can conduct COVID-19 testing; these staff are deployed on temporary contracts supported by partners such as TradeMark East Africa. To address the increase in traffic passing through certain BPs including Rusumo, borders have operated 24/7, and staff has been divided into two shifts. A trained senior staff who can provide mental health support for the BP staff was present in some BPs such as Rusumo BP.

IPC at BPs

SOPs and guidelines on COVID-19 prevention are provided at BPs. Training on IPC, including the usage of PPE, has been conducted on relevant staff. PPE procured at the central level by the MoH or by RBC, are available at all BPs. Water was also available at all BPs, and adequate handwashing stations were placed,

however, not every handwashing station had soaps. Trucks are disinfected at the BPs. The cleaning staff was also trained and they have SOPs to follow.

Port Health at BPs

On average, BPs had 6 HCWs. Costs for the staff and supplies were covered by the RBC at the central level. Every person passing through Rusumo and Kagitumba BPs was screened by a rapid antigen screening test. In Kagitumba, when passengers have a positive antigen test result, they were referred to the Nyagatare District Hospital for PCR testing. In Rusumo, passengers who want to update their digital negative certificate in the Regional Electronic Cargo and Driver Tracking System (RECDTS) may request a PCR test for free. However, BPs did not have laboratories, so in the case of PCR tests, samples were only be obtained and must be transported to the national laboratory in Kigali. For people positive for COVID-19, there were isolation rooms at the BPs where they can stay before admittance to a hospital. Dedicated vehicles or ambulances were used to transfer people who have COVID-19 to hospitals. Drivers sense adequacy on screening at BPs, as a majority (more than 47 out of 53 drivers) rated the pre-screening procedures, as well as the COVID-19 test procedures to be ‘very good’.

BP Infrastructure and System

In principle, the RECDTS is introduced at all BPs, and this is integrated with the National COVID-19 Results System. However, this can only be utilized by those who have smartphones. Power supply and standby generators were also present at BPs in case of power outages. As COVID-19 testing spaces were improvised, inadequate space may be causing the lack of physical distancing among cargo truck drivers, returnees and Port Health staff. Thermal cameras were installed and monitor the temperature of all people entering the border.

Community Awareness and Engagement

Physical distancing was not observed at all times, especially by cargo truck drivers and passengers. For communities around the border, sensitization towards COVID-19 prevention measures has been implemented by the government. The reduction in overall traffic in some BPs, or closure of some BPs, has caused a great impact on the surrounding businesses.

2.2.1.4 South Sudan

For the baseline survey, Nimule BP was physically inspected, Kaya BP was interviewed via telephone.

National Policies

Lockdowns such as school closures, non-essential workplace closures, and banning of arrivals from some regions were enforced in March 2021 after reaching peak infection rates in February 2021.

BP Administration and Coordination

BP managers interviewed were either the Chief of Migration or the Chief of Customs in Kaya and Nimule BPs. The majority of the passengers in the Nimule BP were Kenyans or Ugandans transporting agriculture products and foodstuff to either Nimule or Juba. Both BPs mentioned that they have coordination mechanisms to address COVID-19. Upon interviewing the managers at the BPs in Nimule and Kaya, they admitted to not having any type of contingency plan in the case of overwork, and mental health consultation systems do not exist.

Human Resource Management and Capacity development at the BPs

In Kaya BP, they reported not having restrictions regarding their opening times ever since the COVID-19 pandemic. The findings show that no staff members among the two BPs have received any training on IPC within the last year.

IPC at the BPs

SOPs on handwashing, wearing of masks, and physical distancing were present at BPs according to the managers at Nimule and Kaya. However, the staff have not received training on IPC within the last year. According to the BP managers, in Nimule, SOPs were poorly implemented, as opposed to in Kaya BP. The cleaning staff were highly unlikely trained on IPC procedures, as there was inadequate cleaning equipment. Waste management also seemed to be an issue at Nimule BP. PPE was also insufficient, and if there were any, only face masks were available. Guidelines on who should and how to wear PPE were only available at Kaya.

The main source of water was the tube well/borehole and natural surface water (rivers, ponds, etc). There were two handwashing stations at the BP that were both non-functional. The following were the responses from BP staff regarding how they rated the IPC situation at Nimule and Kaya BPs.

Table 8. Self-evaluation of IPC and Implementation in South Sudan BPs

Item	Nimule BP	Kaya BP
How would rate the implementation of SOPs on IPC in this BP?	Poor	Good
How adequate is the current training/capacity level on IPC for the staff?	Inadequate	Somewhat adequate
How adequate is the current training/capacity level on IPC for the cleaning staff?	Very inadequate	Somewhat inadequate
How adequate is the supply of facemasks in this BP for IPC?	Very inadequate	Inadequate
How adequate is the supply of hand gloves in this BP for IPC?	Very inadequate	Inadequate
How adequate is the supply of full PPE gear in this BP for IPC?	Very inadequate	Very inadequate
Are there adequate cleaning equipment?	No	No
Are there SOPs related to cleaning regimes?	No	No
Do you think there are unmet training needs for the cleaning staff?	Yes	Yes
Have you ever experienced any stock-outs or shortages of the supply of PPE in the past two months?	Yes	Yes
Are there mental health/psychological support systems for the frontline staff during the COVID-19 pandemic?	No	No

Port Health at BPs

The Nimule BP health staff was comprised of 16 laboratory technologists, 2 public health officers, 2 nurses, and 1 clinical officer. The Port Health was rated ‘good’ for both pre-screening procedures (self-reporting, observation, and temperature assessment) and testing procedures (taking specimens for COVID-19) by more than half (12 out of 20) truck drivers’ interviewees at Nimule BP. Port Health managers emphasized the need for capacity-building training regarding IPC, and support for supplies of PPE at both BPs.

BP Infrastructure and System

It was mentioned that there is not enough space in Nimule BP to accommodate other departments. As for power supply, Nimule reported having a solar power system. Kaya BP reported having a generator that works during the daytime. Wi-Fi was also not available for customers on the premises.

Responding to the high demand for testing in Nimule as a result of the high volume of cross-border movement, a mobile laboratory was established in Nimule Hospital with the support of EAC and other partners. However, temporary holding rooms or isolation rooms were not available for people who are presumptive for COVID-19. It was mentioned by some of the respondents that Kaya BP was not operating at its normal capacity.

Community awareness and Engagement

Interviews with a total of 20 truck drivers in Nimule BP revealed that all of the truck drivers have previously taken a COVID-19 test in either Uganda or Kenya and the majority of them (80% of the 20 truck drivers) mentioned that they prefer taking it in a government facility than a private facility. Two out of 20 truck drivers at Nimule BP have mentioned that they have were not aware of RECDTS. A majority of them mentioned that they acquire information on travel restrictions and border control measures through the radio and television.

An additional 20 community members were interviewed at Nimule BP. At the time of the baseline survey, all of them have not yet received the COVID-19 vaccine, however, a majority (15 out of 20) said that they would definitely take it if it were available.

2.2.1.5 Tanzania

For the baseline survey, Rusumo, Kabanga, Namanga, and Holili BPs, were physically inspected, and Sirari, Horohoro, Manyovu, Murongo, Tarakea, and Mutukula BPs were interviewed via telephone.

National Policies

Tanzania, since the onset of the COVID-19 pandemic, did not impose lockdown regulations in 2020. In 2021, school closures were finally enforced after peak infection rates earlier in the year. Most Tanzanian BPs have also not set curfew or closing restrictions for the prevention of COVID-19 transmission during the time of the baseline survey, except for Rusumo and Holili BPs, which had restrictions on their opening hours.

In April 2020, Tanzania released a national COVID-19 guideline for the provision of IPC measures, and awareness towards COVID-19 among the general population, HCWs, and community and religious leaders. The country had ongoing initiatives on proper screening, inspection, testing, risk communication, IPC, vaccination, emergency response, and application of various public health measures under the IHR 2005 for travellers, cargoes, and vector control at BPs. At the country level, joint implementation of public health emergency contingency plans and joint resource mobilization involving different ministries, departments, and agencies were implemented. At the regional level, COVID-19 countermeasure policies and regulations were harmonised across EAC, however, they are not fully operationalized.

BP Administration and Coordination

BPs in Tanzania have coordination platforms with representatives from the MoH, Ministry of Finance, and Ministry of Home Affairs; they run cost-sharing schemes for Port Health Services. Cargo and passenger traffic through the BPs have reduced, as there have been restrictions on BPs in other countries. Tanzania has not imposed any restrictions or changes on BPs, except for COVID-19 testing.

BP Human Resource Management and Capacity development

Training on IPC and sensitization have been conducted at BPs in Tanzania, however, topics such as pandemic preparedness and response, simulation exercises, COVID-19 testing, digital surveillance, risk communication were not covered. In addition, Tanzania was experiencing a shortage of staff and equipment at some BPs. Not limited to BPs, the country did not have psychological support systems for the frontline staff for the COVID-19 pandemic.

IPC at BPs

IPC guidelines and SOPs for BPs were developed by the country; however, the implementation was questionable. A majority (78%) of the BPs interviewed admitted to having no guidelines/SOPs for who

should use them, and how to use them. Physical barriers as a mechanism to prevent the spread of aerosols were not present. Tanzania BPs did have temperature scanners. Softwares for digitalization of data for traveller surveillance have been installed for easier follow-ups. Piped water supply was available at most (80%) BPs, and the supplies are within a 5 km range. Truck disinfection was only observed in Kabanga and Namanga BPs. Handwashing stations were also available in BPs; however, a few were faulty. With PPE supply, 56% of Tanzanian BPs mentioned they have experienced stock-outs. As for IPC training, sessions have been conducted through the Government and international partners such as the Centers for Disease Control and Prevention (CDC), Global Health Security Agenda, United Nations Children’s Fund, and IOM. In addition, waste management in Tanzanian BPs seems problematic as there were no guidelines.

Port Health at BP

A significant regional gap was identified using Tanzania as an example. Tanzania had the most expensive price for PCR testing at the border among the other EAC Partner States. In addition, passengers using the BPs mentioned that there was a necessity to be informed about COVID-19 screening procedures and clearance. According to the core capacity requirement scale questionnaire, the following were deduced regarding the Port Health at Tanzania BPs: (1) There was insufficient interviewing of people who are presumptive for COVID-19, (2) functional linkage with local medical facilities for isolation and treatment were lacking, (3) disinfection measures for trucks, baggage, conveyances, and other goods seemed inadequate, (4) PPE when handling or facing people who are presumptive for COVID-19 were not accessible.

As for testing, BPs had temporary laboratories where rapid antigen tests were performed, and the price was approximately USD 25. However, some reported the priced reached about USD 100.

Key informant interviews to assess core capacities at BPs based on the IHR 2005 were conducted, where the interviewees had to rate themselves on a scale of 1 to 5. The following chart reveals the results of the self-evaluation for Tanzania.

Table 9. Self-evaluation of BP Port Health in Tanzania

Core capacity requirements for BPs	1	2	3	4	5
Ability and capacity to provide appropriate medical service including diagnostic facilities located to allow the prompt assessment and care of ill travellers			X		
Have adequate staff, equipment, and premises for infectious diseases detection, surveillance and response at the BPs		X			
Access to equipment and personnel for the transport of ill travellers to an appropriate medical facility		X			
Adequate and well-trained personnel for the inspection of conveyances		X			
Adequate potable water supplies at the BPs		X			
Adequate Public washrooms for cross-border travellers		X			
Eating establishments/catering services for cross-border travellers		X			
Appropriate solid and liquid waste disposal services		X			
Adequate personnel for the control of vectors and reservoirs in and near PoE.		X			
Well established and maintained public health emergency contingency plan and a coordination team			X		
Appropriate space, separate from other travellers, for interviewing a suspect or affected persons	X				
Functional linkages with local medical and veterinary facilities for the isolation, treatment, and other support services that may be required for suspected travellers or animals			X		
Functional linkages with facilities away from the PoE for assessment and if need be quarantine of suspect travellers			X		
Adequate capacity to apply recommended measures to disinsect, derat, disinfect, decontaminate, or otherwise treat baggage, cargo, containers, conveyances, goods, or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose		X			
Access to appropriate PPE for handling of suspect cases			X		

BP Infrastructure and System

At some BPs, space to accommodate offices seems to be insufficient, with some BPs originally did not have provisions for Port Health when they were being designed. It can be deduced that sample collection spaces, and isolation rooms are likely to be insufficient if not non-sufficient. There are however waiting rooms for passengers, except for Holili and Kabanga BPs. Overall space limitations also restrict proper physical distancing among passengers using the BP. BPs have a stable power supply from the national grid.

Community Awareness and Engagement

IEC materials in Swahili were available, except for Holili BP, and these were deemed ‘appropriate’ in terms of visual and word balance. A majority of community members including truck drivers regarded radio and television as their primary source of information, while about 29% uses social media as the source of COVID-19 information. That being said, almost 40% of the community members said that they normally acquired information on travel restrictions and border control measures solely from word-of-mouth, despite stricter rules in border crossing at the opposite side. When asked the question, ‘how serious would it be if you became infected with COVID-19’ more than half of the community members responded ‘not at all serious. Some (15%) of Tanzanian respondents believed that the only measure they have taken to prevent COVID-19 within the past week was ‘eating garlic, ginger, or lemon’.

2.2.1.6 Uganda

The first case of COVID-19 in Uganda was confirmed on 21st March 2020. During the first wave, Uganda was reviewed as ‘successful’ in suppressing further community transmission by the Lancet, considering it is considered a low-income country. This success is being attributed possibly to the enforcement of stringent measures and Uganda’s experience in controlling the AIDS epidemic.⁸ In addition, deaths during the first wave were low at less than one per million.

For the baseline survey, Mutukula, Mirama Hills, Malaba, and Rusumo BPs, were physically inspected, and Elegu, Oraba, Suam River, Katuna, Lwakhakha, and Kikigati BPs were interviewed via telephone.

National Policies

During the spread of COVID-19 in Uganda, a National COVID-19 Task Force was created and is supplemented with other sub-committees including the Scientific Committee (ensures that sound decisions based on evidence are made), the Technical Inter-sectoral Committee (ensures the cohesion, adherence, and enforcement of the government decisions), and the COVID-19 Fund Taskforce (ensures mobilization of resources from the population and contributes resources to respond to the pandemic). Their major objective is to ensure that all people in Uganda are aware, empowered and were participating actively in the prevention and control of COVID-19, both as a duty and a right.

Uganda, during its second wave of COVID-19 imposed restrictions on social life such as imposing physical distancing, and restrictions on travel, social gatherings including weddings, funerals, and religious gatherings. Academic institutions were closed and schools fully reopened physical classes only in January 2022. These precautionary measures are presidential directives. Curfew hours were from 6:00 PM to 6:00 AM for Boda-boda riders, and from 9:00 PM to 6:00 AM for all other individuals. As for BP closures, Kagitumba BP, which is the Rwanda side of Mirama Hills BP has been closed since March 2020, except for cargoes and returning residents; that being said, Port Health services are functional on both sides. The Katuna BP has also been closed, except for diplomat passengers.

BP Administration and Coordination

At Ugandan BPs, each institution, namely Immigration, Customs, Port Health, and the Uganda National Bureau of Standards are separate entities, however, the Uganda Revenue Authority (URA) acts as the mother body overseeing sanitation, and infrastructure utility (water and electricity) status.

BP Human Resource Management and Capacity development

In 2020, various capacity-building activities by IOM, JICA, EAC, the World Food Program, MoH Uganda,

⁸ Jeffrey D Sachs, et al., “Lancet COVID-19 Commission Statement on the Occasion of the 75th Session of the UN General Assembly”, *The Lancet*, vol. 396, no. 10257, (Sept 2020): 1107, 1110.

AMREF, Red Cross, the URA, TradeMark East Africa have been conducted during the initial phase of COVID-19. Malaba BP has received training from JICA. Mental health support systems for staff were reported to be available in 2 out of 10 BPs in Uganda.

IPC at BPs

Since piped water supply is problematic at the BPs, portable handwashing stations provided by IOM can be seen at some BPs. With this being said, some of them are faulty, non-functional, or not being utilized. Disinfection of trucks in Uganda is not practised. In general, mask usage of BP staff, Port Health staff, the community including vendors and passengers, is problematic as well. Some mask users also only wear them upon hearing somebody cough or sneeze or are improperly wearing them. In addition, the cleaning staff at Mutukula BPs do not utilize PPE.

Waste management seems to be a challenge at some BPs such as in Malaba and Mutukula BPs, where there is heavy reliance on burning waste without proper incinerators. In Elegu BP, in contrast, they have a working garbage incinerator constructed by TradeMark East Africa.

Port Health at BPs

Port Health situation per BP in Uganda was diverse. In Mutukula BP, isolation rooms were non-functional; the female isolation room was converted into a tea room, and the male isolation rooms were unhygienic. As for PPE donning, only about half of the BP staff at the Port Health was observed to be wearing masks, and the cleaning staff did not have PPE. In Malaba BP, hand gloves and face masks were available, however, compliance to wearing these PPE was also questionable. As for COVID-19 testing, the turnover time for results was reported at 4 hours. Biometric thermometers were available but were non-functional. In Elegu BP, COVID-19 testing was approximate at 180,000 Uganda Shillings (USD 50), according to the truck drivers that came from Uganda and passed through Elegu towards Nimule BP (South Sudan). In Cyanika BP, an isolation room was available, however, there were no refrigerators to keep samples at recommended temperatures before testing at Kisoro Hospital. In addition, samples taken on Fridays are subject to testing on the following Monday. As for transferring samples, fuel remains to be a problem. In Mirama Hills BP, a private testing lab was launched by the MoH Officials, however, the turnover time for COVID-19 testing results is lengthy at an average of 3 to 5 days, and significantly slower compared to Malaba BP. In addition, costs for testing were perceived as 'high' by the truck drivers. Temperature monitoring of passengers also seems to be problematic, as only those who physically show symptoms such as coughing are checked. Similar to Malaba BP, biometric thermometers were installed but were non-functional. In Busia BP, there was inadequacy in the supply of PPE. Similar to Malaba and Mirama Hills BPs, the facial biometric thermometer is non-functional. There is an ambulance to transfer people who have COVID-19 to Mbale hospital, however, procuring fuel seems to be a problem similar to the situation in Cyanika, and the staff result to using the Boda. In Busia, COVID-19 testing results from the Kenya side were accepted at the

Uganda side and joint meetings are convened at both sides. Based on telephonic interviews at the Oraba BP and Suam River BP, Port Health services do not seem to exist.

Key informant interviews to assess core capacities at BPs based on the IHR 2005 were conducted, where the interviewees had to rate themselves on a scale of 1 to 5. The following chart reveals the results of self-evaluation in Uganda.

Table 10. Self-evaluation of BP Port Health in Uganda

Core capacity requirements for BPs	1	2	3	4	5
Ability and capacity to provide appropriate medical service including diagnostic facilities located to allow the prompt assessment and care of ill travellers			X		
Have adequate staff, equipment, and premises for infectious diseases detection, surveillance, and response at the BPs		X			
Access to equipment and personnel for the transport of ill travellers to an appropriate medical facility			X		
Adequate and well-trained personnel for the inspection of conveyances			X		
Adequate potable water supplies at the BPs			X		
Adequate Public washrooms for cross-border travellers			X		
Eating establishments/catering services for cross-border travellers			X		
Appropriate solid and liquid waste disposal services			X		
Adequate personnel for the control of vectors and reservoirs in and near PoE.					
Well established and maintained public health emergency contingency plan and a coordination team			X		
Appropriate space, separate from other travellers, for interviewing a suspect or affected persons			X		
Functional linkages with local medical and veterinary facilities for the isolation, treatment, and other support services that may be required for suspected travellers or animals		X			
Functional linkages with facilities away from the PoE for assessment and if need be quarantine of suspect travellers		X			
Adequate capacity to apply recommended measures to disinsect, derat, disinfect decontaminate, or otherwise treat baggage, cargo, containers, conveyances, goods, or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose			X		
Access to appropriate PPE for handling of suspect cases			X		

BP Infrastructure and System

Piped water at the BPs in Uganda seems to be scarce, if not unavailable. As for electricity, it is also quite unstable at most BPs; the Lwakhakha BP reported having no electricity four times a week. As a consequence, public Wi-Fi to access the RECDTS online system is not available, except for Mutukula BP.

Community Awareness and Engagement

In most BPs, as previously mentioned, compliance with COVID-19 prevention guidelines such as wearing masks among the community was quite problematic, except in Elegu BP. The majority of the people visiting Elegu BP were wearing masks, however, they strongly believed COVID-19 does not exist. This is not unique to Elegu BP as other communities continue to have doubts about the reality of COVID-19. For example, in Cyanika BP, the community in Kosoro believed that COVID-19 does not exist as they have not witnessed anyone with COVID-19. In Mirama Hills BP, ambulances used to transport people who have COVID-19 were withdrawn by the MoH, which led the surrounding community to believe that COVID-19 no longer exists in the area anymore. Some community members strongly believed that the local brew,

locally known as “Waragi”, is a cure or protective measure from COVID-19.

As for IEC, materials were distributed in some BPs such as Cyanika and Mirama Hills BPs, however, some of them seem to have a different language from what the target audience speaks (communities at Cyanika speak Kifumbira, but the text was in Kinyakore; communities in Mirama Hills commonly use Swahili, Runyankole, and Kinyarwanda, but the text was written in English). In addition, the readability of IEC materials can be improved, as some were either folded, or words were too congested.

Lack of trust in the effectiveness and safety of vaccines among members of the community in Uganda has affected vaccine uptake, despite its availability in various areas like Mirama Hills, where the uptake was reported to be 20% only.

2.2.2 Regional Analysis

2.2.2.1 National Policy

Under the theme of “National Policy”, this section mainly discusses the national plans and guidelines for COVID-19 compliance in the EAC region and regulations at the border. An analysis of a representative indicator, the recognition of BPs national plans in the region and in each Partner State, is shown in Table 11.

Table 11. Baseline Indicators for National Policy

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs with recognition of National COVID-19 Plan/Strategy*	88.6%	50%	100%	100%	100%	100%	90%

**% of BPs responded National COVID-19 Plan is available at BP*

Key Findings

- Most National Plans and Guidelines identify border areas as high-risk of spreading COVID-19
- The majority of BPs have national plans and are recognized as guiding documents for their COVID-19 response
- Most of the borders remained opened for trans-border truck drivers who were recognized as essential service providers
- Inadequate testing capacity and double testing strategy at the beginning of the pandemic resulted in a long queue of trucks and also caused tension between the Partner States
- Unharmonised border screening protocols and capacities among the Partner States remains a challenge

National Plans and guidelines for COVID-19 Pandemic

According to the WHO COVID-19 Strategy update, every country needs to develop and implement a National Action Plan anchored on a society-wide approach and a realistic appraisal of their capacities to slow down and mitigate the spread of COVID-19 and reduce mortalities associated with it. The plans should be flexible and responsive enough to react promptly to the rapidly changing epidemiological contexts of the virus in the different parts of the country. The national COVID-19 strategy sets the basis for coordination, communication, community mobilization, and engagement with the affected and at-risk populations at the national and sub-national levels. It should also promote context-appropriate public health interventions and measures that reduce transmission and control sporadic cases while maintaining essential health services and protecting the health workers.⁹

⁹ WHO, *COVID-19 Strategy Update* (2020).

Each Partner State reacted differently to some extent towards the containment of COVID-19 which had significant implications on border management and coordinated responses to the pandemic. However, all Partner States, through their national plans and guidelines, identified those border areas and people who live or work there are at higher risk of contracting as well as spreading the COVID-19. For instance, Uganda’s COVID-19 Preparedness and Response Plan¹⁰ categorized 44 districts with high volume border crossing points and Greater Kampala as the most high-risk area followed by 54 districts along transit roads for cross-border cargo. It also pointed out that community transmission in neighbouring countries and porous borders is a threat to the country in terms of containing the virus. Rwanda’s COVID-19 National Preparedness and Response Plan¹¹ also set PoE as one of the strategic pillars for COVID-19 response by enhancing screening to ensure early detection, appropriate isolation, and timely response. The importance of cross-border collaboration, harmonizing information sharing and analysis with neighbouring countries was also highlighted in South Sudan’s National COVID-19 Response Plan.¹²

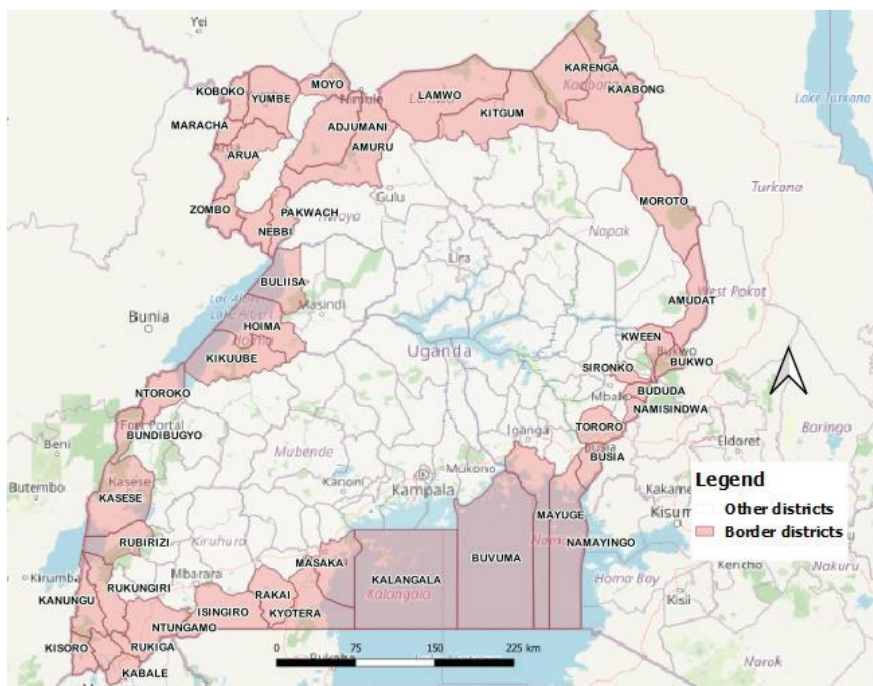


Figure 1. Map of Border Districts Identified as Most-At-Risk Area by Uganda’s COVID-19 Preparedness and Response Plan

Within the EAC, a total of 39 BPs (88.6%) had and recognized the national plan for handling the COVID-19 pandemic while 5 BPs (11.4%) did not have the crucial document. Most of the BPs without the National Action Plan were from Burundi.

¹⁰ Ministry of Health, Uganda, *Corona Virus Disease – 2019 (COVID-19) Preparedness and Response Plan* (2020).

¹¹ Ministry of Health, Rwanda, *Coronavirus Disease 2019, National Preparedness and Response Plan* (2020).

¹² Ministry of Health, South Sudan, *National COVID-19 Response Plan* (2020).

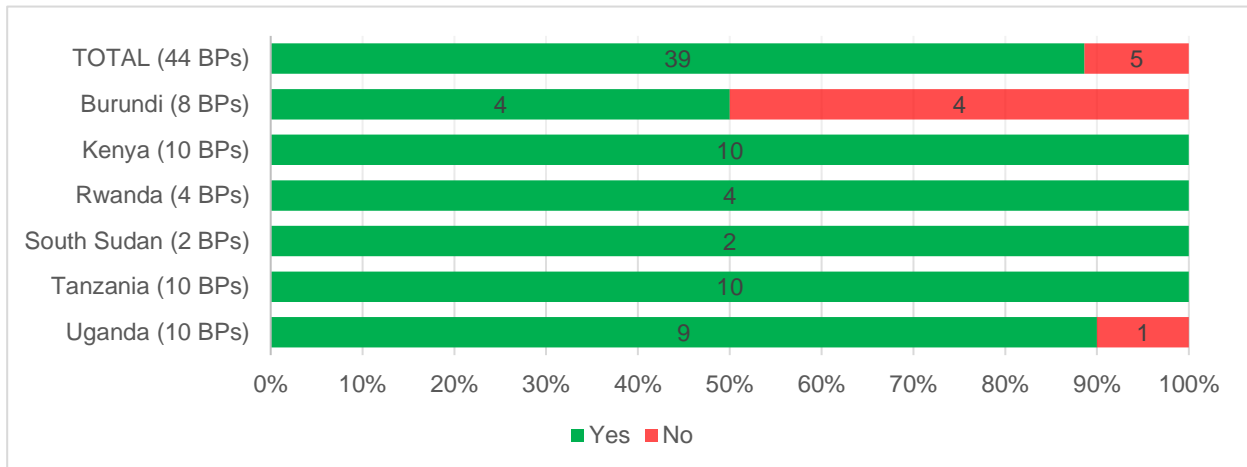


Figure 2. Recognition of National Plan for Handling COVID-19 Pandemic at BP

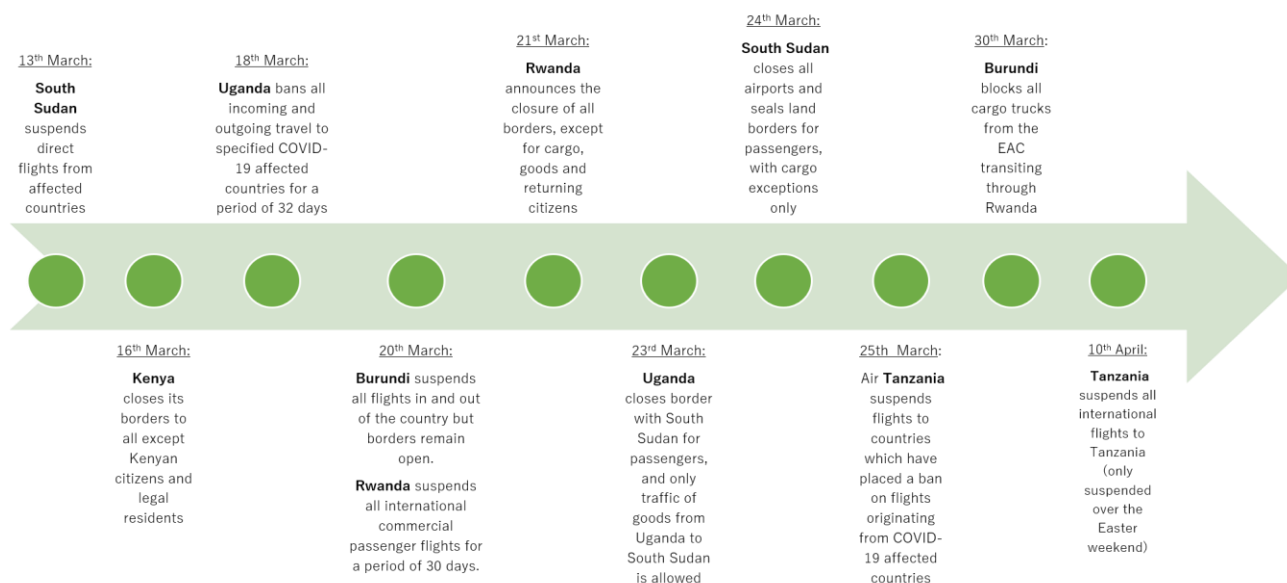
Border Restrictions and COVID-19 Pandemic

According to the IHR published in 2005, nations have a mandate to collectively address the global spread of diseases in a manner that reduces unnecessary restrictions and interference with international trade and traffic. Any travel restriction should; address public health risks, be grounded in science, consider human rights and be commensurate to the risks involved. However, strict or punitive travel restrictions may discourage countries from reporting emerging public health threats or new risks to the international public health authorities.¹³ Both the IHR and the WHO strongly recommend that the borders remain open and that states should mitigate the spread of the pandemic without interfering with trade, traffic and the livelihoods of those who depend on cross-border activities.¹⁴

Since the COVID-19 pandemic started, many countries have reasonably restricted movement within their borders to control the pandemic. Within the EAC, in the past year, most BPs had either partial or full restrictions but remained open for trans-border truck drivers who were recognized as essential service providers. However, inadequate testing capacity at the beginning of the pandemic and double testing strategy (driver tested at both sides of the border) resulted in a long queue of trucks and also caused tension between the Partner States. In order to minimize social interaction and close contact between truck drivers and communities, most countries have put in place measures to monitor and control the movement of trucks and requirements to stop only at designated places.

¹³ Roojin Habibi, et al., “Do not violate the International Health Regulations during the COVID-19 outbreak”, *The Lancet*, vol. 395, no. 10225, (Feb 2020): 664–666.

¹⁴ Adam Ferhani and Simon Rushton, “The International Health Regulations, COVID-19, and bordering practices: Who gets in, what gets out, and who gets rescued?”, *Contemporary Security Policy*, 41:3, (2020): 458–477.



Source: IOM Displacement Tracking Matrix as of 16 July 2020

Figure 3. Timeline of Border Restrictions by the EAC Partner States

Over the past years, several measures have been taken to keep trade moving safely and minimize the spread of the virus. Border screening has been an essential component of COVID-19 testing strategies in most Partner States and has made significant improvements with new technologies and government efforts with support from partners such as strengthening reference laboratories, deployment of mobile laboratories, the introduction of rapid antigen testing and implementation of RECDTS. Those measures made trade move smoothly compared to the beginning of the pandemic but were not implemented uniformly. Partial implementation of RECDTS (not all Partner States are implementing), different screening protocol by BPs (e.g. some BPs use random testing while others use mandatory testing for all travellers), ununiformed cost of testing (e.g. BPs in Kenya and Rwanda provide testing for free while Tanzania charges nearly USD 100 for a PCR test), different types of tests (e.g. Rwanda BPs uses antigen test for screening and PCR for confirmatory testing while BPs in Uganda use PCR for screening) which affects turnaround time, and different pre-screening format (Tanzania use online health surveillance for travellers even at BPs while Rwanda BPs use face-to-face interview) still make border crossing cumbersome for travellers especially truck drivers who often cross more than one border. Therefore, there has been increasing demand for harmonisation of screening protocol and measures for facilitating the free movement of people and goods for the region. Strengthening the network of medical reference laboratories and the regional rapid response mechanism would be the major priority as stated in the EAC Health Sector Investment Priority Framework 2018–2028.¹⁵

¹⁵ EAC Secretariat, *Health Sector Investment Priority Framework 2018–2028*, (2018): 10.

2.2.2.2 Regional Coordination and Standardization

Under the theme of “Regional Coordination and Standardization”, this section mainly focuses on the EAC’s COVID-19 compliance plan and coordination of customs procedures and border control. An analysis of a representative indicator, harmonization of customs procedures in the region and in each Partner State, is presented in Table 12.

Table 12. Baseline Indicator for Regional Coordination and Standardization

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BP with Harmonised Customs Systems, Procedures and Processes*	70.5%	75%	90%	100%	100%	100%	50%

*% of BPs responded “strongly agree” or “agree”

Key Findings

- Perception of the harmonisation of customs procedures within the EAC was favourable among BPs
- Good practice on joint coordination meeting at BPs between Kenya and Uganda
- Un-uniformed cost of tests at BPs

Regional Coordination and Standardization

In April 2020, the EAC Secretariat released the COVID-19 Response Plan to strengthen the countermeasures against infectious diseases and especially the COVID-19 pandemic within the region. The plan that was shared with all the Partner States further aimed at ensuring well-coordinated mechanisms for combating COVID-19 while facilitating the movement of goods and services, without risking the health conditions of the partner states.¹⁶ The plan proposed key interventions such as ensuring access to IPC materials, laboratory supplies and equipment, COVID-19 surveillance capacities, knowledge on existing control strategies and mitigation of the adverse impacts of the pandemic on the economy among others.

At the BPs, the Team sought to find out the current perceptions on the coordination capacities at the customs department to ensure smooth movement of goods within the region. The perception of the harmonisation of procedures within the EAC was favourable with 70.5% (31 BPs) of the respondents agreeing or strongly agreeing that harmonisation of customs systems was good. 11.4% were neutral while 18.2% disagreed or strongly disagreed.

¹⁶ EAC Secretariat. 2020. COVID-19 Response Plan

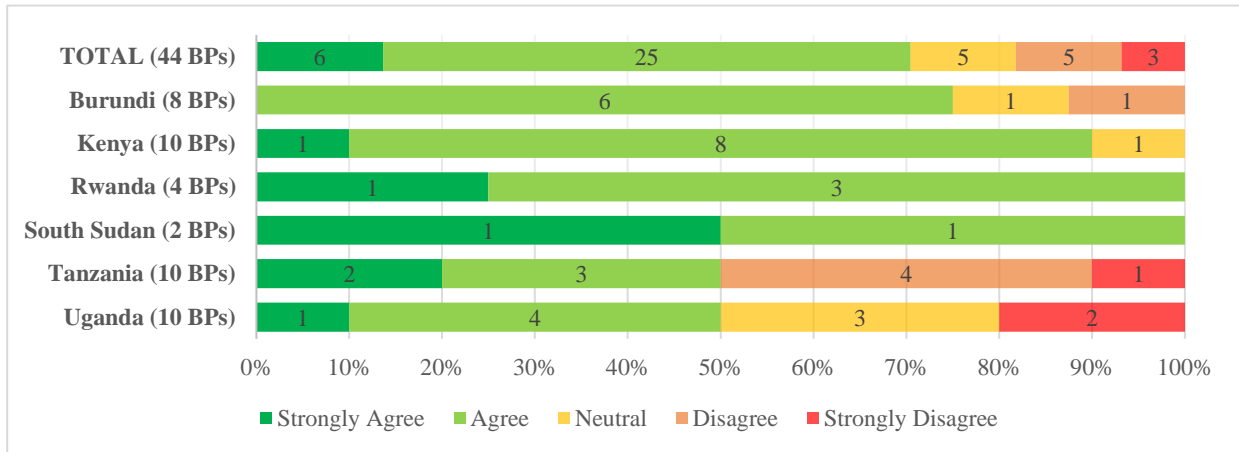


Figure 4. BPs with Harmonised Customs Systems, Procedures and Processes to Allow Smooth Movement of Goods and Services During the COVID-19 Pandemic

The BPs that agreed and strongly agreed to use the EAC regional Electronic Single Window platform that they claim has made coordination easy and expedited the cargo clearing process. The BPs that strongly disagreed cited poor network, slow processing of documents on the neighbouring side and differing COVID-19 policies between states as the main challenges.

Joint Border Management Coordinating Committees (JBMCC)

The BPs have joint BMCs chaired by the heads of each BP from each of the neighbouring countries. The BMC should meet regularly to share information and plans on COVID-19 and any other emerging issues at the BPs. At Busia BP and Malaba BP between Kenya and Uganda convene monthly meetings to sort out pertinent issues including issues related to COVID-19. It is reported that they even share PPE with their fellow counterparts on the other side. This is one of the good practices on regional coordination and standardization.

2.2.2.3 BP Administration and Coordination

Under the theme of “BP Administration and Coordination”, this section mainly deals with BP management, emergency response plans, and guidelines and SOPs in the EAC region. An analysis of three representative indicators, inter-departmental coordination mechanisms, the deployment of contingency plans, and guidelines and SOPs in BPs in the region and in each Partner State, is presented in Table 13.

Table 13. Baseline Indicators for BP Administration and Coordination

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs with inter-departmental coordination mechanism for COVID-19 at BPs*	100%	100%	100%	100%	100%	100%	100%
% of BPs with contingency plans for COVID-19	50%	25%	80%	75%	None	40%	50%
% of BPs with SOPs/guidelines for COVID-19	79.5%	37.5%	100%	75%	100%	90%	20%

*% of BPs responded “strongly agree” or “agree”

Key findings:

- All BPs have an inter-ministerial coordination mechanism but ministerial silos still exist
- Good practice: cost-sharing of Port Health service by other ministries (Tanzania)
- Half of BPs do not have contingency plans
- The majority of BPs have national guidelines and SOPs but there is a need for guidelines reflect local context
- Good practice: BP specific guideline development (Kenya)

The Team sought to find if there is a BP specific coordination mechanism to deal with the COVID-19 pandemic. All the BPs that responded to the survey, reported having a BP specific coordination mechanism to deal with the COVID-19 pandemic among the different departments at the BP. However, it was revealed that ministry silos still cause problems at some BPs. For instance, one BP reported they are not even coordinating PPE procurement and sharing among ministries at BP. In contrast, good practices such as cost-sharing of Port Health services by various ministries have been observed in Tanzania.

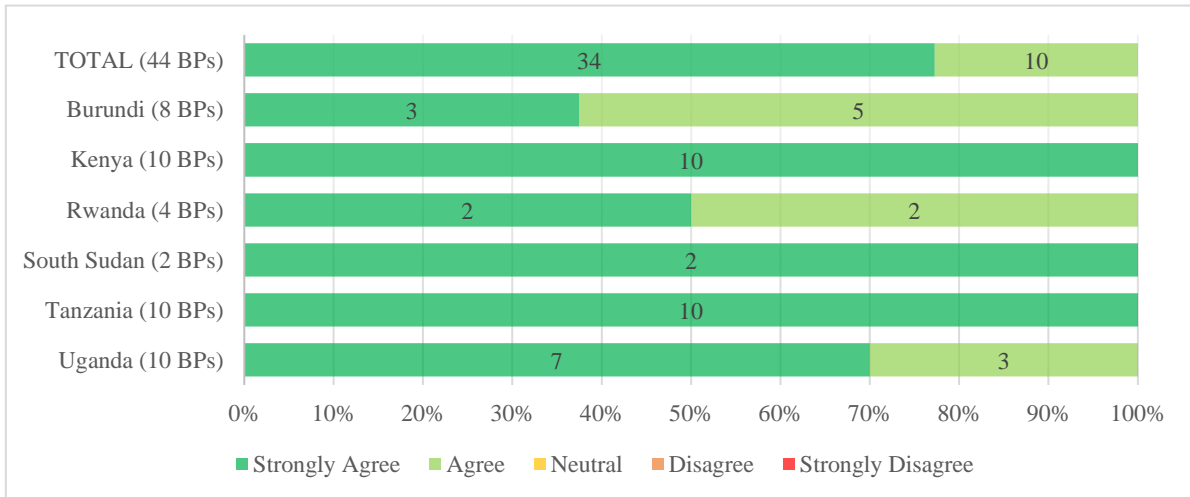


Figure 5. Functional BP-specific Coordination Mechanism to Deal with COVID-19 Pandemic

Contingency/back-up plan for COVID-19

Contingency plans help in achieving national operational readiness for any emerging public health threats. According to the IHR 2005, every country needs to strengthen their preparedness and capacities to proactively detect, assess, report, and address emerging public health threats. In the event of an outbreak, a rapid risk and needs assessment is conducted to update the contingency plan. The plan outlines the activities and guidance on roles, responsibilities and procedures that are critical to guide decision making and response (MoH, 2020). At the BPs, contingency plans are needed to respond to cases detected among travellers. According to the WHO Interim guidance 2020, an appropriate number of staff need to be trained at each PoE to be able to respond to ill travellers or to people who are presumptive for COVID-19. The BP contingency plan must detail the process of referring exposed travellers to health care facilities for further assessment and attention. It should further have cleaning and disinfection guidelines for frequently touched surfaces and washrooms. Moreover, it should identify the means of transport for people who are presumptive for COVID-19 to an identified health facility. The contingency plan should be updated and have a nominated coordinator and contact persons for public health and other relevant authorities.¹⁷

Among the respondent BPs, half of the BPs reported having contingency plans. While a majority of 51% did not have the document. All 2 BPs in South Sudan, 6 out of 8 BPs in Burundi, 6 out of 9 BPs in Tanzania and 5 out of 10 BPs in Uganda did not have contingency plans while the majority of BPs had the plan in Kenya and Rwanda.

¹⁷ WHO, *Management of ill travellers at Points of Entry (international airports, seaports, and ground crossings) in the context of COVID-19 Interim guidance* (2020).

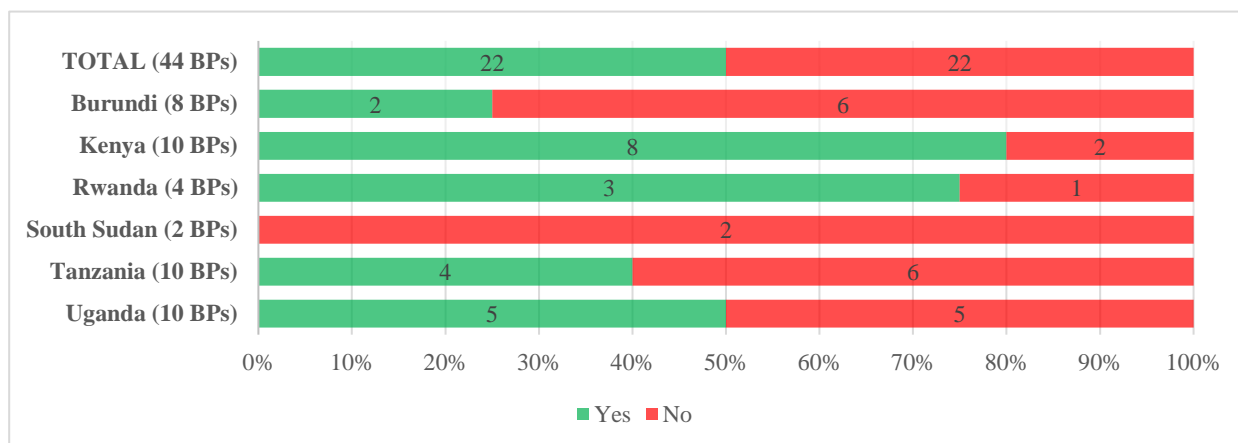


Figure 6. BP with Contingency/Back-up Plan for COVID-19

The ongoing global pandemic has made the international community realize that preparedness for public health emergencies and health systems were not enough. The EAC Partner States should review their Health Sector Emergency Preparedness and Response Plans based on the lessons learned from this pandemic. As the pandemic would not be under control anywhere unless it is controlled everywhere, the EAC secretariat should play a pivotal role in regional preparedness and harmonised responses. In relation to the preparedness and responses at ground crossings, enormous efforts should be made for strengthening the network of medical reference laboratories and border surveillance, full implementation of the RECDTS, improvement of Port Health services and human resource capacity, and revitalization of joint BMCs. The health sector should also closely work with trade, immigration, infrastructure, security, environment and other sectors. Thus, it is recommended that each BP should assess their capacity and prepare their own contingency plan to customize the response for the local situation and needs.

Guidelines and SOPs for COVID-19

The survey further sought to understand if the various BPs within the EAC had guidelines or SOPs for handling COVID-19. Interestingly, 79.5% (35 BPs) had guidelines or SOP at the BPs while 20.5% (9 BPs) did not have the document. Those documents are mostly from the national level; however, there is a need for developing BP-specific guidelines like how Kenya started.

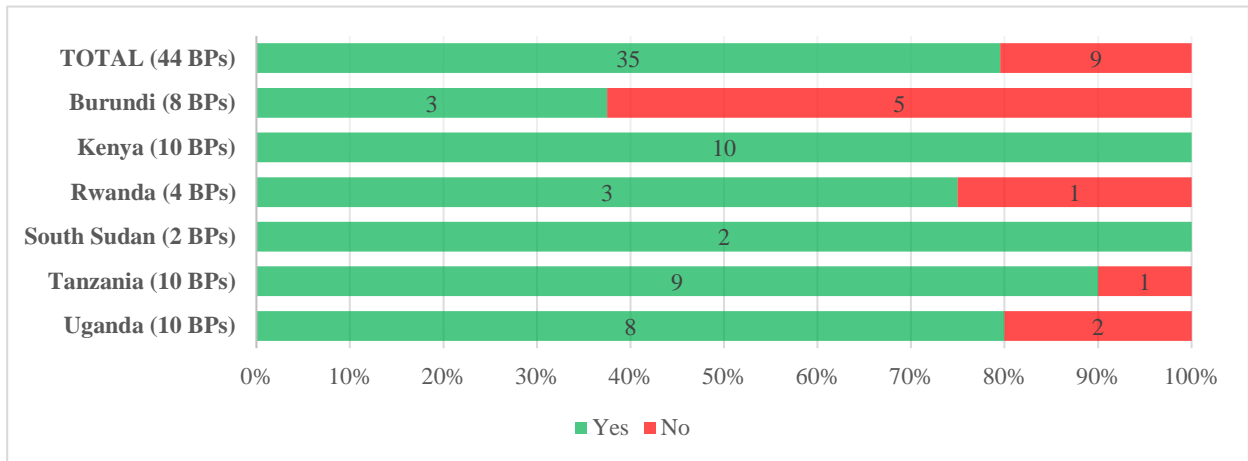


Figure 7. Availability of Guidelines or SOPs for COVID-19 at BP

2.2.2.4 Human Resource Management and Capacity Development

Under the theme of “Human Resource Management and Capacity Development”, this section mainly discusses the status of training implementation, trends, and psychological support for BP staff in the EAC region. An analysis of five representative indicators of human resource management and capacity in the region and in each Partner State is shown in Table 14.

Table 14. Baseline Indicators for Human Resource Management and Capacity development

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs which had IPC Training for the staff in the past year	70.5%	37.5%	70%	75%	None	100%	80%
% of BPs with more than half of the staff trained in the most recent training on IPC	40.9%	12.5%	40%	50%	None	70%	40%
% of BPs with adequate IPC capacity of staff*	61.4%	62.5%	50%	50%	50%	70%	70%
% of BPs with the capacity to conduct online training	38.6%	12.5%	60%	75%	None	70%	40%
% of BPs with psychological support systems for staff	11.4%	12.5%	None	50%	None	None	20%

*BPs which responded “Very adequate”, “Adequate” or “Somewhat Adequate”

Key findings:

- Imbalance of capacity development support; less support for smaller BPs
- Inadequate psychological support for frontline staff
- Good practice: senior officers were trained to become a counsellor (Rwanda)
- Insufficient online training capacity
- Vaccination program for BP staff: Difference by country

Training of BP staff on IPC within the last year

IPC is a practical evidence-based framework for preventing avoidable infections among health workers and patients. According to the WHO core competencies for IPC professionals, IPC guidelines and protocols sets up measures to; break the chain of disease transmission, identify the hierarchy of controls, and list standard practices that apply to the contextual setting. The standard practices applicable to BPs include but are not limited to PPE, risk assessment, hand hygiene, isolation and quarantine of people who

are presumptive for COVID-19, cough etiquette, waste management, environmental cleaning and sterilization or decontamination of reusable equipment.

Within EAC, 70.5% (31 BPs) of the BPs surveyed reported having their staff receiving training on IPC within the last year. However, 29.5% (13 BPs) were yet to have any training on IPC. While all 10 BPs in Tanzania had training, the survey revealed there is a capacity gap in Burundi and South Sudan.

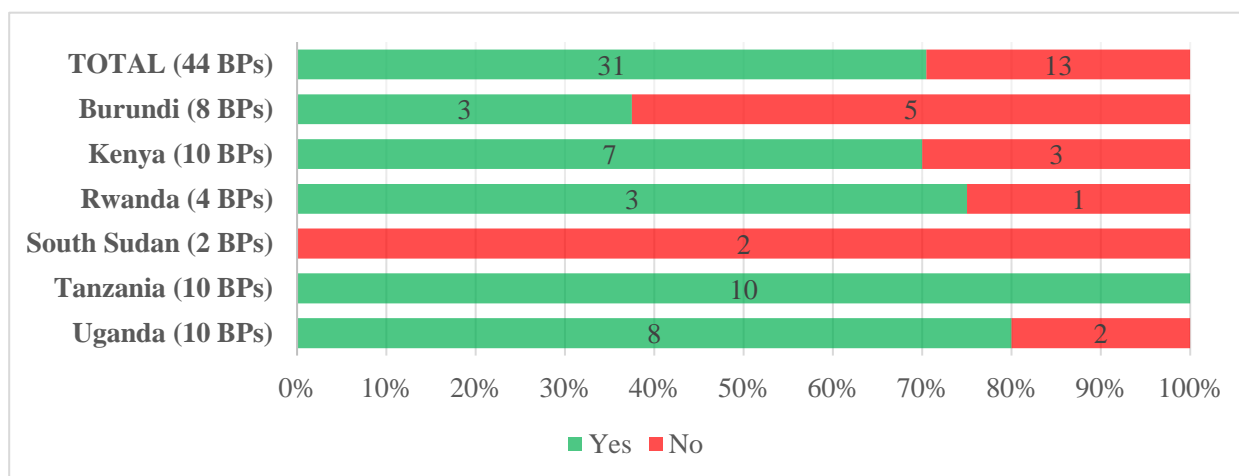


Figure 8. Implementation Status of IPC Training for BP Staff within a Year

As a follow-up question, BPs were further asked about the proportion of their staff who were capacitated in the training within the last year. Out of 31 BPs who had training 13 BPs (41.9%) capacitated less than of staff. The survey also revealed a majority of those BPs with no staff or less staff trained are relatively smaller BPs. It is understandable that BPs, where a large number of trucks and people pass, are prioritized but imbalance among BPs should also be addressed.

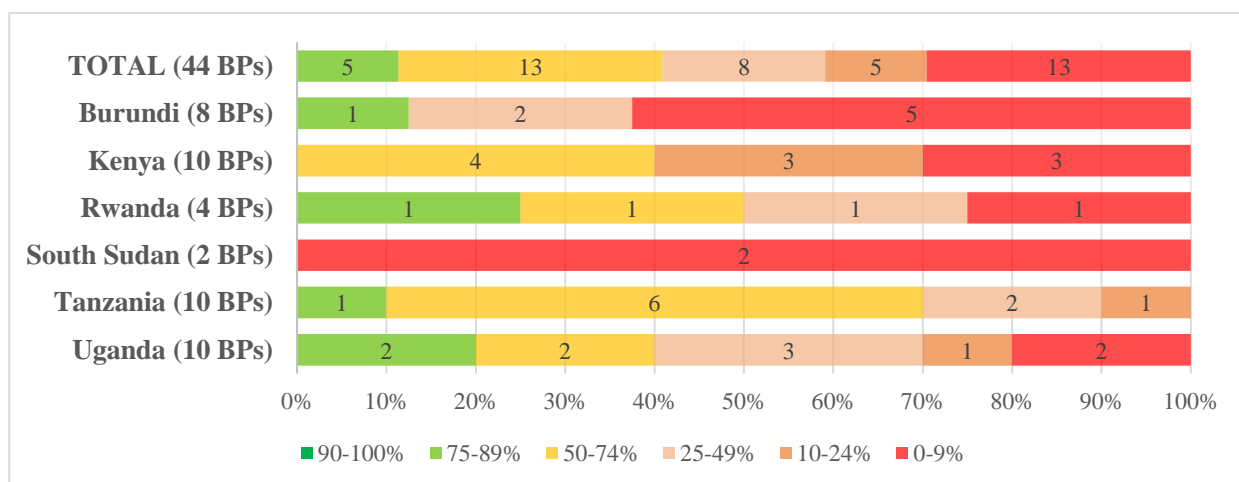


Figure 9. The Proportion of the Staff Trained in The Most Recent Training on IPC

It is contradictory that many BPs viewed their staff’s capacity level on IPC as somewhat adequate or adequate although capacity development activities at BPs are not fully implemented. It is recommended that each BP conduct an assessment to evaluate staff’s capacity, identify their competencies, or discover training needs for better human resource planning.

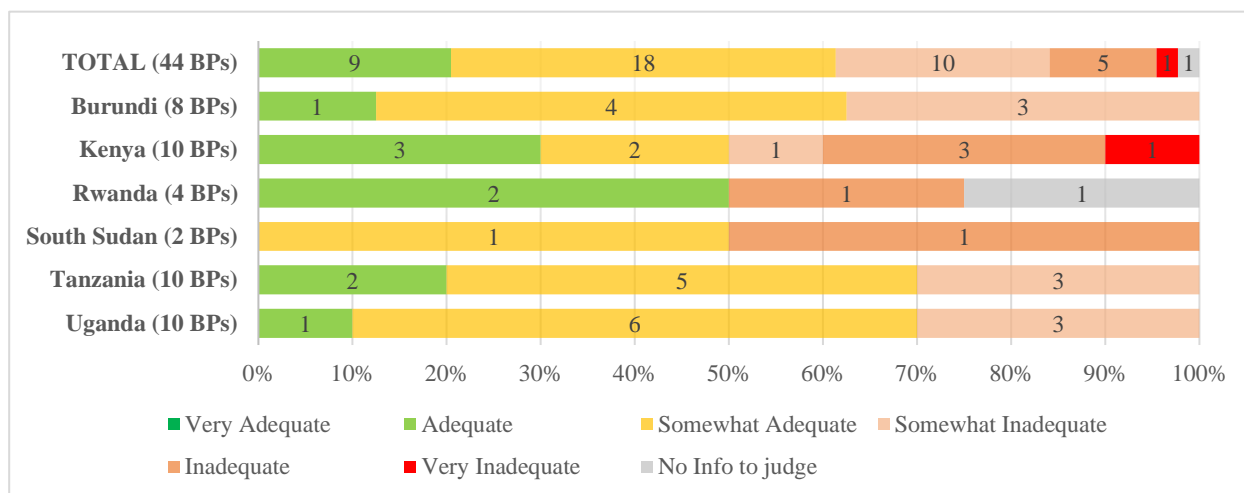


Figure 10. Adequacy of the Current Training/Capacity Level on IPC for the staff

The advent of COVID-19 ushered in a new era of telework/ remote work that relies heavily on online infrastructure, collaboration, and coordination. Teleworking has been hailed as an important aspect of ensuring business continuity despite the lockdowns and the movement restrictions to contain the pandemic. According to the International Labour Organization, telework has been proven effective in reducing commuting times, increasing opportunities to focus on work away from the office and for a better life-work balance. At the BPs, it is not practically possible to have most of the work done remotely, issues of Port Health, immigration and customs require physical inspection and documentation. The survey sought to assess the available capacities of the BPs to conduct training online as part of the capacity-building initiatives to combat the pandemic. A half of the respondents (22 BPs) reported lacking the necessary online capacities to ensure institutional support for human capital development during the pandemic. 38.6% (17 BPs) felt they had adequate capacities while 11.4% had some form of capacities but not adequate. South Sudan, Burundi and Tanzania seem to have challenges in providing online training; it is associated with the availability of stable internet connection which needs substantial investment in BP infrastructure.

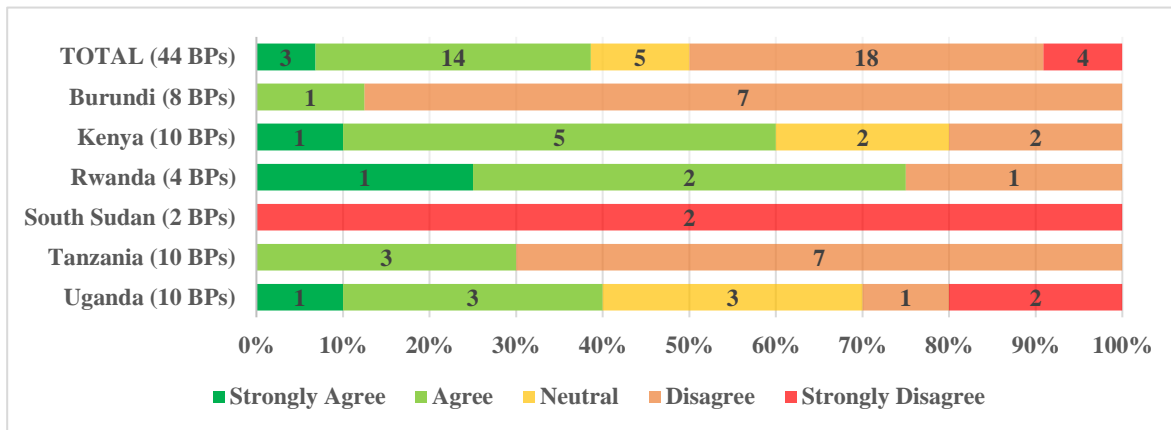


Figure 11. BPs with Capacity to Conduct Adequate Online Training

Mental health/psychological support systems for the frontline staff

The advent of COVID-19 has worsened the mental stress on people in developing countries who were already grappling with distressing experiences related to poverty and livelihoods. The pandemic intensified fears of becoming sick, losing loved ones, or incurring heavy medical costs due to overwhelmed health systems. The government’s response to mitigate the pandemic such as lockdowns, restrictions on travels and public activities, quarantines, physical distancing and their concomitant economic and social implications have further exacerbated the stress levels thus increasing the risk of mental health problems. According to the International Committee of the Red Cross, COVID-19 is also associated with a strong stigma that affects the people who have contacted the virus with some have reporting marginalization even within their own social networks.

It is against this background that the World Health Assembly endorsed the Comprehensive Mental Health Action Plan 2013–2030 and updated it to include implementation options and indicators to support preparedness for supporting mental health during emergencies. The assembly enjoined members to develop and bolster comprehensive mental health and psychological services as a part of universal health coverage. BP staff being essential service providers have been reported to have higher rates of poor mental health outcomes. These are driven by higher levels of anxiety and uncertainty, information overload, changes in workplace procedures and processes, exacerbation of existing health conditions and burn out which results from persistent workplace stress. In short, essential workers are more likely to experience depressive disorders and symptoms of anxiety than non-essential workers.¹⁸

In the current survey, BP managers were asked if they had access to mental or psychological support systems for their front-line staff during the COVID-19 pandemic. Surprisingly, 88.6% reported not having any form of psychological support while 11.4% acknowledged having mental health support systems. It is critical to provide information on mental health support to BP staff and strengthen their capacity to cope

¹⁸ Panchal Urvashi, et al., “The impact of COVID-19 lockdown on child and adolescent mental health: systematic review”, *European Child & Adolescent Psychiatry*, (2021)

with stress build resilience during the COVID-19 Pandemic. Improving the work environment (e.g. Open communication channels, work flexibility, employee health and wellness policy and programme, workplace wellness initiatives) would also be a solution for employees’ stress management and also enhance the productivity of the BP.

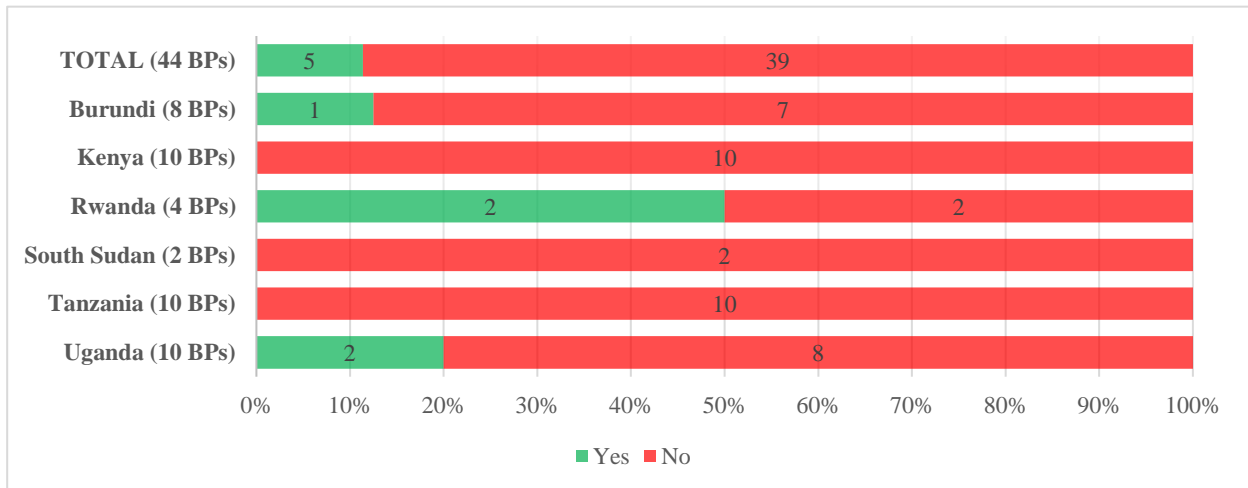


Figure 12. Mental Health/Psychological Support Systems for the Frontline Staff During the COVID-19 Pandemic

2.2.2.5 IPC Including WASH

Under the theme of “IPC measures including WASH”, this section mainly discusses the status of water supply and trends in waste management and PPE deployment and use in BPs in the EAC region. An analysis of six representative indicators of enforcement and compliance to IPC measures in BPs in the region and in each Partner State is presented in Table 15.

Table 15. Baseline Indicators for IPC including WASH

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs with the main source of water supply which is: Piped supply, borehole, tube well, or protected dug well	72.7%	37.5%	70%	100%	50%	90%	80%
% of handwashing stations which is functional	61.7%	50%	77.1%	89.3%	60%	81.3%	30.8%
% of BPs with good waste management*	29.5%	25%	20%	75%	50%	20%	30%
% of BPs without stock-out of PPE in the past two months	25%	None	None	50%	None	60%	30%
% of BPs with all three types of PPE (facemasks, hand gloves, full gown) available	54.5%	37.5%	100%	100%	None	40%	30%
% of BPs with the practice of wearing a mask at BP by staff and users	47.7%	50%	50%	75%	None	50%	40%

*% of BPs which responded “Very good” or “good”

Key Findings:

- Water supply challenge: half of BP does not have piped water supply
- Hand washing station: maintenance issue, need for small BPs,
- Improper waste management
- Cleaning staff: inadequate PPE provision and training, no access to PCR test
- Issues on PPE: stockout, supply chain, distribution to community people, absence of PPE guideline (who should use what)

Water Supply

Access to adequate WASH are critical for the promotion of health, dignity and the general well-being of individuals and communities. Sufficient quantities and qualities of water are essential for all aspects of

life and sustainable development. According to the IHR 2005, core capacities of PoE, every BP must ensure a safe environment for travellers using the BP facilities. This includes having an adequate water supply, eating establishments and waste management. The WHO recommendations for hygiene and cleaning regiments at the BPs also require consistent availability of water. Among the BPs contacted, 52.3% (23 BPs) had piped water supply within their compounds while 27.3% (12 BPs) relied on other improved sources such as boreholes and tube wells. Unfortunately, 11.4% (5 BPs) had unreliable sources of water like surface water, and 9.1% (4 BPs) had no water source.

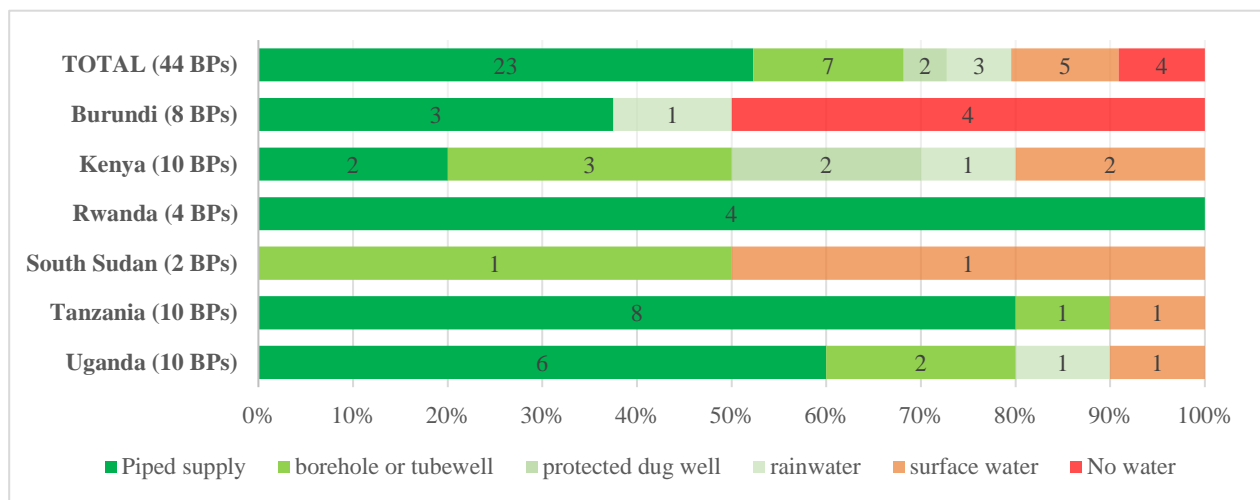


Figure 13. The proportion of BPs per Main Source of Water Supply

Even if a BP has piped supply, some are still affected by inconsistent water supply as it can stop for two full days a week. Suam River BP (Uganda) also faces challenges with water quality from the river. Those BPs which use borehole or tubewell like Mutukula BP (Tanzania) also have an issue when the power supply is not stable as they need electricity for pumping water; hence generator is essential. On the other hand, BPs, like Lunga BP (Kenya), which rely on rainwater often has inadequate water in their tanks during the dry season. One solution could be getting water from Horohoro BP (Tanzania) which has piped supply, located a mile away across the border. Water can be shared across the border like how the power supply is shared through the framework of the East Africa Power Pool.

Installation of hand-washing stations is also a short-term solution as almost all BPs (97.7%) have installed them since last year, however, 56.8% (25 BPs) reported some of them are not functioning and need repair. Among the 44 BPs responded, there were a total of 180 handwashing stations. Of the 180 of them, 69 stations (38.3%) were not functioning. It is notable that 50% and 69.2% of handwashing stations at BPs in Burundi and Uganda respectively were not functioning.

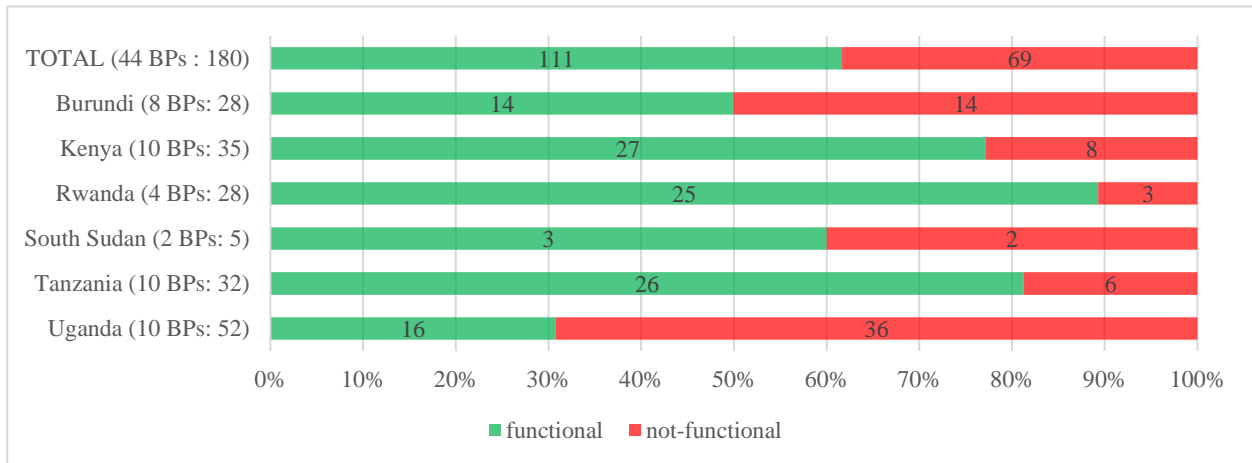


Figure 14. The proportion of Functional and Non-Functional Hand Washing Stations



Functioning portable handwashing stations with liquid Soap at Holili BP, Tanzania (left) and Taveta BP, Kenya (centre) and a non-functioning one at Nimule BP, South Sudan (right)

Waste Management

The survey revealed waste management as one of the most common issues at BPs across the region and several BPs reported the need for an incinerator. While 29.5% (13) of 44 contacted BPs rated their implementation of waste management guidelines either very good or good 17% (7) rated either poor or very poor. The Team also visited 18 BPs and checked the availability of waste management guidelines at BP and observed actual guidelines at only seven BPs. Among the Partner States, only Elegu BP in Uganda and Namanga BP in Kenya reported having their incinerator although Namanga BP was instructed to suspend the use of incinerator as it did not meet the requirements of the National Environment Management Authority of Kenya.

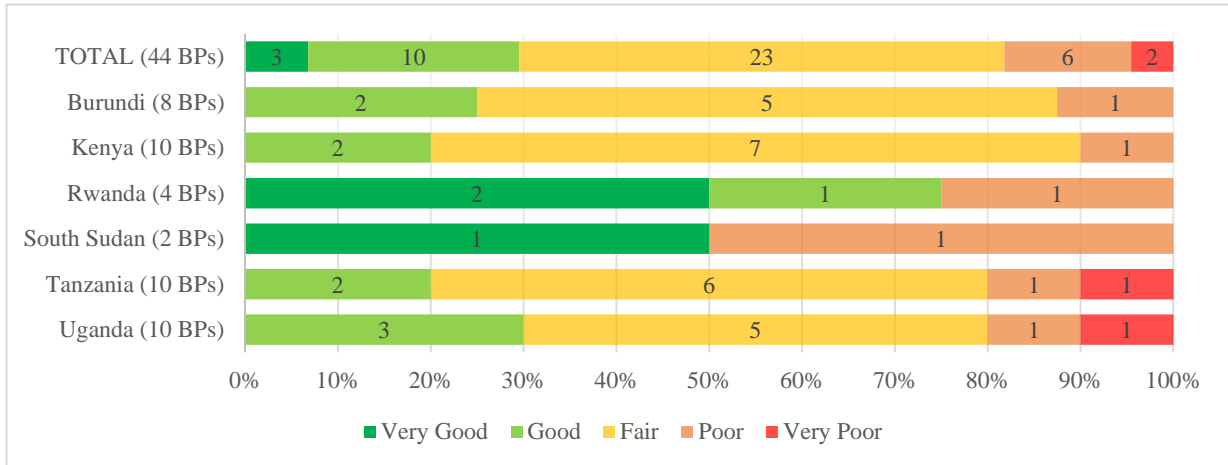


Figure 15. BPs Implementing Waste Management Guidelines

Taveta BP in Kenya was one of the good examples which had guidelines on health care waste management on-premise and practised proper waste management (see photo below). Mutukula BP in Uganda rated their waste management as very poor and there was no guideline on waste management. The practice of waste management in Mutukula BP is also displayed below.



Waste Management Guideline and waste in disposal bag at Taveta BP, Kenya (left and centre) and waste management practice at Mutukula BP, Uganda (right)

PPE

PPE is an integral part of IPC. However, 75% (33 BPs) reported experiencing stock-outs or shortages of PPE in the past two months. Only 25% (11 BPs) reported having a consistent supply of the PPE.

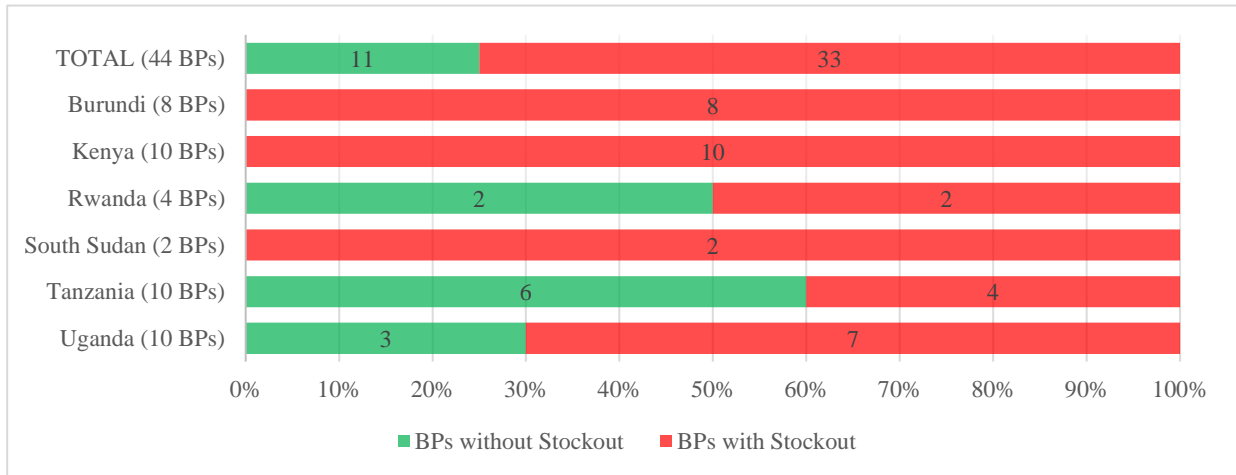


Figure 16. BPs experiencing PPE Stock-out in the past two months

When BPs were asked what types of PPE are available at the BP face masks and hand gloves were available at all 44 BPs and 79.5 % of contacted BPs respectively. However, only 52.3% of contacted BPs had full gowns which are critical equipment particularly dealing with people who are presumptive for COVID-19. In Kenya and Rwanda, all contacted BPs had all three PPE while BPs in South Sudan only had face masks.

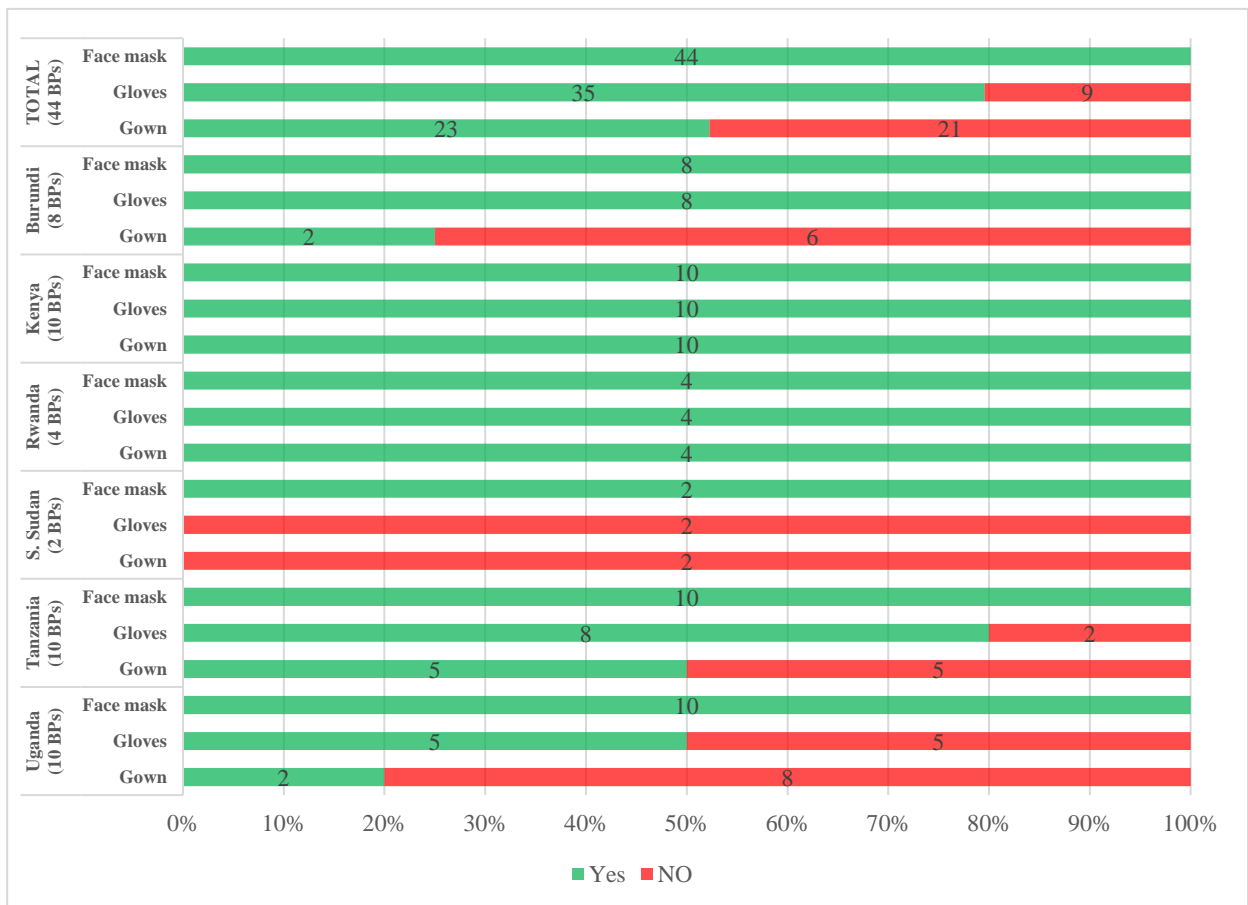


Figure 17. The proportion of BPs Where PPE is Available per PPE Type

Compliance with IPC guidelines is a challenge as more than half of BPs reported either BP staff or clients do not always wear face masks at BPs. At some BPs truck drivers do not wear facemasks while Port Health staff are attending. On the other hand, even BP staff are not practising mask-wearing at some BPs. If it is difficult to enforce BP users to wear facemasks, at least BP staff must wear masks and practice other precautions. Now several measures have been taken to minimize interactions between truck drivers and community people but the virus can still spread around BP areas and communities through BP staff if they do not take serious IPC measures.

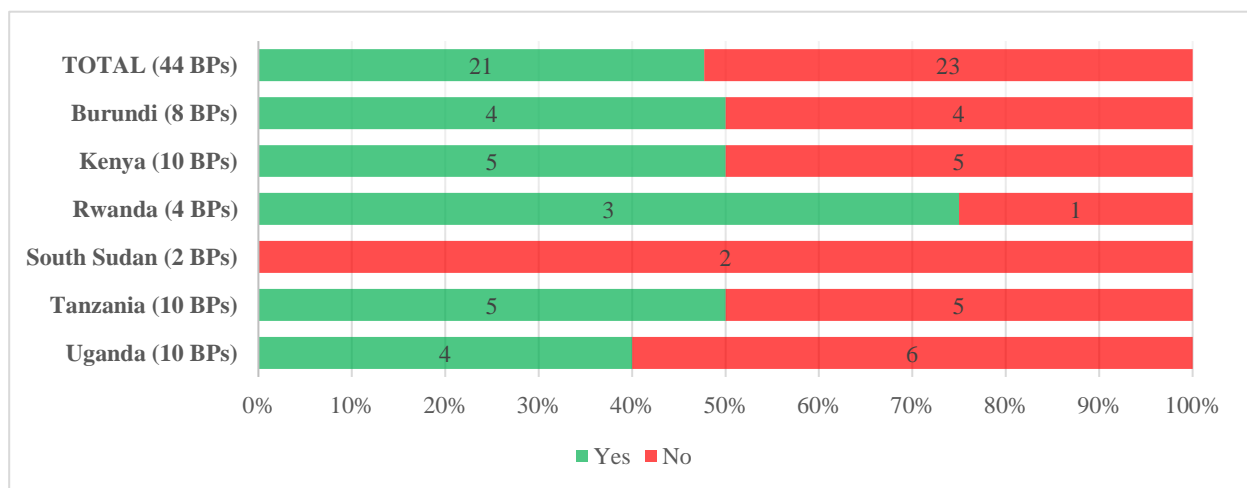


Figure 18. BPs with Staff and Clients Always Wear Facemasks at BPs

Basic IPC rules at BPs in the EAC Partner States must be established and enforcement of mask-wearing at BP should be thoroughly implemented. Clear PPE guidelines, alternative solutions for PPE shortage and stockouts, inter-ministerial PPE supply chain and commodity security, and provision of facemasks for BP users should be discussed and considered.

2.2.2.6 Port Health

Under the theme of “Port Health”, this section mainly discusses the trends and issues of port health staffing, facilities, referrals, and inspection systems in BPs in the EAC region. An analysis of five representative indicators of Port Health capacity in the region and in each Partner State is shown in Table 16.

Table 16. Baseline Indicators for Port Health

Indicator		TOTAL (BP n=35)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=3)	South Sudan (BP n=1)	Tanzania (BP n=5)	Uganda (BP n=8)
% of BPs with isolation rooms with adequate space and items		25.7 %	None	10%	66.7%	None	None	75%
% of BPs with Port Health which have at least one	Medical/Clinical officer	57.1%	75%	30%	33.4%	100%	20%	100%
	Nurse	71.4%	100%	60%	100%	100%	20%	75%
% of BPs with referral health facilities within 40 km		74.3%	100%	100%	66.7%	100%	80%	12.5%
% of BPs with adequate testing equipment for COVID-19		22.9%	None	None	66.7%	None	80%	25%

Key Findings:

- Challenge on the management of people who have COVID-19 or are presumptive for COVID-19: stigma, inadequate training and knowledge
- Isolation room without adequate space and items
- Ununiformed cost of COVID-19 testing among the Partner States
- Referral health facility and laboratory challenge: distance and absence of transportation
- Some biometric thermometers not functioning
- Instability of staffing and inadequate space for Port Health service
- Inadequate testing equipment for COVID-19

SOPs for infectious diseases including COVID-19

Most BPs have SOPs and guidelines for infectious disease including COVID-19. These guidelines are mainly developed by the ministries of health of the individual countries. However, the number of SOPs and the scope covered by each document vary depending on the country. Most Port Health officers suggest there are infrastructural/resource-related issues that prevent ideal compliance to the laid down protocols and procedures.

Isolation rooms

54.3% (19 BPs) of the responded Port Health at 35 BPs in 6 EAC countries have a temporary holding room for isolation of people who are presumptive for COVID-19. However, most isolation rooms are single rooms that were not properly designed for quarantine purposes. They are poorly designed in terms of ventilation and lighting and they lack the necessary hygiene requirements such as water, toilets, and beds.

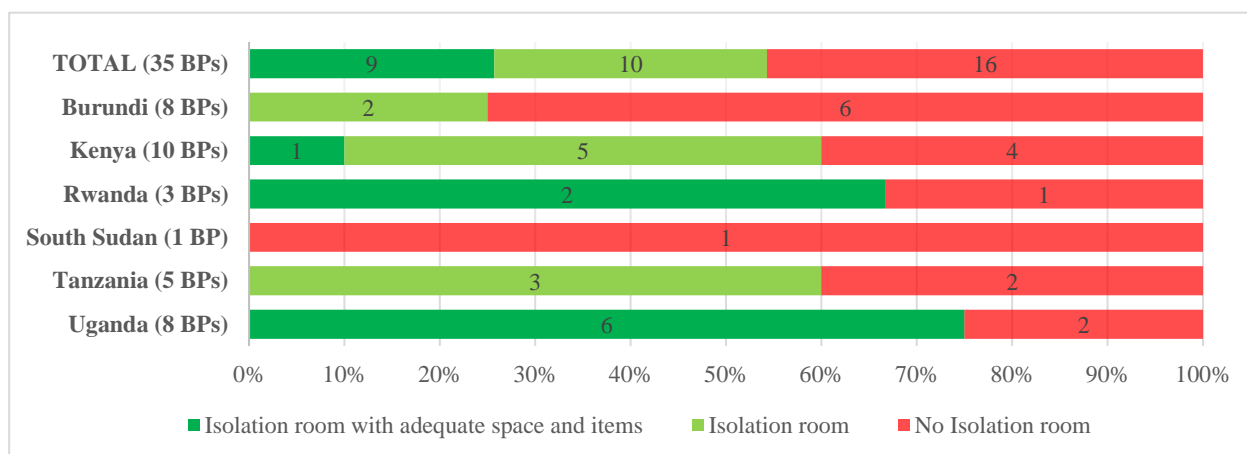


Figure 19. The proportion of BPs with Isolation Room for People who are Presumptive for COVID-19

Port Health staffing

Staffing is one of the major problems at Port Health as many of the staff are on a short-term contract or temporary arrangement. 27 out of 35 BPs (77.1%) in the EAC countries do not have a medical officer; 7 BPs (20%) have one medical officer; while only one BPs (Cyanika BP, Uganda) has 2 medical officers attached to the same BP. 15 BPs (42.9%) do not have either medical or clinical officer. BPs in Tanzania seems to have more Public Health Officers rather than medical or clinical officers while 7 out of responded 8 BPs in Uganda have both clinical and medical officers. Only 10 BPs (28.6%) lack a nurse; the rest have at least two nurses stationed in the BP. Over 60% of the BPs have employed other carders of workers such as community health volunteers or cleaners to support the health departments.

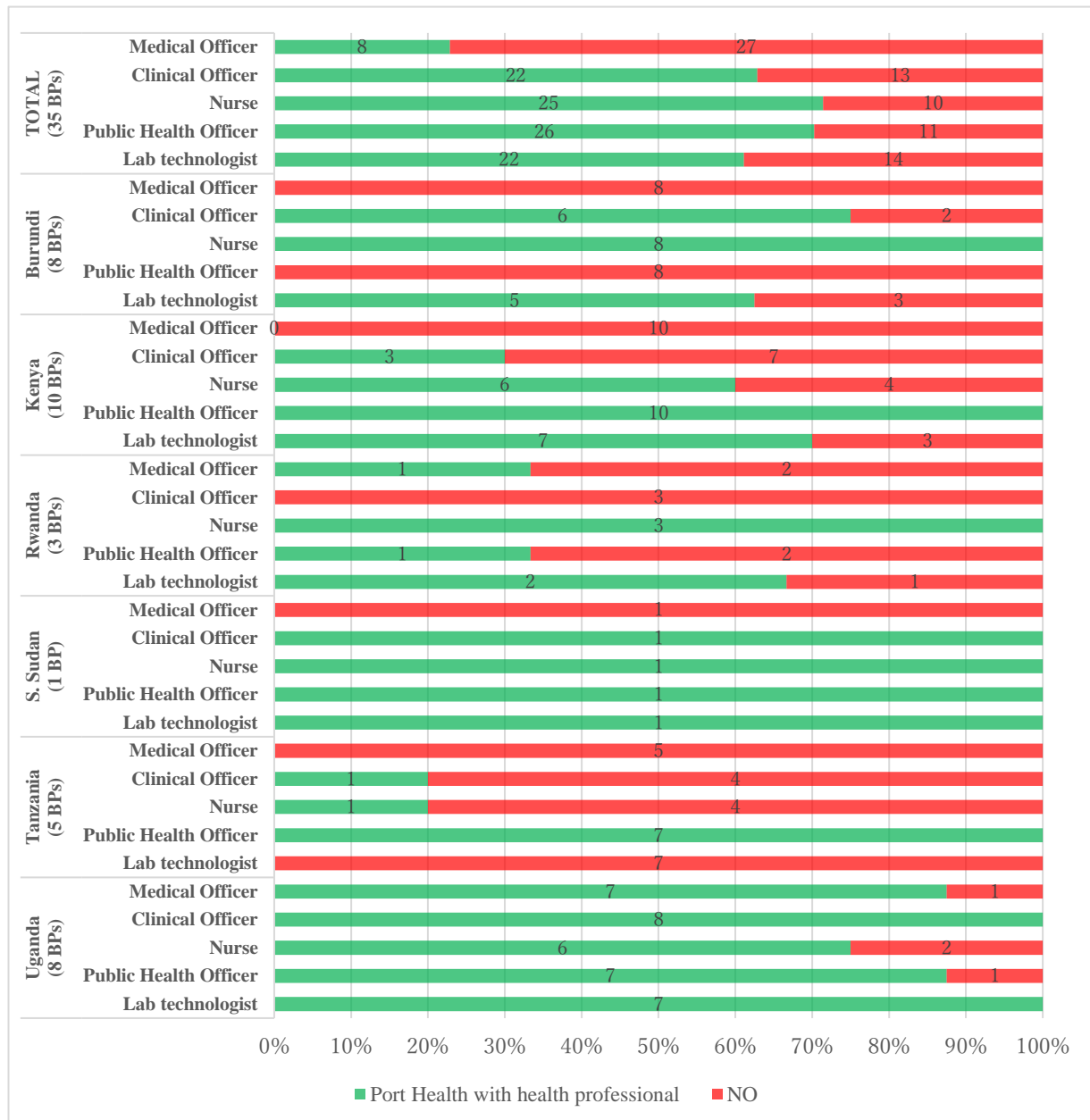


Figure 20. The Proportion of Port Health at BPs with Health Professional Categorized into Positions

Distance and method of transport to a referral health facility

All the BPs have linked/referral facilities for people who are presumptive for COVID-19. Distance and method of transport to the facility are important components of the referral system. 37.1 % (13 BPs) of assessed BPs Most (76%) have referral facilities within 20 km while another 37.1% (13 BPs) are located within 21–40 km of the facility. In Kenya, all assessed 10 BPs are located within 40 km from referral facilities and 7 of them are within 20 km while most of the BPs in Uganda is far from referral facilities.

Most disadvantaged BPs in terms of distance to referral facilities are Kabanga BP (Tanzania) and Suam River BP (Uganda) which are 295 km and 250 km away from their referral hospitals, respectively.

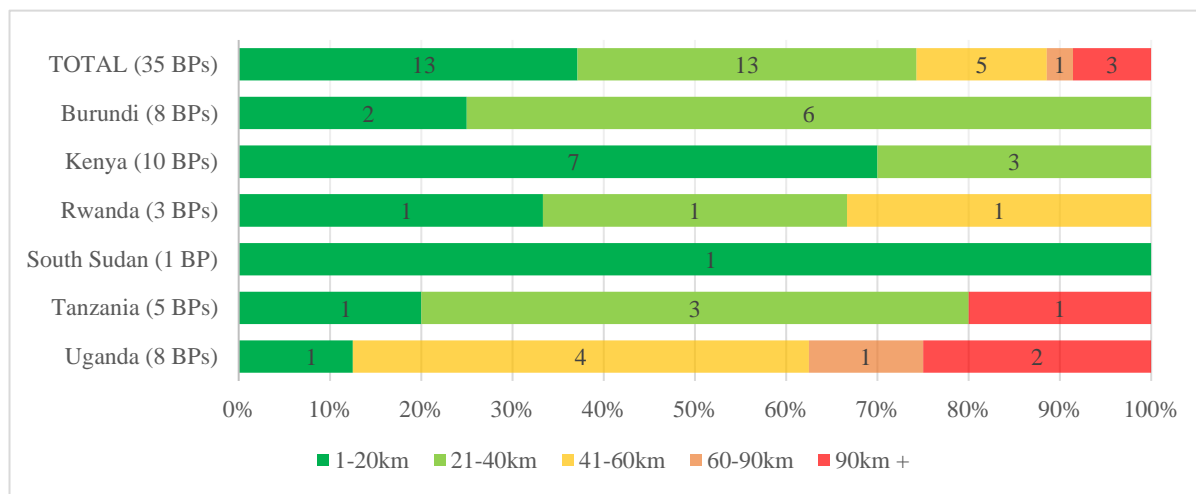


Figure 21. The proportion of BPs per Distance to the Referral Health Facilities

Most (76%) of the referred cases use ambulances owned by the referral facility linked to the BP. Of the 33 BPs assessed, only one BP (Lwakhakha, Uganda) usually do referrals using a vehicle owned by the BP, while the rest usually use public means of transport or taxi for referrals. If BPs relies on the referral facility for transportation, they often struggle to get a vehicle when it is necessary. However, BPs does not always transport people who are presumptive for COVID-19 to referral facilities as asymptomatic patients are normally advised to go home for self-quarantine. Therefore, depending on the policy of the country or BP, it could be argued that the issue of transportation is not much for referring patients compared to the transportation of samples for PCR test that happens every day.

Port Health establishment

Most of the Port Health departments were established before the onset of the COVID-19 pandemic. However, smaller BPs were given additional support such as employment of some staff after the onset of the pandemic in March 2020. Many of the BP facilities are designed to build without the consideration of setting up the Port Health. Health screening by the Port Health service is supposed to be provided even before security checkpoint but current BP facilities including OSBP are not designed in such a way except Mugina and Manyovu BPs (Burundi and Tanzania) which are newly designed. In addition, several BPs are unable to provide office space for Port Health staff, sample collection rooms and isolation rooms. According to the EAC Health Sector Investment Priority Framework 2018-2028 (EAC Secretariat, 2018), upgrading port, cross-border and OSBP health facilities to increase the capacity of detecting and managing cross-border health threats is listed as Sub-Priority 2.4 on the document. Due to the COVID-19 pandemic and recent Ebola outbreak in the Democratic Republic of Congo, it is expected that EAC Secretariat together

with the Partner States will accelerate the process to upgrade Port Health services including infrastructure and human resources.

COVID-19 testing and laboratories

Many BPs tend to use rapid antigen tests while PCR is used for confirmatory testing or RECDTS. There are no proper laboratories for COVID-19 testing within most BPs; some have rooms for sample collection, after which the samples collected are transported to designated laboratories for PCR testing. Rapid antigen tests can be processed within the BPs. Although the supply of testing equipment and variety of testing options have improved compared to the beginning of the pandemic, there is still a shortage of testing equipment at many BPs as 61.4% of BPs reported they do not have adequate COVID-19 testing equipment.

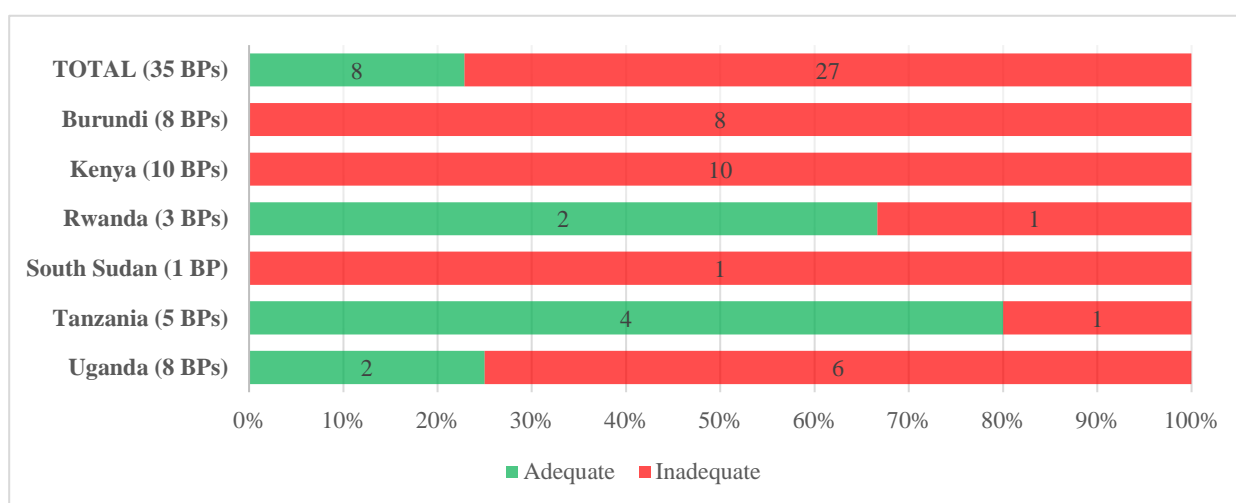


Figure 22. BP with Adequate Testing Equipment for COVID-19

Mobile laboratories handed over by the EAC Secretariat are at Namanga BP (Kenya) and Nimule BP (South Sudan) and reduced turnaround time within 24 hours. In Uganda, Mutukula BP has its laboratory while Malaba BP and Mirama Hills BP have temporary laboratories which are recently launched and operated by private entities. As the majority of BPs do not have laboratories on the premises, collected samples are transported using designated vehicles, usually provided by the ministry of health/linked referrals facilities/ to the designated laboratories for PCR testing. Samples from Lunga BP and Taveta BP in Kenya will be sent to KEMRI Welcome Trust Research Laboratory, Kilifi which is located approximately 180 km and 300 km away respectively. The majority of BPs send samples to designated laboratories within 2–6 hours from the collection but these BPs reported they usually send samples after 2–3 days. A vehicle is usually sent by Port Health Services in Mombasa to collect the samples from Lunga and Taveta BPs and deliver them to KEMRI labs in Kilifi. This process influences turnaround time which is more than 3 days. approximately half of the BPs (51.4%) reported using the RECDTS. But due to various challenges, not all tests are submitted to the online platform for easy access.

2.2.2.7 BP Infrastructure and System

Under the theme of “BP infrastructure and systems”, this section mainly discusses the status and challenges of BP infrastructure and systems in place in the EAC region. An analysis of four representative indicators of the capacity and development in infrastructure and systems in BPs in the region and in each Partner State is shown in Table 17.

Table 17. Baseline Indicators for BP Infrastructure and System

Indicator	TOTAL (BP n=35)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=3)	South Sudan (BP n=1)	Tanzania (BP n=5)	Uganda (BP n=8)
% of BPs introduced RECDTS	51.4%	None	90%	66.7%	None	None	87.5%
Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs with electrical grid as main power source	79.5%	62.5%	90%	100%	None	100%	70%
% of BPs with backup generator	75%	12.5%	90%	100%	None	90%	100%
% of BPs with system supports electronic submission of customs declaration documents*	68.2%	37.5%	60%	75%	50%	100%	70%

*% of BPs responded “Strongly agree” or “Agree”

Key Findings

- Gaps on RECDTS implementation by the Partner States, challenge faced by some drivers
- Majority of drivers viewed RECDTS made border crossing smoother
- Challenge on the constant power supply at some BPs
- Importance of backup generators and needs for BPs in Burundi and South Sudan

RECDTS

RECDTS is designed as a mobile phone application and will enable the issuance of the EAC COVID-19 digital certificates that are mutually recognised by the Partner States, thus eliminating the need for multiple testing as well as contributing to alleviating congestion at EAC borders. The reliance on manual certificates and delayed test results at the borders has been reported as one of the main reasons for long delays at border points, such as those queues witnessed in some borders such as Busia and Malaba BPs. RECDTS provides a surveillance system to monitor cross-border truck crew health and enables contact tracing. It allows Partner States to electronically share truck drivers’ COVID-19 test results; therefore, minimising the need

for multiple COVID-19 tests in a single trip.¹⁹

Out of 35 BPs who responded to the Port Health questionnaire, 51.4% (18 BPs) reported they had introduced RECDTS. This system is one of the best practices implemented in the region as a standardized response to the COVID-19 pandemic. It is highly advised to expand the programme to the rest of Partner States as well as the Democratic Republic of the Congo which shares borders with 5 EAC Partner States.

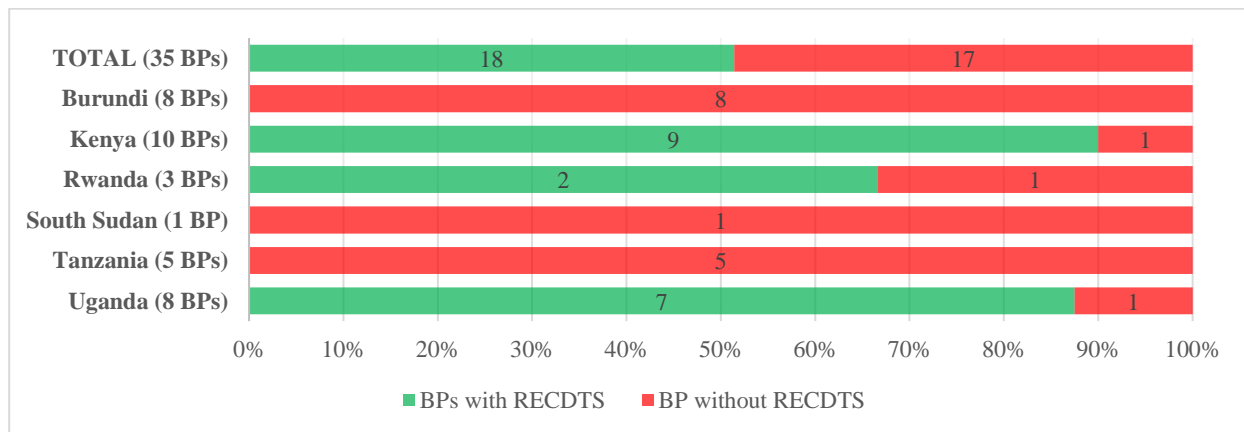


Figure 23. The proportion of BPs who have introduced RECDTS

The Team also interviewed 339 truck drivers and 72% (244) are aware of RECDTS. 66% (224) are already using RECDTS application while 6% (20) know the system but not using it yet. Out of 20 drivers, 5 drivers reported they are not using the system because they do not have a smartphone.

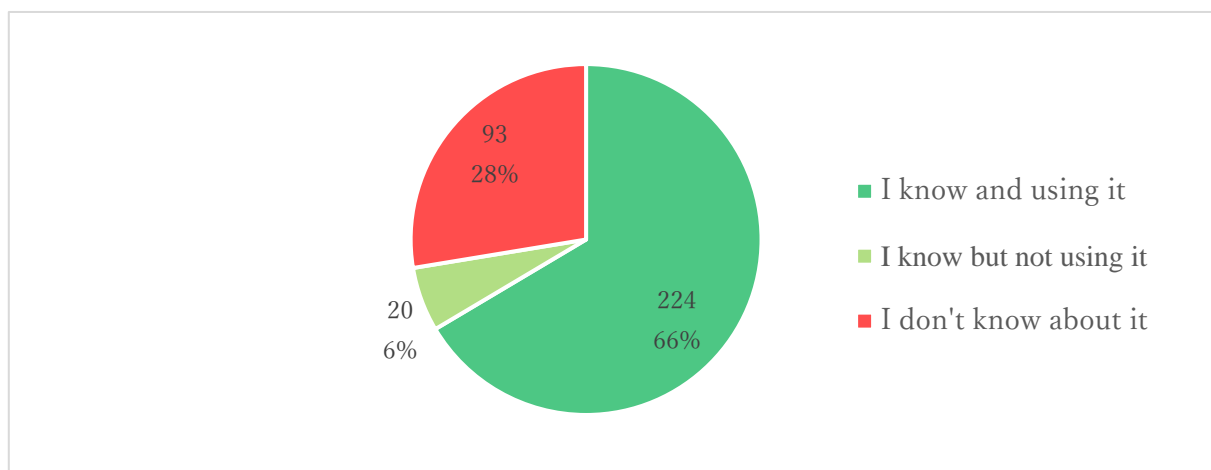


Figure 24. Truck Drivers' Responses to Knowledge and Usage of RECDTS

The following figure illustrates the collective responses of BPs for each countries to the same question. There is no significant difference between countries. Drivers interviewed in Rwanda were slightly less

¹⁹ EAC, Press Release 2020 (<https://www.eac.int/press-releases/147-health/1851-eac-rolls-out-regional-electronic-cargo-and-driver-tracking-system>)

aware of the RECDTS, but no clear reason was identified.

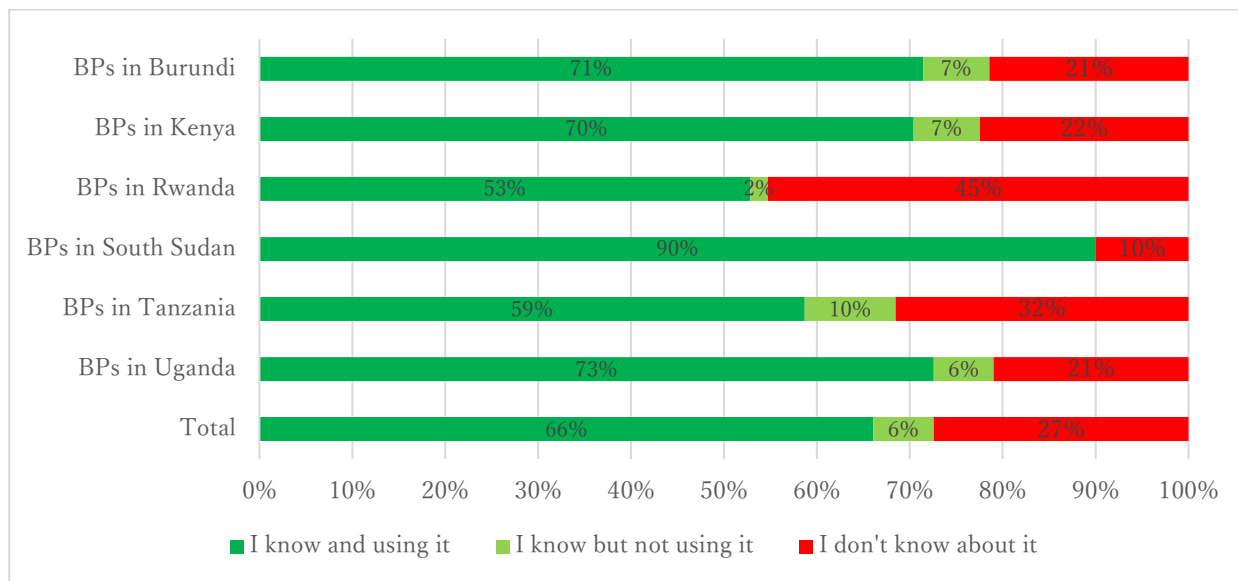


Figure 25. Truck Drivers’ Responses to Knowledge and Usage of RECDTS per Location of Interview

The survey also found that majority of truck drivers view RECDTS useful as 87% (196) agreed that RECDTS made border crossing smooth.

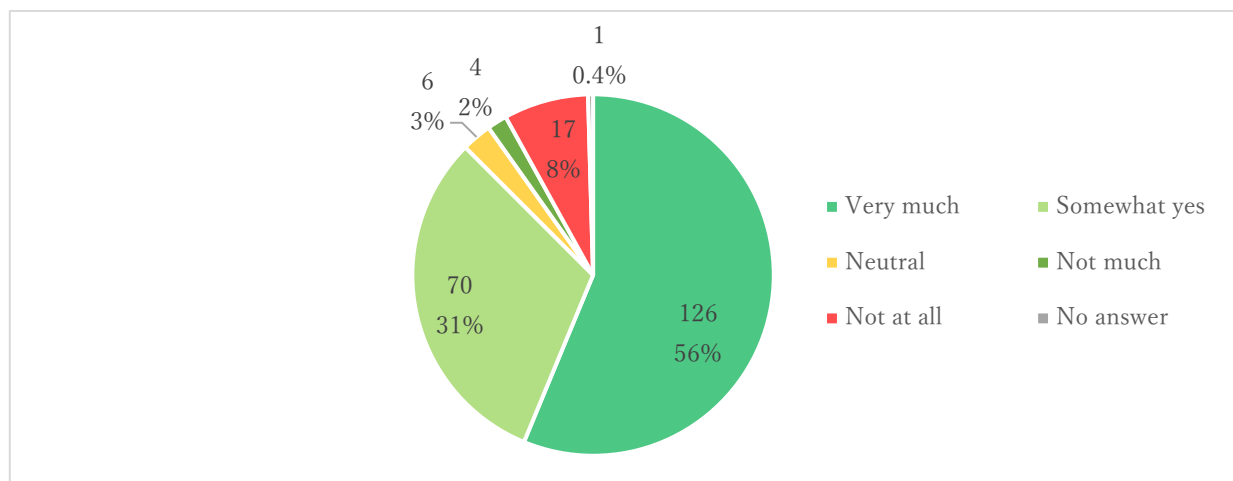


Figure 26. Truck Drivers’ Responses to the Question “Did RECDTS Make Border Crossing Smooth?”

Power source, transmitting hours and backup generators at BPs

The Team also found that constant power supply at some BPs was also problematic. The main power source of 35 BPs (79.5%) is the electrical grid. In South Sudan, Nimule BP uses a solar panel to generate electricity while Kaya BP uses generators without backup. The surveys also looked at the availability of power backup

in case of a power blackout at the BPs. 33 BPs (75%) reported having a backup generator which is essential as some BP often faces power cut which will affect BP services and water source at BPs which pumps water from river or boreholes.

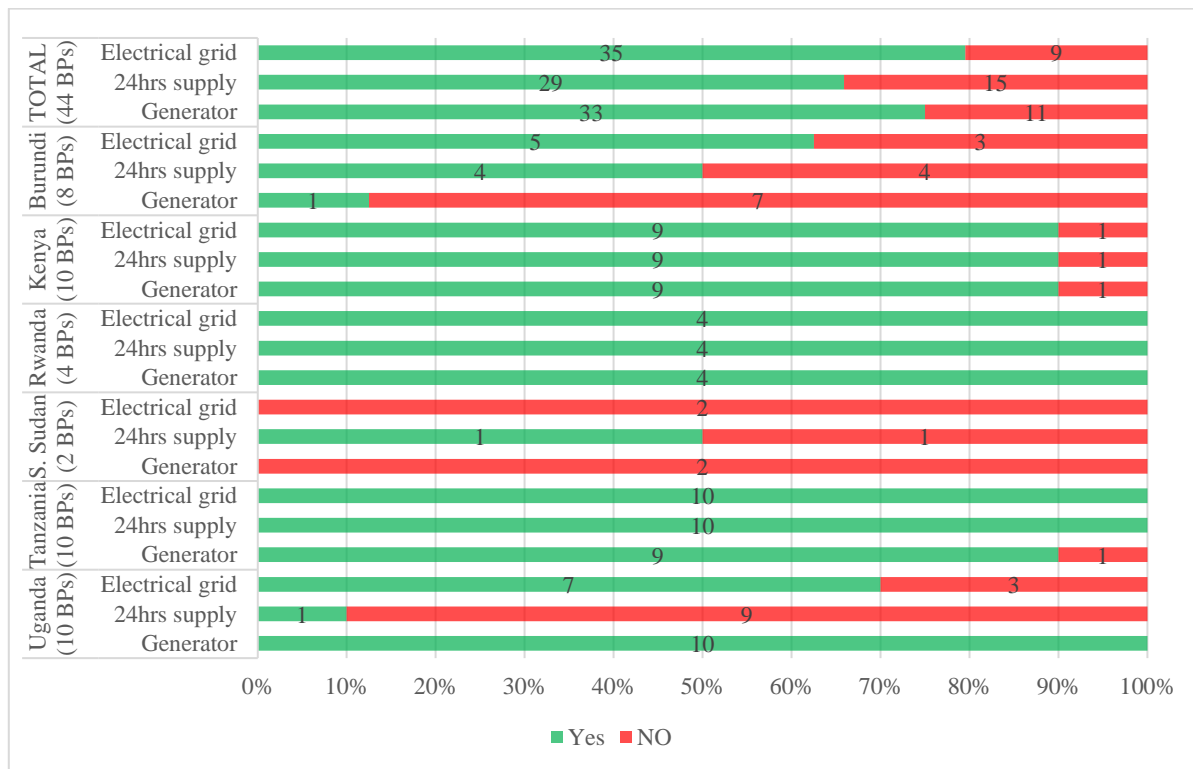


Figure 27. BPs with Electricity from Main Grid, 24-hour Supply, and Back-up Generator

Electronic submission of documents at BP

When asked if the existing customs systems adequately support the electronic submission of documents required for declarations to mitigate risks of COVID-19 transmission through face-to-face interactions, 54.5% (24 BPs) of the respondents agreed that they had adequate systems for electronic submissions while 14.6% (6 BPs) strongly agreed. However, 14.6% (6 BPs) disagreed and only 4.5% (2 BPs) strongly disagreed with having adequate customs systems.

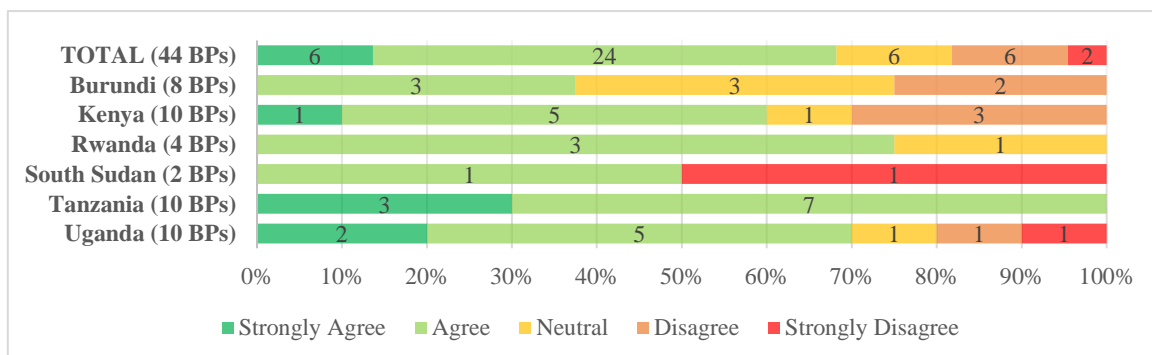


Figure 28. Adequacy of Electronic Submission of Documents to Mitigate Human Interaction

2.2.2.8 Community Awareness and Engagement

Under the theme of “Community Awareness and Engagement”, this section mainly discusses the status of awareness-raising activities and KAP of truck drivers and local residents in communities around the BPs in the EAC region. An analysis of a representative indicator of the adequacy in community awareness and engagement of BP users and surrounding communities in the region and each Partner State is shown in Table 18.

Table 18. Baseline Indicator for Community Awareness and Engagement

Indicator	TOTAL (BP n=44)	Burundi (BP n=8)	Kenya (BP n=10)	Rwanda (BP n=4)	South Sudan (BP n=2)	Tanzania (BP n=10)	Uganda (BP n=10)
% of BPs with sensitization activities for cross-border traders	43.2%	25%	80%	75%	50%	None	50%

*% of BPs responded “Strongly agree” or “Agree”

Key Findings

- Inadequate border community intervention by BPs
- Issues on IEC materials: availability, types, language, message
- Inadequate KAP of truck drivers and community people

Community sensitization activities by BP

Part of the EAC COVID-19 response plan objectives is to promote risk communications, community engagement, sensitization and awareness creation on COVID-19 among the stakeholders that use the BP across countries within the region. The survey sought to find out whether the BPs have carried out any sensitization and capacity-building activities for cross-border traders that are vulnerable to COVID-19. 43.2% (19 BPs) of the respondents reported having conducted a sensitization activity while 18.2% (8 BPs) had not done any awareness creation. Moreover, 38.6% (17 BPs) were not sure whether such activity had been carried out.

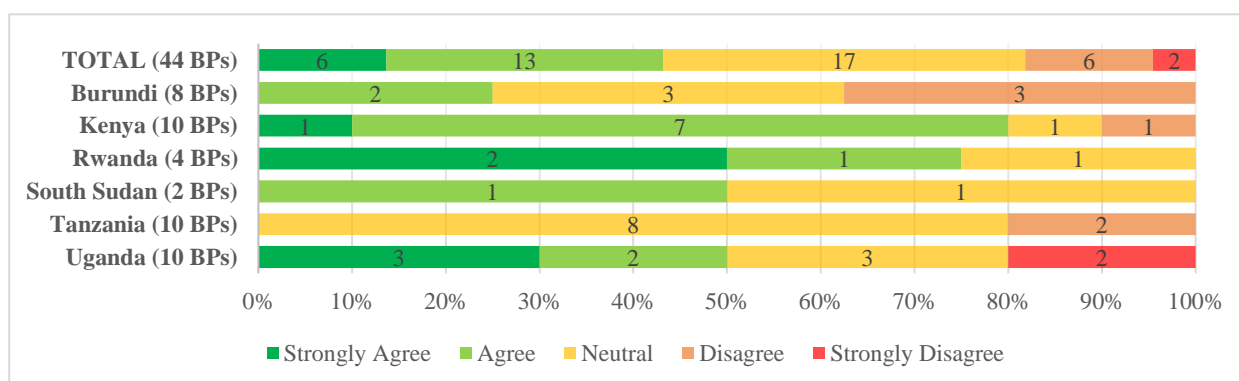


Figure 29. BP with Sensitization Activities for Cross-border Traders/Community People

IEC materials at BPs

IEC materials were available and displayed at 14 (78%) out of 18 BPs where direct observation took place. Four (4) BPs without any IEC materials were Kobero BP and Mugina BP (Burundi), Nimule BP (South Sudan) and Holili BP (Tanzania). At 14 BPs above-mentioned type of material was only posters except for Rwanda where fliers were also available. In terms of the language used in the materials Swahili, one of the key languages used at the BP, particularly by truck drivers, was common after English. While Kenya used both English and Swahili, materials at Tanzanian BPs were only in Swahili. On the other hand, at BPs in Uganda, most of the materials were in English and the material at Cyanika BP was in Kinyankore although the natives speak Kifumbira. Although Swahili is it is important that materials developed in various languages and made available at each BP in at least two languages.



IEC posters in Local Languages at Rusumo BP, Rwanda (left) and Busia BP, Kenya (right)

Cross-border cargo truck drivers and community members

In normal circumstances, a wide range of individuals cross-borders in the region to engage in essential activities. These include truck and boda-boda (motorcycle taxi) drivers, small and large-scale traders, tourists, migrant workers, refugees, returnees and members of border communities. Although COVID-19-related border closures have reduced traffic at borders, these measures exempted cross-border commercial truck drivers as well as returnees.²⁰ The Team also found that some borders remain open for all travellers such as traders and migrant workers as some countries eased restrictions. Border officials, security officers, Port Health staff and support staff as customs clearing agents as well as vendors and workers at restaurants and kiosks around the BP engage with travellers and return to their homes daily, increasing the risk of community spread.

In this study, 339 truck drivers and 349 community members and traders were interviewed at 18 BPs. 88% of truck drivers and 81% of community members knew three or more symptoms of COVID-19. 87% of

²⁰ Jones, L. and M. Schmidt-Sane, "Key Considerations: COVID-19 RCCE strategies for cross-border movement in the Eastern and Southern Africa region", *Social Science in Humanitarian Action (SSHAP)*, (2020): 3.

truck drivers and 57% of community members also reported they practice more than three COVID-19 preventive measures. It seems truck drivers tend to be exposed to COVID-19 information and practice preventive measures more than community members. However, many challenges still remain, such as myths and misconceptions, low risk perceptions, and inadequate behaviour change.

Chapter 3 The Pilot Activities

3.1 Pilot Activity Planning

Pilot activities were conducted with the aim of organizing specific model methods to address the issues and needs identified from desk reviews and baseline survey findings. In section 3.1, an overview of how the pilot activities were planned and the types of pilot activities are discussed. Section 3.2 contains a comprehensive report of each pilot activity in each Partner State. Section 3.3 discusses the proposed models based on the lessons learned and recommendations for each pilot activity.

3.1.1 Activity and BP Prioritization

Good practices and gaps identified from the baseline survey were organized and analysed. The findings were presented to the EAC, and focal persons of each Partner State, who validated the data in August 2021. Based on these data, the Team proposed activities that were categorized into (1) mid- to long-term, or (2) short term interventions. Activities that were implementable within the allotted timeframe, urgent, and feasible were categorized as short-term activities. These short-term activities were considered for inclusion among the pilot activities.

With various possible interventions, it was necessary to prioritise and select the interventions. The selection of pilot activities was facilitated by the Team, through the creation of selection criteria for prioritization. Prioritized activities were extracted based on (1) urgency, and (2) feasibility. Urgency relates to how much time is needed to implement it, and how unique that intervention would be to the BPs. An intervention was then considered highly urgent if it was both implementable within the allotted time frame and unique compared to existing interventions implemented or being implemented. Feasibility was evaluated by the following considerations: costs, accessibility of the target location, availability of human resources, and environmental situations (not limited to natural environments but also political environments). The focal persons from each Partner State, who were guided by the baseline survey findings and the selection criteria, proceeded with a preliminary selection of interventions as candidate pilot activities. Prioritization of areas and interventions in each Partner State can be seen in detail in **Appendix 3**.

To ensure that all the activities are in line with the objectives and available resources, meetings were convened between August to October 2021 with focal persons, relevant organizations from the Partner States, the EAC, and JICA, to review, validate, and/or revise the pilot activity plans. Upon finalization of pilot activity plans, approval was obtained from the abovementioned stakeholders.

3.1.2 Pilot Activity Models and Themes

Pilot activities have two main **targets**: (1) BP facility, including the infrastructure and staff, and (2) the communities surrounding the BPs. In addition, it is desirable to strengthen both tangible (equipment and supplies) and intangible (staff) aspects of the BP facilities, therefore the Team has categorized pilot activities into 3 activity **models** (activities that support the intangible aspects of BP, the tangible aspects of the BP, and then the surrounding community). Each model is further sub-categorized into 5 different **themes** which were based on the needs identified in the baseline survey (Table 19).

Table 19. Pilot Activities Implemented in each Partner State categorized into Targets, Models, and Themes

Target	Models	Themes	Burundi	Kenya	Rwanda	South Sudan	Tanzania	Uganda
BP facilities	Strengthening IPC and Structural Measures at BPs	Hand hygiene facility		✓b			✓g	
		Waste management			✓d			
		Port Health		✓b				✓i
	Human Resource Capacity development	Capacity development		✓c	✓e	✓f		✓j
Communities surrounding BP facilities	Community Awareness Creation Activities	Community engagement	✓a				✓g	

The checkmarks represent pilot activities that were implemented under these themes in the respective countries.

- a. (Burundi) Gisuru, Gahumo, Ngomante, Mutwan, Gatonga, At Madiridiri, At Philippe, At Musoda, Mugina
- b. (Kenya) Illasit, Lwakhakha, Nadapal, Suam, Taveta
- c. (Kenya) Busia, Lwakhakha, Isebania, Malaba
- d. (Rwanda) Rusumo
- e. (Rwanda) No pinpoint BP, but should benefit all Rwandan BPs
- f. (South Sudan) Nimule
- g. (Tanzania) Holili, Namanga, Kabanga, Rusumo
- h. (Uganda) Busia, Malaba, Mutukula, Katuna, Cyanika, Mirama Hills, Oraba
- i. (Uganda) Elegu



Figure 30. Plot Map of BPs where Pilot Activities were Implemented

A list of the pilot activities can be seen below (letters correspond to the BPs listed in Table 19)

Activity Model 1: Strengthening IPC and Structural Measures at BPs

1. Hand hygiene facility (e.g., introduction, improvement, or utilization of handwashing stations^{b,d}, improvement of hand sanitization environment^{d,g})
2. Waste management (e.g., bin organisation)
3. IPC improvement at Port Health (e.g., PPE utilisation, the establishment of safe screening spaces^{b,d,g}, installation of thermal scanners^g, calibration of equipmentⁱ)

Activity Model 2: Human Resource Capacity development

4. BP staff training (e.g., IPC^{b,f}, PCR^f, psychosocial support training^{b,j})

Activity Model 3: Community Awareness Creation Activities

5. Community engagement with community members and truck drivers (e.g., development/reproduction/distribution of IEC materials^g, increasing awareness through information dissemination via radio stations^g)
6. Support for surveillance in the community^a

The details of the pilot activities implemented in each country can be found in the next section.

3.2 Pilot Activity Reports in each Partner State

In this section, the Team will describe the pilot activities implemented in each Partner State using the following outline:

1.1.1 Country

1.1.1.1 Pilot Activity Title

Challenges that the pilot activity aimed to address

Pilot Activity (details of)

Objectives

Target BPs/Target population

Activity output

An approach piloted for improvement

Assessment and observation

Lessons learned and Recommendations

3.2.1 Burundi

One pilot activity was implemented in Burundi, namely:

- (1) Strengthening Community Based Surveillance (CBS) for early case detection, and effective case investigation, referral, and management of COVID-19 and other communicable diseases

3.2.1.1 Strengthening CBS for early case detection, and effective case investigation, referral, and management of COVID-19 and other communicable diseases

Challenges that the pilot activity aimed to address

As a consequence of the baseline survey conducted from May to June 2021 in Burundi, several issues were identified but the pilot activity aimed to address the following challenges:

- Inadequate knowledge and awareness of COVID-19 among the community members: The baseline survey identified that community members in Burundi have a lower level of knowledge on COVID-19 compared to other Partner States. Only 7 out of 17 interviewed community members in Burundi knew that a person infected with COVID-19 who does not show symptoms can spread the coronavirus.
- Insufficient sensitization activities for the community surrounding the borders: Only 2 out of 8 surveyed BPs agreed that they are doing sufficient sensitization for surrounding communities. BPs cannot conduct sensitization for the communities and responsibilities remain with the health authorities in the districts which also need capacity development and financial support.
- The porosity of the borders: The land borders have been partially closed with the border countries to minimize the COVID-19 spread. However, there are many unofficial borders and illegal border transgression continues and puts the community at high risk of both importing and exporting COVID-19 across the border. Communities in border areas remain at high risk of contracting not only COVID-19 but also other communicable diseases including dysentery, malaria, measles, tuberculosis, varicella.

Pilot Activity

Compared to people in urban areas, community people in rural areas have limited access to healthcare services, and in the case of COVID-19, there are very few cases where people voluntarily visit healthcare facilities after the onset of illness and are found to be infected. Nevertheless, communities particularly along the border are at higher risk of infection with COVID-19 and other communicable diseases due to the active movement of people through the porous border. This means that despite the high risk of infection, the probability of a positive person being identified is low, and there is a greater risk of the infection spreading to other communities or to the other side of the border. Based on the National Response Plan to the COVID-19 Epidemic September 2021–February 2022, and the discussion with the Ministry of Public Health and the Fight Against AIDS, as well as the IOM, the Team agreed to support setting up Community-based Surveillance (CBS) in accordance with the Technical Guidelines for Integrated Disease Surveillance and

Response (IDSR) in the African Region: Third edition²¹ and IHR 2005 in the health districts along the Tanzania border. The Ministry of Public Health and the Fight Against AIDS had set up and implemented CBS in partnership with IOM, and its activities have been conducted by Community Health Workers (CHWs) in health districts located in Makamba, Muyinga, and Ruyigi provinces from October 2020 to April 2021. However, there is a need to expand to other provinces and districts and also support for the supervision of the activities of CHWs in the community, and improvement for the reports of their activity remained as issues. In addition, a low level of involvement of Health Promotion Technicians (HPTs), who are the supervisor of CHWs and the link between the community and the healthcare facility, may delay accurate case detection and rapid response, which in turn increases the risk of missing positive cases and the spread of COVID-19 infection within the community. Therefore, in this pilot activity, HPTs who are also part of the health centre staff and coordinator of activities at the community level were involved in the workshop and training prior to the implementation of the CBS activities in each district to inspect the efficiency and impact of the involvement of HPTs and amelioration of reporting system. Strengthening the involvement of the HPTs is expected to provide more robust community health services, and the detection, reporting, and response to corona-positive cases will be faster and smoother, ultimately reducing the infection rate in the communities. Against this background, the information workshop and training for the CBS activities were planned for three days in four districts at the Burundi-Tanzania border as the pilot activity in Burundi.

Objectives

To examine a model case for strengthening inclusive and local disease surveillance, early warning and response systems for early case detection; and effective case investigation, referral, and management through implementing a community-based surveillance

Target BPs

Information workshop and training for CBS towards sensitization and early detection of COVID-19 and other communicable diseases were implemented in Kinyinya, Murore, Gihofi, and Nyanza-lac health districts covering the following BPs:

²¹ WHO AFRO, *Technical Guidelines for Integrated Disease Surveillance and Response in the African Region*, (2019).

BP Name	Health District	Province
Gisuru	Kinyinya	Ruyigi
Gahumo	Murore	Cankuzo
Ngomante Mutwana Gatonga At Madiridiri At Philippe At Musoda	Gihofi	Rutana
Mugina	Nyanza-Lac	Makamba



Figure 31. Map of the health districts targeted for Pilot Activities in Burundi

Activity output

A total of 155 participants participated in the activities in the above four districts in the information workshop and training which took place from 15th November to 26th November 2021 for 3 days per district.

Table 20. Composition of Participants of the Training in Burundi

Name of District	District Officers				Community leaders	HPTs	CHWs	TOTAL
	Police	Immigration	Administrative	Health authorities				
Kinyinya	2	2	3	1	5	2	20	35
Murore	2	2	5	2	5	1	20	37
Gihofi	2	2	2	2	5	3	30	46
Nyanza-lac	2	2	4	2	4	2	21	37
TOTAL	8	8	14	7	19	8	91	155

In each district the following workshop and training were held:

- Information workshop for administrative and health authorities (1 day)

District Officers and HPTs participated in this 1-day workshop. With the aim for information transmission to Administrative and Health Authorities and community leaders in provinces and health districts about the strategy for implementing CBS, the facilitators from MoH have made a PowerPoint presentation describing the purpose of CBS of epidemic diseases with emphasis to COVID-19, the role of each stakeholder, strategy for implementing CBS, and community engagement towards the Administrative (Governor representatives, Community representatives, Immigration and Police Officers) and Health Authorities (District Medical Officer, Provincial Medical Doctor and Director of the provincial hospital), and HPT. Then a discussion on the monitoring and evaluation of the activities of CHWs, and the method of data collection in the community was also conducted as a part of the information workshop.

- Training of CHWs from communities along the borders (2 days)

CHWs, Community Leaders, HPTs participated in this 2-day training. Not only for reinforcement of the adequate knowledge regarding COVID-19, but also to gain the technical method for home visits to detect the people who are presumptive for COVID-19 in the community, general information of COVID-19 such as the way of transmission and preventive behaviours from COVID-19, strategy for CBS, and the role of CHWs had been explained to the participants including CHWs, community leaders and HPT. Furthermore, they had learned some practical skills such as application of hand sanitiser, effective handwashing, interpersonal communication, and reporting method when home visits occurred, then implemented hands-on exercises toward the home visits to early detection of people who are presumptive for COVID-19 and surveillance of the community. Distributed the necessary materials, for example, masks, gloves, hand sanitisers, education material and bags to put them into, as preparedness for the community activities of CHWs as well.



Training for adequate handwashing method in Kinvyinya district (left);



Demonstration of interpersonal communication for home visits in Murore district (rights)



Training for CHWs in Nyanza-lac district (left);



Hands-on training for handwashing in Nyanza-lac district (right)

An approach piloted for improvement

Collaboration and involvement of HPTs in the training: MoH was focused on the numerous participants to be trained so far, however, the most important fact was the involvement of the HPTs into the whole training as the mentors of CHWs, the direct chief and the supervisor to assure monitoring the activities of the CHWs

as well. HPTs conduct community mobilization and sensitization in any given public health project, they assure the coordination of CHW activities. Additionally, HPTs are the bond between the MoH and local community, between the community and health administration as well. The HPTs have a responsibility to make surveillance and communication of disease, so any project that does not involve them may not stand long or fail easier. Given that CHWs are trained by the HPTs and work under their responsibility, it was very worthy to involve HPTs in the training even if their number was insufficient.

Assessment and observation

To assess whether the workshop contributed to increasing the community’s KAP on COVID-19 IPC, pre and post-test were taken by the participants. The results regarding the adequate knowledge of COVID-19 are shown as below:

Table 21. Pre and post-test results for KAP on COVID-19 IPC in Burundi

	Kinyinya	Murore	Gihofi	Nyanza-lac
Pre-test	84.5	0	78.5	14.8
Post-test	94	33.3	92	70.4

The percentage of the participants who gained the correct knowledge of COVID-19 was increased as a short-term evaluation of the training. The training has improved the knowledge about the symptoms of COVID-19 of participants. Before the training, they were confused about distinguishing the symptoms of COVID-19 and other diseases but after the training, most of them were aware that COVID-19 shares the symptoms with other diseases. Since there was no educational training in recent several years in Murore, the scores of pre-tests were the lowest among the four districts. Even in the post-test, Murore was the lowest, mainly because many participants were late for the training and were not able to attend all the lectures. Murore health district is a large county and there were transportation problems and access problems from the community to the training site. It was decided that HPT would follow up with CHWs and transfer the missing knowledge. All the participants have expressed that they were grateful and they will be able to transmit the information gained.

The Focal Person from the MoH has recognized the importance of the involvement of HPTs from the sensitization and training phase and mentioned that it would be continued for the sustainability of CBS activities. However, it seems to be difficult to evaluate adequately the number of alerts, investigations, and validations as the output of the pilot activities by involving HPTs, since it takes several months after implementation of the CBS activities in the above four districts, also the reasons for correlation with the actual trends of diseases in the community.

Lessons learned and Recommendations

- **Dynamic and inclusive approaches for Community Engagement:** It is crucial to involve and cooperate with relevant stakeholders to strengthen the CBS activities more effectively. It was important and

effective to involve Governor representatives, Community representatives, Immigration and Police Officers, the District Medical Officer, Provincial Medical Doctor, Director of the provincial hospital, and HPTs, and share objectives of the CBS and implement them in collaboration. Particularly, HPTs who are responsible for the CBS activity shall be involved in the sustainability and effectiveness of the CBS activities as preparedness for the future potential epidemic diseases.

- Limitation of the mobilized peoples for the community activities, and secure the knowledge sharing opportunities: The number of participants mobilized for the training is also significant. It is suggested to involve the relevant stakeholders in the community engagement as much as possible, like community leaders, HPTs and CHWs, and so on into the workshop and training in the community. Though, it is not always easy to implement adequate training on regular basis in the communities in the local area in Burundi, due to the time required, physical and budgetary issues. Sometimes the poor infrastructural reasons such as traffic conditions to visit Kinyinya, Murore, and Nyanza-lac district interrupt its implementation of the training. To facilitate the sensitization and reinforcement of the CBS activities more effectively, avoiding these issues and challenges above, it is recommended to have the opportunity to share the knowledge and skills gained through the training to other CHWs in the close communities from the trained CHWs. From the trained HPTs to other HPTs as well. It is important to have a knowledge sharing workshop at their levels to lecture what they have learned to others which could help them to deepen their own learning.

3.2.2 Kenya

Three pilot activities were implemented in Kenya, namely:

- (1) Examine the effective hand hygiene facility utilization through the introduction of permanent and easy-to-maintain handwashing stations and water tanks
- (2) Minimizing infection risk at Port Health screening areas through the installation of sneeze guards and screening booth
- (3) Developing a resilient BP workforce through training of BMC on IPC and other relevant issues

3.2.2.1 Examining an effective hand hygiene facility utilization model through the installation of permanent and easy-to-maintain handwashing stations and water tanks

Challenges that the pilot activity aimed to address

Inadequate or non-functional handwashing facilities at certain BPs is the main challenge identified during the baseline survey. Specifically:

- Fewer infrastructure and equipment investment opportunities for smaller BPs: Kenya has a total of 10 gazetted ground crossing points within the EAC. These are: Busia, Namanga, Malaba, Taveta, Illasit, Isebania, Lunga, Lwakhakha, Nadapal and Suam. Of these, Busia, Namanga, Malaba, and Taveta are considered major BPs due to the high traffic that they handle. As a result, a majority of infrastructure and equipment investments have been focused on these major BPs.
- Gaps in handwashing practices among travellers and BP staff: The baseline survey showed that there are gaps in practices to facilitate proper handwashing practices in the following BPs: (1) Illasit, (2) Taveta, (3) Lwakhakha, (4) Suam, and (5) Nadapal. This can be attributed to the fact that these BPs have fewer existing, or functioning handwashing stations. In addition, it was found that standard guidelines and protocols which would ensure continuous and sustainable handwashing practices in the BPs were absent.
- Need for proper maintenance of handwashing stations at BPs: More than 20% of the handwashing stations surveyed during the baseline survey in Kenya were non-functional, which may be attributed to inadequate maintenance protocols, or low durability of existing handwashing stations.

Pilot Activity

Objectives

To examine a model case for improving hand hygiene facility utilization at the BPs among staff and travellers using the BP, specifically through:

- Introduction of new permanent/fixed-type handwashing facilities, including handwashing sinks and/or water tanks
- Provision of guidance on operation and maintenance (O&M), and delegation of tasks for the

management of the handwashing facilities

Target BPs

Illasit, Lwakhakha, Nadapal, Suam, Taveta

Activity Output

A total of five 4-section fixed-type knee-press stainless steel sinks were installed in each of the target BPs, connected to the main water source with water pipes. As water supply systems were unreliable at the target BPs excluding Taveta, a total of four 5,000 L water tanks were installed in Illasit, Lwakhakha, Nadapal, and Suam BPs. Finally, provision of O&M manuals to guide BP staff in proper usage and management of the installed equipment for lengthening longevity of items, and increasing utilization of sinks by both BP staff and travellers.

An approach piloted for improvement

- Rapid needs assessment of hand hygiene facilities at BPs: In addition to the baseline survey conducted earlier in 2021, an additional rapid needs assessment in relation to water, hygiene and sanitation practices, and conditions of hand hygiene facilities of the five target BPs was done. It is worth noting that the baseline survey for these five BPs was done by telephone as it was not possible to do field observations then. Through this assessment, information reported by the BP staff in the baseline survey was compared with the observations made during the assessment. In addition, the most recent situation at the BPs was clarified in order to avoid duplication of activities from different donors. Additional/new information such as measurements, positioning, types of sinks needed, size of the tank needed, etc. were gathered



Measurements made at Illasit BP during the rapid assessment to determine the length of necessary pipes (left);

In Nadapal BP, one portable hand hygiene facility was found during rapid assessment (right).

- Introduction of fixed-type, easy-to-manage handwash stations/water tanks: Prior to the procurement

of sinks, a wide variety of prospective sinks were researched and inspected on-site to ensure quality and ease of use. Plastic sinks, however cheaper than ceramic and steel sinks, tend to have a quicker wear-and-tear. Hands-free plastic sinks usually have foot pedals that are made of metal that rust easily as it constantly gets wet, and pre-fabricated types are rare. Therefore, its pre-fabricated stainless steel alternative was selected. The knee-press handwashing stations that were introduced are hands-free which can help reduce transmission of infectious diseases including COVID-19. Each knee-press sink is fitted with two soap dispensers. Procurement of the handwashing facilities, accessories, and water tanks was subcontracted to TombeTech TM to ensure efficient and timely delivery and installation.



Older handwashing station (left); the newly installed handwashing station (right) at Taveta BP

- Development and provision of an O&M manual and delegation of tasks for the management of hand hygiene facilities: O&M manuals were developed in consultation with the Port Health Department who are responsible for the implementation of the manual in the BPs. The O&M manuals include proper usage of hand hygiene facilities, guidance in the delegation of tasks such as refilling of soap and water, cleaning of sinks and their surroundings, monitoring of usage of soap and water, and contact numbers for repair.

Assessment and observation

After the introduction of the hand hygiene facilities and a brief training about the O&M of the handwashing stations, a survey was conducted to assess KAP relating to the usage of the newly installed equipment. All Port Health officers in the five BPs (100%, n=10) and the station in-charges (100%, n=5) were rated themselves 5 (on a 1 to 5 Likert scale) being confident that the newly installed handwash stations will be used more often by both staff and the travellers at the BP, compared to before. A spot check corroborated with reports from the Port Health Officers in each BP indicated a higher frequency of utilization of the handwashing stations among the travellers after the installation. After implementation of this activity, a follow-up assessment of the newly installed handwashing station was done. Users were interviewed about its: ease of use (is it easy to operate the sinks), accessibility (are the sinks positioned in a strategic and convenient location), availability (was the sink readily available for you to use), motivation factor (are the

sinks encouraging to use), and ease of maintenance. The results of the assessment can be seen below.

Table 22. Assessment of Handwashing Stations at the BPs by Travellers

Evaluation items	Ease of use		Accessibility		Availability		Motivation factor		Ease of maintenance		TOTAL	
	Before	After	Before	After	Before	After	Before	After	Before	After	Overall score before	Overall score after
Taveta (n=1)	2	4	5	5	4	5	3	5	5	5	19	24
Illasit (n=1)	2	4	5	5	2	5	2	5	3	5	14	24
Lwakhakha (n=1)	2	4	5	5	1	5	3	5	4	5	15	24
Suam (n=1)	3	5	3	4	2	5	2	5	3	5	13	24
Nadapal (n=1)	1	4	3	5	2	5	2	5	3	4	11	23

Time constraints limited the number of people interviewed given that more attention was given to the installation process. In addition, port health staff were unavailable during the assessment of the handwashing stations as they were busy at their posts.

Lessons learned and Recommendations

- Thorough field and materials research: Although it may be tempting to only rely on online and telephonic surveys for data as it is fast and convenient, field visits to BPs and equipment inspection at various companies prior to purchasing proved to be vital in this pilot activity. This paved way in ensuring appropriately sized equipment was placed in appropriate locations at BPs, and that the equipment to be installed are of good quality, and user-friendly.
- Good communication between MoH, BP staff, and partners: Prior to the installation of equipment, approval was necessary. The BMC staff and MoH were able to help fast-track the procedures through good communication and prompt coordination between subcontractors and local coordinators.
- Ownership and responsibility: It was critical to involve the Port Health department in the O&M manual development to ensure that guidelines are appropriate; consequently, this should increase the Port Health staffs' sense of ownership for the O&M manuals, and sense of responsibility to ensure sustainable use of the newly installed hand hygiene facilities.
- Monitoring of usage: Upon installation of handwashing sinks, active monitoring of usage of water and soap was recommended as it would generate the information necessary to plan the budget required to sustainably operate the hand hygiene facilities. Through monitoring, the BP staff could also determine if travellers and staff are utilizing the facilities properly, and enforce measures in case utilization declines, or improper utilization occurs.

3.2.2.2 Minimizing infection risk through the installation of sneeze guards and screening booth

Challenges that the pilot activity aimed to address

Exposure to infection risks at Port Health is another main challenge identified in the baseline survey in Kenya, specifically:

- Inadequate space for Port Health at BPs: Part of the Port Health officers' work is to pre-screen travellers before entering the country, placing them on the front line and the first point of contact with travellers. They are exposed to persons possibly infected with COVID-19 and the risk of infection also increases as the traffic increases. Taveta is an example of a border that receives a higher volume of traffic, however, the space allocated for their Port Health screening procedures seemed inadequate for the volume of people they receive.
- Inadequate protection during pre-screening procedures at Port Health: Although Port Health staff are exposed to hundreds of possibly infected people, the risk of infection can be easily mitigated with the proper use of PPE, distancing, ventilation, hand hygiene, and cough etiquette. Sneeze guards are a form of protective equipment that can help prevent transmission of infectious disease by blocking lateral transition of droplets and aerosols from when an infected person sneezes, coughs, talks, etc. In many Kenyan BPs, the Port Health officers' desks did not have any kind of physical barriers such as face shields, sneeze guards, or screening booths to protect both the staff and the travellers.

Pilot Activity

Objectives

To examine a model case on minimizing infection risks at Port Health services through structural improvement such as:

- Introduction of sneeze guards for relatively smaller BPs (Illasit, Lwakhakha, Nadapal, Suam BPs)
- Installation of pre-fabricated screening booths at relatively bigger and busier BPs (Taveta BP)

Target BPs

Illasit, Lwakhakha, Nadapal, Suam, Taveta

Activity Output

Sneeze guards were installed for desks used during screening procedures at Illasit, Lwakhakha, Nadapal, Suam BPs; a pre-fabricated screening booth was installed in Taveta BP to secure adequate screening space and provide additional protection for the Taveta Port Health staff.



Collection of measurements for sneeze guard installation (left); Port Health at Illasit BP before pilot activity (middle); after installation of sneeze guards (right)



The newly installed Port Health Screening Booth at Taveta BP

An approach piloted for improvement

- Front liner prioritization at relatively smaller BPs: As previously mentioned, investments in infrastructures tend to target bigger BPs; to offset the imbalance, this pilot activity focused on smaller BPs who equally need protection. Although they may be receiving less traffic compared to other BPs, their Port Health staff should still be considered as one of the country's front liners in battling COVID-19 as they are still exposed to various people and types of infection risks every day. In addition, paying attention to the IPC needs of smaller BPs may decrease the risk of importing cases of infections through porous borders. Provisions should be in place to ensure that the Port Health staff feel safe in the workplace, even if they are only collecting documents for screening travellers.
- More permanent but affordable IPC measures: Setting up protective equipment such as sneeze guards, not only protects the BP staff from droplets, it also represents that a more permanent IPC measure is available.

Assessment and observation

Like other frontline workers, Port health staff are more susceptible to COVID-19 through interaction with almost all individuals who enter their establishments. Therefore, the degree of their perception of risk and their sense of vulnerability to the virus determines their consciousness of comfort and motivation for their work. This is an important component of occupational health and safety as the high perception of risk with

low coping mechanisms can lead to fear, stress, and low productivity. The BP staff were assessed on the following before installation of the sneeze guards and the prefabricated booth, during the needs assessment.

- Perceived Vulnerability: the likelihood that a port health staff might contract COVID-19 at the workplace.
- Perceived Response Efficacy: the beliefs regarding the effectiveness of the proposed interventions such as wearing masks, maintaining physical distancing, practising coughing and sneezing etiquette, and other practices that are effective in reducing personal risk to COVID-19
- Perceived Self Efficacy: personal belief and confidence in the port health staff’s ability to successfully adhere to COVID-19 basic protective and safety measures

After installation of the sneeze guards and the prefabricated screening booth was assessed using the same scale.

Table 23. Rating of Vulnerability and Risk Before Installation of Sneeze Guards and Screening Booths

Evaluation items	Perceived Vulnerability (lower score is ideal)		Perceived Response Efficacy		Perceived Self-efficacy	
	Before	After	Before	After	Before	After
Respondent (n=8) from						
Taveta	4	1	3	5	2	5
Lwakhakha	4	2	2	3	3	4
Lwakhakha	3	2	2	4	3	4
Suam	4	2	3	4	2	3
Nadapal	4	3	3	4	3	4
Nadapal	4	2	3	4	2	3
Illasit	3	2	3	4	2	4
Illasit	4	3	4	5	3	4
AVERAGE	3.75	2.125	2.875	4.125	2.5	3.875

After installing the sneeze guard and booth, the perceived vulnerability of port health staff reduced from 3.7 to 2.1, meaning they felt less vulnerable to the pandemic. In addition, their beliefs in the effectiveness of the interventions and practices to reduce personal risk to COVID-19 also increased from 3.2 to 4.1 after installing the booth and sneeze guards. Moreover, their confidence in their ability to successfully adhere to COVID 19 protective and safety measures also increased from 2.5 to 3.9, showing that the installation of the sneeze guards and the booth positively impacts the well-being and safety perceptions of the port health staff.

Lessons learned and recommendations

- Ease of implementation: The sneeze guard installation activity was easy to implement as it requires

minimal resources and effort, Aside from obtaining measurements, ordering materials, and ensuring safe delivery of items, there are no other complicated installation or maintenance procedures. The materials' dimensions, shapes, and holes are also customizable and can adapt to various types of work environments.

- Wide range of protection: Sneeze guards and booths installation is recommendable for areas where it is hard to control or enforce mask-wearing practices in the community. The protection is also not limited to COVID-19 but also other droplets and aerosol transmissible infectious diseases such as influenza, colds, respiratory syncytial virus, among others, and therefore should be continuously be utilized even after the COVID-19 pandemic. Although 100% protection cannot be guaranteed, it augments protection when coupled with measures such as wearing of face masks, physical distancing, ventilation, etc.

3.2.2.3 Developing a resilient BP workforce through training of BMC on IPC and other relevant issues

Challenges that the pilot activity aimed to address

Imbalanced and inadequate capacity of BMCs on IPC and multi-agency coordination was a challenge identified in the baseline survey in Kenya, specifically:

- Imbalanced opportunities for capacity development between larger BPs and smaller BPs: As previously mentioned in Kenya Pilot Activity 1, there is a tendency to focus on infrastructure investments in major BPs with higher traffic. The same can be said for training, as it was identified that training for staff at smaller BPs was less frequent.
- Inadequate opportunities for IPC training among non-health staff and BMC: The baseline survey showed that even the training for major BPs targeted only the Port Health staff, although the One Health framework recommends the inclusion of other BP staff, or in the case of Kenya, the BMCs. The interview among BMC members revealed gaps in recognizing signs and symptoms of notifiable infectious diseases. Challenges were also noted in the coordination of multi-agency surveillance at the BPs and psychosocial support for the BP staff during the pandemic.
- Inadequate opportunities for sensitization on COVID-19 vaccine for BMC: Since March 2021, the government of Kenya rolled out COVID-19 vaccination for all eligible members, however, the BMC members from various BPs had not been formally sensitized or trained on the COVID-19 vaccine issues including the rationale for vaccination, the benefits, the possible adverse reactions, and the doctrine for accelerating vaccine uptake within the country. These challenges led to the development of the objective approach to strengthening the BMC capacity for coordination, and IPC.

Pilot Activity

Objectives

To examine an IPC capacity development model targeting BP staff through:

- Training of BP staff on national guidelines of IPC
- Targeting BPs that have received less training
- Targeting staff from various agencies within the BP
- Inclusion of relevant issues previously untackled
- Discussion of multi-agency coordination within BPs

Target BPs

Busia, Lwakhakha, Isebania, Malaba

Target population

40 BMC staff (10 from each BP)

Activity Output

A total of 38 BMC members from selected four BPs in Kenya attended the training. The participants were comprised of staff from Administration, Agriculture and Food Authority, Immigration Services, Kenya Fisheries, KRA, Ministry of Interior, National Criminal Investigation, National Intelligence Services, National Police Services, Port Health Services, and Veterinary Services.

The training was facilitated by the MoH officials from the National Government, however, the topics covered were derived from the gaps identified during the baseline survey.



Facilitation of the training by the MoH Port Health

An approach piloted for improvement

- One Health Approach to Training: Unlike previous training sessions that focused mostly on the Port Health staff, this pilot activity broadened the scope to bring on board all the members of the BMC in accordance with the One Health Approach. The approach recognized the new challenges to cross-border disease control and advanced the need to adopt innovative, systemic, and multi-sectoral

responses. The BMC members were trained on the various role of all agencies at the BP in disease surveillance and how to coordinate with each other in recognizing, isolating, notifying, and supporting the Port Health department.

- Use of Updated and Relevant Training Content: the training manual development was guided by the gaps identified during the baseline survey. Issues that had not been handled such as multi-agency coordination, occupational health, and safety during the pandemic, COVID-19 vaccination, psychosocial support, and nutrition management in the context of COVID-19 were included in the training.
- Mixed BPs Approach: the training brought together the BMC members from both major and smaller BPs. A plenary session was held to discuss the way the COVID-19 pandemic had affected their work and how they had tackled the challenges using their locally available capacities and resources. This provided for a good opportunity for knowledge and experience sharing among the BMC members leading to the identification of best practices, paving way for learning not only from facilitators but also from participants' experiences.

Assessment and observation

Before the training, a pre-test was carried out to assess the level of knowledge of the participants. A 10-item pre-test to assess the knowledge regarding basic COVID-19 concepts (symptoms, prevention, transmission, etc.) was given to the BMC staff who participated in the training. Four additional questions were given to Port Health staff (a total of fourteen items) to assess their knowledge on laboratory sampling, interventions, waste disposal, and sterilization methods in the context of COVID-19. These questions were based on IPC guidelines of the Kenya MoH. After the training, post-tests, comprised of the same questions, were given to the participants to assess if there was an improvement in scores.

A summary of the results of the assessment of knowledge of COVID-19 among BMC staff can be seen below:

Table 24. Average Pre- and Post-test Scores for BMC staff (non-Port Health staff)

BP (non-Port Health staff, n=33)	Pre-test Average	Post-test Average
Busia (n=8)	7 / 10	9 / 10
Isebania (n=9)	8 / 10	9 / 10
Lwakhakha (n=9)	7 / 10	9 / 10
Malaba (n=7)	7 / 10	9 / 10
TOTAL AVERAGE	7 / 10	9 / 10

Table 25. Average Pre- and Post-test Scores for Port Health staff

BP (Port Health staff, n=5)	Pre-test Score	Post-test Score
Busia	10 / 14	12 / 14
Isebania	8 / 14	12 / 14
Lwakhakha	7 / 14	12 / 14
Malaba	8 / 14	10 / 14
Malaba	11 / 14	13 / 14
TOTAL AVERAGE	9 / 14	12 / 14

The three main topics that had posed a challenge (symptoms, transmission, history of COVID-19) during the pre-test were discussed and questions emerging from the participants were responded to. Pre-tests showed an average score of 70%, and 64% for BMC staff, and Port Health staff, respectively; and an improvement of at least 2-points, 90%, and 86%, were seen after the training.

Lessons learned and recommendations

- **Inter-border alliances:** This was noted between Busia and Lwakhakha. Busia being a high-volume BP had many trucks queueing for verification for the COVID-19 protocols. On the other hand, Lwakhakha, the nearby BP had significantly less traffic. The management of Busia BP reached out to the management of Lwakhakha to clear the empty trucks, so Busia could focus on the loaded ones. This made work easier and reduced the queues at the Busia BP.
- **Bilateral Alliances:** This was noted between Busia Kenya and Busia Uganda. The management of the two BPs agreed to harmonise their protocols and held regular meetings to discuss emerging issues on the pandemic.
- **Strong Leadership:** This was noted in the Isebania border where the Port Health officer in charge reached out to other BMC members to consult with them on the various challenges affecting them during the pandemic. He noted that most of them were worried about getting COVID-19. He then reassured them of the IPC measures and made arrangements for early delivery of COVID-19 vaccines to the BP. He ensured that all members who requested the vaccination received it.
- **Strong Local/County Government Involvement:** This was noted in Busia County where the County Commissioner worked closely with the BP management to respond to issues. They held regular meetings where the Port Health department was able to brief them on the emerging protocols and the necessary areas for collaborations and notifications.

3.2.3 Rwanda

Two pilot activities were implemented in Rwanda, namely:

- (1) Strengthening comprehensive IPC measures of Port Health to reduce the risk of infections among drivers, travellers, and Port Health staff
- (2) Development of e-learning modules for public health security and surveillance at the PoE

3.2.3.1 Strengthening comprehensive IPC measures of Port Health to reduce the risk of infections among drivers, travellers, and Port Health staff

Challenges that the pilot activity aimed to address

- Inadequate IPC measures at Port Health screening room: The baseline survey found that Port Health at Rusumo does not have a separate room for COVID-19 testing (the sample collection). Drivers' and travellers' samples are collected in an open space without partitions. The Team further observed that there were various factors at the screening room which put drivers, travellers, and Port Health staff at higher risk of infection. Those factors are as follows:
 - No separate and enclosed space for COVID-19 testing (the sample collection)
 - No clear line of flow of drivers and travellers as people enter and exit randomly
 - No restriction on the number of entries; people came in and waited inside, becoming crowded
 - No sneeze guard was installed on the desk for registration/pre-screening
 - No proper hazardous waste bins were installed and garbage was left outside on the ground
 - No functioning hand sanitiser dispenser at entrances and exits of the screening room
 - Inadequate stock of PPE and other IPC supplies in case of an increased number of eligible drivers and travellers for testing
- Inadequate preparedness for management of people who are presumptive for COVID-19: At Rusumo BP drivers and travellers with positive COVID-19 antigen test results will go for another PCR sample collection test. As samples will be transported to National Reference Laboratory in Kigali they need to wait for 24 hours to get the result. They are required to wait for several hours at the BP until either an ambulance from Kirehe District Hospital, located 26 km away, comes to fetch them or an alternative driver arrives to then send the positive driver back to Tanzania. However, there were several issues at the BP for management of people who are presumptive for COVID-19 as follows:
 - There is a building with two rooms for isolation which was constructed by RBC but was not operationalized as there was no equipment such as beds, and issues with electricity.
 - There was no medical equipment such as a pulse oximeter and blood pressure monitor for monitoring and management of both symptomatic and asymptomatic patients.
 - There was only one old sample transportation box which is not enough in the case of increased sample collection.
- The insufficient number of WASH facilities such as fixed handwashing stations: The baseline survey

confirmed there are enough portable handwashing stations with water tanks but not enough for accommodating the number of drivers and travellers passing through Rusumo BP. It is expected to increase if the current restriction, which only allows cargo and returnees to cross the border, is lifted. There are fixed-type handwashing stations that have multiple taps at the entrance and exit of the BP as shown on the map. However, the one between Port Health and the administration building is not operationalized due to an installation issue of water and electricity. The toilet facility behind said handwashing station was also not operationalized because of an issue with electricity and broken pipes. The issues of those WASH facilities located at the centre of BP are as follows:

- The fixed handwashing station is not operationalized due to problems with water installation, electricity, broken pipes, lack of soap dispensers, and hand dryers.
- There was no retaining wall behind the handwashing station which prevents soil erosion that would affect the electricity board of the handwashing station.
- No handwashing signboards with instructions to promote proper handwashing.
- The toilet facility was not operationalized due to electrical problems.

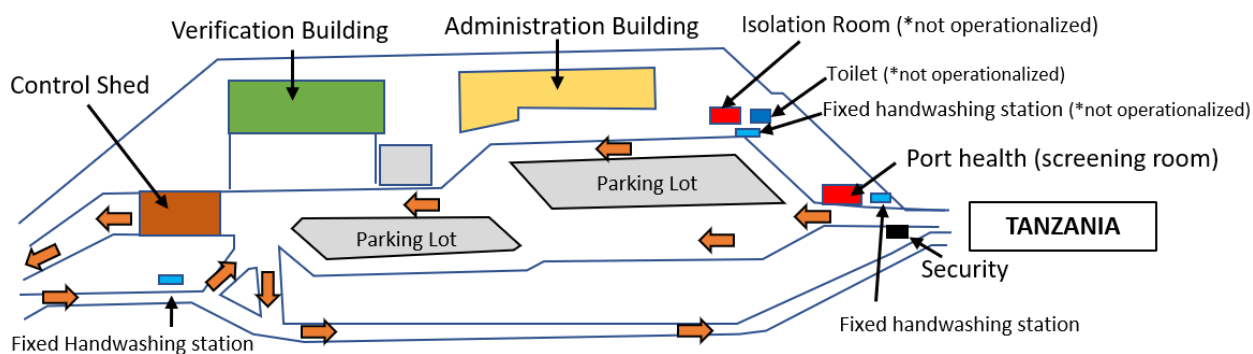


Figure 32. Map of Rusumo BP

Pilot Activity

Objectives

To examine a model case for implementing comprehensive IPC measures through refurbishing and equipping Port Health and WASH facilities for screening, isolation and management of people who are presumptive for COVID-19

Target BP

Rusumo

Activity Output

IPC measures at the Port Health screening room were strengthened

- Sample collection area was enclosed with ward screens and curtains
- Flow line was arranged and the number of entries was restricted using ward screens
- Sneeze guards installed on the larger desks for registration/pre-screening

- Hazardous waste bins were installed to keep hazardous garbage bags inside
- Hand sanitiser dispensers at the entrance and exit of the screening room were installed
- PPE such as masks, gowns, gloves, and sanitisers were supplied to increase the stock level for a projected increase in new infections in the region as well as the number of tests



Conditions of waste disposal at Rusumo BP before installation of bins (left); after installation of bins (centre);

Sanitiser dispensers were also installed (right).

- Preparedness for the management of people with or may presumptive for COVID-19 was strengthened.
 - Two isolation rooms were refurbished and operationalized with hospital beds and linens, cupboards, curtains were supplied and the electrical problem was resolved.
 - Medical equipment such as a pulse oximeter and blood pressure monitor were supplied for the monitoring and management of both symptomatic and asymptomatic patients and sample transportation boxes were also supplied.



Conditions of the isolation room at Rusumo BP (left);before installation of beds (centre); after installation of beds (right).

- The handwashing station and toilet were fixed and operationalized.
 - Electrical and water problems were resolved and broken pipes were repaired and buried underground to avoid breaking.

- Soap dispensers and hand dryers were installed and a retaining wall was built to prevent soil erosion.
- Handwashing signboards with instructions of sufficient handwashing with messages of encouragement were installed.



Conditions of handwashing stations at Rusumo BP before pilot activity (left); After refurbishment (centre and right)

An approach piloted for improvement

- Partition of the room and space to reduce the risk of infection: As it was difficult to expand or increase the number of screening rooms we had to examine the best way to divide the space to reduce the risk of infection among drivers and travellers and also with Port Health staff. Installation of sneeze guard with larger desks and ward screen was indeed a simple but effective solution.



Conditions of the registration desk of Port Health at Rusumo BP before installation of sneezeguards (left);

after installation of sneezeguards (centre and right)

- Consideration of privacy and comfort of drivers and travellers for testing: The use of ward screens to enclose the testing/sample collection area was not just for sake of IPC but also necessary for the privacy of drivers and travellers. Taking samples in open space was discouraging drivers and travellers to be cooperative and also scaring those who are waiting. The baseline survey revealed that the majority of drivers rated low on testing service at BP due to pain caused during sample collection. As Rusumo BP was using random testing cooperation of drivers and travellers was essential for smooth screening. Our approach was to increase their comfort and cooperation during the sample collection process by installing ward screens while infection risks are also reduced.



Conditions of the sample collection space at Rusumo BP before pilot activities (left);
after installation of ward screens (centre and right).

- Reducing the risk of infection by organizing flow lines and limiting the number of people: Previously, there was no clear flow line, and entrance and exit were not clearly marked. In addition, it was not possible to limit the number of people entering the room, which caused many people to stay inside the screening room and increased the risk of infection. We used ward screen to arrange flow line into one direction and also restrict people to come inside without being called by Port Health staff. That reduced the number of close contacts among drivers and travellers as well as the number of people staying inside the room.



Screening room set up at Rusumo BP before pilot activities (left); after arranging flow line (right).

Assessment and observation

The Team administered a questionnaire for seven Port Health staff and interviewed seven drivers in order to assess the approaches and interventions we took as described above. The following table illustrates the summary of their responses on comparison between previous and new setups.

Table 26. Rating of Risk of the Rusumo BP Setup Before and After the Pilot Activities

Evaluation items	User Flow		Number of Entries		Registration Desk		Waste Management		Sample Collection	
	Before	After	Before	After	Before	After	Before	After	Before	After
Port Health staff 1	1	10	1	9	1	10	3	10	1	10
Port Health staff 2	1	10	1	10	2	10	3	10	1	10
Port Health staff 3	5	8	4	8	4	7	4	9	4	8
Port Health staff 4	1	10	1	10	1	10	1	10	1	10
Port Health staff 5	2	9	2	8	1	3	4	9	2	9
Port Health staff 6	2	10	10	10	1	10	2	10	1	10
Port Health staff 7	4	9	4	9	3	8	3	10	2	10
AVERAGE	2.3	9.4	3.3	9.1	1.9	8.3	2.9	9.7	1.7	9.6

*High risk 1 ⇔ 10 low risk

Table 27. Rating of Comfort of the Rusumo BP Port Health Setup Before and After the Pilot Activities

Evaluated Setup	Sample Collection	
	Previous Setup	New Setup
Respondent (n=7)		
Driver 1	5	8
Driver 2	3	10
Driver 3	4	8
Driver 4	5	8
Driver 5	5	10
Driver 6	-	8
Driver 7	4	8
AVERAGE	4.3	8.6

*Uncomfortable 1 ⇔ 10 Comfortable

As we allocated entry and exit doors by installing ward screens, drivers and travellers are now moving in one direction. Port Health rated 9.4 out of 10 for the new setup compared to 2.3 in the previous setup. The number of entries is also limited, indicating congestion has reduced inside the room. This setup was rated 9.1 compared to 3.3 in the previous setup. Some drivers and travellers do not wear face masks although mask-wearing has been increasing compared to before. Desks with sneeze guards would reduce infection risks of Port Health staff and the rating score increased from 2.9 to 9.7 as they feel they are well protected. Waste management was also a problem as there was an insufficient number of waste bins inside the room and no large hazardous waste container outside which can keep filled garbage bags. Rating score by Port Health staff on intervention in waste management improved from 1.7 to 9.6. Lastly, upgraded sample collection space enclosed by ward screens and blind curtains received 8.3 compared to 1.9 in the previous setup. Drivers were also asked to evaluate sample collection space in terms of privacy and comfort. All seven respondents preferred the new setup to the previous one and feel comfortable as the rating score

increased from 4.3 to 8.7. They feel privacy and comfort as they were not seen by other drivers during sample collection.

Lessons learned and recommendations

- Importance of flexibility and preparedness for changeable situations of the pandemic: It has been observed that the Government of Rwanda flexibly respond to the situation of the pandemic and modify measures at BP to suit the situation. Rusumo BP has been implementing random testing of cargo drivers while Kaigutmba BP has been testing all drivers. Rusumo BP also adjust the targeted number of random tastings according to the situation. During the implementation of the pilot activity, with the discovery of the Omicron variant just as the pilot activity was underway and the increase in the positivity at the border screening, it is presumed that the rapid transition to testing of all drivers and travellers reduced the imported cases of COVID-19 through the border. Therefore, the flexibility of border screening is critical. On the other hand, it is equally important to stockpile and prepare PPE for the increased number of tests and for management of people who are COVID-19 positive, and the timing of pilot activity to operationalize isolation rooms and increase and prepare PPE and medical equipment such as pulse oximeter and BP monitor was appropriate.
- Port Health operations with personnel from multiple agencies: Port Health at the Rusumo border is operated by personnel dispatched from several agencies such as RBC, Kirehe District Hospital, and the youth volunteer program. This is an appropriate response to have a sufficient staffing structure responding to the demand caused by the emergency situation. On the other hand, it was observed that there are issues of unclear chain of command, coordination, and sustainability. A permanent structure of both human resources and facilities would be necessary to respond to future public health emergencies.
- Need to build a permanent structure of waiting area: Drivers and travellers used to wait for rapid antigen test results inside the screening room, but now arrangement was changed to waiting outside. However, as the number of tests increases, the need for a waiting area is increasing. As a waiting area, there is a tent that was used during the Ebola response, but it has deteriorated and is no longer usable. Although we were not able to provide support through pilot activity, it is still necessary to build a permanent facility. The following images are examples of a permanent but simple waiting facility. Health education and infection prevention education by Port Health staff can be conducted using the TV monitor.

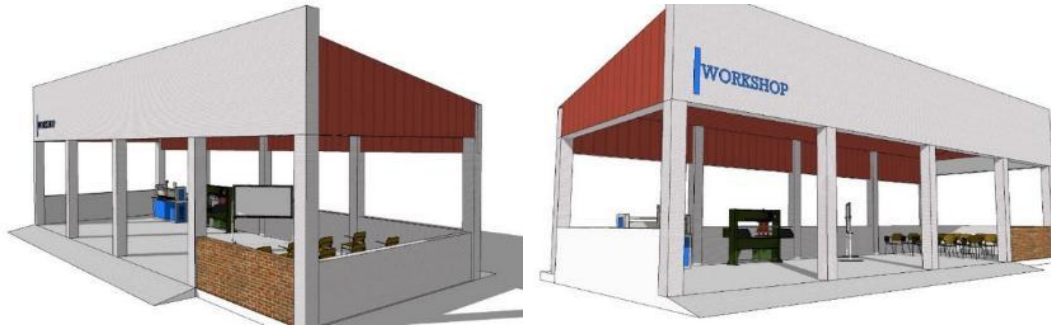


Figure 33. Image of the Proposed Waiting Area

3.2.3.2 Development of e-learning modules for public health threats at PoE

Challenges that the pilot activity aimed to address

PoE play a critical role in the global spread of infectious diseases. Travellers and people living and working on and around borders are particularly vulnerable to this threat. The IHR 2005 stresses the importance of taking measures at PoE, such as ground crossings, to strengthen national capacities to prevent, prepare for, detect and respond to health emergencies. All staff at BP are required to have the minimum level of knowledge and skills on IPC and communicable diseases but there are the following challenges:

- High staff turnover at BP: The PoE play a key role in national public health surveillance, therefore everyone working there should have at least a minimum level of understanding of public health security and surveillance. However, staff turnover in Rwanda is very high which makes the traditional training approach not yield expected results, the people trained after one year or less a year might have gone for new opportunities. This is a constraint for public health surveillance in terms of finance and feasibility due to fact that we need to train every time there is a pull of new staff.
- Limitation of traditional training: As a diverse range of ministries/sectors is active in BP, the traditional training method also poses problems in terms of timing, budget, and control of training quality, as well as the risk of infection in face-to-face meetings in the midst of a pandemic.

Pilot Activity

The IHR 2005, which regulates that public health authorities at international ports, airports and ground crossings are required to establish effective contingency plans and arrangements for responding to events that may constitute a PHEIC and to communicate with their National IHR Focal Point about relevant public health measures. In regard to the IHR 2005, signatory State Parties including Rwanda, have committed to timely detect all events with potential public health risk and respond to them immediately. The PoE play a key role in national public health surveillance, therefore everyone working there should have at least a minimum level of understanding of public health security and surveillance.

By creating an e-learning training module, all staff from each ministry/sector would be able to take the same course before being assigned to the BP, which will provide efficient and uniform capacity-building and strengthen the health crisis management system at the BPs in a sustainable manner. MoH already has a Health Sector e-Learning System which is a digital continuous learning and training mechanism for the health-sector workforce, in public and private institutions to promote the quality of health professional service delivery. The Team, therefore, supported the development of e-learning modules for public health threats at PoE in Rwanda.

Objectives

To examine a model case for improving the efficiency, effectiveness, user-accessibility and time flexibility to engage BP staff from different ministries and sectors in the quality and standardised learning process of public health security and surveillance at PoE through the development of e-learning modules

Target BPs

This activity will eventually benefit all BPs in Rwanda as the e-learning module will be accessible for all the staff being deployed to the BP.

Activity Output

After a desk review, consultations with key stakeholders such as the Rwanda MoH, RBC, Rwanda Directorate General of Immigration and Emigration (RDGIE), and the Rwanda Revenue Authority were conducted. Three BPs namely, Rusumo BP, Rusizi BP and Rubavu BP were also included in the consultation. The main targets of modules are personnel with direct contact with the travellers at PoE, including, but not limited to:

- Immigration staff
- Customs agents
- Security
- Ground handlers and
- Clearing agents

The following two modules were developed. Each module consists of clear objectives and learning outcomes. At the end of the module, learners will be subjected to an assessment with multiple-choice questions to confirm the presence and absence of the expected learning outcomes.

Table 28. Overview of Developed E-Learning Modules for BP Staff on Health Threats at PoE

Module 1: Detecting public health threats at PoE		
Learning objectives:		
<ul style="list-style-type: none"> Describe the roles of agents working at PoE to avert public health threats. Apply the appropriate methods for detecting public health threats at PoE 		
1	Key roles in protecting the health of people at PoE	
2	Detecting public health threats at PoE	
3	Recognize:	Look for, listen for, ask about
		Signs and symptoms
		Fever / Continuous Coughing / Difficulty Breathing / Continuous Diarrhea / Continuous vomiting / Skin rash / New unusual bruising or bleeding / Confused mental state
		Observations and/or questions to consider
4	QUIZ	
Module 2: Responding to public health threats at PoE		
Learning objectives:		
<ul style="list-style-type: none"> Describe the roles of agents working at PoE to avert public health threats. Apply the appropriate methods for responding to public health threats at PoE 		
1	Routine Health Screening at PoE	
2	Screening During Public Health Emergencies	
3	Isolate	Separate, Information, Infection Prevention and Control
		Difference between Isolation and Quarantine
		Hand hygiene
4	Verify	Entry Screening Forms
5	Notify	
6	Give Support	
7	QUIZ	

The modules were digitalized using the Ministry of Health Moodle eLearning platform, an open-source learning tool customized to supplement in-service training through providing a standardized and cost-effective alternative to solely teaching health affiliated staff. As these e-learning modules are expected to issue certificates, there would be another approval process within the government before it will be available on the platform.

Assessment and observation

The development of modules was highly appreciated and considered as one of the solutions for the public health response at the border as the region faces public health threats including the COVID-19. This process has stimulated discussions between the RBC, MoH and the RDGIE, which has brought to the fore the issue of the need for specific guidelines and SOPs for PoE and has helped to move the issue forward, including the implementation of the recommendations of the IHR assessment conducted in 2018. The innovative idea of real-time information sharing with PoE through the health portal, which was raised during the discussion, may become a new good practice that can be shared with the region.

An approach piloted for improvement

- Digital health: WHO defines digital health as ‘a discrete functionality of digital technology that is applied to achieve health objectives.’²² The growing benefits of digital health are evident in training,

²² WHO, *Classification of Digital Health Interventions*, v1.0, (2018): 1.

data collection and analysis and disease surveillance among other uses. Rwanda has made progress to strengthen the use of technology in the health sector, especially in health information systems. Over the past few years, the MoH has been investing in ICT solutions by installing electronic health record systems and other health-related ICT interventions throughout Rwanda. In fact, the Rwandan Government has made smart health one of the pillars of the country's ICT policy.²³ The use of the e-learning method is in line with the global and national digital health agenda which needs to be accelerated because of the COVID-19 pandemic.

- Introduction of e-learning for BP staff: To date, there has not been any comprehensive digital health tool for training personnel working at the border on public health surveillance and response to infectious disease threats and other events of public health concern in Rwanda. As such, there was a critical need to develop training materials to improve capacity for the workforce, to better respond to critical health events in the wake of the COVID-19 pandemic. The training materials would serve as a repository to support continuous professional development, eventually leading to sustainability. One of the issues that needed to be solved was access to the health sector e-learning system by non-health BP staff and method of personal identification but RBC will use a unique personal identifier to keep track of course completion and all relevant BP staff would be granted access to the modules.

Lessons learned and recommendations

- Need for guidelines and SOPs for PoE: Currently, there are no standard guidelines for managing public health threats at PoE in accordance with IHR 2005. The recommendation is to review the recommendations of the 2018 IHR Core Capacity Evaluation Report and develop an implementation plan to develop guidelines and SOPs relevant to support surveillance and response to public health threats at PoE.
- Need for developing and harmonization training modules for the EAC Partner States: The risk of importation of epidemics from neighbouring countries to Rwanda remains high and is related to the free movement of people and goods mainly across land borders. Although there are mechanisms for investigating disease outbreaks at the border and sharing data, and prevention and control of diseases, the same approach is required for developing and harmonizing training modules for PoE that can be adapted by the EAC Partner States.
- Need for development of a web health portal for regular updates between the MoH and authorities at PoE: Benchmarking on the COVID-19 experience, health policies are constantly changing and all key stakeholders including PoE are constantly requested to implement new health regulations such as COVID-19 screening requirements, IPC measures, isolation and quarantine measures, etc. The existing setup does not allow for this information to be shared and accessed in real-time – a significant challenge during emergency situations. The RBC expressed the interest in setting up a web portal

²³ Ministry of Information Technology and Communication, Rwanda, *ICT Sector Strategic Plan (2018–2024) “Towards digital enabled economy”*, (2017): 26.

specific for PoE, that can be regularly updated to disseminate relevant information in real-time. Also, an opportunity to encourage staff at PoE to access available training materials such as modules developed this time. During the validation RBC was also urged to develop training modules tailored to disease-specific prevention and control measures at PoE (e.g., Ebola, Yellow Fever) including zoonoses that are common within the EAC region (e.g., Rift Valley fever, brucellosis).

3.2.4 South Sudan

One pilot activity was implemented in South Sudan, namely:

Strengthening capacity of BP staff and laboratory technicians on IPC in Nimule BP and Nimule Hospital to establish a Resilient BP workforce

3.2.4.1 Strengthening capacity of BP staff and laboratory technicians on IPC in Nimule BP and Nimule Hospital to establish a Resilient BP workforce

Challenges that the pilot activity aimed to address

Inadequate capacity among BP staff at Nimule BP and laboratory staff at the nearby Nimule hospital is the main challenge to be addressed by this activity. Specifically:

- Gaps in IPC practice by BP staff and users: Based on the baseline survey conducted from May to June 2021, it was found that no IPC training was conducted for Nimule BP staff, which is a likely explanation for the gaps in IPC practices in BP staff. Consequently, this leads to inadequate enforcement of IPC measures towards BP users.
- Inadequate number of lab technologists who can use Polymerase Chain Reaction (PCR) system: Nimule hospital, which is 5 km away from Nimule BP, is a vital facility in surveillance and response to COVID-19 at the Nimule BP community. However, the baseline survey showed that only five laboratory staff at the Nimule hospital trained on PCR testing and IPC guidelines.

Pilot Activities

Objectives

To examine a capacity development model that can establish a resilient BP workforce through:

- Training of BP staff on national guidelines on IPC
- Targeting staff from various agencies within the BP
- Discussion of multi-agency coordination within the BPs

To examine a model case for creating a more stable testing environment at Nimule BP through:

- PCR training of lab technicians

Target BP

Nimule

Activity Output

Two types of training were held as part of the pilot activities in South Sudan:

- The first was the training of BP staff on IPC and IPC enforcement, which was held from 6th December

to 8th December 2021 at Elegu Border of Uganda. A total of 130 BP staff (Police officers, National Security Services, Prisons officers, Customs officers, Immigration officers, South Sudan People's Defense Forces, Food and Drug, Standard, Commerce and Clearing agents.) participated. They were divided into three groups (one group per day, for a total of three days). Officers from the South Sudan MoH were invited as facilitators of the training, and the materials of the training were based on the IPC knowledge gaps identified in the baseline survey. Topics included hand hygiene, proper utilization of PPE, respiratory hygiene, prevention of needle-stick injuries, safe waste management, cleaning and disinfection of patient-care equipment and linens, cleaning and disinfection of the patient care environment.

- The second was the training of lab technologists on PCR systems in which eight lab technologists (five from Nimule hospital, and 1 from St. Bakhita Primary Health Care Centre (PHCC), 1 from Oliqi PHCC, and 1 from Pageri PHCC) attended. Facilitators from WHO provided information on how to use the PCR testing equipment and its testing techniques. Full access was given to the Mobile COVID-19 Laboratory at Nimule Hospital for practical exercises. The training was timely, as the EAC is planning to also provide six PCR labs to each EAC Partner States



PCR training also included discussion of discussing principles of PCR testing (left);
and practical exercises on PCR techniques and rapid diagnostic testing (right)

An approach piloted for improvement

- One Health Approach to Training: Similar to Kenya, the IPC training in South Sudan implemented this approach through broadening the target population (not limiting to Port Health staff), as there is a need for all sectors to be responsible for battling infectious diseases.
- Cross-border cooperation: Although the target populations were BP staff and lab technologists from South Sudan, the training was held on an adjacent BP to Nimule, the Elegu BP of Uganda. This was due to unavoidable logistic reasons. In order to hold the training, preparation from the Uganda side was also made and both sides were cooperative with each other. Some facilitators from Uganda also contributed to the training.

Assessment and observation

- IPC Training:

Before the IPC training, a pre-test was carried out to assess the level of knowledge of the participants. A 5-item pre-test to assess the knowledge regarding basic COVID-19 concepts (symptoms, prevention, transmission, etc.) was given. These questions were based on learning modules provided by South Sudan MoH. After the training, post-tests, comprised of the same questions, were given to the participants to assess if there was an improvement in scores. A summary of the results of the assessment of knowledge of COVID-19 among BP staff at Nimule can be seen in the tables below:

Table 29. Average pre- and post-test Scores for BMC staff (non-Port Health staff)

Percentage of participants with a score of at least 60% in the pre-test (n=130)	Percentage of participants with a score of at least 60% in the post-test (n=130)
51%	73%

During the pre-test, scores ranged from 20% to 100%. In the post-test, scores ranged from 40% to 100%. The most commonly mistaken question was: “True or False? In hand hygiene, alcohol-based hand rubs are equally effective in comparison to hand-washing with soap and water.” The majority of the participants answered that disinfecting with alcohol is equally as effective as handwashing with soap and water. At least 75 % of the participants understood the following concepts: virus transmission may still occur with asymptomatic persons, susceptible hosts include persons with diabetes, children, and pregnant women, PPE-donning must be engaged with a buddy, and that PPE is necessary when making chlorine as a cleaning agent.

- PCR training:

All 8 laboratory technicians who participated in the training passed the practical assessment on PCR, GeneXpert and Rapid Diagnostic Testing at the end of the training and gained confidence in performing different types of COVID-19 screening techniques. In addition, they mentioned that practical exercises were very helpful in learning techniques from other lab technicians.

Lessons learned and recommendations

This is said to be the first IPC training for Nimule BP staff (which also includes non-health-related BP staff) and should be considered as a reference or a capacity development model when replicating in other BPs. The inadequacy in training was the reason why the BP staff were not strict in the enforcement of IPC measures. After the training, the participants all had a common understanding of which measure, they should enforce at the BPs. To ensure this, monitoring by the County Health Department (CHD) to ensure COVID-19 protocol is enforced should be considered. The following are lessons learned that from the pilot activities in South Sudan and should be considered when planning activities among BPs in the future:

- Participant Commitment: It was observed that participants were much committed; participants were active in discussing during IPC training, and PCR training participants successfully generated and analysed PCR results during the practical training.
- Flexibility of training material: Adaptability of facilitators and organizers were observed as participants were trained not only on the PCR testing but also on GeneXpert and Rapid Diagnostic Testing to enhance their capacity to run COVID-19 test in various machines that the lab technologists have access to and to accommodate for the various demands in testing. In addition, new content such as the Omicron variant of COVID-19 was discussed so as to increase awareness among BP staff.
- Enhanced the collaboration between Uganda and South Sudan: At the time of the training, there were no reagents at the Nimule Hospital Mobile Lab so it was not functional (although the reagents have arrived in Juba and logistics are being arranged for it to be sent to Nimule BP). This was resolved by the facilitator who brought reagents from the Adjumani Hospital PCR Testing Centre in Uganda for the training of the participants. Throughout the training, the District Health Officer of Amuru District of Uganda had been facilitating the arrangements to ensure the training was conducted successfully. This type of cross-border cooperation may be beneficial to future activities at the BPs and should be considered.
- Good partnership among health-related partners and one health system: Both the WHO and IOM were involved in the co-facilitation of the IPC training and general coordination. They also provided the PPE for training on IPC. In addition, through the one health approach, non-health-related BP staff became enlightened on their roles and understood why they are important in participating in IPC talks and training on COVID-19.
- A recommendation for this activity for South Sudan is to be able to conduct it within the country in the future, to promote utilization of local resources for training activities.

3.2.5 Tanzania

Following pilot activities were implemented in Tanzania.

- (1) Strengthening IPC measures at BPs by improving hand hygiene practice, temperature screening, and waste management
- (2) Community awareness and engagement activities for improving IPC practices among community members around the border

3.2.5.1 Strengthening IPC measures at BPs by improving hand hygiene practice, temperature screening, and waste management

Challenges that the pilot activity aimed to address

In Tanzania, four major borders, namely Holili, Namanga, Kabanga, and Rusumo, were physically inspected during the baseline survey. The survey revealed the following issues related to IPC measures at BP:

- Inadequate awareness of the IPC guidelines and SOPs among BP staff: Only a few staff were aware of its existence and those who are aware do not seem to implement them to their fullest.
- Unreliable, inadequate, and stock-outs of IPC-related supplies: These supplies include sanitisers, face masks, and gloves. Since April 2020, when Tanzania released COVID-19 guidelines for the provision of IPC measures, the majority of the people at the BPs have not been wearing face masks and performing routine handwashing. However, among the reasons behind this was a short supply of face masks and sanitisers.
- Inadequate waste segregation practices: Inadequate number of segregation bins, absence of accessible incinerators, and inadequate provisions for waste management guidelines are some of the factors that attribute to this challenge.
- Non-functional thermal scanners: A bulk of the thermal scanners were found to be inoperable due to the inability to calibrate or repair by the BP staff and also inadequate funds for maintenance. Non-contact forehead thermometers are used by the BP personnel, which take far longer than walk-through scanners and expose the BP workers to a greater risk of infection.

Pilot Activity

Objectives

To examine a model case for reducing infection risks at BPs through the introduction of easy-to-operate IPC equipment for efficient and effective hand hygiene, screening and waste management in a sustainable manner

Target BPs

Holili, Namanga, Kabanga, Rusumo

Activity Output

The following actions were taken in the abovementioned four BPs.

- Instalment of hand sanitiser dispensers and bottles: 120 bottles of 500mL sanitiser (30 bottles per BP), 120 bottles of 5-L gel sanitiser refill (30 bottles per BP), and 32 pieces of wall-mounted hand-manual sanitiser dispensers (8 per BP), which will mostly be placed at the building rooms' entrances. BP management was reminded of the significance of sanitiser use and the percentage of alcohol optimal for disinfection and replacing non-functional dispensers.



Port health staff at Namanga checking sanitisers and dispensers

- To manage the hazardous waste produced at the BPs, the Team supported the provision and installation of 12 pieces of waste segregation bins (3 per BP) with liners and 120 pieces of disposal sharps container (30 per BP) which were used for the vaccine programme at BP. The segregated waste will continue to be transported for incineration at the nearby health facilities. The MoH will support the supply of waste management guidelines, and the SOPs for waste segregation and placed them on the walls where waste is disposed of to the waste bins, instructing the BP staff how to segregate and manage waste.



Before (left) and after (right) support of waste segregation bins with liners at Rusumo

- Four BPs were supported with the provision of 128 boxes of face masks (32 boxes per BP) and 120 boxes of gloves (30 boxes per BP) due to irregular supply or stock-outs of these items. To address the issues of not wearing a mask and gloves while at work, a total of eight personnel from four BPs were assigned to monitor and instruct the use of face masks and gloves throughout the day. By this, changes

in the attitude of the administration of the BP would be encouraged. They were made aware of the need of ensuring that all employees wear face masks and gloves, and this kind of improving awareness was made possible as they were assured that there are adequate face masks and gloves at the BPs.

Table 30. Distribution of IPC supplies at Target BPs in Tanzania

		BP Name				TOTAL
		Holili	Namanga	Kabanga	Rusumo	
Name of the item supplied	500 mL bottled gel sanitiser (pcs)	30	30	30	30	120
	5 L gel sanitiser (pcs)	30	30	30	30	120
	Hand sanitiser manual dispenser (pcs)	8	8	8	8	32
	Face masks (boxes)	32	32	32	32	128
	Gloves (boxes)	30	30	30	30	120
	Waste segregation bins with liners (pcs)	3	3	3	3	12
	Sharp box container (pcs)	30	30	30	30	120
	Wall mounted thermal scanners (pcs)	2	2	2	2	8
	Non-contact forehead thermometer (pcs)	8	8	8	8	32

- For temperature screening, four BPs were supported with eight wall-mounted type infrared thermometers with stands (two per BP) and 32 non-contact forehead thermometers (eight per BP) to reduce health risk, personnel load, and screening time. Two BP staff were also assigned to train in the O&M of the wall-mounted type infrared thermometer. Non-contact forehead thermometers were utilized when a high number of drivers and travellers are passing through particularly during the morning hours and also for children or people with a wheelchair.



Walkthrough thermal scanners installed in Namanga

An approach piloted for improvement

- Manageability: Some equipment that was previously supported and procured was not functioning because of the high cost and competence required for maintenance and operation. Therefore, the

activity will support the installation of an easy-to-operate infrared thermometer instead of a thermal imaging camera which was procured by a donor but not functioning. Manual hand sanitiser dispensers were also selected to be installed against automatic ones for the same reason.

- Sustainability: The activity will not just about be procuring and installing IPC equipment and supplies but also will further facilitate BP staff on simple maintenance, operations, and supervision of some practices such as the use of face masks, hand sanitization, refilling of dispensers, and simple troubleshooting of walkthrough wall-mounted infrared thermometers. This would assure sustainability of management and effective utilization of equipment supported in the pilot activity.
- Leadership involvement: Bringing BP management on board, and advocating the importance of equipping the BPs with the necessary equipment for efficient operations is critical. Allowing for BPs to continuously monitor early warning signs/early detections of the presence of communicable disease spread to help safeguard the frontline BP staff.

Assessment and observation

- Good practice of hand hygiene: Easy access to sanitiser bottles placed at the working tables and the ones mounted on the walls of main entry points into the BPs enabled the passengers and the workers/staff to use it to sanitize their hands. The security officers at the entry points will remind all the BP users including the BP staff to use the sanitiser when they enter or exit the BPs. BP manager will assign cleaning company staff to conduct constant inspections of the sanitiser's volume in the dispensers located on the BP walls and working tables.
- Accelerated screening process: Introduction of both wall-mounted type infrared thermometers with stands and non-contact forehead thermometers has reduced screening time, especially during busy hours. At Kabanga BP, before the intervention, one passenger bus with an average of 64 passengers took approximately 35 minutes to take temperature, after the activity, one passenger bus with an average of 64 passengers takes only 17 to 20 minutes to scan passengers' temperature. In addition, it has helped in queue management and reduced personnel workload, as observed by the BP Port Health staff.
- Reduced Risk of infection of the BP staff: Installation of the new thermometers has not only reduced time spent for screening but has also improved the physical distancing between passengers and BP staff, therefore reducing the risk of getting infections, during the screening process. The BP staff were interviewed how the pilot activity has reduced stress fear of getting infected during work at the border.
- Good practice on waste segregation and management: Currently, both hazardous and non-hazardous wastes are mixed and therefore present health risks to the handlers. The provision of an adequate number of waste segregations bins with liners and disposal sharps containers, easy and clear access to SOP with guidelines for waste segregation has enabled disposal of hazardous and non-hazardous easier and safer, per the standards of the MoH. Although the Namanga, Holili and Rusumo BPs are relying on incinerators from the nearby health facilities, the hazardous waste produced at the BPs is segregated

effectively and well managed during transportation, with exception of Kabanga OSBP which has an incinerator.

Lessons learned and recommendations

- **Prioritization and harmonisation:** Although the baseline survey came up with several gaps that needed to be addressed, this pilot activity has been prioritized based on the timing and resources available. Assistance with some of the challenges has already been committed to by other partners such as the construction of fixed handwashing facilities and support of some IPC-related supplies. The pilot activity needed to be implemented at a national level which requires prioritization and harmonisation.

3.2.5.2 Community awareness and engagement activities for improving IPC practices among community members around the border

Challenges that the pilot activity aimed to address

- **Poor IPC practices in the community:** In the baseline survey, it was found that most people living near the BPs do not practice physical distancing, the wearing of masks, or routine handwashing to prevent the spread of COVID-19.
- **COVID-19 infodemic among BP communities:** There have been various myths and misconceptions related to COVID-19 in BP communities reported during the baseline survey. Among the myths and misconceptions identified included: vaccines are harmful towards Africans, natural herbs are enough to combat COVID-19, vaccines will lead to infertility or mental health problem, and COVID-19 only spreads during the cold season.
- **Low COVID-19 vaccination uptake in BP communities:** Related to the ongoing infodemic on COVID-19, misconceptions on vaccination are one of the main reasons why vaccination uptake was low. In addition, in the baseline survey, a need for linking communities with ongoing vaccination programmes was identified.

Pilot Activity

Objectives

To examine a model case for community awareness and engagement through addressing myths and misconceptions related to COVID-19 among community people, improving their IPC practices, and linking them to ongoing COVID-19 related services including vaccine programmes

Target BPs

Rusumo, Kabanga, Holili, Namanga

Activity Output

The Team implemented community engagement activities in Tanzania through a local sub-contractor.

- 1,777 community members around BPs were reached and the breakdown per intervention is as follows:
 - 538 through community sensitization meetings
 - 768 through house-to-house visits
 - 471 through one-to-one discussion sessions

Within this number 98 were truck drivers who are reached through one-to-one and Focus Group Discussion (FGD) sessions. Out of 1,777 people reached through interventions, 492 people including 37 truck drivers were vaccinated.

- Community sensitization meetings:

The goal of these COVID-19 activities was to raise IPC awareness among the general public in the vicinity of BPs and truck drivers. The District Medical Officer (DMO) office's HCW teams were involved in the implementation of the planned activities, and they were in charge of providing vaccines during the operations of the activities. Additionally, the team engaged theatre groups to utilize Social and Behaviour Change Communications (SBCC) transcripts and COVID-19 messages and IPC prevention strategies that in addition were presented during community meetings. Furthermore, the preparations for the community gatherings were made easier by community leaders and influential persons. The team noted that the truck driver's association exists in Namanga BP, which also participated in the awareness-raising meetings, whereas truck drivers also participated in the community awareness meetings. In Holili and Kabanga BPs, access to truck drivers for the planned interviews was organized by the Holili BP Authorities, whereas drivers participated in the awareness-raising meeting together with other BP supporting staff including Cleaners, Porters and Security Guards. FGDs were then facilitated by the healthcare providers aimed to increase the demand for vaccines. The HCWs provided the targeted vaccines to truck drivers, BP officials and the willing community members. The team also distributed COVID-19 IPC flyers and brochures to the community members and truck drivers.

Table 31. Vaccinations Provided during Community Meetings

Name of the BP	Community meetings held	No. of members reached	No. of vaccinations provided
Namanga	2	123	26
Holili	2	71	12
Kabanga	2	190	82
Rusumo	2	154	33
TOTAL	8	538	153

- House to house visit/One-to-one discussion for awareness creation and vaccination:

This community engagement methodology allowed individuals to respond to the questions related to privacy and the team ensured the responses were COVID-19 pressure-free. The Team observed that the respondents could easily discuss even sensitive topics or information on their understanding of COVID-19 ongoing issues. The consultancy team working modality also allowed for the provision of

customized or specific information or referrals based on the diverse needs of individuals. During the house-to-house visits, the DMO's HCWs teamed up with community leaders and led discussions on COVID-19 myths, question-and-answer sessions, provided onsite vaccines, and linked household members and individuals to the COVID-19 vaccine. The team for instance noted that respondents in Namanga BP were willing to go for vaccination that was linked to Namanga Dispensary and Oriendek Health Centre. Additionally, respondents from Holili BP were willing to be linked to Holili Health Centre. In Namanga, Holili and Kabanga BPs, at least 1311 individuals were reached, approximately 268 individuals were given vaccination, and approximately of the 79 truck drivers who were approached and 26 truck drivers were immunized. During the exercise fliers and brochures were also given to the participants. In Holili BP there was an improved coverage on the outreach due to having a vehicle and a motorbike which facilitated reaching more individuals and families.

Table 32. Vaccination Provided during House-to-house Visits

Name of the BP	No. of house/business locations visited	No. of individuals reached	No. of vaccinations provided
Namanga	64	192	17
Holili	78	234	28
Kabanga	52	156	22
Rusumo	62	186	86
TOTAL	256	768	153

Table 33. Vaccination Provided during One-to-one Sessions

Name of the BP	One-to-one	No. of individuals reached	No. of vaccinations provided
Namanga	45	45	8
Holili	137	137	26
Kabanga	163	163	73
Rusumo	126	126	79
TOTAL	471	471	186



House-to-house visit in Rusumo BP

- Engaging the local media in the promotion of COVID-19 measures and actions:

To boost access to information about COVID-19, the local media, particularly locally available radios, were engaged as it was found in the baseline survey that a majority of truck drivers obtained more information about COVID-19 via radio programs as compared to other media channels. As a result, utilizing the local media resources accessible to the communities was a top emphasis during the implementation of these IPC COVID-19 planned pilot programs. The DMO's HCWs at Namanga and Kabanga BPs provided health education for COVID-19 prevention and promoted vaccination programmes in vaccine clinics through the local media and radio. In Namanga BP, the local radio station Kijito cha Uzima FM was used as a platform. In Kabanga and Rusumo BPs, a regional radio station called Radio Kwizera was used to boost access to air outing information about COVID-19. The sessions were aired for 30-minutes. Callers were entertained and medical personnel and HCWs responded to the inquiries. Questions included vaccinations rules and regulations, access to vaccine clinics, and eligibility for vaccinations.



Engaging the local media in the promotion of COVID-19 measures and actions at Namanga BP (left) through Kijito cha Uzima FM, and at Kabanga BP (right) through Radio Kwizera

An approach piloted for improvement

- Local edutainment approach: Through the use of local songs, poems, and role-plays, the engaged local theatre groups provided health education to address myths around COVID-19 and promoted the use of COVID-19 vaccines. During their demonstrations in the community meetings, it was observed that the community members were very attentive, entertained, and some even participated in the dancing. It was further noted that during the performance of the local theatre groups, no members from the community left the meetings. This edutainment approach in the local language proved to be an effective method to convey health messages related to COVID-19 IPC measures. This was demonstrated during the closing session when community leaders led a discussion about what should be done to prevent the spread of the COVID-19.
- Mixed-interventions approach: The Team planned to use different platforms, namely mass media, community gatherings, household visits and one-to-one sessions, to deliver messages and raise awareness to reach out to individuals with diverse backgrounds, beliefs, lifestyles and preferences. In particular, the use of the one-to-one approach was novel yet effective as it provided room for the

individual to dialogue openly on issues perceived to be confidential, and encourage conversation due to lack of confidence, embarrassment, and peer pressure towards beliefs related to COVID-19.

- Collaboration with community stakeholders: To effectively implement the public health agenda, it is important to take advantage of the numerous opportunities available in the community. In the community engagement activities in Tanzania, three major community stakeholders collaborated with the Team: community leaders, local health care providers, and the Port Health authorities. At Kabanga BP, the participation of community/ten-cell leaders on sensitization and creating awareness on vaccination made it simple for the public to obtain COVID-19 health information and vaccines as anticipated. Community leaders were involved in the preparations of the community meetings and ensuring security during the meetings. Local health care providers were responsible for the sensitization, provision of health education, and vaccines for COVID-19. The Port Health authorities were responsible for the provision of transportation to facilitate movement from one place to another. The combined influence of these three actors will raise vaccination demand, face mask use, and physical distancing in the neighbourhood surrounding the BPs. As a result, it demonstrates the importance of maintaining this coordination to prevent any pandemic outbreaks in their immediate area.
- Coordination: The community COVID-19 IPC sensitization meetings created the demand for the vaccines. Therefore, proper coordination of the vaccines, their transportation, waste production and the health staff to provide vaccines was inevitable. The MoH, through the DMO Office, ensured the availability of enough vaccines and allocated staff responsible for the provision of vaccines. This was all set during a preparatory meeting conducted by the MoH, the local country coordinator, the local government officials and the Team responsible for the COVID-19 IPC community awareness and engagement interventions.

Assessment and observation

The HCWs reported that the demand for COVID-19 IPC-related measures and the use of items such as sanitiser, handwashing and face masks increased after the community engagement activities. With regards to vaccination, the table below shows improvement in vaccination frequency among community members after the activities. It was also notable that 40% of the participants who joined the one-to-one discussion received the vaccination. These efforts contributed to an increase in COVID-19 vaccination uptake. DMOs could not perform house visits for promotion and sensitisation regarding COVID-19 vaccination prior to this activity due to inadequate funding (for health care providers incentive and transport fees) that were necessary to reach the community. DMOs usually wait for people to come to the health facilities, however, after the activities, there was a significant uptake as the community members were made aware of the vaccination benefits, and how to access them. The table below shows the average daily intake before the activities, and during the activities. The increased uptake is expected to continue even after the activities as word-of-mouth, and increased awareness in the community may pave the way to changes in attitude.

Table 34. Vaccination Frequency Before and After Community Engagement

BP name, Area	Average Vaccinations Before	Average Vaccinations During
Namanga BP, Longido	3	35
Holili BP, Rombo	2.5	33
Kabanga BP	5.5	88
Rusumo BP, Mshikamano Dispensary	1.5 on regular days, 25 on vaccine campaign days	99

Lessons learned and recommendation

- One-to-one discussion: The community engagement activities proved that one-to-one discussions were vital in addressing concerns regarding vaccination, COVID-19 as a disease, and IPC measures. Although theatre groups were entertaining and raised awareness on IPC measures, one-to-one discussions would further their knowledge on COVID-19 without the pressure of being judged or coerced.
- Motivation for HCWs: Incentives for HCWs including transportation costs motivated them to pursue community engagement activities. They reported that the shortage of gloves and masks also hindered them in proceeding with vaccination activities. Therefore, the Team recommends the MoH, future Development Partners, and bodies responsible for vaccination programmes to put into consideration the supply of proper PPE for HCWs and medical officers.
- Social, cultural, and livelihood differences affect the selection of communication strategies: Namanga BP is in the Maasai dominated area (livestock keepers), Holili BP is in the Chaga tribe business-based community), Kabanga and Rusumo BPs are dominated by the Waangaza and Nyambo (mostly traders and sustainable farmers). The house-to-house strategy was not very successful in Namanga since the Maasai community often migrates in search of grazing lands. In Holili BP, the house-to-house /business location strategy was more successful due to the setup of economic activities around the BP. In Kabanga BP the use of local HCW made it easier for the community to engage with the team for the planned activities. In Rusumo the use of community leaders made it easier to reach the community members and the strategy was more effective in increasing the number of vaccinations uptakes.
- Need for expansion into the deeper community level: The activities were limited to BPs and the surrounding towns; however, future efforts should include the second and third-row villages as well as the nearby sub-borders e.g., Tarakea BP (Rombo) and Benaco Township (Rusumo). The interaction of residents in these areas is high, an increase in the uptake of vaccines in these areas could significantly reduce the spread of COVID-19, and create a higher overall awareness in the community.

3.2.6 Uganda

Two pilot activities were implemented in Uganda, namely:

- | |
|---|
| <ol style="list-style-type: none">(1) Training of BP staff on psychosocial support and IPC(2) Providing technical support of thermal scanners at the seven BPs |
|---|

3.2.6.1 Training of BP staff on psychosocial support and IPC

Challenges that the pilot activity aimed to address

The government of Uganda has put in place strict measures to stop the spread of COVID-19. Public places such as schools, churches, and markets were closed for an extended period of time, and mass gatherings and inter-district movements were banned. Public transport was suspended, and private vehicle movements were restricted. Lockdowns were introduced, relaxed, and re-imposed in response to the epidemiological situation in the country. The prolonged lockdown made it difficult to maintain social togetherness and participation stressing out Ugandans, which led to the increased risk of anxiety and depression. Among the main challenges identified in the baseline survey, access to psychosocial support was considered considerably limited in Uganda, where there is a shortage of clinical psychiatrists. In particular, psychiatrists and social workers are concentrated in urban areas such as Kampala, and psychosocial support is almost non-existent in border areas.

Staying mentally healthy or managing their mental health conditions at work is especially important during the pandemic. The pandemic has placed frontline workers, including BP staff, under enormous stress, putting their physical, mental, and social well-being at risk. There are growing concerns about the negative impact on their mental health and well-being. Stressors during the pandemic such as the fear of being infected, constant vigilance, higher demands in the workplace, including long work hours, adjustment to new protocols can lead to harmful consequences. The consequences of the impact on mental health include burnout, mental disorders such as depression and anxiety, unhealthy behaviours like using tobacco, alcohol, or other substances, frequent absence from work, reduced productivity while at work, frequent accidents and mistakes, breach of protocols, and increased risk of infections. Since there was inadequate awareness regarding these consequences and inadequate support to colleagues in coping with stress is a crucial impediment to access to psychosocial support, training on psychosocial support for BP staff was requested by Elegu Port Health and was subsequently endorsed by the MoH. Given frequent rotations of BP staff and moderate turnover of the BPs, it was proposed to combine the training with a refresher training on IPC measures. The last time when Elegu BP staff received IPC training was February 2021.

Pilot Activity

Objectives

To examine a case model of capacity-building to enhance psychosocial support at Ugandan BPs

Target BP

Elegu

Target population

Elegu BP staff

Activity Output

A total of 35 participants participated in the one-day workshop on 3rd December 2021 within the Elegu BP facility. They were team leaders, managers, and other staff representing immigration, customs, clearing agents, Port Health, security forces, and police at Elegu BP. Other participants included people from the district level, including the District Resident Commissioner, the Chief Administrative Officer, the District Health Officer, and the Local Council I Chairperson. The Teams in their respective department proposed action plans for implementation in the subsequent months. Training material on psychosocial support was developed for this training while considering the specific context and challenges faced by BP staff. The material was also developed based on the Inter-Agency Standing Committee (IASC) references. The activity was highly participatory, resulting in psychosocial healing for some participants. The Team facilitated the psychosocial support training while Port Health staff members of Elegu BP conducted the IPC training. It was the first-ever training targeted at a Ugandan BP on psychosocial support.

Participants at the managerial level noted that in their capacity as supervisors, they tended to strongly emphasize outputs while not paying enough attention to the fact that they work with humans who get stressed and experience burnout. One participant admitted that his excessive demand for outputs might have negatively impacted the mental health of their staff. They realized that a focus should be placed on workers' mental health and well-being.



Psychosocial support training at Elegu BP (left); group works during the training (right).

Some of the critical, well-accepted messages for team leaders and managers were as below:

- Help them care for themselves: provide them with information on stress, how to maintain a healthy lifestyle, and when to seek further support.
- Create a healthy work environment: tackle the sources of stress by ensuring appropriate work hours and workload, sufficient breaks between shifts, and that tasks are well matched to skills and experience level.
- Encourage peer support: create a formal or informal platform where peers can share knowledge and provide basic psychosocial support through peer networks under the supervision of mental health and psychosocial support professionals.

The participants commended the participatory approach employed during the training. One participant highlighted that “answers are with us, and we have been able to explore through the participatory methods and learned new techniques for promoting psychosocial support.”

An approach piloted for improvement

As opposed to knowledge-based training, skill-based training is a necessity to develop practical or hands-on ability to respond to the needs of coworkers experiencing stress. Unfortunately, the existing training modules of MoH are primarily knowledge-based learning, limiting the opportunity to develop emotional, social and communication skills required to provide psychosocial support. In addition, in discussion with MoH, it was noted that they lack a psychosocial support training module designed for non-health workers responding to the pandemic. Therefore, through the pilot activity, the Team developed and tested a training material for frontline workers on psychosocial support with a strong emphasis on interaction and peer-to-peer learning.

Assessment and observation

The training design was adapted to the needs of frontline workers in the specific context of BPs. The icebreaking session offered an opportunity to reflect on participants’ experience during the pandemic, connect it to locally available items, including candles, fruits, flowers, sand, and express their experience and feelings to other participants. This allowed the participants to contemplate how these experiences impacted their psychosocial well-being. For instance, the stones were pointed to as a symbol of being strong and courageous in the fight against COVID-19. One participant said, “we keep strong and courageous amid all the challenges during the pandemic. We need to amplify our voices and sensitize communities on the disease. Without doing so as frontline workers, we risk losing more lives”. Others said the stones symbolized the need to be more committed to building a strong team to consolidate efforts in the fight against COVID-19. Another participant interpreted it to be how COVID-19 made people lose hope, thus a need to restore it. A stone is hard, and thus, communities need to be resilient and fight against the plague.

The subsequent session encouraged the participants to reflect on significant changes that happened to their work since the pandemic began and invited them to analyze the causes of stress particular to the COVID-19 pandemic while at work. The personal reflection and discussion process resulted in healing to some participants. Eagerness to learn and creativity displayed was remarkable. The participants became familiar with common signs and reactions to stress and also realized while frontline workers have the responsibility of caring for themselves and verbalizing their needs and concerns, many of the efforts to prevent and reduce stress and care for the mental health of frontline workers must be made by managers and organizations. Then, they were guided to focus on things in their control instead of things outside of their control. They discussed psychosocial support available at Elegu BP through group work, identified gaps, and found creative ways of enhancing psychosocial support in their workplace.

Finally, each group created action plans to execute their proposed solution to provide peer support for workers experiencing stress and promote collective actions to enhance psychosocial support. Most of the proposed action plans do not require many resources and are feasible within the existing systems. The proposed action plans indicate good understanding and appreciation of psychosocial support among the participants. Examples of the proposed action plans are shown in Table 35.

Table 35. Examples of the Proposed Action Plans

No.	Proposed action plans	Progress of implementation of the proposed action plans between December 2021 and January 2022
1	Promote regular group exercises like jogging	Elegu BP staff from various departments jointly organize playing football almost every evening after completing their work engagement. They bought balls from their financial contribution. In addition, jogging and walking in small groups of the BP staff were also observed. 52 BP staff have taken part in either of these activities.
2	Promote peer counselling through inter-department cooperation	Peer counselling is offered continuously on an as-needed basis after the training. 26 BP staff have benefitted from this support.
3	Establish counselling structure	A proper counselling structure is not yet established mostly due to the major rotation of URA staff, including the supervisor, in-charge and managers.
4	Create awareness on psychosocial support among BP staff	Informal sessions to create awareness on psychosocial support was held in December 2021.

Overall, the training was well accepted and appreciated by the participants. The participants perceived the training on psychosocial support as critically important. Given the increased workload connected to the new COVID-19 protocols and inadequate psychological support, they suggested that more frequent and extensive training on this topic is needed as it was helpful to sensitize the frontline workers and equip them with the knowledge and skills required to enhance psychosocial support in their workplace. As shown in Table 35, many of the proposed action plans are being implemented after the training to enhance psychosocial support.

Lessons Learned and Recommendations

- Much more needs to be done to create the enabling environment to provide peer support for workers experiencing stress and promote collective actions to enhance psychosocial support. In addition, following up on the implementation of the action plans should be done by the URA and Amur District Health Team, and necessary support should be provided to ensure sustainability.
- The training on psychosocial support adapted to frontline workers should be replicated at other BPs across Uganda. Their staff would be facing inadequate awareness regarding the consequences of prolonged stress and the absence of peer or organizational support to cope with stress. Burnout, mental disorders such as depression and anxiety, frequent absence from work, and reduced productivity often lead to frequent accidents and mistakes, breach of COVID-19 protocols, and increased risk of infections at BPs. MoH should mobilize its internal resources or fundings from development partners like IOM and WHO to roll out the training.
- The training module on psychosocial support with a strong emphasis on interaction and peer-to-peer learning should be developed by MoH based on the training material devised through the pilot activity. Such a module should be tailored to the specific needs of frontline workers.
- MoH should increase the number of trained and qualified facilitators for psychosocial support training. Producing and deploying them at regional and district levels is essential for a scalable impact.
- The large majority of the participants in Elegu were men, which suggests the leadership positions at the BP are predominantly occupied by men. In addition, duty stations in remote areas and requirements for frequent rotations are major barriers to more women gaining experience at PoE. Therefore, creating an environment conducive to more women working for BPs should be a priority for Ugandan Revenue Authority.

3.2.6.2 Providing technical support to thermal scanners at the seven BPs

Challenges that the pilot activity aimed to address

BPs are considered at high risk of transmission of COVID-19 due to the high volume of movements. The majority of travellers crossing Ugandan borders are young adults, which is the part of the population considered to be highly contagious. Given that fever is the most common symptom of COVID-19, body temperature screening of travellers crossing land borders is the major strategy adopted in the EAC, especially in countries with limited resources, to detect cases. In Uganda, the MoH procured and provided thermal scanners for BPs to strengthen COVID-19 surveillance. Travellers flagged as feverish by the machine are advised to go through a secondary screening, Reverse Transcription-Polymerase Chain Reaction (RT-PCR) test performed by private laboratories stationed in BPs. The ministry has an operational model of body temperature screening where cross-border travellers walk through a prefabricated structure with a thermal scanner installed. However, these thermal scanners have technical issues showing inaccurate temperature, which results in false positives. Thus, such an operational model

is not being implemented at BPs. The BPs face an urgent need to calibrate the equipment and train Port Health staff to calibrate, troubleshoot and maintain it.

Pilot Activity

Objectives

To examine the validity of the MoH's proposed model of body temperature screening at BP by building the capacity of Port Health staff and other BP staff to calibrate and maintain thermal scanners

Target BPs

Busia, Malaba, Mutukula, Katuna, Cyanika, Mirama Hills, Oraba

Target population

Port Health staff, district health teams and MoH staff

Activity Output

A company with technical expertise in installing, calibrating, and maintaining thermal scanners signed a contract to conduct a capacity-building activity at seven BPs, which have World Bank-supported thermal scanners. Training on calibration, troubleshooting, and maintenance targeted at Port Health staff in charge of screening, daily maintenance and troubleshooting, and district health teams supervising Port Health staff and MoH staff responsible for procuring and installing new equipment. The MoH staff participated in the training for monitoring and supervision purposes as the thermal scanners are property of the government of Uganda under the MoH. Besides training, the selected vendor develops a quick reference guide to calibrate, troubleshoot and maintain the equipment. A copy of the guide was distributed to the relevant BPs. The biomedical engineer will also follow up for six months after the training and provide remote user support where necessary.

An approach piloted for improvement

Given the inaccurate thermal scanners, BPs are unable to implement the MoH's operational model of body temperature screening where cross-border travellers walk through a prefabricated structure with a thermal scanner installed. Once the machines are calibrated and technical issues are resolved through the training, BP would be able to put the operational model into practice. The screening's efficiency and safety are expected to enhance as the operational model makes it easier to control the flow of people entering the BPs.

Assessment and observation

The calibration training is completed in all the selected sites namely Busia, Malaba, Oraba, Cyanika, Mirama Hills, Mutukula, and Katuna by 10th January 2022. By January, the quick reference guide is developed and finalized in an easy-to-digest, engaging way. The guide tailored to the specific needs of Port

Health provides quickly accessible step-by-step instructions on how to calibrate, troubleshoot and maintain the equipment and is expected to help sustain the knowledge level of the concerned personnel. The vendor reported on training outcomes, causes of the technical problems of the thermal scanners, actions taken to address these issues, and remaining challenges to the proper function of the machines.



Calibration training (left); shifting the equipment from Port Health Office to a prefabricated structure (right).

Follow-ups to the BPs suggested some success cases. As a result of the intervention, the thermal scanner at Mutukula BP was transferred and calibrated from the main building to the prefabricated structure. The machine is working very well, measuring the body temperature of travellers accurately and safely. The table below illustrates comparisons of the screening in Mutukula before and after the pilot activity.

Table 36. Assessment of Screening Procedures Before and After the Pilot Activity

Before the pilot activity	After the pilot activity
<ul style="list-style-type: none"> Using infrared thermometers (also known as temperature guns) at the busy BP was considered exposure screeners at risk of infection and led to a slow screening process given the high volume of movements. It was challenging to keep physical distancing among the travellers and between screeners and travellers. BP staff in Mutukula contracted COVID-19, which left many of their colleagues worried and scared for their life. 	<ul style="list-style-type: none"> Only one person enters the prefabricated structure for screening at a time. Now health workers feel very secure as they instruct the travellers to stop at a certain distance/point before and while screening. Life has been made easy with the use of the properly calibrated thermal scanner.

However, follow-ups to the BPs also suggested major challenges in calibrating and using the thermal scanners. The table below shows the remaining challenges at the other BPs, which hinder putting the same screening model into practice.

Table 37. Remaining Challenges that Need to be Addressed in the Future

BP name	Remaining challenges
Busia	The camera system is not configurable due to the language (Chinese) of the software.
Cyanika	No government agency or partner is able to pay electricity bills to operate the thermal scanner.
Katuna	The thermal scanner remains in the immigration office and needs to be shifted and reinstalled in the new building of OSBP office. In addition, materials needed for installation, including power sockets, mountable boxes, PVC pipes, T-bends, PVC saddles, PVC couplers, elbow bends, power cable, are missing in the building. The machine is in good shape without mechanical problems.
Malaba	The camera system is not configurable due to the language (Chinese) of the software.
Mirama Hills	The scanner's power adapter is faulty and needs replacement.
Oraba	Causes for the thermal scanner not working could not be conclusively ascertained during the site visit.

Lessons learned and recommendations

- The involvement and training of MoH staff in charge of procurement and installation of new equipment like thermal scanners were critical as they needed to understand better operational challenges on the ground faced by Port Health. The training provided a rare opportunity for the MoH staff to learn practical issues relating to the operation of thermal scanners, including access to stable electricity and the language of the software. Enhancing the capacity of MoH staff is the key strategy to calibrate other thermal scanners at BPs that are not targeted through this activity. The MoH is pursuing a way to expand the same activity to calibrate or reinstall other existing thermal scanners using their resources.
- Although it is not conclusive through the survey and pilot activities, screening for fever may not be sensitive enough to detect the vast majority of COVID-19 cases in the BP settings due to different reasons. The biggest shortcoming is that thermal scanners and handheld thermometers measure skin temperature, which can be higher or lower than core body temperature. Currently, RT-PCR is a reliable test in detecting both symptomatic and asymptomatic COVID-19. However, given the constrained resources allocated to BPs, the turnaround time for test results, and the economic status of travellers, it would not be feasible and realistic to have all the travellers crossing the land borders tested with RT-PCR. Travellers flagged as feverish through the use of thermal scanners could be advised to use lateral flow tests that give rapid results. These rapid tests do not need a laboratory setup or require samples to be sent to a laboratory.
- Temperature screening alone at PoE is not an effective way to stop cross-border transmission of COVID-19 since infected individuals may be in the incubation period, may not exhibit symptoms, like fever, in the course of the disease (asymptomatic cases), or may dissimulate fever through the use of antipyretics. Other symptoms such as cough and shortness of breath or difficulty breathing need to be looked into during screening. A digital travel health questionnaire could be developed and introduced as part of the efforts to strengthen active screening and surveillance of COVID-19 cases.

3.3 Proposed Models

In this section, proposed models based on each pilot activity are grouped into three: (1) models for strengthening IPC measures BPs, (2) models for capacity development, and (3) community engagement models. The first two groups target the BP facilities but are separated as the support types are different, tangible and intangible. The third group targets the community surrounding the BPs.

For the purpose of future similar activities, the expansion of the interventions, or the replication of pilot activities at other BPs, the models list the key actors who may be involved or responsible for implementing the proposed models. Key actors may include BP staff, Port Health, BMCs, MoH, development partners, and community stakeholders.

1. “BP staff” refers to all the staff working in the various departments of the BP.
2. “Port Health” refers to the department responsible for health activities at the BP.
3. “BMC” refers to the groups of managers/leaders representing the departments stationed at the BP.
4. “MoH” is the body responsible for the Port Health, infectious disease control, and screening of infectious diseases
5. “Development partners” refer to any organization or body providing foreign aid for a survey/project along with the teams that are implementing it.
6. “Community stakeholders” refer to CHWs, NGOs, and community leaders

MoH and BMC are the primary entities for whom each model is proposed.

3.3.1 Strengthening IPC and Structural Measures at BPs

This section proposes models supporting the tangible aspects (equipment and materials) of the BP facilities.

3.3.1.1 IPC Model 1: Effective hand hygiene facility utilization model through the installation of permanent and easy-to-maintain handwashing stations and water tanks (Kenya)

The Team proposes this good practice model for improving hand hygiene facility utilization as a means of strengthening IPC at the BPs. This proposed model is under the condition that there is a stable water source. In the case of Kenya, among the target BPs for this pilot activity, only Taveta BP has a stable water source. Therefore, 5000L tanks were also installed in the Illasit, Lwakhakha, Nadapal, and Suam BPs. The conditions of the water source (stable or unstable) were determined during the baseline survey and confirmed during the field assessment.

Table 38. Proposed Model for Hand Hygiene Facility Utilization

Challenges to be tackled	Hand Hygiene Facility Utilization Model		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Fewer infrastructure and equipment investment opportunities for smaller BPs Gaps in handwashing practices among travellers and BP staff Need for proper maintenance of handwashing stations at BPs 	Needs assessment of BP <i>Key contents:</i> <ul style="list-style-type: none"> On-site conditions inspection Water source inspection Information gathering on positioning, measurements, sink type 	MoH, Development Partners, BMC	Thorough research on target sites and their needs <ul style="list-style-type: none"> Prior to the procurement of equipment, conduct a needs and field conditions assessment at the BPs. BMCs and BP staff should be interviewed, and key actors should avoid relying solely on telephonic interviews or online data as conditions in the field are likely to be different, and important information may be missed This would also help prevent duplications and procurement of unnecessary materials Consider the placement of equipment, and necessary accessories (such as stands) that will improve user (truck drivers, passengers, BP staff) experience
	Introduction of handwashing facilities <ul style="list-style-type: none"> Tanks installation for BPs with unstable water source Durable sink introduction <i>Input:</i> 4-sink knee-press stainless steel handwashing stations, tanks	MoH, Development Partners	Proper research on equipment specification <ul style="list-style-type: none"> Consider the durability of items especially if placed outdoors as in the case of the sinks installation in Kenya; select materials (whether it is a type of durable plastic, ceramic, or stainless steel) that can withstand wear and tear factors such the weather Consider hands-free equipment such as knee-press type sinks when infectious disease control is an objective Ensure that equipment is inspected and tested prior to procurement in order to assess ease of use and quality
	Equipment Manual Development <i>Key contents:</i> <ul style="list-style-type: none"> Collaborative output to tailor towards BP conditions Training of O&M manual with BMC staff Delegation of specific tasks <i>Input:</i> O&M manual	Development Partners, BMC, BP staff	Improving hand hygiene facility conditions through maintenance <ul style="list-style-type: none"> Introduce easy to understand O&M manuals to maximize equipment lifespan. Manuals may be based on existing manuals and recommendations of manufacturers Produce manuals that fit conditions in the field (for example: adjusting the frequency of cleaning based on the predicted number of users). Manual development should be in collaboration with BMCs they are expected to know the field conditions When training the staff on the O&M manuals, delegate tasks for maintaining the equipment to instil a sense of responsibility Provision of soft copies for replication or revision and hard copies for staff reference

Hand hygiene is key to infectious disease control. As BP staff face many travellers at the borders each day, they must be protected from various threats such as infection through contact. Handwashing sinks should not only be installed but must be easy to access and easy to use in order for utilization to increase. To reduce the wasteful 'non-functional sinks' phenomena, O&M should be sufficiently controlled within the BP by none other than the BP staff. The abovementioned proposed models should help ensure improvements in hand hygiene facility conditions at the BPs.

3.3.1.2 IPC Model 2: Minimizing infection risk through the installation of sneeze guards and screening booth (Kenya)

The Team proposes the following good practice model on reducing infection risk at the BP Port Health. This is recommended for BPs that have inadequate space or lack a designated room for Port Health operations. Sneeze guard installation is recommended to areas with minimal space and available resources, booths are recommended to areas with heavier traffic.

Table 39. Proposed Model for Strengthening IPC and Structural Measures at BP Port Health

Challenges to be tackled	Strengthening IPC and Structural Measures at BP Port Health Model		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Inadequate space for Port Health at BP Inadequate protection during pre-screening procedures at Port Health 	<p>Securing a safe space for Port Health operations <i>Key contents:</i></p> <ul style="list-style-type: none"> Sneeze guard installation to protect Port Health staff from droplet infection Booths installation to secure screening spaces for Port Health <p><i>Input:</i></p> <ul style="list-style-type: none"> Screening booth to Port Health in BP with heavier traffic, sneeze guards to Port Health in BP with relatively less traffic 	MoH, Port Health, BP staff	<p>Attention to detail/logistic matters</p> <ul style="list-style-type: none"> Collect measurements on furniture and rooms Simulate usage of sneeze guards prior to procurement and consider setting an allowance for items for proper fitting Proper fittings are important in ensuring protection from infectious particles Consider the distance from the manufacturer's site to installation sites when choosing the manufacturer of equipment. It may be more practical to opt for manufacturers near installation sites in case of changes, repairs, or upgrades
			<p>Assessing and reporting needs for improvements</p> <ul style="list-style-type: none"> Continuously conduct needs assessments as needs change depending on the existing health threats and conditions in the field. For example, a booth that can accommodate two staffs with a wider glass coverage was installed at Taveta BP to accommodate for the bigger traffic they receive; this was decided through assessment of the BP through the support of Development Partners and the MoH The MoH should clarify with Port Health staff the amount of space needed for operations (e.g. how many staff? what movements will they be making? do they expect people to enter?) in these rooms/installations. Consider storage area of necessary items such as documents and PPEs when calculating size The MoH should create opportunities or platforms where the Port Health staff can share their perceived risks at BPs, in order to improve the occupational safety of staff

Similar to previous pilot activities, this activity focuses on smaller less targeted BPs in order to adjust for the imbalance. The instalment of sneeze guards is an example of an easy, affordable, quick, yet very useful model in improving occupational safety. For BPs that have no pre-existing Port Health rooms, a pre-fabricated booth can be a solution in securing a proper space for Port Health operations. The BP staff and stakeholders should continuously aim for constant improvement in their workplace in terms of safety and comfort.

3.3.1.3 IPC Model 3: Strengthening comprehensive IPC measures of Port Health to reduce the risk of infections among drivers, travellers, and Port Health staff (Rwanda)

The Team proposed the following good practice model on IPC of Port Health for effective infection prevention and detection, isolation and management of people who are presumptive for COVID-19 at BPs. This model could be replicated at other BPs providing the COVID-19 test with limited space available.

Table 40. Proposed Model for Strengthening Comprehensive IPC Measures of Port Health

Challenges to be tackled	Strengthening comprehensive IPC measures of Port Health Model		
	Activities	Responsible Persons/Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> ■ Inadequate IPC measures at Port Health screening room: <ul style="list-style-type: none"> • No separate and enclosed space for testing, • No protection on the registration desk ■ Inadequate preparedness for management of suspected positive cases: <ul style="list-style-type: none"> • Isolation room not operationalized • No medical equipment for management ■ Insufficient number of handwashing station: <ul style="list-style-type: none"> • Fixed handwashing station not operationalized and pipes are broken • No signboard on handwashing methods 	<p>Screening Maximizing the limited space at Port Health screening rooms to minimise the risk of infection Increasing operational efficiency and safety</p> <p><i>Input:</i> PPE, ward screen, sneeze guard, waste segregation bin, hand sanitiser dispenser</p>	<p>RBC/MoH District Hospital (referral facility) Border Management Port Health staff</p>	<p>Reducing infection risks at the screening room</p> <ul style="list-style-type: none"> • Screen temperature of travellers before entering into the screening room • Restrict the number of entries to the screening room if space is limited • Arrange user flow line into one direction • Enclose the sample collection space using ward screen for IPC and privacy purposes • Install sneeze guard and larger desk for registration/pre-screening desk • Install hazardous waste segregation bin to store garbage bags before transporting for incineration • Install hand sanitiser dispensers at entrance and exit of the screening room • Prepare sufficient PPE (e.g, facemasks, gloves, gowns) and ensure proper donning • If possible allocate/construct a waiting area for people to wait to be tested and for the result
	<p>Isolation Refurbishing isolation room</p> <p><i>Input:</i> Bed, cabinet, waste bin, curtains</p>		<p>Operationalising isolation room</p> <ul style="list-style-type: none"> • Allocate/construct isolation room for travellers diagnosed positive and waiting for transportation • Agree on cleaning and disinfection of rooms and bed linens with a cleaning company or nearby health facilities
	<p>Case Management: Procuring equipment and orientation</p> <p><i>Input:</i> Pulse oximeter, blood pressure monitor, sample transportation box</p>		<p>Strengthening management of presumptive cases</p> <ul style="list-style-type: none"> • Install minimum medical equipment and PPE for positive case management such as pulse oximeter, BP monitor, handheld thermometer, N95 mask and training/orienting Port Health staff on the use of equipment • Agree on case management and transportation of people presumptive of COVID-19 among Port Health, referral health facilities, and border management
	<p>Hand hygiene: Operationalise/refurbish handwashing station in a sustainable manner</p> <p><i>Input:</i> Signboard, soap dispenser, hand dryer</p>		<p>Operationalizing and maintaining WASH facilities</p> <ul style="list-style-type: none"> • Install fixed handwashing stations for sustainability and accommodating more people • Consider proper interventions for protection and maintenance of handwashing station such as constructing the roof and retaining wall to protect from soil erosion, installing water pipe underground • Install signboard to encourage handwashing as well as educating public on proper handwashing techniques with local and regional languages

3.3.1.4 IPC Model 4: Strengthening IPC measures at BPs by improving hand hygiene practice, temperature screening, and waste management (Tanzania)

This model is recommended for BPs experiencing a surge in traffic volume, affecting the availability of resources necessary for infection control. In this pilot activity, improvements for hand hygiene facilities, waste management, and Port Health operations were combined under one IPC model.

Table 41. Proposed Model for Strengthening IPC Measures at BPs by Improving Hand Hygiene Practice, Temperature Screening, and Waste Management

Challenges to be tackled	Strengthening IPC Measures Model through IPC Equipment		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Inadequate awareness of the IPC guidelines and SOP among BP staff Unreliable, inadequate, and stock-outs of IPC-related supplies: Inadequate waste segregation practices: Non-functional thermal scanners 	<p>Improving IPC measures at BPs by securing IPC equipment and supplies</p> <p><i>Input:</i></p> <ul style="list-style-type: none"> Instalment of hand sanitiser dispensers and bottles Provision and installation of waste segregation bins Provision of face mask and gloves Instalment of thermal scanners for screening of travellers 	MoH, Port Health, BMC BP staff	<p>Manageability</p> <ul style="list-style-type: none"> Consider cost and skills needed for operation and maintenance of equipment before the introduction of new equipment Consider manageability and easy-to-operate equipment if basic functions necessary for the purpose are guaranteed Strategically consider where to place equipment, taking into account the flow line of travellers and staff, to increase the convenience and accessibility for users and the effectiveness of equipment utilization
			<p>Sustainability</p> <ul style="list-style-type: none"> Consider capacitating staff on simple operation, trouble-shooting and maintenance of equipment Specify tasks and allocate personnel for maintaining equipment and its utilization including continuous monitoring of usage Constantly capacitate, monitor and supervise staff in IPC practices such as the use of face masks, hand sanitization Forecast requirements and set up stockpiling policies at all levels (national, sub-national as well as BP) to avoid stock-outs Supply guidelines and SOPs and display in visible place if possible Bring BP management on board, and advocate the importance of equipping the BPs with the necessary equipment for efficient operations of BP services
			<p>Prioritization and harmonization</p> <ul style="list-style-type: none"> Consider prioritization if resources are limited to allocate IPC supplies but the effort also has to be made at the same time to eliminate unbalance between smaller and larger BPs in terms of volume of traffic Harmonize and coordinate efforts made by various stakeholders and avoid duplication of efforts Strengthen inter-ministerial coordination and cooperation at BP in terms of implementation of IPC measures and PPE supplies

Both consumables such as hand sanitisers, masks, gloves, and non-consumables such as thermal scanners were distributed. For a more sustainable supply of consumables, securing supply chains at a national level is recommended. For emergency situations, a rapid assessment should still be conducted to avoid duplicates and identify BPs that are of higher priorities.

3.3.2 Human Resource Capacity Development

3.3.2.1 Capacity development Model 1: Developing a resilient BP workforce through training of BMC on IPC and other relevant issues (Kenya)

This model is proposed to increase KAP of BP staff regarding infectious disease control, not limited to Port Health staff, but all other staff under Customs, Immigration, Police, etc.

The following are the three novel approaches used in this activity: (1) One Health Approach to Training, (2) Use of Updated and Relevant Training Content, and (3) Mixed BPs Approach should be considered when implementing training at BPs in the future. Approach (1) is necessary to ensure that IPC all BP staff, regardless of the department they belong to, are trained in proper IPC measures. As BP staff all work in the same environment, following IPC measures and proper health management is necessary to reduce the spread of work-related infections. Approach (2) is necessary, as information on diseases prevention techniques are constantly being generated (i.e., new variants of COVID-19, vaccination information, etc.) and there is a need to streamline information and undergo fact-checking. The addition of relevant topics based on needs assessment such as multi-agency coordination, occupational health, and safety during the pandemic, COVID-19 vaccination, psychosocial support, and nutrition management is recommended when replicating the activity. Finally, approach (3) is recommendable to implement as it reduces costs (training in one venue), encourages knowledge co-creation, and cooperation between BPs.

Table 42. Proposed Models for Capacity Development for BMC Staff

Challenges to be tackled	BMC Capacity development Model		
	Activities	Responsible Persons/Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Imbalanced opportunities for capacity development between larger BPs and smaller BPs Inadequate opportunities for IPC training among non-health staff and BMC Inadequate opportunities for sensitization on COVID-19 vaccine for BMC 	<p>IPC training for BMC staff <i>Key contents:</i></p> <ul style="list-style-type: none"> IPC training targeting BMC from multiple agencies including non-health-related officers New and updated topics such as occupational health, psychosocial support, nutrition management, vaccination were discussed Sharing of experiences during COVID-19 among BMC staff to learn good practices and needs 	<p>MoH, Development Partners, BMCs, BP staff</p>	<p>One Health Approach to Training</p> <ul style="list-style-type: none"> The MoH and Development Partners should ensure inclusiveness of IPC training by including BP staff from various departments, not only Port Health staff The MoH should share information training materials to BMCs of all departments to increase overall BP staff capacity If BMCs are not in place at BPs, BP staff should consider the development of a BMC which is key to improving organization among BP staff The MoH and Development Partners should consider allotting discussion time during training in order for BP staff to share experiences and good practices with one another. This may also be a platform for BP staff to share training needs
		<p>MoH, BMCs</p>	<p>Constant update of new information on health threats</p> <ul style="list-style-type: none"> Ensure BP staff have access to the internet, television, radio, or newspapers so that they are updated on current news and affairs in order to respond quickly and appropriately to infectious disease threats Ensure BP staff are accessing reliable information by recommending sound news sources within the country and the East African region. This would increase the BP staffs vigilance on infodemics (spread of false information) Ensure prevailing myths are corrected and undergo fact-checking amongst BP staff when necessary Consider including relevant topics such as occupational safety, psychosocial support, among others in training that have not or have been rarely tackled in previous training if there is an obvious need or request from the BP staff
		<p>BMCs, MoH, Development Partners</p>	<p>Mixed BPs Approach</p> <ul style="list-style-type: none"> Consider merging training with other borders to encourage co-creation of knowledge/ideas and cooperation Consider merging BPs from 2 countries to further improve bilateral cooperation among East African Partner States

3.3.2.2 Capacity development Model 2: Development of e-learning modules for public health threats at PoE (Rwanda)

The following model is proposed for other Partner States which plan to develop similar modules for general BP staff. The development process is the same as the usual curriculum development process. However, because it is an e-learning course, the accessibility to the internet and the availability of a national e-learning platform will have an impact on the implementation. The process of accreditation and issuing certificates of completion will also need to be considered. In addition, as the course is targeted at non-health sector personnel, the content should be basic and easy to understand, for example, through the use of illustrations. It is also critical to involve the Revenue Authority or Ministry in charge of immigration that manages the BP in all processes, including the implementation phase after the development of the module.

Table 43. Proposed Model for Public Health Threats at PoE E-learning Module Development for BP staff

Challenges to be tackled	E-learning for public health threats at POE Model		
	Activities	Responsible Persons/Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> BP staff without adequate knowledge of health threats at the border despite the growing need for non-health BP staff for detecting and responding to public health threats at the border High staff turnover at BP requires frequent training of newcomers Limitation of traditional training in terms of timing, budget, and training quality control as well as infection prevention 	Desk Review of National, regional and global materials, guidelines, SOPs	RBC/MoH	Utilising local and international resources <ul style="list-style-type: none"> Refer local, regional and global guidelines and SOPs. IHR 2005 and IHR Core Capacity External Evaluation report will guide the discussion and development
	Consultations and validation with key stakeholders providing services at the border	RBC/MoH Immigration, Customs at POE	Multi-sectoral engagement <ul style="list-style-type: none"> Involve different departments from the health sector, including but not limited to, departments in charge of research, surveillance, public health, training and communicable diseases Involve other sectors including immigration and customs Get feedback and inputs from POE
	Development of modules <ul style="list-style-type: none"> Module 1: Detecting public health threats at PoE Module 2: Responding to public health threats at PoE 	RBC/MoH	Targeting non-health staff at border <ul style="list-style-type: none"> Set target groups: Non-health BP staff e.g., Immigration staff, Customs agents, Security, Ground handlers, Clearing agents Focus on three learning objectives <ul style="list-style-type: none"> Describe the roles of agents working at PoE to avert public health threats. Apply the appropriate methods for detecting public health threats at PoE Apply the appropriate methods for detecting public health threats at PoE Bear in mind that the learners may not be health professionals Use illustrations and pictures to make it easy to understand Provide two scenarios, normal time and health emergency, if necessary Create QUIZ or self-assessment to confirm learning outcomes
	Incorporating into an e-learning platform Key points: <ul style="list-style-type: none"> accessibility, accreditation and certification, personal identification 	RBC/MoH	Digitalisation and certification <ul style="list-style-type: none"> E-learning can be provided even if a governmental e-learning platform is not in place Utilize open-source learning platforms such as Moodle Clarify the process of accreditation, certification and personal identification Clarify the accessibility of non-BP staff if the e-learning platform is meant for health sector personnel

3.3.2.3 Capacity development Model 3: Strengthening capacity of BP staff and laboratory technicians on IPC in Nimule BP and Nimule Hospital to establish a Resilient BP workforce (South Sudan)

The Team proposes the following good practice model on IPC capacity development and PCR testing capacity development of BP staff. This model is proposed to increase KAP of BP staff regarding infectious disease control, not limited to Port Health staff, but all other staff under Customs, Immigration, Police, etc. However, the PCR testing training only targets laboratory technicians involved in the screening of infectious diseases at BPs or referral hospitals.

Table 44. Proposed Model on IPC and PCR training for BP Staff and Lab Technicians

Challenges to be tackled	IPC Training and PCR training		
	Activities	Responsible Persons/Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Gaps in IPC practice by BP staff and users Inadequate number of lab technologists who can use Polymerase Chain Reaction (PCR) system Need for proper maintenance of handwashing stations at BPs 	IPC and IPC enforcement training <i>Key contents:</i> <ul style="list-style-type: none"> IPC training targeting BP from multiple agencies including non-health-related officers Topics included hand hygiene, proper utilization of PPE, respiratory hygiene, prevention of needle-stick injuries, safe waste management, cleaning and disinfection of patient-care equipment and linens, cleaning and disinfection of the patient care environment 	MoH, Development Partners, BMC	One Health Approach to Training <ul style="list-style-type: none"> The MoH should share information training materials to BMCs of all departments to increase overall BP staff capacity If BMCs are not in place at BPs, BP staff should consider the development of a BMC which is key to improving organization among BP staff The MoH and Development Partners should consider allotting discussion time during training for BP staff to share experiences and good practices with one another. This may also be a platform for BP staff to share training needs Ensure terminologies in the training are understood by non-health-related personnel
	PCR training <i>Key contents:</i> <ul style="list-style-type: none"> Training of lab technologists from hospital/clinics involved in testing samples from BPs on PCR systems PCR training included principles lectures and hands-on training at the lab Rapid diagnostic testing methods were also included 	MoH, Development Partners	Cross-BPs Approach <ul style="list-style-type: none"> In the situation of South Sudan, we have witnessed bilateral cooperation between Uganda and South Sudan Consider expansion of these cross-border training to improve coordination and camaraderie between the Partner States in East Africa

The training conducted for South Sudan BP staff is a capacity development model due to the following reasons:

1. Similar to Kenya's IPC training, the One Health Approach to training (broader target population for training) was also utilized for the South Sudan pilot activities. This increases the involvement and responsibility of all staff in BPs and reduces the burden for health workers. Local capacity development was utilized to ensure the sustainability of the services as the staff are already on either government or partners' payroll and do not require additional cost to provide the services to the communities.
2. For the PCR Training, the participants were requested to practice their knowledge at the Nimule Hospital to enhance their understanding and skills and CHD has been requested to create a rotation for the lab technicians at the PHCCs to come to the PCR Lab for practice. This will require continuous follow-up by the CHD. Continuous training on PCR testing was recommended to retain the knowledge and prepare the Team for any intervention, especially after every three months.

As for future training locations, to ensure sustainable resilience in the BP workforce, training must also be provided at BPs, or at least gather them at a conveniently located area for training, as practised in the IPC training in Kenya.

The cross-BMC has provided easy access to both Elegu and Nimule BP for services and support. This cross-border coordination is also a novel approach utilized in the training and proves to be beneficial in future activities with BPs as it is likely to increase cooperation between two countries in working together for the prevention of infectious diseases.

The CHD has created effective coordination of partners working on health at the BP and integrated the hospital services to ensure gaps are filled without duplications that made the training distinct from other interventions of the partners and has supplemented their activities. The positive attitude and commitment of the partners, government institutions, and participants was vital in the success of the training.

3.3.2.4 Capacity development Model 4: Enhancing psychosocial support at the BPs (Uganda)

The pilot activity allowed us to conduct the first-ever training targeted at a Ugandan BP on the topic of psychosocial support. The Team advocated that the MoH should develop psychosocial support training for frontline workers, including BP staff. The Team also shared the training material, which was devised through the pilot activity, with clinical psychiatrists of MoH’s health training institution who serve as training facilitators for mental health and psychosocial support. The current MoH’s training module relevant to psychosocial support is designed to guide a set of targeted immediate actions at a health facility level to re-organize and maintain access to essential health services, including psychosocial support. In the guidance, mental health is included in the essential service package. However, it is not a guideline or SOP on providing psychosocial support to health workers or other frontline workers who come under increased stress amid the pandemic. The Team handed over the training material to MoH in a bid to advance it and establish a training model on psychosocial support.

The diagram below shows integral components of the model proposed for the Uganda MoH to enhance psychosocial support at the BPs. The ministry may consider implementing it with the technical support of development partners like WHO and IOM. Once implemented in several BPs, the results, best practices and lessons learned could be disseminated among the EAC state members for their adaptation in their countries. BP staff across the region need timely, effective psychosocial support amid the prolonged pandemic.

Table 45. Proposed Models for Enhancing Psychosocial Support At the BPs

Challenges to be tackled	Enhancing psychosocial support at the BPs Model		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> • Frontlines face multiple stresses (fear of being infected, constant vigilance, higher demands in the workplace, adjustment to new protocols) due to the COVID-19 pandemic • Supporting colleagues in coping with stress deemed inadequate 	Needs assessment <i>Key Contents:</i> <ul style="list-style-type: none"> - Identification of psychosocial support needs and challenges - Identification of existing resources and mechanisms to provide psychosocial support 	MoH, development partners, BMCs	Problem and resource identification <ul style="list-style-type: none"> • Assess well-being, including mental health conditions, of BP staff • Identify stressors and other challenges affecting the well-being of BP staff • Explore existing mechanisms to provide psychosocial support in the workplace • Identify psychosocial support services by government or nongovernment actors in the target areas
	Development and rollout of a PSS training module <i>Key Contents:</i> <ul style="list-style-type: none"> - Development of a training module that is contextualized in the BP settings. - Training of clinical psychiatrists, psychiatric clinical officers, or assistant medical officers to roll out the training 	MoH, development partners, BMCs	Adaptability, co-learning, and targeting <ul style="list-style-type: none"> • Tailor the training module to the specific needs of BP staff • Encourage interaction and peer-to-peer learning during the training • Encourage collective actions to enhance psychosocial support during the training • Focus on team leaders and managers to make organizational impacts • Train clinical psychiatrists, psychiatric clinical officers, or assistant medical officers, who hold a 2-year diploma in clinical psychiatry, on the new training module to produce enough trainers at national and district levels

3.3.2.5 Capacity development Model 5: Providing technical support to thermal scanners at BPs (Uganda)

The diagram below shows a proposed model to establish COVID-19 surveillance capacity through body temperature screening at the BPs. This is proposed for the Uganda MoH and is tailored to specific needs and challenges on the ground at the BPs to realize effective and sustainable use and maintenance of thermal scanners. To avoid mechanical problems, selecting and procuring the right type of equipment is particularly important, considering the inadequate technical capacity of Port Health staff and concerned MoH staff being responsible for managing thermal scanners at PoE. Capacity-building is an essential part of the model to facilitate proper maintenance and troubleshooting of the thermal scanners. MoH should be prepared to extend timely, technical support to BPs in the event that their machines need servicing or repair.

Table 46. Proposed Models for Capacity Development for COVID-19 Surveillance through Temperature Screening

Challenges to be tackled	Capacity Development for COVID-19 Surveillance through Temperature Screening Model		
	Activities	Responsible Persons/Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Risky practices of body temperature screening at BPs Thermal scanners not working properly for body temperature screening at BPs 	Procurement of the equipment <i>Key Contents:</i> <ul style="list-style-type: none"> Procurement of accurate and durable thermal scanners that are easy to operate and maintain 	MoH	Equipment Research <ul style="list-style-type: none"> Select thermal scanners with separate components (a computer with the proper software installed, a thermal camera, a visual camera, a black body), which are replaceable Ensure the thermal scanner has a camera configurable in English Select a manufacturer that has reliable online support Select thermal scanners with at least two years warranty periods and from a supplier that has a local presence with skilled technicians available for servicing
	Maintenance of the equipment <i>Key Contents:</i> <ul style="list-style-type: none"> Establish a good maintenance system 	MoH, POE, DHT	Production of equipment guides based on environment and users <ul style="list-style-type: none"> Ensure stable electricity supply for thermal scanners Designate a person in charge of maintenance of the equipment within BPs Prepare and distribute a simple user reference guide for proper maintenance and troubleshooting
	Capacity-building <i>Key Contents:</i> <ul style="list-style-type: none"> Capacitating concerned personnel to calibrate, maintain and troubleshoot the equipment 	MoH, POE, DHT	Training of users with involvement of supervisors <ul style="list-style-type: none"> Provide training for capacity-building of Port Health staff using the thermal scanners to prevent breakdown or inaccuracy Involve concerned MoH staff who are responsible for overseeing thermal scanners at ports of entry

3.3.3 Community Awareness Creation Activities

3.3.3.1 Community Engagement Model 1: Strengthening CBS for early case detection, and effective case investigation, referral, and management of COVID-19 and other communicable diseases (Burundi)

The Team proposes the following good practice model on CBS for the effective risk communication and community engagement (RCCE) programme. RCCE is a key pillar in public health emergency response that ensures accurate health information sharing, adoption of protective behaviours by the affected people, and collaborative participation by all stakeholders, including the local community structures.²⁴ It is also critical to strengthen reporting and referral mechanisms between communities and governmental structures for effective case detection, investigation, referral and management of COVID-19 and other communicable diseases. This model can be replicated particularly in the communities along the porous border with CHWs or Village Health Workers are in place.

²⁴ Laston Gonah, “Key considerations for successful risk communication and community engagement (RCCE) programmes during COVID-19 pandemic and other public health emergencies”, *Annals of Global Health*, 86, 146, (2020): 1.

Table 47. Proposed Models for CBS for Effective RCCE Programme

Challenges to be tackled	Community-Based Surveillance Model		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Inadequate knowledge and awareness of COVID-19 among the community members Insufficient sensitization activities for the community surrounding the borders The porosity of the borders: illegal border transgression put the community at high risk of both importing and exporting COVID-19 and other communicable diseases across the border 	<p>Information Sharing Workshop <i>Key Contents:</i></p> <ul style="list-style-type: none"> Strategy for implementing CBS Purpose of CBS of epidemic diseases with emphasis to COVID-19 Role of each stakeholder M&E and data collection methods in communities <p><i>Items to be provided:</i> Masks, gloves, hand sanitisers</p>	<p>COUSP, MoH Provincial Director</p> <p><i>Participants:</i> District Authorities (Police, Immigration, Health authority, Administrative) HPT</p>	<p>Involving provincial and district authorities and community leaders</p> <ul style="list-style-type: none"> Obtain buy-in and support from provincial and district administrators Strengthen linkages between community efforts and governmental programmes Improve communication, cooperation and collaboration among communities as well as districts
	<p>Training on CBS <i>Key Contents:</i></p> <ul style="list-style-type: none"> Basic information of COVID-19 e.g., way of transmission Strategy for CBS, and the role of CHWs Practical skills e.g., effective handwashing, Interpersonal communication, Reporting method hands-on exercises toward the home visits <p><i>Items to be provided:</i> Masks, gloves, hand sanitisers, educational materials, and bag</p>	<p>COUSP, MoH Provincial Director</p> <p><i>Participants:</i> CHWs, HPTs, Community Leaders</p>	<p>Involving and capacitating HPTs (supervisors of CHWs)</p> <ul style="list-style-type: none"> Involve supervisor of CHWs from sensitisation and training phase Link community and health facilities Promote knowledge sharing between HPTs
	<p>Implementation of CBS <i>Key actions:</i></p> <ul style="list-style-type: none"> Detection / Reporting Investigation Validation <p><i>Items to be provided:</i> PPE, Soap, Bicycle, Mobile, Airtime, umbrella</p>	<p>COUSP, MoH CHWs HPTs Community Leaders</p>	<p>Capacitating CHWs</p> <ul style="list-style-type: none"> Provision of PPEs and educational materials in local language Provide guidance on signs and symptoms of notifiable infectious diseases and reporting as well as management of suspected cases Capacity building on interpersonal skills, practical handwashing Refresher training is required to reinforce knowledge and skills as well as increase motivation

3.3.3.2 Community Engagement Model 2: Community awareness and engagement activities for improving IPC practices among community members around the border (Tanzania)

The Team would propose the following good practice model on community awareness and engagement activities for improving practices on IPC among border communities. In the mixed-interventions approach, one must consider various lifestyles that may affect the selection of effective communication strategies. For example, in Namanga, the house-to-house strategy may not be the most optimal method since it is dominated by the Maasai community who often migrate in search of grazing lands. Language should be appropriate, and engaging the community (allowing them to speak, ask, and share) would help earn trust and successfully convey the desired message.

Table 48. Proposed Models for Community Engagement for IPC Improvement

Challenges to be tackled	Community Awareness and Engagement Activities for IPC Model		
	Activities	Responsible Persons/ Organizations	Success Factors/Key Considerations
<ul style="list-style-type: none"> Inadequate IPC practices in the community awareness COVID-19 infodemic among BP communities Low COVID-19 vaccination uptake in BP communities 	<p>Vaccination and IPC Awareness Activities</p> <p><i>Key contents:</i></p> <ul style="list-style-type: none"> Community sensitization meetings House to house visit/One-to-one discussion Engaging the local media in the promotion of COVID-19 measures and actions 	MoH, Port Health, POE, DMO, Community leader Local HCWs	<p>Local Edutainment Approach</p> <ul style="list-style-type: none"> Consider the use of use of local songs, poems, and role-plays, Engage local theatre groups provided health education to address myths around COVID-19 and promote the use of COVID-19 vaccines Convey messages using the local language as much as possible
			<p>Mixed-Interventions Approach</p> <ul style="list-style-type: none"> Consider the use of different platforms, namely mass media, community gathering, household visits and one-to-one sessions, to deliver messages and raise awareness to reach out to individuals with diverse backgrounds, beliefs, lifestyles and preferences Assess the sociocultural background of the area and select the most appropriate intervention and time that would suit the situation of the area One-to-one sessions may be more effective to increase persons' knowledge however community meetings will be effective to increase community awareness To improve practices, consider long-term and sustained community engagement activities as well as rule enforcement
			<p>Collaboration with Community Stakeholders</p> <ul style="list-style-type: none"> The influence of community leaders towards members should be taken into consideration, therefore their involvement is crucial HCWs who can follow-up on vaccinations, and update information on COVID-19 on IPCs even after the activities are done should be involved in community engagement Authorities relevant to coordination of transport, security, vaccination supply etc. are necessary for planning these activities Involve the MoH, local coordinators for information to be streamlined with national guidelines as well as for future follow-up activities

Chapter 4 Recommendations

4.1 Proposed Plan of Actions

Upon completion of the Pilot Activities, the Team convened a Knowledge Sharing Workshop to report all the activities and lessons learned in each country, with all Focal Persons from the Partner States, JICA, and the EAC Secretariat. This workshop was an opportunity to compare results in each Partner State, share ideas, and gather all the recommendations from the stakeholders. These recommendations were organized and are incorporated in the Proposed Plan of Actions (Section 4.1) to the EAC Partner States and the EAC Secretariat, followed by the Policy Recommendations (Section 4.2) which requires prioritized and collective efforts in order to strengthen cross border health security in the region.

The Plan of Actions proposed by the team to the Partner States and the EAC Secretariat is a combination of the findings of the baseline survey, the lessons learned and recommendations from the pilot activities, information gathered during discussions in the Knowledge Sharing Workshop, the input of the Focal Persons from each Partner State, and meetings with the EAC. The Proposed Plans of Action are divided into the 8 main themes of this Survey Project, namely: National Policy, Regional Coordination and Standardization, BP Administration and Coordination, Human Resource Management and Capacity development, IPC including WASH, Port Health, BP Infrastructure and System, and Community Awareness and Engagement. The Team summarized interventions to address issues identifies in each theme; these interventions were sub-categorized as mid-/long-term interventions (requiring a year or longer) or short-term interventions (requiring less than a year).

4.1.1 National Policy

As mentioned in Chapter 2, section 2.2.2 Regional Analysis, WHO mentions that every country needs to develop and implement a ‘National Action Plan’, which should be flexible and responsive enough to react promptly to the rapidly changing epidemiological contexts of the virus. As most National Plans and Guidelines identify border areas as being high-risk for the spread of COVID-19, the majority of BPs recognize existing national plans as a guiding document towards COVID-19 response. However, each Partner State reacted differently to some extent towards the containment of COVID-19; this had significant implications on border management and coordination of responses to the pandemic. From the baseline survey, the Team highlights the following issues regarding the National Policy:

- Unharmonised screening protocols, cost, unbalanced and inadequate capacities at BPs among the Partner States
- Insufficient or lack of recognition of national plans as guiding document for COVID-19 response at some BPs
- Inadequate coordination and cooperation among BPs especially adjacent ones.

Table 49. Proposed National Policy Plan of Action

National Policy		
Identified Issues	Mid-term/Long-term Interventions	Short-term Intervention
1.1 Unharmonised border screening protocols, cost, and unbalanced and inadequate capacities among the Partner States	1.1.1 Standardising border screening protocols and cost among the Partner States	
	1.1.2 Strengthening the network of medical reference laboratories and the regional rapid response mechanism	1.1.3 Strengthening capacities of national and sub-national laboratories
	1.1.4 Advocate for mutual recognition of COVID-19 test results issued by EAC certified COVID -19 testing laboratories through the RECDTS/EACPass ²⁵ by the Partner States	1.1.5 Disseminating information about EAC certified COVID-19 testing laboratories to stakeholders such as airlines, travel agencies, and the public
1.2 Insufficient recognition of national plans as guiding document for their COVID-19 response at some BPs	1.2.1 Ensuring involvement of multi-sectors and multi-agencies at BPs on planning and review of a national strategy on COVID-19 and other health threats	1.2.2 Sensitizing BP managers and staff on national COVID-19 strategy

The unharmonised protocols and costs in testing among the Partner States confused truck drivers and travellers and consequently led some to pursue falsification of certificates and illegal border crossings to avoid payments for duplicative testings at both sides of the border. Differences in capacities such as availability of human resources and facilities for surveillance and response during the pandemic affected

²⁵ EACPass is the Digital COVID-19 Certificate Mobile app developed by the EAC in collaboration with the Commons Project which integrates all EAC Partner States negative test results for COVID-19 and those vaccinated supporting those who are traveling across the regional and international

uniformity of turn-over time for results, quarantine protocol enforcement, and testing requirements, which altogether furthered the confusion among the travellers. In addition, ongoing efforts by the EAC for regional standardization such as the usage of RECDTS are still not yet absorbed in all BPs, and the need to disperse and enforce such efforts is evident.

As seen in Table 49 standardization of screening protocols, strengthening laboratory networks, and advocacy for mutual recognition of test results are the proposed mid- to long-term interventions to address these issues. Capacity strengthening of national and sub-national laboratories is a critical element that should be focused on before or during the establishment of laboratory networks. Lessons learned from South Sudan's pilot activities not only stimulated mutual learning by bringing together laboratory technicians from neighbouring health facilities for training but also demonstrated the need and effectiveness of forming a pool of neighbouring laboratory technicians to reduce the burden on each technician and to create a system for emergency preparedness. Training on the use of different testing machines and skills also contributed to the accommodation for the various demands in testing. The Team recommends that these good practices be taken into account in supporting future capacity development of lab technicians.

Moreover, the RECDTS and the EACPass, which are being implemented by the EAC, are great examples of efforts that should ensure smoother border-crossing by reducing duplicative procedures such as testing, and filling-up forms for Customs and Port Health. These efforts should be recognized and promoted in each Partner State. These would be enforced successfully until the borders if there were provisions for its dissemination at the national level.

For the recognition of national plans as guiding document for their COVID-19 response at BPs, multi-sectoral, multi-agency involvement is necessary for planning and reviewing national strategies for COVID-19 and other health threats. At the Knowledge Sharing Workshop, many stakeholders such as Focal Persons pointed out its importance, as the needs in each BP were better organized when involving representatives from multiple agencies such as but not limited to Customs, Police, Immigration, Port Health, etc. Short-term interventions include sensitisation of BP managers and staff on national COVID-19 strategies, as was done in Kenya for the pilot activity. In addition, the invitation of representatives of each BP for national level and county/district level consultations would help identify needs and clarify conditions in the field, which should aid in improving the national strategies.

4.1.2 Regional Coordination and Standardisation

In fact, regional coordination and standardisation are cross-cutting issues, and their importance and necessity are evident in most of the proposed actions across all themes. In terms of customs systems in the EAC region, the baseline survey sought to find out that the perception of the harmonisation of procedures within the EAC was favourable with 70.5% (31 BPs) and the respondents agreed or strongly agreed with the harmonisation of customs systems. However, many BPs have not been successful in coordinating their management and response with their counterparts across borders, including the COVID-19 response. Key interventions which could be proposed in this section would be coordination and harmonization of border management including customs, immigration and health issues across the border. To tackle the issue of inadequate joint coordination and cooperation at BPs, the team suggests establishing/revitalizing the JBMCC and regular meetings. The JBMCC is a gathering of the heads of various agencies on both sides of the border, including Immigration, Customs, Trade, Agriculture, Police, Port Health, etc. It meets on a quarterly basis, and sometimes more frequently as needed. In other words, it is a joint meeting place for BMCs on both sides of the border. This approach allows for the sharing of issues at the border, coordination of responses to health emergencies, among others. Good practices done through the JBMCCs include convening monthly meetings and sharing PPE at the Busia border between Kenya and Uganda. It is recommended that both sides of BMCs should meet regularly to share information and plans on COVID-19 and any other emerging issues at the border.

Table 50. Proposed Regional Coordination and Standardisation Plan of Action

Regional Coordination and Standardisation		
Identified Issues	Mid-term/Long-term Interventions	Short-term Intervention
2.1 Inadequate joint coordination and cooperation at BPs	2.1.1 Establishing/Revitalizing the JBMCC, which brings together the heads of different agencies on both sides of the border, and regular meetings	

In the Pilot Activity, cross-border cooperation and collaboration were observed between Uganda and South Sudan for the training held for Nimule BP and Nimule Hospital staff of South Sudan. Although the target population where South Sudanese, activities were implemented at the Uganda side of the border (Elegu BP), here Uganda side provided support such as facilitation and logistics. This type of cross-border cooperation may be beneficial to future activities at the BPs and such efforts should be disseminated to other BPs to improve regional collaboration and camaraderie.

At the Knowledge Sharing Workshop, it was noted that some countries were falling behind in aspects such as infrastructure and human resource capacities. There was a plead to the EAC Secretariat in standardising investment and development plans within the region. In addition, upon the comparison of capacities and benefits of OSBPs and non-OSBP borders during the baseline survey and pilot activities, the expansion of OSBPs is recommendable in the region.

4.1.3 BP Administration and Coordination

Good inter-ministerial administration and coordination at the BPs are crucial for controlling the import and export of infectious diseases at BPs. From the baseline survey, all the responding BPs said they had a BP-specific coordination mechanism to deal with the COVID-19 pandemic among the different departments at the BPs, however, it was revealed that ministry silos such as differences in procurement prioritization remain. For BP Administration and Coordination, the Team has identified the following issues and proposes the following Plans of action for each issue.

Table 51. Proposed BP Administration and Coordination Plan of Action

BP Administration and Coordination		
Identified Issues	Mid-term/Long-term Interventions	Short-term Intervention
3.1 Inadequate inter-ministerial coordination and cooperation at BPs despite the presence of inter-ministerial coordination at most BPs	3.1.1 Facilitating inter-ministerial coordination at the national level	
	3.1.2 Strengthening inter-ministerial coordination and collaboration at BPs through the One Health approach such as training for BMCs	
	3.1.3 Involving other sectors working at the border including community leaders to strengthen inter-sectoral coordination and collaboration through the One Health approach	
3.2 Absence of contingency/backup plan for COVID-19 at some BPs	3.2.1 Development/adoption of public health emergency contingency plan, and nomination of a coordinator and contact points at each BP	
3.3 Absence of BP specific guidelines and SOPs which reflect local context	3.3.1 Development and implementation of BP specific guidelines and SOPs	

For the inter-departmental coordination and cooperation, the Team suggests facilitating inter-ministerial coordination at the national level, strengthening inter-ministerial coordination and collaboration at BPs through the One Health approach such as training for BMC members, and encouraging multisectoral participation at BMC meetings. Community leaders and representatives from other sectors (e.g., business associations, truck drivers' associations) who are part of the border community should also be represented at BMC meetings as they are integral in keeping infectious diseases at bay.

According to the IHR 2005, every BP needs to have a contingency plan to strengthen its preparedness and capacities for any emerging public health threats. In the event of an outbreak, a rapid risk and needs assessment is conducted to update the contingency plan. The plan outlines the activities and guidance on roles, responsibilities, and procedures that are critical to guide decision-making and response. The contingency plan should be updated and have nominated coordinators and contact persons such as medical and public health officers and relevant authorities. From the survey, only half of the BPs reported having contingency plans. The EAC Secretariat, along with national policymakers, should spearhead regional preparedness and harmonisation of responses the region is susceptible to the rapid spread of infectious diseases due to its geography.

During the pandemic, various SOPs and guidelines for COVID-19 were developed by the Partner States.

The purpose of SOPs is to ensure that certain tasks are carried out in a specific way by key personnel or departments in both non-emergency and emergency situations. The need for standard procedures to operationalize a contingency plan was recognized. From the baseline survey, 79.5% of the surveyed BPs had guidelines or SOP of the national level, and the region needs to aim for 100%. BP-specific conditions such as limited health facilities and limited human resources would inevitably affect operations at BPs, therefore SOPs should be reviewed by BMCs and should be revised accordingly. With the creation of BP-specific guidelines, one must be careful not to misalign from national guidelines. In addition, these BP-specific guidelines should take into account the local context: languages, holidays that would affect operations, and contact persons such as community leaders, water and electricity personnel, among others. In addition, BMCs would be more familiar with the SOPs through the mere act of the creation/revision process. Revisions or additions to the SOPs at each BP should be reported back to the national level for future policy development or SOP revisions, and must also be coordinated with other BPs to be able to share and grasp new ideas in improving guidelines at the BPs.

4.1.4 Human Resource Management and Capacity development

Human resource management and development at BP is a complex subject as a diverse range of ministries and agencies are active, and staff turnover is high. Capacity development is costly, and the survey has shown that in allocating limited resources, there is a concentration of resources and opportunities at relatively large BPs. In responding to health threats such as infectious diseases, it is essential to improve the KAP not only of Port Health staff but also of other BP staff and managers in the non-health sector.

Table 52. Proposed Human Resource Management and Capacity development Plans of Action

Human Resource Management and Capacity development		
Identified Issues	Mid-term/Long-term Interventions	Short-term Intervention
4.1 Inadequate capacity development of staff on IPC at some BPs	4.1.1 Developing regional standardized training materials	4.1.2 Training of BP staff and management on IPC and other issues
	4.1.3 Expanding IPC training for non-health staff in accordance with the One Health Approach	
	4.1.4 Development of e-learning programme for BP staff on IPC and managing COVID-19 cases	
	4.1.5 Adoption of available e-learning courses (WHO, IOM, CDC etc.) on the management of COVID-19 at ground crossings for capacity development of BP officials	
4.2 Inadequate psychosocial support for frontline staff	4.2.1 Develop/revise employee health and wellness policy for BPs and strengthening programme	
	4.2.2 Training of BP senior officers on lay counselling	
	4.2.3 Training of BP staff on psychosocial support	
4.3 Insufficient access to vaccines for BP staff	4.3.1 Advocating for provision of vaccination programmes for other infectious diseases (e.g., yellow fever) for front line workers at BP	4.3.2 Sensitising, promoting, and implementing COVID-19 vaccination programme for all BP staff

IPC is a practical evidence-based framework for preventing infections among health workers and patients, in the case of BPs: BP staff and travellers. IPC training should be marked as a requirement among all BP staff, not limited to Port Health staff, as BPs are likely to become hubs for importing and exporting infectious diseases. As a mid- to long-term intervention, regional standardization of training materials should be developed; and training should incorporate the One Health Approach, in other words including non-health-related staff, as previously recommended in capacity development models in Kenya and South Sudan.

To standardize content and material, a way to address standardization of content and materials is through the development of e-learning programmes. In the pilot activities in Rwanda, the development of e-learning modules for public health threats at PoE was implemented. By creating an e-learning training module, all staff from each ministry/sector would be able to take the same course before being assigned to the BP. This should provide efficient, sustainable, and uniform capacity-building at the BPs. Although e-learning is ideal, not all BPs have the capacity to digitalize pieces of training; however, available training materials on

management of COVID-19 and other infectious diseases at ground crossings developed by the WHO, IOM, and CDC, among others, should at least be circulated and utilized by BMCs and BP staff. If digitalization or access to devices and internet stability is an issue, the EAC and relevant stakeholders from the health and infrastructure sectors should be able to address these needs. Access to stable internet should be considered a daily necessity for human resources at BPs, as valuable information such as global health and security threats circulate online. The need for real-time information sharing with PoE, including BPs through health portals, which was raised in the course of the pilot activities in Rwanda, should also be discussed at the regional level.

From the baseline survey, many of the BP staff responded that they felt overworked and burned-out, with a feeling that it is 'inevitable' to feel that way, as there is little available psychological support. There were more prominent among relatively smaller and isolated BPs, who have staff living far away from their usual support groups such as family members. In order to maintain a resilient workforce, it is recommended that training materials be adjusted based on the needs of the staff which can be influenced by a changing working and social environment including pandemics. Training should incorporate the contents that has received little attention in the past, but whose importance and demand are growing, such as physical and mental wellness. The pilot activities paved way for the introduction of these new content; the first-ever psychosocial-support training for Ugandan BP staff was implemented; IPC training in Kenya incorporated psychosocial support and nutritional management for BMC staff. In Uganda, training materials were developed based on the references from the IASC for the pilot activities while considering the specific challenges faced by BP staff. The activities were highly participatory, resulting in psychosocial healing for some participants and it was highly appreciated for the participants as well as MoH staff.

Also, these training programmes can be used as platforms in providing accurate information and addressing misinformation to promote infection control activities such as vaccination for BP staff, as some of them were either unaware of its benefits or reluctant due to the reported side effects. BP staff should be the key players for promoting the vaccination itself to travellers, and provisions for vaccination programmes for COVID-19 other infectious diseases (e.g., yellow fever) for frontline workers including BP staff should be in place. In Kenya, vaccination and its benefits were discussed during the pilot activities (IPC training for BMC staff); some BP staff were persuaded to receive vaccinations, others agreed in acting as promoters of vaccination for the communities surrounding BPs. These types of sensitization activities need to be expanded in other BPs within the region.

4.1.5 IPC Including WASH

WASH is critical for the promotion of health, dignity, and the general well-being of individuals and communities. According to the IHR 2005 core capacities of PoE, every BP must ensure a safe environment for travellers while using the BP facilities. This includes access to clean water. Under the theme IPC Including WASH, there were several identified issues within the borders of the region.

Table 53. Proposed Plans of Action for IPC/WASH

IPC including WASH			
Identified Issues	Mid-term Long-term Interventions	Short-term Intervention	
5.1 Lack of piped water supply system (Half of BP does not have piped water supply)	5.1.1 Improving and maintaining water supply system	5.1.2 Digging tube well/borehole	
	5.1.3 Initiating cooperation on access to/sharing of piped water supply across the border		
5.2 Inadequate number of handwashing stations installed at BPs	/		
	5.2.2 Procuring and installing fixed-type sustainable handwashing stations (e.g., with underground pipe, roof, universal design)	5.2.1 Procuring and installing mobile handwashing stations at BPs without piped water supply	
5.3 Improper maintenance of handwashing stations	5.3.1 Developing operation and maintenance (O&M) manual and plan delegating tasks of maintenance of handwashing stations		
5.4 Improper waste management practice at BPs	5.4.1 Development/Adoption of waste management guideline/SOP		
	5.4.2 Training on health hazards and waste management		
	/		
	5.4.3 Procuring and installing hazardous waste bin		
	5.4.4 Arranging transportation of hazardous waste to nearby health facilities with incinerator		
5.5 Issues on PPE: stockout, poor supply chain, inadequate distribution to community people, absence of PPE guideline (who should use what)	5.4.5 Procurement and instalment of incinerators at BP with a high volume of traffic	/	
	5.5.1 Strengthening supply chain mechanism of PPE at national and sub-national levels	/	
5.6 Non-compliance with wearing masks at BPs	5.5.2 Improving PPE stock management at BP	5.5.3 Procuring basic PPE (facemasks, gloves, and gowns)	
	5.6.1 Promoting regional legislation for enforcement of mask-wearing and IPC measures at the border	5.6.2 Distributing facemasks to BP users and continuous education on IPC	
5.6.3 Sensitizing and capacitating BP staff particularly security and police officers on enforcement of IPC measures by BP users			
5.7 Inadequate PPE provision, IPC training, and no access to COVID-19 tests among cleaning staff	5.7.1 Providing adequate PPE (heavy-duty/utility rubber gloves, eye protection, gown/work coverall, closed-toe boots/shoes as per recommendation by WHO), IPC training, and access to free COVID-19 test and vaccine for cleaning staff		

Improvement in water supply systems is not only through construction works but also through the initiation of access to water supplies across borders. In other words, it may be practical for two countries to share a water source across borders if the water supply is stable on one side. This being said, provisions for cost-

sharing must be considered. Short-term improvements include digging tube well/borehole. Unsafe, or lack of clean water sources amplify disease transmission and should be seen as a collective responsibility of both sides of the border.

During the baseline survey, handwashing stations were identified at various borders, but a number were not utilized or non-functional. When introducing handwashing stations installed at BPs, consideration of durability and equipment specification is crucial as the environment and infrastructure in BPs may be quite different from metropolitan areas. Portable handwashing stations (self-sufficient, with tanks) should be considered for BPs without or unstable piped water supply; fixed-type sustainable handwashing stations (e.g., with underground pipe, roof, universal design) should be appropriate for BPs with stable piped water supply. In order to ensure the sustainability of facilities in the BPs, it is necessary to consider procurement of equipment which are more permanent and easy to manage, partnered with the creation of O&M manuals. Although many BPs outsource their O&M to cleaning companies, it is important to create a system that enables BP staff themselves to maintain and manage the facilities using the O&M manual. It is ideal to develop an O&M manual, and delegate tasks in maintaining the handwashing stations among BP staff for its sustainability. Upon outsourcing cleaners, it is recommended that their tasks include referral to these manuals. In this case, a more permanent, easy-to-manage alternative to existing portable handwashing stations should be considered.

For the improvement of waste management practices at BPs, the Team suggests the development or adoption of waste management guidelines/SOP, training on health hazards and waste management, and procurement of hazardous waste bins. For more sustainable waste management, procurement of incinerators that pass national environmental protocols should be highly considered. If procurement of incinerators is hard to attain, transporting the waste to a nearby facility with an appropriate incinerator such as hospitals would be a practical alternative measure. However, vehicle arrangements, fuel costs, and the distance to the neighbouring facilities need to be taken into account when planning. alternatives include the provision of logistic arrangements such as allocation of transportation and fuel to nearby facilities with proper disposal equipment. In Tanzania, the Team supported the provision and installation of waste segregation bins at BPs; however, there may be a more sustainable and long-term intervention such as ensuring a stable supply of PPE and waste disposal materials to borders.

PPE is an integral part of IPC. Therefore, those PPE should not be stocked out, and the stable supply to the BPs and the distribution to community people must be secured. For compliance with wearing masks at BPs, PPE guidelines, training, and a level of enforcement should be required at BPs. BMCs should be reminded to shift prioritization in procurements (gloves, masks, sanitisers, etc.) during outbreaks swiftly. It is important to consider having these items on stock at all times in case there are disruptions in the supply chain. With regards to enforcement, it was reported in the baseline survey that the availability of PPE such

as masks, does not necessarily guarantee its utilization. Therefore, for compliance with PPE-wearing at BPs, the EAC and policymakers should consider the inclusion of PPE training, and enforcement as part of safety and IPC measures at the borders. PPE distribution protocols in case of stock-outs at BP should be in place within each Partner State as well as at the sub-national level. In the pilot activities in Tanzania, after the distribution of PPE, two staff members were assigned at each BP to monitor and teach proper donning and utilization of the PPE throughout the day, which resulted in improved hand sanitisation and mask-wearing practices among BP staff and travellers entering BP. Ongoing monitoring and guidance will be necessary until a behavioural change has taken root. In Rwanda, additional PPE instalment contributed to strengthening the response towards increasing demands in testing and case management caused by the spread of the Omicron variant in December 2021, highlighting the importance of maintaining stock levels in case of emergency.

4.1.6 Port Health

For the Port Health theme, several issues in infrastructure (isolation and screening spaces), equipment availability (screening and testing equipment) were identified. The issues and corresponding interventions are summarized in the table below.

Table 54. Proposed Port Health Plans of Action

Port Health		
Identified Issues	Mid-term/Long-term Interventions	Short-term Intervention
6.1 Inadequate knowledge and skills on, and equipment for the management of people who may have COVID-19	6.1.1 Training/simulation exercise for port health staff and other BP staff on management of people who are presumptive for COVID-19	
	6.1.2 Developing SOP on the management of people who are presumptive for COVID-19 at BP	
	6.1.3 Procuring equipment such as pulse oximeter and blood pressure monitor and training on its use	
6.2 Absence of isolation room at BP facility	6.2.1 Construction of pre-fabricated isolation room 6.2.3 Reviewing OSBP blueprint and renovating existing buildings	6.2.2 Allocating space for isolation room from existing BP building
6.3 Isolation room without adequate space and items		6.3.1 Refurbishment of isolation room and procurement of items (e.g., bed, linens, curtain, cabinet)
6.4 Inadequate space for port health service and absence of separate testing/sample collection room	6.4.1 Expanding port health room or building separate rooms for testing/sample collection	6.4.2 Refurbishing/rearranging screening room with ward screens and other items
	6.4.3 Installing sneeze guards or screening booth for pre-screening/registration desks	
6.5 Absence of BP's own transportation which can be used for transporting samples as well as presumptive cases	6.5.1 Procurement of vehicle for BPs	6.5.2 Utilizing public transportation e.g., taxi
	6.5.3 Procurement of ambulance for health facilities nearby BP	6.5.4 Facilitating discussion between BP and health facility on arrangement of ambulances for transporting patients
	6.5.5 Strengthening capacity of health facilities nearby borders	
6.6 Long distance from BP to referral health facility and laboratory	6.6.1 Initiating inter-state cooperation on health facility and laboratory across the border	6.6.2 Facilitating discussion between BPs on sharing of transportation
	6.6.3 Establishing mobile laboratory system in the country for deploying at borders in emergency	
6.7 Inadequate supply of testing equipment for COVID-19	6.7.1 Procurement of testing equipment	
	6.7.2 Strategizing testing methods for each BP considering traffic volume, distance to laboratories, personnel availability, among others	6.7.3 Procurement of refrigerator for storing samples and sample transportation box
6.8 Unfunctional thermal scanner/thermographic camera	6.8.1 Improve equipment management	
	6.8.2 Procurement of wall-mounted infrared thermometer and provision of instruction with O&M or equipment manuals	
	6.8.3 Capacitate Port Health staff to calibrate and maintain thermal scanners	

One of the issues identified at the Port Health was the staff capacity. Some of the BP staff themselves feel that they have inadequate knowledge and skills on the management of people who are presumptive for COVID-19. It is recommendable to conduct training/simulation exercises for Port Health on managing

people who are presumptive for COVID-19 and to develop SOPs on the management of those who have or may have COVID-19. For BPs lacking or have an insufficient supply of necessary equipment for case management such as pulse oximeters and sphygmomanometers, stakeholders from the MoH should address this via procurement, and providing training of usage and maintenance among Port Health staff.

From the baseline survey, some of the BPs have no isolation rooms or have inadequate space for isolation. The same was found for screening rooms. The introduction of pre-fabricated rooms at BPs is a simple alternative to address this issue. If there is no available space and budget for installing these pre-fabricated rooms, the installation of sneeze guards on desks to prevent droplet transmission is another quick alternative. Depending on the volume of traffic, sneeze guards may be sufficient for smaller BPs, however, installation of a pre-fabricated booth should be considered for BPs receiving higher traffic, as piloted in Kenya.

Another issue is the access to referral health facilities. Some BPs have nearby health facilities, but others need to travel more than 40 km, like in the case of some BPs in Uganda and Tanzania. In addition, even when referral facilities are within 40 km, the majority of the BPs do not have vehicles designated to transfer a possibly infectious patient. The Team suggests procurement of vehicles for BPs or coordination with nearby health facilities for arranging ambulances, or at the very least, allocation of budget for hiring taxis or motorbikes. If these are not addressed, sick patients will most likely leave BP premises without proper quarantining, and possibly spread the infection to nearby populations.

In case of an outbreak and other emergencies, an alternative is to also establish mobile laboratory systems within each Partner State. These mobile labs should be deployed to borders with low access to health facilities. Testing equipment necessary for surveillance of infectious disease, including refrigerators for storing samples and sample transportation boxes, should be procured as necessary.

In many BPs, although they have installed thermal scanners/thermographic cameras, it was found that many of them were non-functional. The Team had provided technical support for thermal scanners calibration and management at the seven BPs in Uganda through the pilot activities. These types of support should increase the lifespan of this equipment for more sustainable usage. In Tanzania, procurement and introduction of thermal scanners significantly reduced time for screening processes at the BPs, and also reduce staff's work burden, especially during busy hours. Consideration should be given to the introduction of equipment that is relatively easy to operate and maintain, provided that a minimum level of functionality is ensured.

4.1.7 BP Infrastructure and System

For the BP Infrastructure and Systems, there are several identified issues such as availability of electricity and internet, which are essential in the introduction of programs such as the RECDTS. The other identified issues and corresponding interventions are listed in the table below.

Table 55. Proposed BP Infrastructure and System Plans of Action

BP Infrastructure and System		
Identified Issues	Mid-term/Long-term Interventions	
		Short-term Interventions
7.1 Partial implementation of RECDTS in the EAC region	7.1.1 Continuous regional digitalization	7.1.2 Advocating for implementation of RECDTS
		7.1.3 Sensitizing truck drivers on the use of RECDTS
7.2 Inconsistent electricity supply at some BPs	7.2.1 Improving national power supply system	7.2.2 Procuring and installing solar power system as a backup
7.3 Absence of backup generators at some BPs		7.3.1 Procuring and installing a backup generator
7.4 Inadequate internet connection and Wi-Fi environment for access to online training, access to RECDTS, and others	7.4.1 Improving internet and Wi-Fi environment at BPs	
7.5 Delays in transition from paper-based and manual system to a paperless and automated system for customs and immigration at BP	7.5.1 Promoting smart and seamless customs and immigration operation through automated and paperless systems for prevention of COVID-19 to reduce infection risks	

RECDTS is an example of an excellent and effective system introduced at BPs in EAC. Interview among the truck drivers during the baseline survey revealed good reviews as it saved time by reducing document processing time when crossing the borders. This system should be introduced to all BPs. This being said, the feasibility for a full expansion would be affected by inconsistent electricity supply at some BPs. The EAC Secretariat and infrastructure policymakers should devise a way in securing a stable power supply even at the borders. BPs with unstable power supply, such as frequent power outages, would benefit from the introduction of a solar power system as a backup.

As previously mentioned, access to stable internet should be considered a daily necessity for BPs, as it is a means of acquiring important information for surveillance of potential health and security threats. With access to an internet connection, RECDTS implementation, document digitalization, e-learning, and remote meetings are possible for the BPs and their staff; this is an important area to focus on for the region. In addition, travellers and truck drivers can also get access to the updated information on requirements regarding COVID-19 which seem to continuously change day by day. This transition from paper-based to automated systems would also reduce paper consumption and waste at the BPs, and improve data management, not only for Port Health but also for other agencies such as customs and immigration.

4.1.8 Community Awareness and Engagement

One of the EAC COVID-19 response plan objectives is to promote risk communications, community engagement, sensitization and awareness creation on COVID-19. Through the baseline survey, needs for sensitization and behaviour change interventions for community people and cross-border traders, including truck drivers, were identified.

Table 56. Proposed Community Awareness and Engagement Plans of Action

Community Awareness and Engagement		
Identified Issues	Mid-term/Long-term Interventions	Short-term Interventions
8.1 Lack of border community intervention by BPs	8.1.1 Implementation of standardized sensitization campaigns and utilization of regional pandemic preparedness and risk and crisis communications SOPs	
	8.1.2 Strengthening joint-community RCCE interventions across the border	
8.2 Inadequate KAP of truck drivers and community people		8.2.1 Establishing/strengthening community-based surveillance
8.3 The porosity of the borders which increases illegal cross border movement and activities, and the risk of the spread of infectious diseases across the border		

In the Pilot activities in Burundi, the community was involved in strengthening CBS for early case detection, and effective case investigation, referral, and management of COVID-19 and other communicable diseases. The training aimed to improve participants' knowledge about the symptoms of COVID-19 and to establish a system for early detection and response to cases through home visits, particularly within border communities at high risk of infection. The issue of informal border movements and activities and the risk of infectious diseases in surrounding communities is a common challenge for the Partner States, and enhanced surveillance through the establishment of CBS is needed throughout the region. In Tanzania, the Team conducted: community sensitization meetings to raise COVID-19 awareness among the general public in the vicinity of BPs and truck drivers, house-to-house visits/one-to-one discussion for awareness creation and vaccination, and engagement of the local media in the promotion of COVID-19 measures and actions to boost access to information about COVID-19 through local radio stations. Vaccination uptake was reported to increase after the activities, and questions from community members about access, safety, eligibility, and benefits of vaccination were addressed in the activities in Tanzania. The effectiveness of face-to-face intervention and outreach services has been confirmed, but in the early stages of a pandemic or when infection rates are rising, such interventions are unlikely to be possible due to infection prevention measures, and flexible planning is needed, including the use of radio and social networking services. Proposed interventions include awareness-raising activities and campaigns across communities and borders, with planning that takes into account the differences in language, culture, demographic composition and social infrastructure between communities even within the country, and the involvement of stakeholders such as community leaders, county administrations and health facilities is essential.

4.2 Policy Recommendations

The Team proposes the following 10 policy recommendations (six to the EAC Partner States and four to the EAC Secretariat) based on the data gathered in this survey in accordance with IHR 2005 and the EAC Health Sector Investment Priority Framework 2018–2028. These recommendations are based on the Plan of Actions proposed in the previous section while taking into account regional priorities and the responses required of all Partner States which are identified from the survey.

4.2.1 Policy Recommendations to the EAC Partner States

The following recommendations are primarily proposed to the EAC Partner States. It mainly depends on the efforts of each country, but it aims to establish health security in the border area and within the country by strengthening human resource development and management and management of IPC equipment and devices at BPs, upgrading Port Health and WASH infrastructure, hospitals and laboratory facilities near BPs, and strengthening community engagement and surveillance along the border. Needless to say, the collaboration and support of other Partner States and the EAC Secretariat will be essential to achieve this goal.

1. Advocation for health and wellness improvement of BP staff and human resource management

Throughout this pandemic, the burden on BP staff has been highlighted, particularly the excessive burden on Port Health staff and the need to review staffing structures. There is a need to promote the development and implementation of employee health and wellness policies and programmes for BP staff, including the provision of psychological care and psychosocial support for frontliners in emergency response who are facing higher risks of infection and experiencing isolation from their support groups. In addition, prioritization and provision of testing and vaccines for personnel should be in place. The development of a staffing structure for the sustainable operation of Port Health even after a pandemic and in anticipation of the next health threat also needs to be discussed at the national level.

2. Introducing e-learning and standardising training modules and materials for BP staff in response to health threats at PoE

During the survey, it was found that human resource development efforts vary from border to border; there is not enough training conducted for non-health-related staff at BPs creating a gap in IPC knowledge and skills. It is only when all BP staff, from cleaners to BP managers, are capacitated and practice IPC measures that infection control can function as a BP. In addition, even if only the larger BPs are supported, it is still possible for infections to spread from smaller borders where training and support are not adequately provided. Ideally, all staff at BPs, whether large or small, health or non-health staff, should be equally trained to implement IPC measures. There is a need to move away from traditional training to e-learning,

as frequent staff turnover and different timing of deployments by each ministry are detrimental to uniformed capacity development. All BP staff should be required to take an e-learning course before deployment to gain a minimum level of knowledge about the health threats at the PoE. At the same time, there is strong demand for the EAC to harmonise and standardise training modules and materials on health threats and IPC for BP staff. The influx of infectious diseases from outside the region cannot be prevented unless coordinated efforts are made at the regional level. There are many differences between countries in terms of internet infrastructure and the availability of national e-learning systems, hence, it may take some time to introduce e-learning. However, it is believed that standardisation of training materials can be achieved in a short term and each country can domesticate them by revising contents to suit the situation in each country. At the same time, it is recommended that the content be constantly updated and include new critical topics such as physical and mental wellness, nutritional management, vaccinations, and information on emerging infectious diseases. Aside from the introduction of e-learning systems, incentivizing through accreditation and certification should be considered. Opportunities for knowledge transfer and information sharing should not be limited to government officials at the BPs, but also extend to staff from other sectors, truck drivers, and BP users; otherwise, it will not be possible to declare that IPC at the border has been adequately implemented.

3. Linking the selection and procurement of equipment with O&M for a sustainable and effective implementation of IPC measures at BP

Experience has shown that procurement and instalment of equipment in emergencies were often made with minimal to no assessment of both the needs and available capacities for proper O&M. In these instances, there was hardly any communication between the future users, the planners, and donors; environmental aspects and social inclusion were often not taken sufficiently into consideration. During the course of the survey, several cases were identified (e.g. hand-washing stations, thermal cameras) where the equipment was not suitable to accommodate for the number and variety of users, the installation was not in the most proper location, maintenance procedures were unknown, and there was no BP staff capable of calibration and maintenance. No matter how sustainable equipment may have been in its design, it can only remain so if it is operated responsibly and maintained properly. It is recommendable to assess the capacity of O&M at BPs before selecting and procuring equipment. The type of equipment and technology to introduce are likely to have an impact on user experience, and future operation and maintenance activities. Operation and maintenance personnel must be part of the project planning and implementation process. If procurement is done at the national level, different needs and capacities at each BP should be taken into consideration. In many cases, complex and sophisticated equipment is not always necessary, and it is practical to install equipment that is simple and easy to use and maintain. Due to high staff turnover at BP, sharing of O&M knowledge and skills, the succession of responsibility, and provisions for equipment are also important issues. In addition, educating the users on the proper use of equipment including hand hygiene education for handwashing stations is also critical and should be encouraged.

4. Upgrading/building secondary or tertiary hospitals close to the major borders, equipping them with modern and sustainable equipment and facilities (including laboratories for early detection and management of cross-border health threats) and national and regional sentinel disease surveillance

Port Health at BPs alone have limitations to infectious disease response, including testing and management of infectious diseases; therefore neighbouring health facilities play an important role in supporting BPs. While many argue that a laboratory with PCR testing capacity should be established within the BP, utilization of the facility post-pandemic and maintenance is still questionable. Thus, coordinating with nearby tertiary or secondary level hospitals with existing laboratories would be a more practical and permanent solution. In addition, securing the means of transport between the hospital and the BP (e.g., procurement of designated vehicles) is an important element to solve several problems such as incinerating hazardous waste, and transporting ill travellers and specimens. As indicated in the EAC Health Sector Investment Priority Framework 2018–2028, the establishment of sentinel disease surveillance sites in epidemic-prone areas is one of the priorities in the region. The establishment of such a hospital facility near the border would enable rapid detection and response, and the incorporation of these hospitals into national or regional surveillance systems would make a significant contribution to national and regional infectious disease control. In addition, some BPs are closer to facilities on the other side of the border than to those in their own country. If it becomes possible to facilitate the smooth cross-border use of health facilities and laboratories, it will also be possible to plan the establishment of such hospitals at the regional level, thus, making better use of the resources within the region. In addition, expansion of portability of benefits of social health protection, as part of the overall social protection agenda in support implementation of the EAC common market, is highly recommended and it will also contribute to the acceleration of cross-border use of health facilities.

5. Upgrading BP infrastructure especially Port Health and WASH facilities in response to the growing demand for a response to the global public health threats at borders

The improvement of BP infrastructure has progressed significantly with the introduction of OSBP but relatively small borders and some countries are lagging. The EAC needs to mobilise resources to reduce the gaps in BP infrastructure between borders. Access to water is as important as access to electricity, and the EAC needs to actively support those borders and countries that are lagging in the provision of safe water supply, handwashing facilities, and toilets. As PoE can become a place for the international spread of diseases through persons, conveyances, and goods, Port Health plays a major role in the monitoring of international travellers to ensure compliance with the IHR 2005 and to control the spread of communicable diseases across the border. The survey revealed inadequate space available for port health services including screening and isolation at many BPs even with a high volume of traffic. It has already been demonstrated by the confusion and long queue of trucks at the border in the early stages of the pandemic that providing

necessary Port Health services, such as screening/testing, to large numbers of travellers in a limited space not only increases the risk of infection to staff and users but also increases customs clearance times and ultimately results in soaring costs of logistics and goods that stagnate the region's economy. For the time being, partitions and sneeze guards could be installed to minimize infection risks, but it is necessary to construct more permanent and spacious buildings in the existing BPs as well as in the new BPs; it is also desirable to have the same level of infrastructure on both sides of the border.

6. Strengthening infectious disease response measures in the communities along the border by involving community leaders, prioritizing service delivery such as testing and vaccination, and establishing and enhancing community-based surveillance programmes

The survey showed that there is inadequate community involvement in BP measures and community awareness-raising activities for BP users. The involvement of community leaders in BMC needs to be promoted and encouraged. Public health threats are not always detected in BP or hospitals and could be first reported informally in communities. Frequent communication and collaboration with the community are therefore essential in BP management and health threats response. Access to health facilities remains a challenge in many countries, and it is also important to connect communities with health facility services and programmes. This is particularly important in the fight against infectious diseases, where border communities are at higher risk of infection and need to be prioritised for some services such as testing and vaccination. In addition, as BP staff live are likely to live within the area and are part of the community; provisions for testing and immunization for BP staff would contribute to reducing the risk of infection in the community, and vice versa. In accordance with the IDSR, support for establishing and enhancing community-based surveillance is also essential for early detection, rapid confirmation, and response to public health threats in the communities along the border. The Partner States should facilitate collaboration and communication among communities across the border. As part of RCCE efforts at the regional level, there is a need for harmonised SBCC messages and IEC materials as well as coordinated campaigning across the region. As regional pandemic preparedness and risk and crisis communications SOPs are available, the Partner States should be encouraged to utilise the SOPs for effective implementation of RCCE.

4.2.2 Policy Recommendations to the EAC Secretariat

The following recommendations are proposed to the EAC Secretariat to coordinate and support the Partner States' collective effort towards the realization of regional health security and building regional resilience.

1. Establishing and Revitalizing JBMCCs, and establishing and operationalising a Regional One Health Rapid Response Mechanism with a pool of rapidly deployable experts for BPs to address public health emergencies particularly pandemic and epidemic-prone diseases

Coordinated multi-disciplinary border management is essential in border operations, both domestic and international, in the context of seeking greater efficiencies over managing trade and travel flows while maintaining a balance with compliance requirements. As borders are managed by countries on both sides, cross-border management, and coordination through JBMCCs are equally important and their importance in health emergency response and preparedness is quite high as health threats like infectious diseases are issues beyond the border. For a variety of reasons, JBMCCs have not been established or functioning in many borders, but the COVID-19 pandemic has reaffirmed their importance, and there is a strong need for communication and cooperation between the concerned countries and support for coordination at the regional level. As advocated by the WHO, all countries require rapidly deployable, multidisciplinary teams of trained and equipped health emergency responders. It would be a major step forward in regional health security to build, connect and leverage national response workforces so that they can support other countries. The EAC is expected to facilitate the formation of a pool of rapidly deployable experts, which is currently underway. As health emergency needs speedy responses, it is required to establish and coordinate a system that facilitates smooth and speedy decision-making by the government to request dispatch of experts to the border based on the report from the MoH or the JBMCCs; response to requests by the EAC should also be included in this system. In addition, ongoing simulation exercises and regular implementation at each border are also critical and these areas need continuous support.

2. Standardising, promoting, and enforcing IPC measures such as mask-wearing and hand hygiene among BP staff and users within border facilities in the region

Despite the availability of uniform SOPs on IPC including PPE use at the regional level, there are differences in the IPC practices such as mask-wearing in the country or in BPs, which is more a matter of clarity, thoroughness, and enforcement of the rules at BPs rather than the availability of PPE. Rules regarding implementation and adherence to these SOPs must be strictly imposed for effective implementation of IPC measures at BPs. Although there has been an improvement since the early days of the pandemic, there is reported opposition and resistance from some BP users to the mandatory wearing of masks and handwashing inside BPs; even some BP staff do not comply with the wearing of masks. In some cases, truck drivers wear masks on one side of the border but not on the other side; in some cases mask-wearing is uncommon. It is recommended that the EAC clarify and enforce the regulations related to IPC

within the border facilities in the region. In addition, the cooperation of the police and security personnel is essential to enforce the rules, and posters and other forms of awareness-raising need to be implemented at the regional level.

3. Promoting the production of PPE, IPC equipment, and vaccines in the region; encouraging the Partner States to strengthen their supply chains and stockpile the necessary quantities; and establishing and operationalising regional response mechanism to provide necessary supplies for the Partner States

The baseline study found that many BPs experienced stock-outs of PPE and that the supply of PPE and testing equipment did not keep pace with demands, a problem not limited to the EAC region but also in many parts of the world. Lack of clarity regarding how PPE should be used and the types of personnel and situations in which they should be used may have been a factor. Thus, support is needed for the consolidation of SOPs on PPE use, forecasting of requirements, stockpiling, and strengthening of supply chains and stock management. Cross-border sharing and other practices in the event of PPE shortages were also reported as good practices, therefore, collaboration on both sides of the border should be encouraged in case of such emergencies. On the other hand, the EAC, as a regional body, should ensure that effective regional mechanisms are in place to supply Partner States and BPs with the necessary PPE and other equipment in times of emergency, including vaccines equipment needed for screening and case management. These items may need to be supported by donors or purchased in bulk to meet demands. There should also be a mechanism to ensure that the quality, functionality, operability, and sustainability of equipment are well assured. In the early stages of the COVID-19 pandemic, a large amount of equipment and materials were provided by the donors, and in some cases, they could not be used continuously due to a lack of planning and quality control. The EAC Secretariat has a key role to play in managing the quality of PPE and equipment used in the region, in standardising the items that should be installed at BPs, as well as in supporting the procurement of the necessary equipment on either side of the border.

4. Promoting and accelerating the implementation of the EACPass which integrates negative COVID-19 and vaccination certificates by all the Partner States for facilitating smooth travel and trade in the region and beyond, and economic recovery

Positive reactions towards the introduction of RECDTS was reported by both drivers and Port Health staff to some extent, but it was not fully implemented as it had only been implemented in four Partner States. At some BPs drivers and travellers are still tested with or without negative status on RECDTS application. Certification of COVID-19 laboratories in each Partner State currently undertaken by the EAC will contribute to solving the problem of border screening. As RECDTS is mainly meant for truck drivers, there is a need for a platform for all travellers. The EAC Secretariat should, therefore, fast-track the implementation of the EACPass which is the digital health pass for all travellers integrating negative COVID-19 and vaccination certificates. EAC and Partner States should also sensitize and capacitate BPs

and travellers on the EACPass. In addition, not having a smartphone was cited by some drivers as a reason for not using the RECDTS. If the EACPass will be expanded to all travellers, the smartphone penetration rate among cross-border travellers in the region should be taken into account during planning and implementation.

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Appendices

Appendix 1 – BP Score Card

Appendix 2 – Analysis of 10 Major Borders

Appendix 3 – Prioritization of Areas and Interventions for Pilot Activities

Appendix 4 – BP Profile

Appendix 5 – Baseline Survey Interview Guide and Questionnaires

Appendix 6 – Materials in Pilot Activities

6.1 Kenya Handwashing Station Operation and Maintenance Manual

6.2 Rwanda E-learning Modules

6.3 Rwanda Handwashing Signs

6.4 Uganda Action Plan

6.5 Uganda Training Materials

Appendix 7 – Booklet

Appendix 1 - BP Score Cards

1. BP Score Card: Burundi

Baseline Survey Items		Gahumo	Gasenyi-Nemba	Gisuru	Kabonga	Kanyaru	Kobero	Mugina	Ruhwa
BP management	National Plan Recognition at BPs	1.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	2.5	2.5	3.0	2.5	2.5	3.0	2.5	3.0
	Contingency/back-up plan for COVID-19	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
	Availability of guidelines and SOPs at BPs	1.0	1.0	3.0	1.0	1.0	3.0	1.0	3.0
HRM	Proportion of the staff trained in the past year	2.0	1.1	2.0	3.0	1.0	1.0	1.0	1.0
	Presence of psychological support systems for staff	1.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0
	Capacity to conduct online trainings	1.5	1.5	1.5	1.5	1.5	1.5	2.5	1.5
Infection Prevention and Control (IPC)	Main source of water	1.0	1.0	1.0	3.0	3.0	3.0	2.0	1.0
	Availability of functioning handwashing station	3.0	1.0	3.0	1.0	1.0	1.5	2.5	3.0
	Availability of three types of PPE (facemasks, hand gloves, full gown)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0
	PPE stockouts in the past 2 months	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Practice of wearing a mask at BP by staff and users	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0
	Implementation of waste management	2.0	2.0	2.5	2.0	2.0	2.0	1.5	2.5
	BP conducting COVID-19 sensitization for cross border traders	1.5	2.5	2.0	1.5	2.0	2.5	1.5	2.0
Infrastructure & systems	Harmonized customs systems, procedures and processes	2.5	2.5	2.5	2.5	2.0	2.5	1.5	2.5
	Electronic customs declaration and document processing	2.5	2.0	2.0	1.5	2.0	2.5	1.5	2.5
	Implementation of electronic payment process at BPs	1.5	1.5	2.5	2.0	1.5	1.5	1.0	1.5
	Main source of power	2.0	2.5	3.0	3.0	3.0	3.0	2.0	3.0
	Availability of backup generator	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0
Port Health	Adequate port health staff	2.5	2.0	1.5	2.5	2.0	2.0	2.5	1.5
	Isolation room with adequate space and items for suspected cases	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0
	Distance to health facility for referral of suspected cases	2.5	2.5	3.0	3.0	2.5	2.5	2.5	2.5
	Use of the RECDTS	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Adequate equipment for COVID-19 testing	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Separate testing room for COVID-19 testing	1.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0
	COVID-19 laboratory attached to the BP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Average Score		1.6	1.5	2.1	1.7	1.5	1.9	1.6	1.8
		53%	48%	70%	58%	51%	65%	53%	61%

2. BP Score Card: Kenya

	Baseline Survey Items	Busia	Illisit	Isebania	Lunga	Lwakhakha	Malaba	Nadapal	Namanga	Suam	Taveta
BP management	National Plan Recognition at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Contingency/back-up plan for COVID-19	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	1.0	3.0
	Availability of guidelines and SOPs at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
HRM	Proportion of the staff trained in the past year	1.5	1.0	2.5	1.5	1.5	2.5	2.5	2.5	1.0	1.0
	Presence of psychological support systems for staff	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Capacity to conduct online trainings	2.5	2.0	2.0	3.0	2.5	2.5	2.5	2.5	1.5	1.5
Infection Prevention and Control (IPC)	Main source of water	3.0	2.5	3.0	2.0	2.5	1.5	2.5	2.5	1.5	2.5
	Availability of functioning handwashing station	1.5	3.0	2.5	3.0	3.0	1.5	1.5	2.5	3.0	1.5
	Availability of three types of PPE (facemasks, hand gloves, full gown)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	PPE stockouts in the past 2 months	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Practice of wearing a mask at BP by staff and users	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	1.0	3.0
	Implementation of waste management	2.0	2.5	2.0	2.0	2.0	1.5	2.5	2.0	2.0	2.0
	BP conducting COVID-19 sensitization for cross border traders	2.5	2.5	2.5	3.0	2.5	2.0	2.5	2.5	1.5	2.5
Infrastructure & systems	Harmonized customs systems, procedures and processes	2.5	2.0	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Electronic customs declaration and document processing	2.5	1.5	3.0	2.5	2.0	1.5	2.5	2.5	1.5	2.5
	Implementation of electronic payment process at BPs	2.0	2.0	2.5	2.5	2.0	2.0	2.5	2.5	1.5	2.0
	Main source of power	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0
	Availability of backup generator	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0
Port Health	Adequate port health staff	2.5	1.5	2.0	2.0	1.0	2.5	2.0	2.5	1.0	1.5
	Isolation room with adequate space and items for suspected cases	2.0	1.0	3.0	2.0	2.0	1.0	1.0	2.0	1.0	2.0
	Distance to health facility for referral of suspected cases	3.0	3.0	2.5	3.0	3.0	2.5	2.5	3.0	3.0	3.0
	Use of the RECDTS	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0
	Adequate equipment for COVID-19 testing	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Separate testing room for COVID-19 testing	3.0	3.0	3.0	3.0	1.0	3.0	1.0	3.0	3.0	3.0
	COVID-19 laboratory attached to the BP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0
	Average Score	2.4	2.3	2.5	2.4	2.1	2.2	2.1	2.5	1.9	2.3
		79%	75%	83%	81%	70%	74%	71%	84%	63%	75%

3. BP Score Card: Rwanda

Baseline Survey Items		Cyanika	Kagitumba	Ruhwa	Rusumo
BP management	National Plan Recognition at BPs	3.0	3.0	3.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	2.5	3.0	2.5	3.0
	Contingency/back-up plan for COVID-19	1.0	3.0	3.0	3.0
	Availability of guidelines and SOPs at BPs	3.0	3.0	1.0	3.0
HRM	Proportion of the staff trained in the past year	1.0	2.0	2.5	3.0
	Presence of psychological support systems for staff	1.0	1.0	3.0	3.0
	Capacity to conduct online trainings	1.5	3.0	2.5	2.5
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	3.0	3.0	3.0	3.0
	Availability of functioning handwashing station	1.0	2.5	3.0	3.0
	Availability of three types of PPE (facemasks, hand gloves, full gown)	3.0	3.0	3.0	3.0
	PPE stockouts in the past 2 months	1.0	3.0	1.0	3.0
	Practice of wearing a mask at BP by staff and users	3.0	3.0	3.0	1.0
	Implementation of waste management	1.5	3.0	2.5	3.0
	BP conducting COVID-19 sensitization for cross border traders	2.0	3.0	2.5	3.0
Infrastructure & systems	Harmonized customs systems, procedures and processes	2.5	3.0	2.5	2.5
	Electronic customs declaration and document processing	2.0	2.5	2.5	2.5
	Implementation of electronic payment process at BPs	2.5	2.5	2.5	3.0
	Main source of power	3.0	3.0	3.0	3.0
	Availability of backup generator	3.0	3.0	3.0	3.0
Port Health	Adequate port health staff		2.0	1.5	2.0
	Isolation room with adequate space and items for suspected cases		3.0	1.0	2.0
	Distance to health facility for referral of suspected cases		2.0	3.0	2.5
	Use of the RECDTS		3.0	1.0	3.0
	Adequate equipment for COVID-19 testing		3.0	1.0	3.0
	Separate testing room for COVID-19 testing		3.0	1.0	1.0
	COVID-19 laboratory attached to the BP		1.0	1.0	1.0
Average Score		2.1	2.7	2.3	2.6
		71%	89%	75%	87%

4. BP Score Card: South Sudan

	Baseline Survey Items	Kaya	Nimule
BP management	National Plan Recognition at BPs	3.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	3.0	3.0
	Contingency/back-up plan for COVID-19	1.0	1.0
	Availability of guidelines and SOPs at BPs	3.0	3.0
HRM	Proportion of the staff trained in the past year	1.0	1.0
	Presence of psychological support systems for staff	1.0	1.0
	Capacity to conduct online trainings	1.0	1.0
Infection Prevention and Control	Main source of water	2.5	1.5
	Availability of functioning handwashing station	3.0	1.0
	Availability of three types of PPE (facemasks, hand gloves, full gown)	1.0	1.0
	PPE stockouts in the past 2 months	1.0	1.0
	Practice of wearing a mask at BP by staff and users	3.0	1.0
	Implementation of waste management	3.0	1.5
	BP conducting COVID-19 sensitization for cross border traders	2.5	2.0
Infrastructure & systems	Harmonized customs systems, procedures and processes	2.5	3.0
	Electronic customs declaration and document processing	1.0	2.5
	Implementation of electronic payment process at BPs	1.0	1.0
	Main source of power	1.5	2.0
	Availability of backup generator	1.0	1.0
Port Health	Adequate port health staff		2.0
	Isolation room with adequate space and items for suspected cases		1.0
	Distance to health facility for referral of suspected cases		3.0
	Use of the RECDTS		1.0
	Adequate equipment for COVID-19 testing		1.0
	Separate testing room for COVID-19 testing		3.0
	COVID-19 laboratory attached to the BP		3.0
	Average Score	1.9	1.8
		63%	58%

5. BP Score Card: Tanzania

Baseline Survey Items		Holili	Horohoro	Kabanga	Manyovu	Murongo	Mutukula	Namanga	Rusumo	Sirari	Tarakea
BP management	National Plan Recognition at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Contingency/back-up plan for COVID-19	1.0	1.0	3.0	3.0	1.0	3.0	3.0	1.0	1.0	1.0
	Availability of guidelines and SOPs at BPs	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0
HRM	Proportion of the staff trained in the past year	3.0	2.5	2.5	2.5	2.5	1.5	2.5	2.0	2.5	2.0
	Presence of psychological support systems for staff	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Capacity to conduct online trainings	1.5	1.5	2.5	1.5	1.5	2.5	1.5	1.5	1.5	2.5
Infection Prevention and Control (IPC)	Main source of water	3.0	3.0	3.0	3.0	3.0	2.5	3.0	1.5	3.0	3.0
	Availability of functioning handwashing station	1.0	3.0	3.0	3.0	3.0	3.0	1.5	1.0	1.0	2.5
	Availability of three types of PPE (facemasks, hand gloves, full gown)	2.0	2.0	3.0	2.0	3.0	3.0	1.0	2.0	2.0	3.0
	PPE stockouts in the past 2 months	1.0	3.0	3.0	1.0	3.0	3.0	1.0	1.0	3.0	3.0
	Practice of wearing a mask at BP by staff and users	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Implementation of waste management	2.0	2.0	2.5	2.0	2.0	2.0	1.5	1.0	2.0	2.5
	BP conducting COVID-19 sensitization for cross border traders	2.5	2.5	1.5	2.5	2.5	2.5	2.5	1.5	2.5	2.5
Infrastructure & systems	Harmonized customs systems, procedures and processes	1.5	2.5	1.5	2.5	3.0	2.5	1.5	1.0	1.5	3.0
	Electronic customs declaration and document processing	2.5	2.5	2.5	2.5	2.5	3.0	3.0	3.0	2.5	2.5
	Implementation of electronic payment process at BPs	2.5	2.5	1.5	2.5	2.5	2.5	2.5	3.0	2.5	2.5
	Main source of power	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Availability of backup generator	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0
Port Health	Adequate port health staff			1.0			1.5	1.5	1.0	2.5	
	Isolation room with adequate space and items for suspected cases			2.0			2.0	1.0	2.0	1.0	
	Distance to health facility for referral of suspected cases			1.0			2.5	3.0	2.5	2.5	
	Use of the RECDTS			1.0			1.0	1.0	1.0	1.0	
	Adequate equipment for COVID-19 testing			1.0			3.0	3.0	3.0	3.0	
	Separate testing room for COVID-19 testing			1.0			3.0	1.0	3.0	3.0	
	COVID-19 laboratory attached to the BP			1.0			1.0	1.0	1.0	1.0	
Average Score		2.1	2.4	2.1	2.4	2.4	2.3	2.1	1.8	2.2	2.5
		71%	79%	70%	79%	82%	77%	68%	62%	72%	82%

6. BP Score Card: Uganda

	Baseline Survey Items	Busia	Cyanika	Elegu	Katuna	Lwakhakha	Malaba	Mirama Hills	Mutukula	Oraba	Suam River
BP management	National Plan Recognition at BPs	3.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Inter-departmental coordination for COVID-19 at BPs	3.0	2.5	3.0	2.5	3.0	3.0	3.0	3.0	3.0	2.5
	Contingency/back-up plan for COVID-19	3.0	3.0	1.0	1.0	1.0	3.0	3.0	3.0	1.0	1.0
	Availability of guidelines and SOPs at BPs	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0	1.0
HRM	Proportion of the staff trained in the past year	3.0	2.5	2.0	1.0	2.5	2.0	3.0	2.0	1.5	1.0
	Presence of psychological support systems for staff	3.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	1.0
	Capacity to conduct online trainings	3.0	2.5	2.5	1.0	2.0	2.0	2.5	2.0	1.5	1.0
Infection Prevention and Control (IPC)	Main source of water	1.5	3.0	2.5	3.0	3.0	3.0	2.0	3.0	2.5	3.0
	Availability of functioning handwashing station	2.5	1.0	1.5	1.0	1.0	1.5	1.0	1.5	1.0	1.0
	Availability of three types of PPE (facemasks, hand gloves, full gown)	2.0	2.0	1.0	1.0	1.0	2.0	3.0	3.0	1.0	1.0
	PPE stockouts in the past 2 months	3.0	3.0	1.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0
	Practice of wearing a mask at BP by staff and users	3.0	3.0	3.0	3.0	3.0	1.0	3.0	1.0	3.0	3.0
	Implementation of waste management	2.5	2.5	2.0	2.0	2.0	1.5	2.0	1.0	2.5	2.0
	BP conducting COVID-19 sensitization for cross border traders	3.0	2.0	2.5	1.0	2.0	2.5	3.0	3.0	2.0	1.0
Infrastructure & systems	Harmonized customs systems, procedures and processes	3.0	1.0	2.0	1.0	2.5	2.5	2.5	2.0	2.5	2.0
	Electronic customs declaration and document processing	3.0	3.0	2.5	1.0	2.5	2.5	2.5	2.0	2.5	1.5
	Implementation of electronic payment process at BPs	2.5	3.0	2.0	2.5	2.5	2.5	3.0	3.0	2.5	2.5
	Main source of power	3.0	3.0	1.5	3.0	3.0	3.0	3.0	3.0	2.5	1.5
	Availability of backup generator	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Port Health	Adequate port health staff	2.5	2.0	3.0		3.0	3.0	2.5	3.0		3.0
	Isolation room with adequate space and items for suspected cases	3.0	3.0	3.0		1.0	3.0	1.0	3.0		3.0
	Distance to health facility for referral of suspected cases	1.5	3.0	1.5		2.0	2.0	1.5	1.5		1.0
	Use of the RECDTS	3.0	3.0	3.0		3.0	3.0	3.0	3.0		1.0
	Adequate equipment for COVID-19 testing	1.0	1.0	1.0		1.0	3.0	1.0	3.0		1.0
	Separate testing room for COVID-19 testing	1.0	1.0	1.0		1.0	3.0	1.0	3.0		1.0
	COVID-19 laboratory attached to the BP	1.0	1.0	1.0		1.0	3.0	3.0	3.0		1.0
	Average Score	2.5	2.3	2.1	1.7	2.2	2.4	2.5	2.4	2.1	1.7
		85%	76%	69%	58%	72%	81%	80%	81%	70%	56%

BP Score Index

	Baseline Survey Items	3.0	2.5	2.0	1.5	1.0
BP management	National Plan Recognition at BPs	Yes				No
	Inter-departmental coordination for COVID-19 at BPs	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Contingency/back-up plan for COVID-19	Yes				No
	Availability of guidelines and SOPs at BPs	Yes				No
HRM	Proportion of the staff trained in the past year	75-89%	50-74%	25-49%	10-24%	0-9%
	Presence of psychological support systems for staff	Yes				No
	Capacity to conduct online trainings	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Infection Prevention and Control (IPC)	Main source of water	piped supply inside the building	tube well borehole protected dug well	rainwater tanker truck	surface water river dam lake pond	no water source
	Availability of functioning handwashing station	All functioning	More than half functioning		More than half not functioning/ All functioning but only one	No functioning stations
	Availability of three types of PPE (facemasks, hand gloves, full gown)	facemasks, hand gloves and full gown		hand gloves and full gown		facemasks
	PPE stockouts in the past 2 months	No				Yes
	Practice of wearing a mask at BP by staff and users	Yes				No
	Implementation of waste management	excellent/very good	good	fair	Poor	very poor
	BP conducting COVID-19 sensitization for cross border traders	Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Infrastructure & systems	Harmonized customs systems, procedures and processes	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Electronic customs declaration and document processing	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Implementation of electronic payment process at BPs	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Main source of power	electricity from the main grid	Others	solar	generator	No power source
	Availability of backup generator	Yes				No
Port Health	Adequate port health staff	Both Medical and Clinical Officers and others	2 Medical/Clinical officers and others / or 1 Medical/Clinical officers, more than 10 staff	1 clinical officer and more than 5 staff / or More than 10 staff	No Medical/Clinical officer, No nurse, more than 5 staff	No Medical/Clinical officer, No nurse, less than 5 staff
	Isolation room with adequate space and items for suspected cases	Isolation room with adequate space and items		Isolation room without adequate space and items		No isolation room
	Distance to health facility for referral of suspected cases	1-20km	21-40km	41-60km	60-90km	91km +
	Use of the RECDTS	Yes				No
	Adequate equipment for COVID-19 testing	Yes				No
	Separate testing room for COVID-19 testing	Yes				No

Appendix 2 - Analysis of 10 Major Borders

1. Malaba (Kenya-Uganda) Border

	Baseline Survey Items	Malaba BP (Kenya)	Malaba BP (Uganda)
BP management	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	Yes	Yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	50-74%	25-49%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Agree	Neutral
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	Surface water river (On premises)	Piped supply inside the building (On premises)
	Availability of functioning handwashing station	2/5 functioning	4/10 functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Two (masks and gloves) available
	PPE stockouts in the past 2 months	Yes	Yes
	Practice of wearing a mask at BP by staff and users	Yes	No
	Implementation of waste management	Poor	Poor
	BP conducting COVID-19 sensitization for cross border traders	Neutral	Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Agree
	Electronic customs declaration and document processing	Disagree	Agree
	Implementation of electronic payment process at BPs	Neutral	Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 21 (1 clinical officer, 3 nurses, 12 PHO*, 5 lab technologists)	# of Port Health staff: 19 (1 medical officer, 1 clinical officer, 4 nurses, 1 PHO, 5 lab technologists, 7 others)
	Isolation room with adequate space and items for suspected cases	No isolation room	Isolation room with adequate space and items
	Distance to health facility for referral of suspected cases	30km to Alupe hospital isolation centre	53km to Mable Regional Referral Hospital
	Use of the RECDTS	Yes	Yes
	Adequate equipment for COVID-19 testing	No	Yes
	Separate testing room for COVID-19 testing	Yes	Yes
	COVID-19 laboratory attached to the BP	No	Yes

*PHO: Public Health Officer

Major Issues:

- Ugandan side has piped supply water but Kenyan side use surface water from river.
- More than half of handwashing stations are not functioning at both BPs
- Inadequate equipment: Both sides experienced PPE stockouts in the past 2 month and Port Health at Kenyan side also reported testing equipment are inadequate.
- While more than half of staff at Kenyan side were trained recently, more than half of staff at Uganda side are not trained in the past year.

2. Busia (Kenya-Uganda) Border

	Baseline Survey Items	Busia BP (Kenya)	Busia BP (Uganda)
management BP	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	10-24%	75-89%
	Presence of psychological support systems for staff	No	Yes
	Capacity to conduct online trainings	Agree	Strongly Agree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	piped supply inside the building (on premises)	Surface water river, dam lake, pond (on premise)
	Availability of functioning handwashing station	2/5 functioning	6/7 functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Two (masks and gloves) available
	PPE stockouts in the past 2 months	Yes	No
	Practice of wearing a mask at BP by staff and users	Yes	Yes
	Implementation of waste management	Neutral	Good
	BP conducting COVID-19 sensitization for cross border traders	Agree	Strongly Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Strongly Agree
	Electronic customs declaration and document processing	Agree	Strongly Agree
	Implementation of electronic payment process at BPs	Neutral	Agree
	Main source of power	Electricity from the main grid	Electricity from the main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 21 1 clinical officer, 3 nurses, 10 PHO, 5 Lab technologists, 2 others	# of Port Health staff: 9 1 clinical officer, 3 nurses, 1 PHO, 3 Lab technologists, 1 others
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	Isolation room with adequate space and items
	Distance to health facility for referral of suspected cases	1 km to Alupe hospital	53 km to Tororo Hospital
	Use of the RECDTS	Yes	Yes
	Adequate equipment for COVID-19 testing	No	No
	Separate testing room for COVID-19 testing	Yes	No
	COVID-19 laboratory attached to the BP	No	No

Major Issues:

- While majority of staff at Ugandan side were trained recently, majority of staff at Kenyan side have not received training in the past year.
- Uganda side use surface water from river but majority of handwashing stations are functioning. On the other side Kenyan side have piped supply water but more than half of handwashing stations are not functioning.
- Inadequate equipment: Both sides reported testing equipment are inadequate and Kenyan side experienced PPE stockouts in the past 2 month.
- No separate testing/sample collection room at Kenyan side.

3. Taveta/Holili (Kenya - Tanzania) Border

	Baseline Survey Items	Taveta BP (Kenya)	Holili BP (Tanzania)
BP management	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	Yes	No
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	0-9%	75-89%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Disagree	Disagree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	tube well borehole (On premises)	Piped supply inside the building (5km or further)
	Availability of functioning handwashing station	All (1) functioning	No handwashing station provided
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Two (masks and gloves) available
	PPE stockouts in the past 2 months	Yes	Yes
	Practice of wearing a mask at BP by staff and users	Yes	No
	Implementation of waste management	Fair	Fair
	BP conducting COVID-19 sensitization for cross border traders	Agree	Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Disagree
	Electronic customs declaration and document processing	Agree	Agree
	Implementation of electronic payment process at BPs	Neutral	Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 11 (5 PHO, 5 lab Technologists, 1 other)	No Information
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	
	Distance to health facility for referral of suspected cases	5km to Taveta Sub-county Hospital	
	Use of the RECDTS	Yes	
	Adequate equipment for COVID-19 testing	No	
	Separate testing room for COVID-19 testing	Yes	
	COVID-19 laboratory attached to the BP	No	

Major Issues:

- While majority of staff at Holili BP (Tanzania) were trained recently, staff at Taveta BP (Kenya) have not received training in the past year.
- Inadequate equipment: Both sides experienced PPE stockouts in the past 2 month and Port Health at Taveta BP also reported testing equipment are inadequate.
- Despite the size of the border number of hand washing stations are small. Holili BP does not have handwashing station while Taveta BP has only one.

4. Namanga (Kenya-Tanzania) Border

	Baseline Survey Items	Namanga BP (Kenya)	Namanga BP (Tanzania)
BP management	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	50-74%	50-74%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Agree	Disagree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	Tube well / borehole (on premises)	piped supply inside the building (up to 5km)
	Availability of functioning handwashing station	4/5 functioning	All (1) functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Facemask only
	PPE stockouts in the past 2 months	Yes	Yes
	Practice of wearing a mask at BP by staff and users	Yes	No
	Implementation of waste management	Neutral	Poor
	BP conducting COVID-19 sensitization for cross border traders	Agree	Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Disagree
	Electronic customs declaration and document processing	Agree	Strongly Agree
	Implementation of electronic payment process at BPs	Agree	Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 20 (1 clinical officer, 4 nurses, 7 PHO, 7 lab technologists, 1 other)	# of Port Health staff: 13 (13 PHO)
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	No isolation room
	Distance to health facility for referral of suspected cases	1 km to Namanga Health Centre	1 km to Eworendeke health centre
	Use of the RECDTS	Yes	No
	Adequate equipment for COVID-19 testing	No	Yes
	Separate testing room for COVID-19 testing	Yes	No
	COVID-19 laboratory attached to the BP	Yes	No

Major Issues:

- Considering the size of the border only 1 handwashing station at Tanzania side is not enough.
- Inadequate equipment: Both sides experienced PPE stockouts in the past 2 month but type of PPE available at Tanzania side is only facemask and mask wearing practice by staff and BP users are not observed.
- Port Health at Tanzania side does not have medical/clinical officers nor nurses and no isolation room and separate testing/sample collection room available. Kenyan side also reported testing equipment are inadequate.
- RECDTS is only implemented at Kenyan side.

5. Mutukula (Tanzania-Uganda) Border

	Baseline Survey Items	Mutukula BP (Kenya)	Mutukula BP (Uganda)
BP management	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	10-24%	25-49%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Agree	Neutral
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	Tube well / borehole (on premises)	piped supply inside the building (on premises)
	Availability of functioning handwashing station	2/4 functioning	2/5 functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	All three available
	PPE stockouts in the past 2 months	No	Yes
	Practice of wearing a mask at BP by staff and users	No	No
	Implementation of waste management	Neutral	Very poor
	BP conducting COVID-19 sensitization for cross border traders	Agree	Strongly Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Neutral
	Electronic customs declaration and document processing	Strongly Agree	Neutral
	Implementation of electronic payment process at BPs	Agree	Strongly Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	No	Yes
Port Health	Adequate port health staff	# of Port Health staff: 8 (8 PHO)	# of Port Health staff: 10 (1 medical officer, 1 clinical officer, 4 nurses, 1 PHO, 1 lab technologists, 2 others)
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	Isolation room with adequate space and items
	Distance to health facility for referral of suspected cases	28 km to Bunazi District Hosiptal	60 km to Kalisizo Hospital
	Use of the RECDTS	No	Yes
	Adequate equipment for COVID-19 testing	Yes	Yes
	Separate testing room for COVID-19 testing	Yes	Yes
	COVID-19 laboratory attached to the BP	No	Yes

Major Issues:

- More than half of staff at both BPs were not trained on IPC in the past year.
- Staff and users at both BPs do not comply with mask wearing practices and Uganda side experiences PPE stockouts and have very poor waste management.
- While majority of staff at Ugandan side were trained recently, majority of staff at Kenyan side have not received training in the past year.

6. Nimile/Elegu (South Sudan-Uganda) Border

	Baseline Survey Items	Nimule BP (South Sudan)	Elegu BP (Uganda)
management BP	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	No	No
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	0-9%	25-49%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Strongly Agree	Agree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	Surface water river, dam lake, pond (on premise)	Tube well / borehole (up to 5km)
	Availability of functioning handwashing station	All (2) not functioning	1/5 functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	Facemask only	Facemask only
	PPE stockouts in the past 2 months	Yes	Yes
	Practice of wearing a mask at BP by staff and users	No	Yes
	Implementation of waste management	Poor	Neutral
	BP conducting COVID-19 sensitization for cross border traders	Neutral	Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Strongly Agree	Neutral
	Electronic customs declaration and document processing	Agree	Agree
	Implementation of electronic payment process at BPs	Strongly disagree	Neutral
	Main source of power	Solar	Generator
	Availability of backup generator	No	Yes
Port Health	Adequate port health staff	# of Port Health staff: 24 (1 medical officer, 3 nurse, 2 PHOs, 2 lab technologists and 16 others)	# of Port Health staff: 9 (1 medical officer, 1 clinical officer, 3 nurses, 1 PHOs, 2 lab technologists, 1 other)
	Isolation room with adequate space and items for suspected cases	No isolation room	Isolation room with adequate space and items
	Distance to health facility for referral of suspected cases	1 km to Nimule Hospital	146 km to Kitgum Hospital
	Use of the RECDTS	No	Yes
	Adequate equipment for COVID-19 testing	No	No
	Separate testing room for COVID-19 testing	Yes	No
COVID-19 laboratory attached to the BP	No	No	

Major Issues:

- Staff at Nimule has not received training on IPC while more than half of staff of Elegu BP have also not trained yet.
- Both side do not have access to piped water supply and main source of power is solar (Numule BP) and generator (Elegu BP). No backup generator available at Numule BP.
- Both BPs do not have enough testing equipment and also experience PPE stockouts. Gloves and full gowns are not available at both BPs.
- Nimule hospital at South Sudan side is within walking distance from the border but referral hospital for Elegu BP in Uganda is 146 km away.

7. Kagitumba/Mirama Hills (Rwanda-Uganda) Border

	Baseline Survey Items	Kagitumba BP (Rwanda)	Mirama Hills BP (Uganda)
BP management	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	25-49%	75-89%
	Presence of psychological support systems for staff	No	Yes
	Capacity to conduct online trainings	Strongly Agree	Agree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	pipled supply sinde the buidling (5km or further)	Rainwater/tanker, truck (up to 5km)
	Availability of functioning handwashing station	4/6 functioning	3/7 functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	All three available
	PPE stockouts in the past 2 months	No	Yes
	Practice of wearing a mask at BP by staff and users	Yes	Yes
	Implementation of waste management	Strongly Agree	Neutral
	BP conducting COVID-19 sensitization for cross border traders	Strongly Agree	Strongly Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Strongly Agree	Strongly Agree
	Electronic customs declaration and document processing	Agree	Agree
	Implementation of electronic payment process at BPs	Agree	Strongly Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 11 (6 nurses, 4 lab technologists and 1 other)	# of Port Health staff: 5 (1 medical officer, 1 clinical officer, 1 PHO, 1 lab technologists, 1 other)
	Isolation room with adequate space and items for suspected cases	Isolation room with adequate space and items	No isolation room
	Distance to health facility for referral of suspected cases	50km to Nyagatare District Hospital	96 km to Mbarara Regional Referral Hospital
	Use of the RECDTS	Yes	Yes
	Adequate equipment for COVID-19 testing	Yes	No
	Separate testing room for COVID-19 testing	Yes	No
	COVID-19 laboratory attached to the BP	No	Yes

Major Issues:

- More than half of staff at Kagitumba BP has not received training on IPC while majority of staff of Mirama Hills BP have been trained in the past year.
- While Kagitumba BP has access to piped water supply Mirama Hills BP use rain water.
- Mirama Hills BP does not have isolation room, enough testing equipment and separate testing room.

8. Rusumo (Rwanda-Tanzania) Border

	Baseline Survey Items	Rusumo BP (Rwanda)	Rusumo BP (Tanzania)
management BP	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	No
	Availability of guidelines and SOPs at BPs	Yes	No
HRM	Proportion of the staff trained in the past year	75-89%	25-49%
	Presence of psychological support systems for staff	Yes	No
	Capacity to conduct online trainings	Agree	Disagree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	piped supply inside the building (on premises)	Surface water river, dam lake, pond (on premise)
	Availability of functioning handwashing station	All (15) functioning	All (3) Not functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Two (masks and gloves) available
	PPE stockouts in the past 2 months	No	Yes
	Practice of wearing a mask at BP by staff and users	No	No
	Implementation of waste management	Excellent	Very poor
	BP conducting COVID-19 sensitization for cross border traders	Strongly Agree	Disagree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Strongly disagree
	Electronic customs declaration and document processing	Agree	Strongly Agree
	Implementation of electronic payment process at BPs	Strongly Agree	Strongly Agree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	Yes	Yes
Port Health	Adequate port health staff	# of Port Health staff: 6 1 medical officer, 1 nurse, 2 lab technologists and 2 others	# of Port Health staff: 4 (4 PHO)
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	Isolation room without adequate space and items
	Distance to health facility for referral of suspected cases	26 km to Kirehe District Hospital	30 km to Lukole Health Centre
	Use of the RECDTS	Yes	No
	Adequate equipment for COVID-19 testing	Yes	Yes
	Separate testing room for COVID-19 testing	No	Yes
	COVID-19 laboratory attached to the BP	No	No

Major Issues:

- Despite the size of the border, it is alarming that BP at Tanzania side have serious issues with IPC. They use surface water from river, have no functioning hand washing stations and waste management practice, and experience PPE stockouts.
- Port Health at both sides should have more staff in place considering the number of truck drivers they receive. Testing/sample collection room of Port Health at Rwanda side is congested and put both staff and customers at risk.
- Resistance of truck drives against mask wearing and random antigen testing still remains as problem at Rwandan side.

9. Kobero/Kabanga (Burundi-Tanzania) Border

	Baseline Survey Items	Kobero BP (Burundi)	Kabanga BP (Tanzania)
management BP	National Plan Recognition at BPs	Yes	Yes
	Inter-departmental coordination for COVID-19 at BPs	Strongly Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	yes	yes
	Availability of guidelines and SOPs at BPs	Yes	Yes
HRM	Proportion of the staff trained in the past year	0-9%	50-74%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Disagree	Agree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	piped supply inside the building (on premises)	piped supply inside the building (5km or further)
	Availability of functioning handwashing station	1/4 functioning	All (2) functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	All three available
	PPE stockouts in the past 2 months	Yes	No
	Practice of wearing a mask at BP by staff and users	No	No
	Implementation of waste management	Neutral	Agree
	BP conducting COVID-19 sensitization for cross border traders	Agree	Poor
Infrastructure & systems	Harmonized customs systems, procedures and processes	Agree	Disagree
	Electronic customs declaration and document processing	Agree	Agree
	Implementation of electronic payment process at BPs	Disagree	Disagree
	Main source of power	Electricity from main grid	Electricity from main grid
	Availability of backup generator	No	Yes
Port Health	Adequate port health staff	# of Port Health staff: 13 (1 clinical officer, 1 nurses, 8 Lab technologists, 3 others)	# of Port Health staff: 4 (4 PHOs)
	Isolation room with adequate space and items for suspected cases	Isolation room without adequate space and items	Isolation room without adequate space and items
	Distance to health facility for referral of suspected cases	25 km to Muyinga Hospital	295km to Kagera Regional Hospital
	Use of the RECDTS	No	No
	Adequate equipment for COVID-19 testing	No	No
	Separate testing room for COVID-19 testing	No	No
	COVID-19 laboratory attached to the BP	No	No

Major Issues:

- Staff at Kobero BP has not received training on IPC while more than half of staff of Kabanga BP have been trained recently.
- Number of functioning handwashing stations are not enough in this border and 3 out of 4 handwashing stations at Kobero BP are not functioning.
- No backup generator available at Kobero BP
- Staff and users at both BPs do not comply with mask wearing.
- No medical/clinical officer and nurses at Kabanga BP and referral facility is 295km away.
- Both BPs does not have adequate testing equipment and separate room for testing.
- Both BPs allocated isolation room but without adequate space and items.

10. Mugina/Manyovu (Burundi-Tanzania) Border

	Baseline Survey Items	Mugina BP (Burundi)	Manyovu BP (Tanzania)
management BP	National Plan Recognition at BPs	No	Yes
	Inter-departmental coordination for COVID-19 at BPs	Agree	Strongly Agree
	Contingency/back-up plan for COVID-19	No	yes
	Availability of guidelines and SOPs at BPs	No	Yes
HRM	Proportion of the staff trained in the past year	0-9%	50-74%
	Presence of psychological support systems for staff	No	No
	Capacity to conduct online trainings	Agree	Disagree
Infection Prevention and Control (IPC)	Main source of water (location of main water supply)	Rainwater/tanker, truck (up to 5km)	pipied supply inside the building (up to 5km)
	Availability of functioning handwashing station	4/6 functioning	All (6) functioning
	Availability of three types of PPE (facemasks, hand gloves, full gown)	All three available	Two (masks and gloves) available
	PPE stockouts in the past 2 months	Yes	Yes
	Practice of wearing a mask at BP by staff and users	No	No
	Implementation of waste management	Poor	Neutral
	BP conducting COVID-19 sensitization for cross border traders	Poor	Agree
Infrastructure & systems	Harmonized customs systems, procedures and processes	Disagree	Agree
	Electronic customs declaration and document processing	Disagree	Agree
	Implementation of electronic payment process at BPs	Strongly disagree	Agree
	Main source of power	Generator & Solar	Electricity from main grid
	Availability of backup generator	Strongly agree	Yes
Port Health	Adequate port health staff	# of Port Health staff: 11 (4 clinical officer, 4 nurses, 7 Lab technologists, 1 other)	No Information
	Isolation room with adequate space and items for suspected cases	No isolation room	
	Distance to health facility for referral of suspected cases	30 km to Makamba Hospital	
	Use of the RECDTS	No	
	Adequate equipment for COVID-19 testing	No	
	Separate testing room for COVID-19 testing	No	
	COVID-19 laboratory attached to the BP	No	

Major Issues:

- No national plan recognition, contingency plan and guidelines at Mugina BP.
- Staff at Mugina BP has not received training on IPC while more than half of staff of Manyovu BP have been trained recently.
- While Manyovu BP has access to piped water supply Mugina BP use rain water.
- Both BPs experiences PPE stockouts and staff and users do not wear face masks.
- Mugina BP does not have isolation room, enough testing equipment and separate testing room.

Appendix 3 - Prioritization of Areas and Interventions for Pilot Activities

Legend

Short-term, high urgency, high feasibility	Short-term, High urgency, medium feasibility	Short-term, Medium urgency, high feasibility
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L= Long Term activities, S- Short term Activities

H=High, M=Middle or Medium, L=Low

Other proposed activities (no colour) shall be included as backup activities which were considered upon consultation or are recommended as long-term activities (not part of the scope of pilot activities of the Team).

Burundi

1. Prioritized areas for intervention in Burundi

Themes	Items	Burundi (BP n=8)	Long (L) term or Short (S) Term	Urgency	Feasibility	Proposed Activities
National Policies	National Plan Recognition at BPs	Lower than others (50%)	L	-	L	-
Human Resource Management and Capacity Development	IPC Training in the past year	Low rate of Training (37.5%)	L,S	H	H	SOP Training (Human Capacity)
	Capacity to conduct online trainings (related to internet connectivity)	12.5% are capable	L,S			SOP Training (Human Capacity)
	Presence of psychological support systems for staff	12.5%	L,S			Mental Support Program (Remote)
Infection Prevention and Control (IPC)	Water source	Piped supply	37.5%	L		--
		Rainwater	12.7%	L		--
		No water	50%	L		--
	Waste management implementation	12.5% rated poor; cleaners were absent; unsanitary toilets observed	S	H	H	Waste management (Strengthen IPC)
	Experience PPEs stockouts (past 2 months)	100%; Kobero BP has stock but not utilized	S	H	H	Provide PPE (Standardization SOP)
	BPs practicing mask-wearing at all times	50%; BPs generally not conscious of social distancing or handwashing	S	H	H	Provide PPE (Standardization SOP)
Port health	Isolation Rooms with adequate space and items	0%	L	H	L	-
BP Infrastructure and System	RECDTS Introduction in BPs	0%	L, S	H	L	Promote RECDTS
Community Awareness and Engagement	IEC materials (COVID-19 prevention posters)	None in Kobero and Mugina BPs	S	H	H	IEC Material (Standardization)
	Cross border Community members	Gaps in awareness identified	L, S	H	H	Community Awareness (Outreach)

Prioritized BPs in Burundi

According to the BP score card (See Appendix 1) scores for BPs in Burundi are as follows.

BP name	Gahumo	Gasenyi	Gisuru	Kabonga	Kanyaru	Kobero	Mugina	Ruhwa
Score	1.6	1.5	2.1	1.7	1.5	1.9	1.6	1.8

Although Gasenyi and Kanyaru BPs scored lowest all other BPs also scored low and needs support. Burundi's borders with Tanzania are important as many goods are coming from the Indian Ocean port such as Dar es Salaam and they reopened on 23 June 2021. Thus, Kobero and Mugina BPs, which are main borders with Tanzania, need urgent support and should be prioritized for interventions.

Kenya

2. Prioritized areas for intervention in Kenya

Themes	Items	Kenya (BP n=10)	Long (L) or Short(S) Term	Urgency	Feasibility	Proposed Activities
Human Resource Management and Capacity Development	IPC Training in the past year	70%; a majority of training was conducted at bigger and busier BPs	S	M	H	SOP Training (Human Capacity)
	Adequacy of IPC capacity of BP staff	50% responded inadequate		L		SOP Training (Human Capacity)
	Presence of psychological support systems for staff	None	S	H	H	Mental Support (Remote)
Infection Prevention and Control (IPC)	Waste management implementation	10% rated poor; cleaning staff are outsourced (may not have IPC training)	L, S	H	M	Waste management (Strengthen IPC)
	BPs practicing mask-wearing at all times	50%	L, S	H	H	Provide PPE (Standardize SOP)
Port Health	Isolation Rooms with adequate space and items	10%	L, S	H	M	
Community Awareness and Engagement	Cross border Community members	Generally aware of COVID-19, symptoms, and prevention; some gaps on the reliability of information sources identified	L, S	H	H	Community Awareness (Outreach)

Prioritized BPs in Kenya

According to the BP score card (See Appendix 1) scores for BPs in Kenya are as follows.

BP name	Busia	Illasit	Isebania	Lunga Lunga	Lwakhakha	Malaba	Nadapal	Namanga	Suam	Taveta
Score	2.4	2.3	2.5	2.4	2.1	2.2	2.1	2.5	1.9	2.3

In terms of movement of people Busia and Malaba BPs with Uganda, and Namanga and Taveta BPs with Tanzania have heavy traffic flows and interventions would make greater impact. Smaller BPs such as Suam and Lwakhakha BPs (bordering with Uganda) and Nadapal BP (with South Sudan) scored lower and could be option for pilot activities as well.

Rwanda

3. Prioritized areas for intervention in Rwanda

Themes	Items	Rwanda (BP n=4)	Long (L) or Short(S) Term	Urgency	Feasibility	Proposed Activities
Human Resource Management and Capacity Development	IPC Training in the past year	75%; includes training on how to wear PPEs	L, S	L	H	SOP Training (Human Capacity)
	Presence of psychological support systems for staff	50%	L, S	M	H	SOP Training (Human Capacity)
	Handwashing stations (count, how many percent functional), other disinfection procedures	28, 89.2%; disinfection of trucks observed	L, S		M	Water Tank (Strengthen IPC)
	Waste management implementation	25% rated poor; however, cleaning staff were trained and had SOPs	L, S	H	L	Waste management (Strengthen IPC)
	Experience PPEs stockouts (past 2 months)	50%	S	H	H	Provide PPE (Standardize SOP)
Port Health	Port health responded	Rwanda (PH n=3)				
	Isolation Rooms with adequate space and items	33.3%	L	H	L	--
	Laboratories within port health capable of conducting PCR	None reported	L	H	L	--
BP Infrastructure and System	RECDTS	33%	L, S	L	M	Promote RECDTS
Community Awareness and Engagement	BPs conducting COVID-19 sensitization activities for cross border traders	75%	L, S	H	H	SOP Training (Human Capacity)
	IEC materials (COVID-19 prevention posters)	100%; fliers were also available	S	L	H	(IEC Material (Standardization))
	Cross border Community members	Sensitization activities implemented by the government; strict closures of borders have affected surrounding businesses	L, S	H	H	Community Awareness (Outreach)

Prioritized BPs in Rwanda

According to the BP score card (See Appendix 1) scores for BPs in Rwanda are as follows.

BP name	Cyanika	Kagitumba	Ruhwa	Rusumo
Score	2.1	2.7	2.3	2.7

Like Burundi, BPs with Tanzania are the lifeline for Rwanda, so Rusumo BP would be the priority for Rwanda and another option is Kagitumba BP with Uganda. Although both BPs scored highest, they can be prioritized as other Ugandan borders such as Cyanika and Gatuna BPs and Burundi borders are inactive.

South Sudan

4. Prioritized areas for intervention in South Sudan

Themes	Items	South Sudan (BP n=2)	Long (L) or Short(S) Term	Urgency	Feasibility	Proposed Activities
BP Administration and Coordination	Availability of Contingency plans for COVID-19	Absent	L, S	H	H	Waste management (Strengthen IPC)
	IPC Training in the past year	Not conducted	L, S	H	H	SOP Training (Human Capacity)
Human Resource Management and Capacity Development	Adequacy of IPC capacity of BP staff	50% responded inadequate	L, S	H	H	Waste management (Strengthen IPC) ²
	Capacity to conduct online trainings (related to internet connectivity)	None are capable	L, S	H	H	SOP Training (Human Capacity)
	Presence of psychological support systems for staff	None	L, S	H	H	Mental Support (Remote)
Infection Prevention and Control (IPC)	Handwashing stations (count, how many percent functional), other disinfection procedures	5, 60%	L, S	H	H	Water Tank (Strengthen IPC)
	Waste management implementation	50% rated poor; inadequate cleaning equipment	L, S	H	H	Waste management (Strengthen IPC)
	Experience PPEs stockouts (past 2 months)	100%	L, S	H	H	Provide PPE (Standardize SOP)
	BPs practicing mask-wearing at all times	0%	L, S	H	H	Provide PPE (Standardize SOP)
Port Health	Isolation Rooms with adequate space and items	0%	L,	--		--
BP Infrastructure and System	RECDTS	0%; some drivers do not know RECDTS	L, S	H	H	Promote RECDTS
Community Awareness and Engagement	BPs conducting COVID-19 sensitization activities for cross border traders	50%	L, S	H	H	Community Awareness (Outreach)
	IEC materials (COVID-19 prevention posters)	None in Nimule BP	L, S	H	H	IEC Material (Standardization)
	Cross border Community members	Generally aware of COVID-19 vaccination benefits	L, S	M	H	Community Awareness (Outreach)

Prioritized BPs in South Sudan

According to the BP score card (See Appendix 1) scores for BPs in South Sudan are as follows.

BP name	Kaya	Nimule
Score	1.9	1.8

Nimule BP bordering with Uganda (Elegu BP) is one of the busiest and most important borders among EAC borders for South Sudan and is considered as the priority.

Tanzania

5. Prioritized areas for intervention in Tanzania

Themes	Items	Tanzania (BP n=10)	Long (L) or Short(S) Term	Urgency	Feasibility	Proposed Activities
Human Resource Management and Capacity Development	Adequacy of IPC capacity of BP staff	30% responded inadequate	S	H	L	IPC Training (Human Capacity)
	Presence of psychological support systems for staff	None	L, S	H	H	Mental Support (Remote)
Infection Prevention and Control (IPC)	Waste management implementation	20% rated poor or very poor; cleaning equipment available but lacking on SOPs	L, S	H	M	Waste management (Strengthen IPC)
	Experience PPEs stockouts (past 2 months)	40%	S	H	H	Provide PPE (Standardize SOP)
	BPs practicing mask-wearing at all times	50%	S	H	H	SOP Training (Human Capacity)
Port Health	Isolation Rooms with adequate space and items	0%	L		L	--
	Laboratories within port health capable of conducting PCR	None reported; additionally, COVID-19 testing prices in TZ are expensive				(IEC Material (Standardization))
BP Infrastructure and System	RECDTS	0%	L, S	H	M	Promote RECDTS
Community Awareness and Engagement	BPs conducting COVID-19 sensitization activities for cross border traders	0%	L, S	H	H	Community Awareness (Outreach)
	IEC materials (COVID-19 prevention posters)	None in Holili BP	S	H	H	IEC Material (Standardization)
	Cross border Community members	Generally aware of COVID-19, symptoms, and prevention; some gaps on reliability of information sources identified	L, S	M	H	Community Awareness (Outreach)

Prioritized BPs in Tanzania

According to the BP score card (See Appendix 1) scores for BPs in Tanzania are as follows.

BP name	Holili	Horo	Kabanga	Manyovu	Murungo	Mutukula	Namanga	Rusumo	Sirari	Tarakea
Score	2.1	2.4	2.1	2.4	2.4	2.3	2.1	1.9	2.2	2.5

For the access and importance, either the Namanga and Holili BPs with Kenya and Mutukula BP with Uganda will be the priority. Other borders such as Kabanga BP with Burundi, and Rusumo BP with Rwanda could also be the target. Despite their size and importance those BPs scored lower than other BPs. Urgent support is needed particularly for Rusumo and Holili BPs to strengthen IPC measures.

Uganda

6. Prioritized areas for intervention in Uganda

Themes	Items	Uganda (BP n=10)	Long (L) or Short(S) Term	Urgency	Feasibility	Proposed Activities	
Infection Prevention and Control (IPC)	Water source	Piped supply	60%	L			
		Borehole or tubewell	20%	L			
		Rainwater	10%	L, S	H	M	Water Tank (Strengthen IPC) Water Tank
		Surface water	10%	L, S	H	M	Water Tank (Strengthen IPC)
	Handwashing stations (count, how many percent functional), other disinfection procedures	52, 30.7%	L, S	H	H	Water Tank (Strengthen IPC)	
	Waste management implementation	20% rated poor or very poor	L, S	H	M	Waste management (Strengthen IPC)	
	Experience PPEs stockouts (past 2 months)	70%	S	H	H	Provide PPE (Standardize SOP)	
	BPs practicing mask-wearing at all times	40%	S	H	H	Water Tank (Strengthen IPC)	
BP Infrastructure and System	RECDTS		87.5%	L, S	M	M	Promote RECDTS
	Power Source	Electrical Grid	70%				
		24-hr supply	10%; electric supply affects Wi-Fi availability, RECDTS utilization may be hindered	L, S	H	L	(Promote RECDTS)
		Generator	100%				
Community Awareness and Engagement	BPs conducting COVID-19 sensitization activities for cross border traders	30%	L, S				
	IEC materials (COVID-19 prevention posters)	100%; need for translation to native languages	L, S	H	H	IEC Material (Standardization)	
	Cross border Community members	Lack of trust in efficacy and safety of vaccines, with low vaccine uptake at 20%; unproven COVID-19 prevention methods still exist	L, S	H	H	Community Awareness (Outreach)	

Prioritized BPs in Uganda

According to the BP score card (See Appendix 1) scores for BPs in Uganda are as follows.

BP name	Busia	Cyanika	Elegu	Katuna	Lwakhakha	Malaba	Mirama Hills	Mutukula	Oraba	Suam River
Score	2.5	2.3	2.1	1.7	2.2	2.4	2.5	2.4	2.1	1.7

Two main borders with Kenya, Busia and Malaba BPs, can be targeted. Another minor border with Kenya is the Suam River BP which scored lowest and seems to be quite problematic. The BP with Tanzania, Mutukula BP, would be the most eligible target as severe gaps and challenges were identified together with Mirama Hills BP with Rwanda.

Appendix 4

BP Profiles List

No.	Name of BP	Country	No.	Name og BP	Country
1	Busia	Kenya	28	Akanyaru	Rwanda
2	Busia	Uganda	29	Gatuna	Rwanda
3	Kabanga	Tanzania	30	Katuna	Uganda
4	Kobero	Burundi	31	Mugina	Burundi
5	Namanga	Kenya	32	Manyovu	Tanzania
6	Namanga	Tanzania	33	Cyanika	Uganda
7	Rusumo	Rwanda	34	Cyanika	Rwanda
8	Rusumo	Tanzania	35	Oraba	Uganda
9	Nimule	South Sudan	36	Kaya	South Sudan
10	Elegu	Uganda	37	Lwakhakha	Kenya
11	Kagitumba	Rwanda	38	Lwakhakha	Uganda
12	Mirama Hills	Uganda	39	Suam River	Uganda
13	Taveta	Kenya	40	Suam	Kenya
14	Holili	Tanzania	41	Lokiriyama	Uganda
15	Isebania	Kenya	42	Lokiriyama	Kenya
16	Sirari	Tanzania	43	Nadapal	Kenya
17	Lunga Lunga	Kenya	44	Nadapal	South Sudan
18	Horohoro	Tanzania	45	Gahumo	Burundi
19	Malaba	Kenya	46	Murusagamba	Tanzania
20	Malaba	Uganda	47	Ilasit	Kenya
21	Mutukula	Tanzania	48	Tarakea	Tanzania
22	Mutukula	Uganda	49	Murongo	Tanzania
23	Gasenyi	Burundi	50	Kikagati	Uganda
24	Nemba	Rwanda	51	Mabamba	Tanzania
25	Ruhwa	Burundi	52	Gisuru	Burundi
26	Ruhwa	Rwanda	53	Kagunga	Tanzania
27	Kanyaru	Burundi	54	Kabonga	Burundi

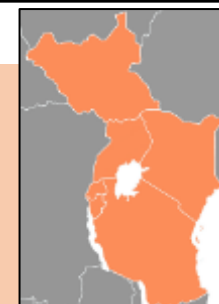
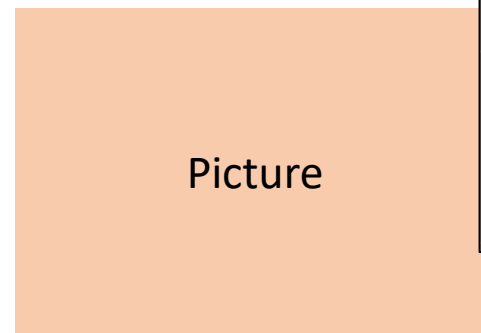
There are no data of the BP Listed No. 24, 28, 29, 41, 42, 44, 46, 50, 51, 53 as some of them were closed or suspended, or there were no responses from staff.

BP Profile Sheets

No. XX

Name of BP
(Country)

Another side
No. XX



★:Place of BP

General information and Characteristic of BP:

Electricity	Water			Equipment	Vehicle
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Situation					
• Additional data and note					

Health				Technology	Awareness
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
Situation					
• Additional data and note					

Note:

- This Profiles are mainly based on the Project baseline (May 2021), and may therefore differ from the current situation.
- It is also noted that, due to the nature of the survey, some of the data may be based on perceptions of respondents and some may differ from actual situation.
- Some data are based on information from “One-stop border post sourcebook 2nd edition” (May 2016), and are marked with an asterisk (*).

No.1

Busia BP (Kenya)



Another side
No. 2

BP Type: OSBP(Juxtaposed)

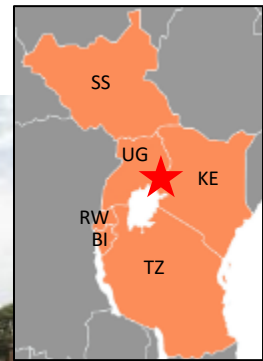
Location: Northwest of Nairobi , the border with Uganda, Busia

OSBP launched:2017

Open working hours: 24hrs

Characteristic :

- Border area small and congested(*)
- Intraregional trade and trade originating from/destined to overseas trade(*)
- Passenger per month 33,150(2019) -> 12,881(2020)



Source : Trade mark, <https://www.trademarka.com/onestopborderposts/image/>

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	5	Flush/pour-flush toilet to sewer connection	Happened in past two months	Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not have water 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 5 times a day 	<ul style="list-style-type: none"> • Gown, hand gloves, face masks, face shield are available 	

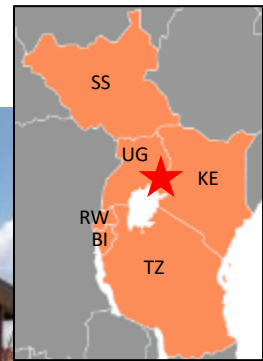
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Molecular test (RNA/PCR) /charge-free	Available/ Alupe hospital	In use	Available (Posters)
<ul style="list-style-type: none"> • 21 staff work in total, including 1 clinical office, 3 nurse and 5 lab technologists. • Confirmed cases currently are recommended for home-based care 	<ul style="list-style-type: none"> • Kemri Alupe is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Digital certificates issue • Average turnaround time between sample collection and results is 12-24 hours 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning but no provision for meals nor adequate space/items • Approximately 1 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at main entry notice board, Lounges and Waiting bays • English and Swahili • Also signs for physical/social distancing is in use

No.2

Busia BP (Uganda)



Another side
No. 1



BP Type: OSBP(Juxtaposed)

Location: East of Kampala, the border with Kenya, Busia

OSBP launched:2017

Open working hours: 24hrs

Characteristic :

- Border area small and congested(*)
- Intraregional trade and trade originating from/destined to overseas trade(*)
- Passenger per month: approximately 1,800(2019) -> 1,700(2020)



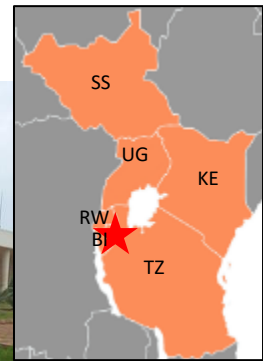
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Surface water (river/dam/lake/pond)	7	Flush/pour-flush toilet to sewer connection	Not happened in past two months	Not available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 3 times a day 	<ul style="list-style-type: none"> • Face masks, hand gloves, gumboots, coats are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00am -	Not available	Molecular test (RNA/PCR) /180,000ugx	Available /County referral hospitals	In use	Available (Posters)
<ul style="list-style-type: none"> • Established in march 2020 • 9 staff work in total, including 1 clinical officer, 3 nurses, and 3 lab technologists 	<ul style="list-style-type: none"> • Test and Fly Laboratory at Malaba BP and Mbale hospital is the main laboratory to send samples • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Digital certificates issue • Average turnaround time between sample collection and results is 5-12 hours 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 78 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at main entry notice board • Only English • Also signs for physical/social distancing is in use

No.3

Kabanga BP (Tanzania)

Another side
No. 4



BP Type: OSBP(Juxtaposed)

Location: Northwestern of Tanzania, the border with Burundi, Kobero

Open working hours: 8:00am - 7:00pm

Characteristic :

- Border river and several km between border posts(*)
- High volume of trade originating from/destined to overseas(*)
- Number of trucks/cargo per month: 743 (2019) -> 1,094 (2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	2	Flush/pour-flush toilet to tank or pit	Not Happened in past two months	Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located at 5km or further 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 3 times a day 	<ul style="list-style-type: none"> • Gown, face masks, hand gloves are available 	

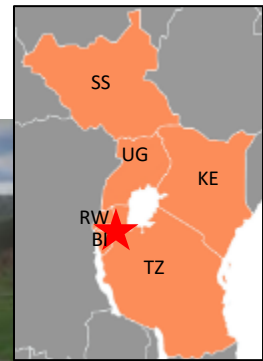
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00am -	Not available	Antigen test (rapid test) /57,700tzs	Available /Kagera Regional Hospital	Not used	Available (Posters)
<ul style="list-style-type: none"> • Established in December 2005 • 4 staff work and all of them are public health officers /technicians. 	<ul style="list-style-type: none"> • Kagera regional hospital is the main laboratory to send samples • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Paper certificates issue • Average turnaround time between sample collection and results is 6-12 hours 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 295 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at main entry notice board • Only Swahili • No signs for physical/social distancing is in use

No.4

Kobero BP (Burundi)



Another side
No. 3



BP Type: OSBP(Juxtaposed)

Location: Southeastern of Burundi, the border with Tanzania, Kabanga

Open working hours: 7:30am -

Characteristic :

- Border river and several km between border posts(*)
- High volume of trade originating from/destined to overseas(*)
- Number of trucks/cargo per month: 2,100 (2019) -> 3,000 (2020)

Source : Trade mark, <https://www.trademarka.com/onestopborderposts/videos/>

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	4	Composting toilet	Happened in past two months	Not Available
<ul style="list-style-type: none"> • No Generator for backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 1 time a day 	<ul style="list-style-type: none"> • Gown, face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:00am to 6:00pm	Not available	Antigen test (rapid test) /30bif	Available /Muyinga Hospital	Not used	Available (Fliers)
<ul style="list-style-type: none"> • Established in June 2020 • 13 staff work in total, including 1 clinical officer, 1 nurse and 8 lab technologists. 	<ul style="list-style-type: none"> • Muyinga Hospital is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Paper certificates issue • Average turnaround time between sample collection and results is 6-12 hours 	<ul style="list-style-type: none"> • Isolation room does not have provision for regular cleaning nor meals, nor adequate space/items • Approximately 25 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at main entry notice board • French, Kirundi, and Swahili • No signs for physical/social distancing

No.5

Namanga BP (Kenya)



Another side
No. 6



Source : JICA, https://openjicareport.jica.go.jp/pdf/12301644_11.pdf

BP Type: OSBP(Juxtaposed)

Location: Southeast of Nairobi, the border with Tanzania, Namanga

OSBP launched:2017

Open working hours: 24hrs

Characteristic :

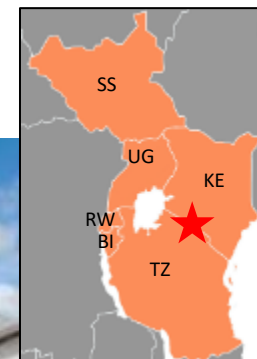
- Geographically no natural boundary; hilly terrain(*)
- Intraregional trade and trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
2,565 (May 2020) -> 4,172 (April 2021)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Tube well borehole	5	Flush/pour-flush toilet to sewer connection	Happened in past two months	Available
• Generator is installed as a backup	• Main water supply located on premises	• Reported some hand washing facilities do not function	• At least one is usable • Frequency of Cleaning is 3 time a day	• Gown, face masks, hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24 hrs	Available (Namanga mobile laboratory)	Molecular test (RNA/PCR) /Charge-free	Available /Namanga Health Centre	In use	Available (Posters)
• 20 staff work in total, including 1 clinical officer, 4 nurses, 7 public health officers/technicians and 7 lab technologists.	• Samples are taken to National Public Health Lab(Namanga mobile laboratory) on foot • Sample is sent after 2- 6hrs	• Digital certificates issue • Average turnaround time between sample collection and results is 12-24 hours	• Isolation room has provision for regular cleaning, but no provision for meals nor adequate space/items • Approximately 1 km from BP to the facility		• Locate at main entry notice board, lounges, and waiting bays • English and Swahili • Signs for physical/social distancing is in use

No.6

Namanga BP (Tanzania)

 Another side
No. 5


BP Type: OSBP(Juxtaposed)

Location: North of Arusha, the border with Kenya, Namanga

OSBP launched:2017

Open working hours: 24hrs

Characteristic :

- Geographically no natural boundary; hilly terrain(*)
- Intraregional trade and trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
2,238 (2019) -> 1,923 (2020)->3,029 (2021)

Source : JICA, https://openjicareport.jica.go.jp/pdf/12301644_11.pdf

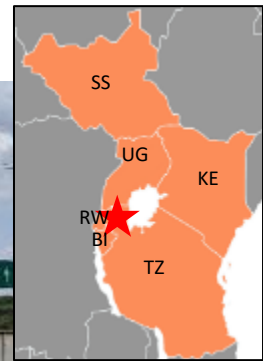
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	1	Flush/pour-flush toilet to tank or pit	Happened in past two months	Available
• Generator is installed as a backup	• Main water supply located up to 5km		• At least one is usable • Frequency of Cleaning is 3 time a day	• Face masks are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Antigen test (rapid test) /57,700tzs	Not Available /Eworendeke health centre	Not used	Available (Posters)
• Established in 1998 • 13 staff work in total, and all of them are public health officers /technicians.	• Arusha Regional Hospital is the main laboratory to send samples • Sample is sent Sample is sent within 2hrs	• Paper certificates issue • Average turnaround time between sample collection and results is 6-12 hours	• Approximately 1 km from BP to the facility		• Locate at lounges • Swahili and English • Signs for physical/social distancing is in use

No.7

Rusumo BP (Rwanda)

Another side
No. 8



BP Type: OSBP(Juxtaposed)

Location: Southeast of Kigali, the border with Tanzania, Rusumo

OSBP launched : March 2016

Open working hours: 24hrs

Characteristic :

- The border line in the Kagera River(*)
- Very high maritime volume(*)
- Number of trucks/cargo per month:
approximately 10,000 (2019) -> approximately 5,000 (2020)

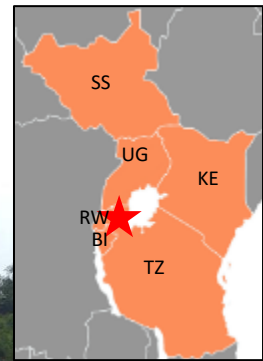
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	15	Flush/pour-flush toilet to sewer connection	Not happened in past two months	Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 8 time a day 	<ul style="list-style-type: none"> • Gown, face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Antigen test (rapid test) /Free-charge	Available /Kirehe District Hospital	In use	Available (Posters and tv/radio adverts)
<ul style="list-style-type: none"> • 6 staff work in total, including 1 medical officer, 1 nurse, and 2 lab technologists 	<ul style="list-style-type: none"> • National Reference Laboratory of Rwanda is the main laboratory to send samples • Sample is sent after 12 hrs but within a day (daily) 	<ul style="list-style-type: none"> • PCR test is available if a driver desires • Digital certificate issue • Average turnaround time between sample collection and results is 12-24 hours 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 26 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at main entry notice board, lounges, and waiting bays • English, Swahili and Kinyarwanda • Signs for physical/ social distancing is use

No.8

Rusumo BP (Tanzania)

Another side
No. 7



BP Type: OSBP(Juxtaposed)

Location: Northwestern Tanzania, the border with Rwanda, Rusumo

OSBP launched : March 2016

Open working hours: 24hrs

Characteristic :

- The border line in the Kagera River(*)
- Very high maritime volume(*)
- Number of trucks/cargo per month: 7,530 (2019) -> 8,960 (2020)

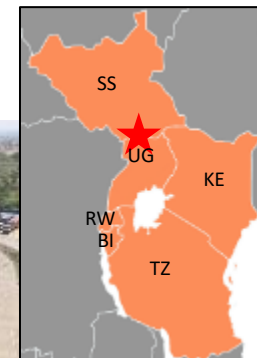
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Surface water (river/dam/lake/ pond)	3	Flush/pour-flush toilet to tank or pit	Happened in past two months	Not Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 3 time a day 	<ul style="list-style-type: none"> • Face masks and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Antigen test (rapid test) /57,500tzs	Available /Lukole Health Centre	Not used	Available (Posters)
<ul style="list-style-type: none"> • 4 staff work in total, and all of them are public health officers /technicians. 	<ul style="list-style-type: none"> • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Average turnaround time between sample collection and results is 6-12 hours 	<ul style="list-style-type: none"> • Isolation room does not have provision for regular cleaning nor meals, nor adequate space/items • Approximately 30 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at lounges • Swahili • Signs for physical/social distancing is in use

No.9

Another side
No. 10

Nimule BP (South Sudan)



BP Type: OSBP(Juxtaposed)

Location: Southeast of Juba, the border with Uganda, Elegu

OSBP launched: February 2020

Open working hours: 24hrs

Characteristic :

- High volume of trade originating from/destined to overseas(*)
- Approximate passenger per month: 5,000 (2019) -> 2,000 (2020)

Source : Trade mark, <https://www.trademarka.com/wp-content/uploads/2014/01/Nimule-4-min.jpg>

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Solar electricity (24hrs)	Surface water (river/dam/lake/pond)	2	Pit latrine without slab/open pit	Happened in past two months	Not Available
<ul style="list-style-type: none"> • No generator for a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 2 time a day 	<ul style="list-style-type: none"> • Face masks are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00am to 5:30pm	Available (Nimule Mobile Lab)	Molecular test (RNA/PCR)/ Charge-free	Not Available /County referral hospitals	Not used	Not Available
<ul style="list-style-type: none"> • Established in September 2018 • 24 staff work in total, including 1 clinical officer, 3 nurses and 2 lab technologists 	<ul style="list-style-type: none"> • Sample is sent after 12 hrs. but within a day (daily) 	<ul style="list-style-type: none"> • Paper certificates issue • Average turnaround time between sample collection and results is 12-24 hours 	<ul style="list-style-type: none"> • Approximately 5 km from BP to the facility 		<ul style="list-style-type: none"> • No Signs for physical/social distancing

No.10

Elegu BP (Uganda)

Another side
No. 9



BP Type: OSBP(Juxtaposed)

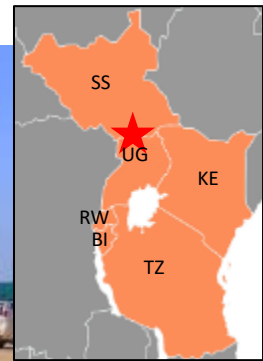
Location: North of Kampala, the border with South Sudan, Nimule

OSBP launched: November 2018

Open working hours: 24hrs

Characteristic :

- High volume of trade originating from/destined to overseas(*)
- Approximate passenger per month: 9,000 (2019) -> 4,000 (2020)



Source : Trade mark, <https://twitter.com/trademarkeasta/status/1062982106689798144>

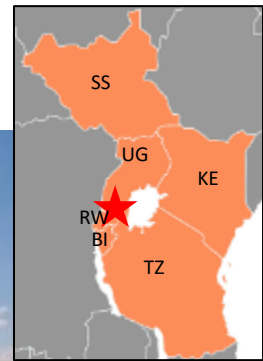
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Generator	Tube well borehole	5		Happened in past two months	
<ul style="list-style-type: none"> • Some times power goes off and it is unpredictable 	<ul style="list-style-type: none"> • Main water supply located up to 5km 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> • Face masks and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not Available	- /170,000ugx	Available /Kitgum hospital	In use	
<ul style="list-style-type: none"> • Established in March 2020 • 9 staff work in total, including 1 medical officer, 1 clinical officer, 3 nurses and 2 lab technologists 	<ul style="list-style-type: none"> • Test and fry is the main laboratory to send samples • Sample is sent after 2-6 hrs 	<ul style="list-style-type: none"> • Paper certificates issue • Average turnaround time between sample collection and results is 6- 12 hours 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 99 km from BP to the facility 		

No.11

Kagitumba BP (Rwanda)

Another side
No. 12



Source : Trade mark, <https://www.trademarka.com/onestopborderposts/image/>

BP Type: OSBP(Juxtaposed)

Location: Northeast of Kigali, the border with Uganda, Mirama Hills

OSBP Launched: December 2015

Open working hours: 7:00am to 8:00pm

Characteristic :

- Hilly terrain(*)
- Trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
approximately 700 (2019) -> 1,000 (2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Piped supply inside the building	6	Flush/pour-flush toilet to sewer connection	Not happened in past two months	Available
• Generator is installed as a backup	• Main water supply located at 5km or further	• Reported some hand washing facilities do not function	• At least one is usable • Frequency of Cleaning is 3 time a day	• Gown, face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:00am to 8:00pm	Not Available	Antigen test (rapid test) /Charge-free	Available /Nyagatare District Hospital	In use	Available (Posters, Fliers, tv/radio adverts)
• Established in May 2020 • 11 staff work in total, including 6 nurses and 4 lab technologists	• Nyagatare District Hospital is the main laboratory to send samples • Sample is sent after 12 hrs. but within a day (daily)	• Digital certificates issue • Average turnaround time between sample collection and results is 12-24 hours	• Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 50 km from BP to the facility		• Locate at main entry notice board and waiting bays • English and Kinyarwanda • Signs for physical/ social distancing is use

No.12

Mirama Hills BP (Uganda)

Another side
No. 11



Source : Trade mark, <https://www.trademarka.com/onestopborderposts/videos/>

BP Type: OSBP(Juxtaposed)

Location: Southwest of Kampala, the border with Rwanda, Kagitumba

OSBP Launched: July 2015

Open working hours: 8:00am to 9:00pm

Characteristic :

- Hilly terrain(*)
- Trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
approximately 5,800 (2019) -> 4,000 (2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main gridline(24hrs)	Rainwater tanker truck	3	Flush/pour-flush toilet to sewer connection	Happened in past two months	Not Available
• Generator is installed as a backup	• Main water supply located up to 5km	• Reported some hand washing facilities do not function	• At least one is usable • Frequency of Cleaning is 3 time a day	• Gown, face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00am to 9:00pm	Available (Test and Fly laboratory)	- /165,000ugx	Not Available /County referral hospitals	In use	Available (Posters)
• Established in February 2020 • 5 staff work in total, including 1 medical officer, 1 clinical officer and 1 lab technologists	• Itojo Hospital is the main laboratory to send samples • Sample is sent after 12 hrs. but within a day (daily)	• Paper certificates issue • Average turnaround time between sample collection and results is more than 3 days	• Approximately 100 km from BP to the facility		• Locate at lounges • English and Runyankole • No Signs for physical/social distancing

No.13

Taveta BP (Kenya)



Another side
No. 14



BP Type: OSBP(Juxtaposed)

Location: Southeast of Nairobi, the border with Tanzania, Holili

OSBP Launched:

Open working hours: from 7:00 AM to 8:00 PM (at May 2021)

Characteristic :

- Relatively flat terrain without a border river(*)
- 15 trucks per day; intraregional trade and trade originating from/destined to overseas trade(*)
- Number of trucks/cargo per month: 1,977(2019) ->1,390(2020)

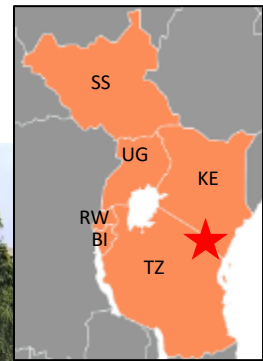
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Tube well borehole	1	Flush/pour-flush toilet to sewer connection	Happened in past two months	Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 		<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 2 time a day 	<ul style="list-style-type: none"> • Gown, face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:00 AM to 8:00 PM	Not Available	Molecular test (RNA/PCR) /Charge-free	Available /Taveta Sub-county Hospital	In use	Available (Posters)
<ul style="list-style-type: none"> • 11 staff work in total, including 5 public health officer and 5 lab technologists. 	<ul style="list-style-type: none"> • Kemri Wellcome Trust Research Laboratory, Kilifi is the main laboratory to send samples • Sample is sent after every 2-3 days 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is more than 3 days 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning, but no provision for meals nor adequate space/items • Approximately 5 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at notice board , lounges and waiting bays • English • Signs for physical/social distancing is in use

No.14

Holili BP (Tanzania)

Another side
No. 13



BP Type: OSBP(Juxtaposed)

Location: Northeastern of Tanzania, the border with Kenya, Taveta

OSBP Launched:

Open working hours: 24hrs

Characteristic :

- Relatively flat terrain without a border river(*)
- 15 trucks per day; intraregional trade and trade originating from/destined to overseas trade(*)
- Number of trucks/cargo per month: 579(2019) -> 824(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Piped supply inside the building	0	Flush/pour-flush toilet to tank or pit	Happened in past two months	Not Available
• Generator is installed as a backup	• Main water supply located at 5km or further		• At least one is usable • Frequency of Cleaning is 3 time a day	• Face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
					Not Available
					• No signs for physical/social distancing is in use

No.15

Isebania BP (Kenya)



Another side
No. 16

BP Type: Not operational as OSBP

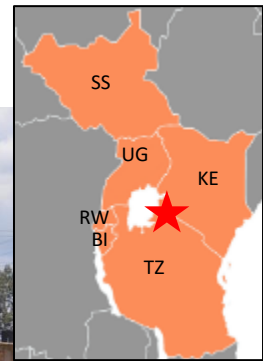
Location: West od Kenya, the border with Tanzania, Sirari

OSBP Launched:

Open working hours: 24hrs

Characteristic :

- Intraregional trade(*)
- Number of trucks/cargo per month: 972(2020) -> 1,848(2021)



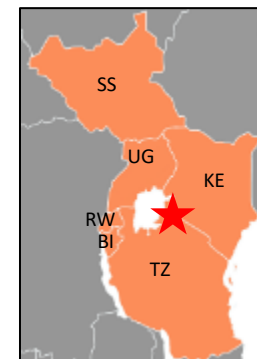
Source : <https://www.kenyanews.go.ke/kenya-tanzania-trade-picking-after-covid-19/>

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Piped supply inside the building	7		Happened in past two months	
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> • Gown, face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24 hrs	Not available	Molecular test (RNA/PCR) /Charge-free	Available /Migori County Hospital	In use	
<ul style="list-style-type: none"> • 13 staff work in total, including 2 nurses 7 public health officers, and 4 lab technologists 	<ul style="list-style-type: none"> • Kemri Kisumu is the main laboratory to send samples • Sample is sent after every 2-3 days 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is more than 3 days 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items , but no provision for meals • Approximately 24 km from BP to the facility 		

No.16

Sirari BP (Tanzania)

 Another side
No. 15


BP Type: Not operational as OSBP

Location: Northern Tanzania, the border with Kenya, Isebania

OSBP Launched:

Open working hours: 24 hrs

Characteristic :

- Intraregional trade(*)
- Number of trucks/cargo per month: 2,010(2019) -> 1,197(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Piped supply inside the building	3		Not happened in past two months	
• Generator is installed as a backup	• Main water supply located up to 5km			• Face masks, and hand glovers are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24 hrs	Not available	Antigen test (rapid test) /57,700tzs	Not available /Heri Hospital	Not used	
• 6 staff work in total, including 2 clinical officers, 1 nurse, and 2 public health officers	• Kigoma Regional Hospital is the main laboratory to send samples • Sample is sent within 2 hrs	• Paper certificate issue • Average turnaround time between sample collection and results is 6-12hrs	• Approximately 25 km from BP to the facility		

No.17

Lunga Lunga BP (Kenya)



Another side
No. 18

BP Type: Not operational as OSBP

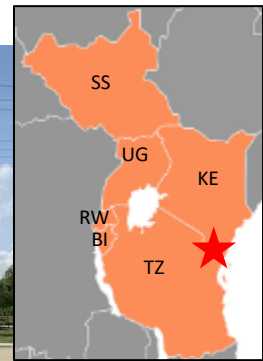
Location: Southeastern Kenya, the border with Tanzania, Horohoro

OSBP Launched:

Open working hours: 24 hrs

Characteristic :

- Intraregional trade(*)
- Number of passengers per month: 8,400(2019) -> 1,099(2020)



Source : <https://infotradekenya.go.ke/procedure/1945?l=en&embed=true>

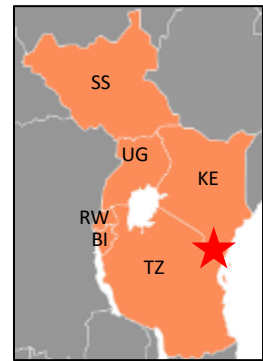
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Rainwater tanker truck	3		Happened in past two months	
• Generator is installed as a backup	• Main water supply located on premises			• Gown, face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24 hrs	Not available	Molecular test (RNA/PCR) /Charge-free	Available /Lunga Lunga Subcounty Hospital	Available	
• 13 staff work in total, including 1 nurse, 6 public health officers, and 6 lab technologists	• Kemri Wellcome Trust Research Laboratory, Kilifi is the main laboratory to send samples • Sample is sent after every 2-3 days	• Paper certificate issue • Average turnaround time between sample collection and results is more than 3 days	• Isolation room has provision for regular cleaning , but no provision for meals nor adequate space/items • Approximately 5 km from BP to the facility		

No.18

Horohoro BP (Tanzania)

Another side
No. 17



BP Type: Not operational as OSBP

Location: East Tanzania, the border with Kenya, Lunga lunga

OSBP Launched:

Open working hours: 24hrs

Characteristic :

- Intraregional trade(*)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Piped supply inside the building	5		Not happened in past two months	
• Generator is installed as a backup	• Main water supply located up to 5km			• Gown, face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.19

Malaba BP (Kenya)

Another side
No. 20



BP Type: OSBP(Juxtaposed)

Location: Northwest of Kenya, the border with Uganda, Malaba

OSBP Launched:

Open working hours: 24 hrs

Characteristic :

- Border line in the Malaba River(*)
- High volume of trade originating from/destined to overseas(*)

Source : Trade mark, <https://www.trademarka.com/onestopborderposts/image/>

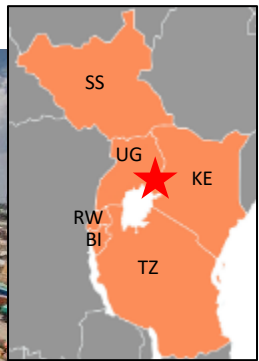
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid(24hrs)	Surface water river dam lake pond	5	Flush/pour-flush toilet to tank or pit	Happened in past two months	Available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located up to 5km 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 3 time a day 	<ul style="list-style-type: none"> • Gown, face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24 hrs	Not available	Molecular test (RNA/PCR) /Charge-free	Not available /Alupe Hospital Isolation Centre	In use	Available (Posters)
<ul style="list-style-type: none"> • 21 staff work in total, including 1 clinical officer, 3 nurses, 12 public health officers, and 5 lab technologists 	<ul style="list-style-type: none"> • Kemri Alupe Kilifi is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is 12-24hrs 	<ul style="list-style-type: none"> • Approximately 30 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at notice board , lounges and waiting bays • English and Swahili • Signs for physical/social distancing is in use

No.20

Malaba BP (Uganda)

Another side
No.19



BP Type: OSBP(Juxtaposed)

Location: East of Kampala, the border with Kenya, Malaba

OSBP Launched:

Open working hours: 24hrs

Characteristic :

- Border line in the Malaba River(*)
- High volume of trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
approximately 1,000(2019) -> approximately 700(2020)

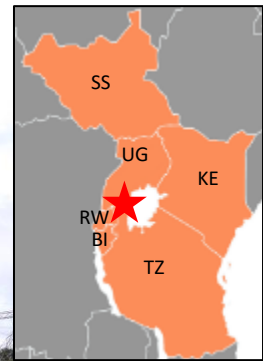
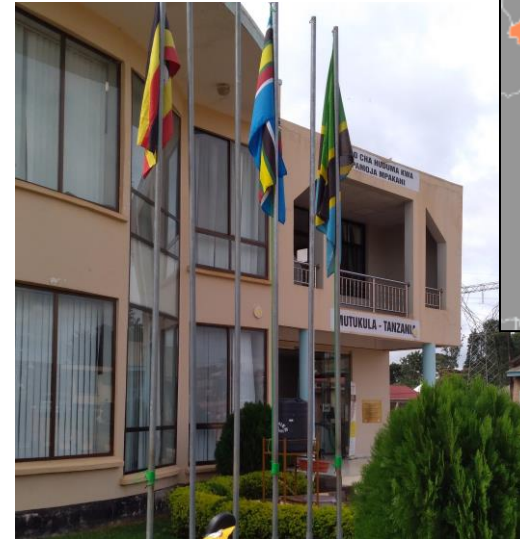
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (daytime only)	Piped supply inside the building	10	Flush/pour-flush toilet to tank or pit	Happened in past two months	Not available
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located up to 5km 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 2 time a day 	<ul style="list-style-type: none"> • Face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Available (Test and Fly lab)	Molecular test (RNA/PCR) /170,000ugx	Available /County hospital	In use	Available (Posters)
<ul style="list-style-type: none"> • Established in May 2021 • 19 staff work in total, including 1 medical, 1 clinical, 4 nurses, 1 PH officer and 5 lab technologists 	<ul style="list-style-type: none"> • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is 6-12hrs 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning and adequate space/items , but no provision for meals • Approximately 53 km from BP to the facility 		<ul style="list-style-type: none"> • Locate at notice board , • English • Signs for physical/social distancing is in use

No.21

Mutukula BP (Tanzania)

Another side
No. 22



BP Type: OSBP(Juxtaposed)

Location: North of Tanzania, the border with Uganda, Mutukula

OSBP Launched:

Open working hours: 24hrs

Characteristic :

- Large area(*)
- High volume of trade originating from/destined to overseas(*)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Tube well borehole	4		Not happened in past two months	
<ul style="list-style-type: none"> • No Generator for backup 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> • Gown, face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not Available	Molecular test (RNA/PCR)/ 58,000	Available /Bunazi District Hospital	Not used	
<ul style="list-style-type: none"> • All 8 staff work is public health officer 	<ul style="list-style-type: none"> • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Paper certificate issue • Average turnaround time between sample collection and results is 6-12hrs 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning, but no provision for meals nor adequate space/items • Approximately 28 km from BP to the facility 		

No.22

Mutukula BP (Uganda)

Another side
No.21



Source : Trade mark, <https://www.trademarka.com/onestopborderposts/videos/>

BP Type: OSBP(Juxtaposed)

Location: South of Kampala, the border with Tanzania, Mutukula

OSBP Launched:

Open working hours: 24hrs

Characteristic :

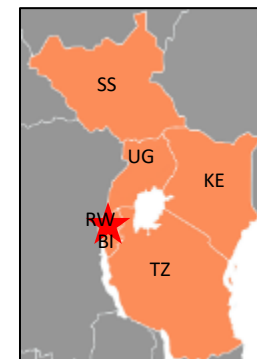
- Large area(*)
- High volume of trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
approximately 13,000(2019) -> approximately 8,000(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid	Piped supply inside the building	5	Flush/pour-flush toilet to tank or pit	Happened in past two months	Not available
• Generator is installed as a backup	• Main water supply located on premises	• Reported some hand washing facilities do not function	• At least one is usable • Frequency of Cleaning is 3 time a day	• Face masks, and hand glovers are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00 AM to 8:30 PM	Available (Test and fry lab)	Molecular test (RNA/PCR)/ 170,000ugx	Available /County referral hospital	In use	Available (Posters)
• Established in February 2020 • 10 staff work in total, including 1 medical, 1 clinical, 4 nurses, 1 PH officer and 1 lab technologist	• Sample is sent within 2hrs	• Paper certificate issue • Average turnaround time between sample collection and results is 6-12hrs	• Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals • Approximately 90 km from BP to the facility		• Locate at lounge • English • Signs for physical/social distancing is in use

No.23

Gasenyi BP (Burundi)


 Another side
No. 24


BP Type: OSBP(Juxtaposed)

Location: Northwestern of Burundi, the border with Rwanda, Nemba

OSBP Launched:

Open working hours: 7:30 AM to 6:30 PM

Characteristic :

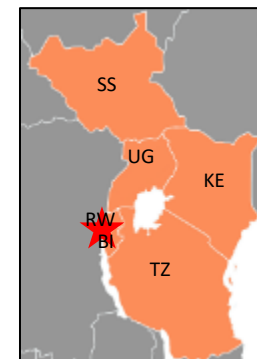
- Small border area(*)
- Intraregional trade(*)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Other (24hrs)	No water source	5		Happened in past two months	
<ul style="list-style-type: none"> • Power comes from to Rwanda side • No Generator for backup 	<ul style="list-style-type: none"> • Main water supply located at 5km or further 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> • Face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:30 AM to 6:30 PM	Not available	Not identified/ Charge-free or 15,000bif	Not available /Kirundi Hospital	Not used	
<ul style="list-style-type: none"> • Established in March 2014 • 9 staff work in total, including 4 clinical officers, 4 nurses 	<ul style="list-style-type: none"> • Institut National De Sante Publique (INSP) is the main laboratory to send samples 	<ul style="list-style-type: none"> • Charge-free for drivers and users, but charge for other individual • Paper certificate issue • Average turnaround time(sample collection to results) is 6-12hrs 	<ul style="list-style-type: none"> • Approximately 34 km from BP to the facility 		

No.25

Ruhwa BP (Burundi)

 Another side
No. 26


BP Type: OSBP

Location: Northwestern of Burundi, the border with Rwanda, Ruhwa

OSBP Launched:

Open working hours: 6:00AM to 6:00PM

Characteristic :

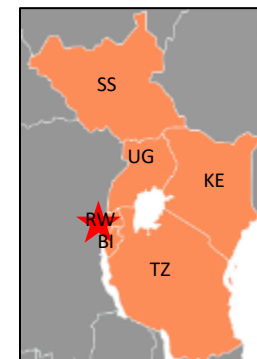
- Border line in the Ruhwa River; hilly terrain on the Rwandan side(*)
- Intra regional trade(*)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (daytime only)	No water source	4		Happened in past two months	
• No Generator for backup	• Main water supply located at 5km or further			• Face masks, and hand glovers are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:00AM to 6:00PM	Not available	Not identified/ Charge-free or 15,000bif	Not available /Cibitoke Hospital	Not used	
• Established in May 2019 • 9 staff work in total, including 8 nurses	• Institut National De Sante Publique (INSP) is the main laboratory to send samples	• Charge-free for drivers and users, but charge for other individual • Paper certificate issue	• Approximately 25 km from BP to the facility		

No.26

Ruhwa BP (Rwanda)

 Another side
No. 25


BP Type: OSBP(Juxtaposed)

Location: Westan Rwanda, the border with Burundi, Ruhwa

OSBP Launched:

Open working hours: Border was closed at May 2021

Characteristic :

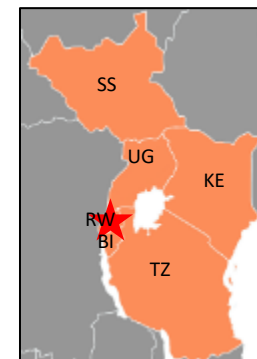
- Border line in the Ruhwa River; hilly terrain on the Rwandan side(*)
- Intraregional trade(*)
- Number of trucks/cargo per month:
approximately 500(2019) -> approximately 300(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	6		Happened in past two months	
• Generator is installed as a backup	• Main water supply located at 5km or further			• Gown, face masks, and hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
closed (at the time of survey)	Not available	Antigen test (rapid) /Charge free or 5,000rwf	Not available /Bugarama Health Center	Not used	
• 7 staff work in total, including 4 nurses, 1 public health officer	• Rusizi District Hospital is the main laboratory to send samples • Sample is sent After 12 hrs. but within a day (daily)	• Charge-free for drivers and users, but charge for other individual • Digital certificate issue • Average turnaround time(sample collection to results) is 6-12hrs	• Approximately 5 km from BP to the facility		

No.27

Kanyaru BP (Burundi)

 Another side
No.28


BP Type: Not operational as OSBP

Location: Eastern Burundi, the border with Rwanda, Akanyaru

OSBP Launched:

Open working hours: 6:00AM to 6:00 PM

Characteristic :

- Border line in river(*)
- Intraregional trade(*)
- Number of passengers per month:
approximately 10,000(2019) -> approximately 10,000(2020)

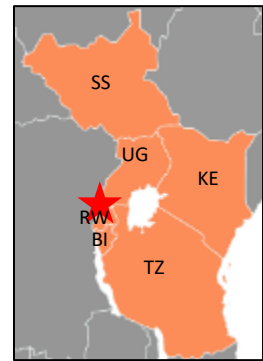
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	4		Happened in past two months	
• No Generator for backup	• Main water supply located on premises	• Reported some hand washing facilities do not function		• Face masks, and hand glovers are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:00AM to 6:00 PM	Not available	Not identified/ Charge-free	Not available /Kayanza Hospital	Not used	
• Established in August 2018 • 9 staff work in total, including 4 clinical officers, 4 nurses	• Institut National De Sante Publique (INSP) is the main laboratory to send samples	• Paper certificate issue	• Approximately 21 km from BP to the facility		

No.30

Katuna BP (Uganda)

Another side
No.29



BP Type: OSBP Construction

Location: Southwestern Uganda, the border with Rwanda, Gatuna

OSBP Launched:

Open working hours: : Border was closed at May 2021

Characteristic :

- High volume of trade originating from/destined to overseas(*)
- Number of trucks/cargo per month:
approximately 5,000(2019) -> approximately 800(2020)

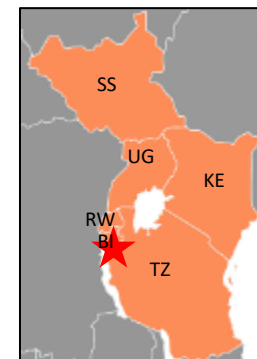
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid	Piped supply inside the building	5		Happened in past two months	
• Generator is installed as a backup	• Main water supply located on premises	• Reported some hand washing facilities do not function		• Face masks, and hand glovers are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.31

Mugina BP (Burundi)

Another side
No. 32



BP Type: OSBP In design process

Location: Northwestern Burundi, the border with Tanzania, Manyovu

OSBP Launched:

Open working hours: 6:00AM to 6:00 PM

Characteristic :

- Number of passengers per: 6,750(2019) -> 2,120(2020)

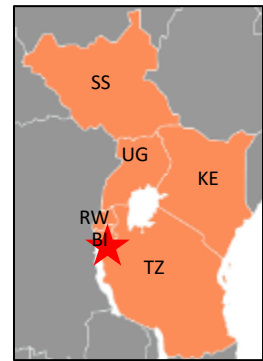
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Generator & solar	Rainwater tanker truck	6	Flush/pour-flush toilet to sewer connection	Happened in past two months	Not available
	<ul style="list-style-type: none"> • Main water supply located up to 5km 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> • At least one is usable • Frequency of Cleaning is 1 time a day 	<ul style="list-style-type: none"> • Gown, face masks, and hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:00AM to 6:00 PM	Not available	Not identified/ Charge-free or 15,000bif	Not available /Makamba Hospital	Not used	Available (Brochures & Fliers)
<ul style="list-style-type: none"> • Established in July 2018 • 16 staff work in total, including 4 clinical officers, 4 nurses, and 7 lab technologists 	<ul style="list-style-type: none"> • Institut National De Sante Publique (INSP) is the main laboratory to send samples • Sample is sent within 2hrs 	<ul style="list-style-type: none"> • Charge-free for drivers and users, but charge for other individual • Paper certificate issue • Average turnaround time(sample collection to results) is 6-12hrs 	<ul style="list-style-type: none"> • Approximately 30 km from BP to the facility 		<ul style="list-style-type: none"> • Swahili, French, and English • No signs for physical/social distancing is in use

No.32

Manyovu BP (Tanzania)

Another side
No. 31



BP Type: OSBP In design process

Location: northeastern Tanzania, the border with Burundi, Mugina

OSBP Launched:

Open working hours: 8:00 AM to 7:00 PM

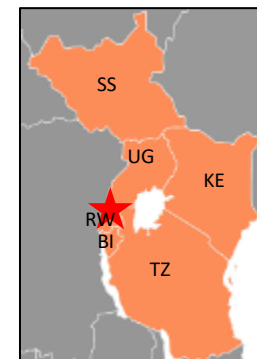
Characteristic :

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	4		Happened in past two months	
• Generator is installed as a backup	• Main water supply located up to 5km			• Face masks, hand glovers, gum boots are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.33

Cyanika BP (Uganda)

 Another side
No. 34


BP Type: Not OSBP

Location: Southwestern Uganda, the border with Rwanda, Cyanika

Open working hours: 7:00 AM to 9:00 PM

Characteristic :

- Number of passengers per month:
approximately 700(2019) -> approximately 300(2020)

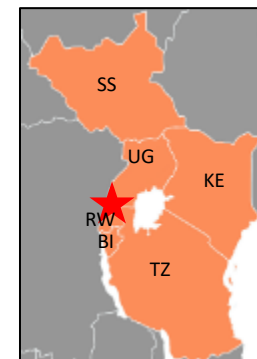
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	5	Flush/pour-flush toilet to sewer connection	Not happened in past two months	Not available
<ul style="list-style-type: none"> Generator is installed as a backup 	<ul style="list-style-type: none"> Main water supply located on premises 	<ul style="list-style-type: none"> Reported some hand washing facilities do not function 	<ul style="list-style-type: none"> At least one is usable Frequency of Cleaning is 3 time a day 	<ul style="list-style-type: none"> Face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
8:00 AM to	Not available	Molecular test (RNA/PCR)/ 170,000ugx	Available /Kisoro Hospital	In use	Available (Posters)
<ul style="list-style-type: none"> Established in May 2020 5 staff work in total, including 2 medical officers, 1 clinical officer and 2 lab technologists 	<ul style="list-style-type: none"> Test and Fry in Kampala is the main laboratory to send samples Sample is sent more than 3 days 	<ul style="list-style-type: none"> Digital certificate issue Average turnaround time between sample collection and results is After 12 hrs. but within a day (daily) 	<ul style="list-style-type: none"> Isolation room has provision for regular cleaning and adequate space/items, but no provision for meals Approximately 9 km from BP to the facility 		<ul style="list-style-type: none"> Locate at notice board and Lounges English and Kinyankore (Local language) Signs for physical/social distancing is in use

No.34

Cyanika BP (Rwanda)

Another side
No. 33



BP Type: Not OSBP

Location: Northern Rwanda, then border with Uganda, Cyanika

Open working hours:

Characteristic :

- Number of passengers per month: 146,656(2019) -> 33,355(2020)

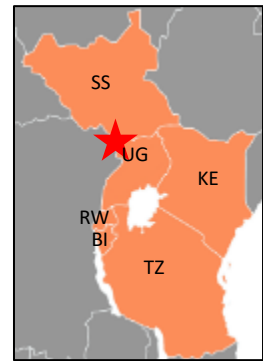
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	1		Happened in past two months	
<ul style="list-style-type: none">• Generator is installed as a backup	<ul style="list-style-type: none">• Main water supply located on premises	<ul style="list-style-type: none">• Reported some hand washing facilities do not function		<ul style="list-style-type: none">• Gown, face masks, hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.35

Oraba BP (Uganda)

Another side
No.36



BP Type: Not OSBP

Location: Northwestern Uganda, the border with South Sudan, Kaya

Open working hours:

Characteristic :

- Number of trucks/cargo per month:
approximately 700(2019 -> approximately 700(2020))

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Private supplier	Tube well borehole	4		Happened in past two months	
<ul style="list-style-type: none">• Generator is installed as a backup	<ul style="list-style-type: none">• Main water supply located on premises	<ul style="list-style-type: none">• Reported some hand washing facilities do not function		<ul style="list-style-type: none">• Face masks are available	

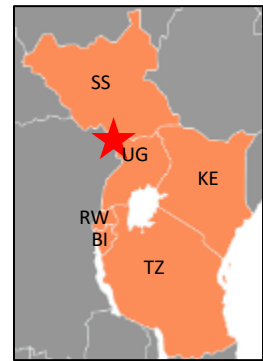
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.36

Kaya BP

Another side
No. 35

(South Sudan)



BP Type: Not OSBP

Location: Southern South Sudan, the border with Uganda, Oraba

Open working hours: 8:00 AM to 5:00 PM

Characteristic :

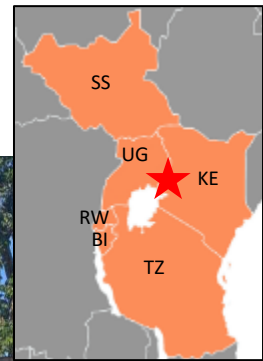
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Generator (daytime only)	Tube well borehole	3		Happened in past two months	
	<ul style="list-style-type: none">Main water supply located on premises			<ul style="list-style-type: none">Face masks are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.37

Lwakhakha BP (Kenya)

Another side
No.38



BP Type: Not OSBP

Location: Western Kenya, the border with Uganda, Lwakhakha

Open working hours: 6:30 AM to 6:30 PM

Characteristic :

- Number of trucks/cargo per month: 1,460(2019) -> 1,414(2020)

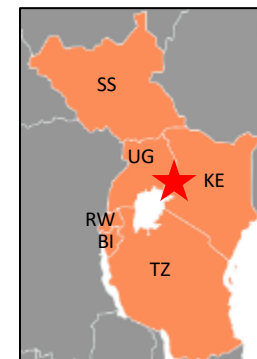
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Tube well borehole	4		Happened in past two months	
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located up to 5km 			<ul style="list-style-type: none"> • Gown, face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:30 AM to 6:30 PM	Not available	Not identified/ Charge-free	Available /Sirisia Sub-county Hospital	In use	
<ul style="list-style-type: none"> • Established in April 2020 • 1 staff working in total is public health officer 	<ul style="list-style-type: none"> • Kemri-Kisumu is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is 6-12hrs 	<ul style="list-style-type: none"> • Isolation room has provision for regular cleaning, but no provision for meals nor adequate space/items • Approximately 19 km from BP to the facility 		

No.38

Lwakhakha BP

(Uganda)

 Another side
No. 37


BP Type: Not OSBP

Location: Southeastern Uganda, the border with Kenya, Lwakhakha

Open working hours: 24hrs

Characteristic :

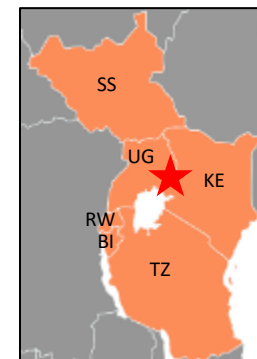
- Number of trucks/cargo per month:
approximately 19,000(2019) -> approximately 18,000(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid	Piped supply inside the building	3		Not happened in past two months	
<ul style="list-style-type: none"> • Generator is installed as a backup • Reported instability of transmit hours 	<ul style="list-style-type: none"> • Main water supply located on premises 	<ul style="list-style-type: none"> • Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> • Face masks are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Not identified /170,000ugx	Not available /Mable Regional Referral Hospital	In use	
<ul style="list-style-type: none"> • Established in March 2020 • 9 staff work in total, including 1 medical, 1 clinical, 3 nurses, 1 PH officers and 3 lab technologists 	<ul style="list-style-type: none"> • Tororo herb, located within Tororo hospital, is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is 12-24hrs 	<ul style="list-style-type: none"> • Approximately 55 km from BP to the facility 		

No.39

Suam River BP (Uganda)

 Another side
No. 40


BP Type: Not OSBP

Location: Eastern Uganda, the border with Kenya, Suam

Open working hours: 24hrs

Characteristic :

- Number of trucks/cargo per month:
approximately 3,000(2019) -> approximately 1,800(2020)

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Generator	Piped supply inside the building	1		Happened in past two months	
	<ul style="list-style-type: none"> Main water supply located on premises 	<ul style="list-style-type: none"> Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> Face masks are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
24hrs	Not available	Molecular test (RNA/PCR) /170,000ugx	Available /Tororo Hospital	Not used	
<ul style="list-style-type: none"> Established in March 2020 10 staff work in total, including 1 medical, 1 clinical, 2 nurses, 3 PH officers and 2 lab technologists 	<ul style="list-style-type: none"> Tororo herb, located within Tororo hospital, is the main laboratory to send samples Sample is sent within 2hrs 	<ul style="list-style-type: none"> Paper certificate issue Average turnaround time between sample collection and results is 6-12hrs 	<ul style="list-style-type: none"> Isolation room has adequate space/items but not provision for regular cleaning nor provision for meals Approximately 250 km from BP to the facility 		

No.40

Suam BP (Kenya)

Another side
No. 39



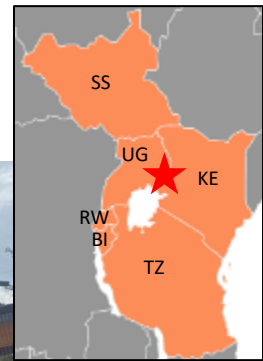
BP Type: Not OSBP

Location: Western Kenya, the border with Uganda, Suam river

Open working hours: 6:30 AM to 6:30 PM

Characteristic :

- Number of passengers per month: 422(2019) -> 412(2020)



Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Surface water from river, dam, lake or pond	2		Happened in past two months	
<ul style="list-style-type: none"> • Generator is installed as a backup 	<ul style="list-style-type: none"> • Main water supply located on premises 			<ul style="list-style-type: none"> • Gown, hand gloves, face masks are available 	

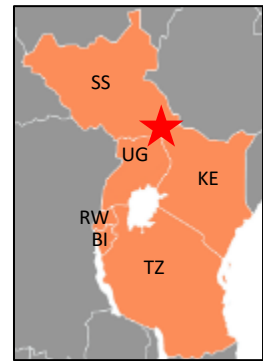
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:30 AM to 6:30 PM	Not available	Molecular test (RNA/PCR) /1,100ksh	Not available /Chepchoina Dispensary	Not used	
<ul style="list-style-type: none"> • Established in January 2019 • 2 staff work and both are public health officers 	<ul style="list-style-type: none"> • Kitale County Hospital laboratory is the main laboratory to send samples • Sample is sent after 2-6hrs 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is 12-24hrs 	<ul style="list-style-type: none"> • Approximately 6 km from BP to the facility 		

No.43

Nadapal BP (Kenya)



Another side
No. 44



BP Type: Not OSBP

Location: Northwestern Kenya, the border with South Sudan, Nadapal

Open working hours: 6:00 AM to 6:00 PM

Characteristic :

- Number of passengers per month:
approximately 900(2019) -> approximately 210(2020)

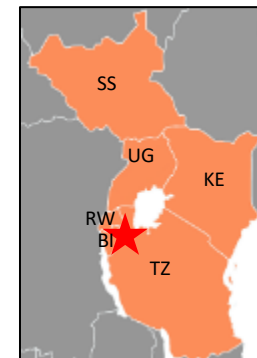
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
No power source	Protected dug well	1		Happened in past two months	
	<ul style="list-style-type: none"> • Main water supply located on premises 			<ul style="list-style-type: none"> • Gown, face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
6:00 AM to 6:00 PM	Not available	Antigen test (rapid test) /Charge-free	Not available /Lopiding Sub- county Hospital	In use	
<ul style="list-style-type: none"> • 9 staff work in total, including 1 nurse, 3 public health officers and 5 lab technologists 	<ul style="list-style-type: none"> • MTRH Eldoret is the main laboratory to send samples • Sample is sent after every 2-3 days 	<ul style="list-style-type: none"> • Digital certificate issue • Average turnaround time between sample collection and results is more than 3 days 	<ul style="list-style-type: none"> • Approximately 27 km from BP to the facility 		

No.45

Gahumo BP

(Burundi)

 Another side
No. 46


BP Type: Not OSBP

Location: Northeastern Burundi, the border with Tanzania

Open working hours: 7:00 AM to 6:00 PM

Characteristic :

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Solar power	No water source	2		Happened in past two months	
<ul style="list-style-type: none"> No Generator for backup 	<ul style="list-style-type: none"> Main water supply located at 5km or further 			<ul style="list-style-type: none"> Face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:30 AM to 3:30 PM	Not available	Not identified/ Charge-free or 15,000bif	Not available /Murore hospital	Not used	
<ul style="list-style-type: none"> Established in March 2019 20 staff work in total, including 6 clinical officers, 6 nurses, and 4 lab technologists 	<ul style="list-style-type: none"> Institut National De Sante Publique (INSP) is the main laboratory to send samples Sample is sent within 2hrs 	<ul style="list-style-type: none"> Charge-free for drivers and users, but charge for other individual Paper certificate issue 	<ul style="list-style-type: none"> Approximately 40 km from BP to the facility 		

No.47

Ilasit BP (Kenya)



Another side
No. 48

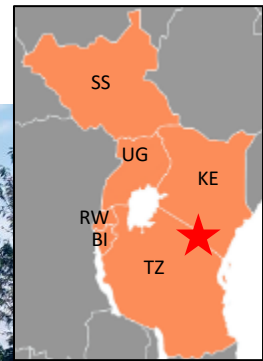
BP Type: Not OSBP

Location: Southern Kenya, the border of Tanzania, Tarakea

Open working hours: 7:00 AM to 7:00PM

Characteristic :

- Number of trucks/cargo per month: 364(2019) -> 420(2020)



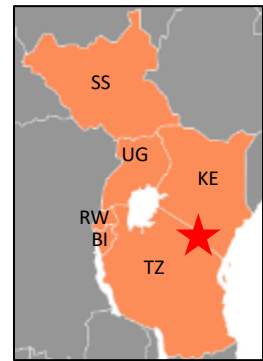
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Protected dug well	2		Happened in past two months	
• Generator is installed as a backup	• Main water supply located on premises			• Gown, hand gloves, face masks and face shield are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:00 AM to 7:00 PM	Not available	Molecular test (RNA/PCR) /Charge-free	Not available /Loitoktok Subcounty Hospital	In use	
• 5 staff work in total and all are public health officers	• National Mobile Laboratory, Namanga is the main laboratory to send samples • Sample is sent after 2- 6hrs	• Digital certificate issue • Average turnaround time between sample collection and results is 12-24hrs	• Approximately 12 km from BP to the facility		

No.48

Tarakea BP (Tanzania)

Another side
No. 47



BP Type: Not OSBP

Location: Northeastern of Kenya, the border with Kenya, Ilasit

Open working hours: 24hrs

Characteristic :

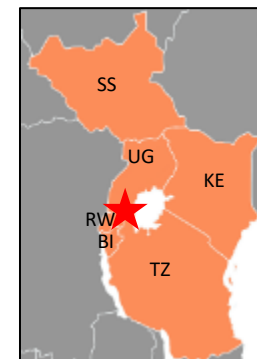
Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	6		Not happened in past two months	
<ul style="list-style-type: none">Generator is installed as a backup	<ul style="list-style-type: none">Main water supply located up to 5km	<ul style="list-style-type: none">Reported some hand washing facilities do not function		<ul style="list-style-type: none">Gown, face masks, hand gloves are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.49

Murongo BP (Tanzania)

Another side
No. 50



BP Type: Not OSBP

Location: Northwestern Tanzania, the border with Uganda, Kikagati

Open working hours: 24hrs

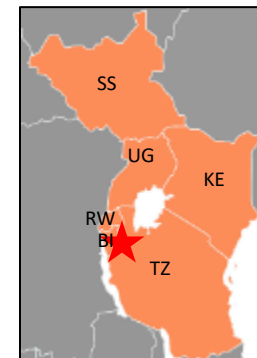
Characteristic :

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	4		Not happened in past two months	
<ul style="list-style-type: none">Generator is installed as a backup	<ul style="list-style-type: none">Main water supply located up to 5km			<ul style="list-style-type: none">Gown, face masks, hand gloves and boots are available	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material

No.52

Gisuru BP (Burundi)

 Another side
No. 51


BP Type: Not OSBP

Location: Southeastern Burundi, the border with Tanzania, Mabamba

Open working hours: 7:00 AM to 6:00 PM

Characteristic :

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (daytime only)	No water source	2		Happened in past two months	
<ul style="list-style-type: none"> No Generator for backup 	<ul style="list-style-type: none"> Main water supply located at 5km or further 			<ul style="list-style-type: none"> Face masks, hand gloves are available 	

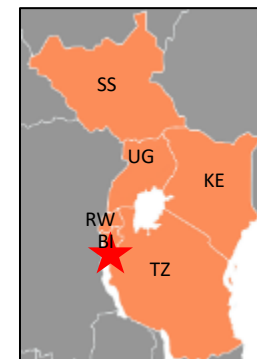
Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:30 AM to 4:00 PM	Not available	Not identified/ Charge-free or 15,000bif	Available /Gisuru Hospital	Not used	
<ul style="list-style-type: none"> 7 staff work in total, including 3 nurses, and 2 lab technologists 	<ul style="list-style-type: none"> Institut National De Sante Publique (INSP) is the main laboratory to send samples Sample is sent within 2hrs 	<ul style="list-style-type: none"> Charge-free for drivers and users, but charge for other individual Paper certificate issue 	<ul style="list-style-type: none"> Isolation room does not have provision for regular cleaning, provision for meals nor adequate space/items Approximately 11 km from BP to the facility 		

No.54

Kabonga BP

Another side
No. 53

(Burundi)



BP Type: Not OSBP

Location: Southern Burundi, the border with Tanzania, Kagunga

Open working hours: 6:00 AM to 6:00 PM

Characteristic :

Main Source of Power	Water Availability/ Main Source	Number of Handwashing Station	Type of Toilets	Experience of PPE Stockout	Disinfection of Trucks
Electricity from the main grid (24hrs)	Piped supply inside the building	1		Happened in past two months	
<ul style="list-style-type: none"> No Generator for backup 	<ul style="list-style-type: none"> Main water supply located on premises 	<ul style="list-style-type: none"> Reported some hand washing facilities do not function 		<ul style="list-style-type: none"> Face masks, hand gloves are available 	

Port Health	Laboratory attached to BP	COVID-19 Test Type and Price	Isolation Room and Referral Facility	Use of RECDTS	IEC Material
7:00 AM to 6:00 PM	Not available	Not identified/ Charge-free	Not available /Nyanza Lac Hospital	Not used	
<ul style="list-style-type: none"> Established in July 2018 11 staff work in total, including 4 clinical officers, 4 nurses, and 1 lab technologists 	<ul style="list-style-type: none"> Institut National De Sante Publique (INSP) is the main laboratory to send samples 	<ul style="list-style-type: none"> Paper certificate issue 	<ul style="list-style-type: none"> Approximately 16 km from BP to the facility 		



**BASELINE SURVEY ON STRENGTHENING INFECTIOUS DISEASES
COUNTERMEASURES AT BORDER CROSSING SITES IN EAC
MEMBER STATES (KENYA, UGANDA, TANZANIA, RWANDA,
BURUNDI, & SOUTH SUDAN)**

Proposed Data Collection Tools

April, 2021

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Interview Guides and Questionnaires on Strengthening Infectious Diseases Countermeasures at Border Crossing Sites for EAC Member States

Introduction

The East African Community (EAC) in conjunction with Japan International Cooperation Agency (JICA), are conducting an assessment for strengthening infectious diseases countermeasures at the border posts (BPs) among the member states. TA Networking Corp and Palme Research and Training Consultants were hired to assist with the assessment.

The purpose of the assessment is to identify the policy and regulatory gaps, infrastructure and capacity building needs to make recommendations for intervention and pilot activities.

We take this opportunity to thank you for agreeing to participate in the interview. Your participation is voluntary. Your identity will not be attached to your individual responses. Responses from the interviews will be analyzed in aggregate. Any quotes used in the report will be selected to ensure that no individual is identifiable from the quote.

The interview should take approximately one hour to complete. Do you have any questions before we begin?

Title	
Department	
Border Post	
Date	
Time Interview Started	
Time Interview Ended	
Name of Interviewer	

Key Informant Interview Questions

These questionnaire targets Policy Makers, National Task force and the EAC Secretariat

Part One: Interviewee's Background and Experiences

1. How long have you been....
..... in your current position?
..... at your Ministry / EAC Secretariat?

2. Could you give me a brief overview of what you do in your work?
.....
.....

Probes:

- Is the work focused on policy, implementation or coordination?
- Have you ever been involved in the development of COVID-19 policy counter measures and responses?
- If yes how so?
- How has your work been affected by the COVID-19 pandemic?

3. Could you describe some of the challenges that your department/ ministry has faced or is currently facing due to the COVID-19 pandemic?

Probes:

- The delicate balance between ensuring efficient movement of people and goods across the borders while protecting the countries from the spread of the virus?
- How have the challenges been addressed?

4. Why do you think your department/ ministry is facing the challenges that you have listed?

5. Does your job require you to work closely with other ministries or agencies? If yes which ministries?

Probes

- Has the COVID-19 pandemic and the responses to it affected the way you currently relate to the ministries or agencies?
- Are there existing platforms for coordination and sharing of knowledge and information across ministries / departments or agencies?

Part Two: Policies, Legislations and Regulations

1. Do you think there is good stakeholders' coordination, among the departments concerned with COVID-19 mitigation at the BPs or the partner states?

Probes:

- If yes, what has been the key success factors?
- If no, what have been the challenges?
- Whether yes or no, what are the lessons learnt in stakeholder's coordination?
- What would it take to ensure smooth coordination among the stakeholders?

2. Does your response to COVID-19 employ the principles of One Health?

Probes:

- If yes, what has been the key success factors?
- If not why not, what have been the challenges?

- What would it take to ensure smooth implementation of One Health principles among the stakeholders?

3. Which of these policies or COVID-19 counter measures do you find a challenge to implement at the BPs / member states?

1	Temporary suspension of cross-border movements	
2	Closure of BP	
3	Limitation of operating hours	
4	Restrictions of number of staff at the BP	
5	Development and implementing Covid-19 safety guidelines at the BP's	
6	Access to adequate PPE's,	
7	Establishment of health and sanitation facilities at the BP's,	
8	Changes in customs and BP crossing procedures	
9	acceptance of electronic BP crossing documents	

Probes

- Why do you find them a challenge to implement?
- What would it take for you to effectively implement them?

4. How are the COVID-19 policies communicated to all stakeholders, both public and private?

Probes

- What were the timeframes allowed before the policies were enacted?

5. Have you faced any other policy or legislation challenges since the COVID-19 pandemic started?

Probes:

- What are the areas of conflicts and inconsistencies with the current policies and regulations among EAC states?

6. Have the COVID 19 Countermeasures policies, practices and regulations been harmonized across the EAC states?

Probes:

- If yes, what have been the key success factors?
- If no, what have been the challenges? What would it take to harmonize them?
- Whether yes or no, what are the lessons learnt in harmonization and standardization of policies and practices across the EAC?

7. What role do you think COVID-19 vaccine could play in making our borders safe?

Probes:

- Would you recommend it as part of the policies to enable easy movement of people at the BPs?

Part Three: Border Point Infrastructure

1. Which of the following have been the main infrastructural challenges that you have faced at the border posts due to the COVID-19 pandemic?

1	Power source (Electricity, solar, generator)	
2	Equipment (refrigerator)	
3	Reliable and adequate source of water	
4	Adequate sanitation facilities	
5	Lack of a laboratory	
6	Inadequate laboratory supplies	
7	PPE's	
8	Lack of Isolation / quarantine facilities	

2. Among the infrastructural needs, that you have stated, which ones do you think are the top three priorities for your department in this BP?

Part Four: Capacity Building

1. What capacity building initiatives have you had in your department?
2. Did you have any trainings on the previous out breaks and what kind of capacities and training did you have
3. Have you had capacity building initiatives specifically targeting COVID-19 countermeasures at the BP?
4. Are there training needs or skills that you feel should be implemented in your department to make it more responsive to the pandemic?
5. Among the training needs, that you have stated, which ones do you think are the top three priorities for your department?

THE END

Thank You!

Border Post Managers / In-charges Questionnaire

The respondent should be in a senior managerial position at the border post (BP) to answer these questions.

Target: Policy Implementers

Introduction

The East African Community (EAC) in conjunction with Japan International Cooperation Agency (JICA), are conducting an assessment for strengthening infectious diseases countermeasures at the border posts (BPs) among the member states. TA Networking Corp and Palme Research and Training Consultants were hired to assist with the assessment.

The purpose of the assessment is to identify the policy and regulatory gaps, infrastructure and capacity building needs to make recommendations for intervention and pilot activities.

We take this opportunity to thank you for agreeing to participate in the interview. Your participation is completely voluntary. Your identity will not be attached to your individual responses. Responses from the interviews will be analyzed in aggregate. Any quotes used in the report will be selected to ensure that no individual is identifiable from the quote.

The interview should take approximately one hour to complete. Please respond to each of the following questions.

A. Basic BP Information

Question	Response
Name of Border Point	
Location (Country)	
Name of respondent	
Sex (respondent)	1. <input type="checkbox"/> Male 2. <input type="checkbox"/> Female
“Position” or “job title” of the respondent	
BP Open working hours	
Has there been a restriction of opening time in the past one year due to COVID-19 pandemic?	1. <input type="checkbox"/> No restriction 2. <input type="checkbox"/> Minor restrictions (changes in open gate time by 1-3 hours) 3. <input type="checkbox"/> Major restriction (changes in open gate time by 4 or more hours)
Number of passengers per month (please provide a copy of the datasheet)	1. 2018: 2. 2019: 3. 2020: 4. 2021:
Number of trucks/cargo per month (please provide a copy of the datasheet)	1. 2018: 2. 2019: 3. 2020: 4. 2021:
Has there been a restriction of the flow of cargo and passengers in the past one year due to COVID-19 pandemic?	1. <input type="checkbox"/> None 2. <input type="checkbox"/> Partial restriction 3. <input type="checkbox"/> Full restriction

B. BP Legislation, Administration, and Coordination for COVID-19 Prevention and Control (In this section, the respondent should provide documentary evidence for each section)

Question	Response
Is there a national plan for handling COVID-19 pandemic at this BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you think that the customs systems, procedures and processes have been harmonized enough to allow for smooth movement of goods and services during the COVID-19 pandemic?	1. <input type="checkbox"/> Strongly Agree 2. <input type="checkbox"/> Agree 3. <input type="checkbox"/> Neutral 4. <input type="checkbox"/> Disagree 5. <input type="checkbox"/> Strongly Disagree
Do the existing customs systems adequately support electronic submission of documents required for customs declarations to mitigate risks of human interactions?	1. <input type="checkbox"/> Strongly Agree 2. <input type="checkbox"/> Agree 3. <input type="checkbox"/> Neutral 4. <input type="checkbox"/> Disagree 5. <input type="checkbox"/> Strongly Disagree
Is there a BP-specific coordination mechanism to deal with the COVID-19 pandemic among the different ministries / department at the BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Have you had sensitization and capacity building activities for cross border traders who are vulnerable to COVID-19 in order to sustain their activities?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you have the capacity to conduct adequate online trainings to ensure institutional support for human capital development during the pandemic?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you have a contingency/back-up plan for COVID-19 in case you get overwhelmed?	
Are there guidelines or Standard Operating Procedures for COVID-19 in this BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If there are SOPs or guidelines, please list them	Title (s) of SOP or guidelines here...

C. Border Point Infrastructure: Water, Hygiene and Sanitation (Wash)

Question	Response
<p>What is the main source of water supply for the BP facility (tick one)</p> <p>Note (if there is more than one water source, the one most frequently used should be selected. If water is brought from home because water is not available in the facility, “no water source” should be selected. Photos may be useful, where possible)</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> Piped supply inside the building 2. <input type="checkbox"/> Tube well/borehole 3. <input type="checkbox"/> Protected dug well 4. <input type="checkbox"/> Unprotected dug well 5. <input type="checkbox"/> Protected spring 6. <input type="checkbox"/> Unprotected spring 7. <input type="checkbox"/> Rainwater tanker truck 8. <input type="checkbox"/> Surface water (river/dam/lake/pond) 9. <input type="checkbox"/> Other (specify) 10. <input type="checkbox"/> Don't know 11. <input type="checkbox"/> No water source
<p>Where is the main water supply located?</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> On premises 2. <input type="checkbox"/> Up-to 5km 3. <input type="checkbox"/> 5km or further
<p>Were the new hand washing station (s) purchased by the BP or donated by other organization?</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> donated 2. <input type="checkbox"/> purchased 3. <input type="checkbox"/> Other (specify) <p>...</p>
<p>What is the main source of power in this BP</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> Electricity from the main gridline 2. <input type="checkbox"/> Solar 3. <input type="checkbox"/> Generator 4. <input type="checkbox"/> Other (explain) <p>...</p>
<p>What are the transmitting hours for power / electricity in this BP?</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> 24hrs 2. <input type="checkbox"/> daytime only 3. <input type="checkbox"/> night only 4. <input type="checkbox"/> Other (explain) <p>...</p>
<p>Does the BP own a generator for backup when the main supply is unavailable?</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No 3. <input type="checkbox"/> Others (explain) <p>...</p>
<p>Does the BP provide free WIFI for the clients?</p>	<ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes

	2. <input type="checkbox"/> No
--	--------------------------------

D. Infection Prevention and Control (IPC): SOPs and Training at the Border Point

Questions	Response
Have the staff members received any training on IPC within the last one year?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
When was the last training done?	Date(s):
What type of training did they receive?	1. <input type="checkbox"/> general IPC 2. <input type="checkbox"/> COVID-19 IPC 3. <input type="checkbox"/> Ebola IPC 4. <input type="checkbox"/> Other (explain) ...
Who funded this training?	1. <input type="checkbox"/> BP 2. <input type="checkbox"/> government 3. <input type="checkbox"/> donor Name of donor... 1. <input type="checkbox"/> Other (explain) ...
How many staff were trained?	
Do you have any SOPs for IPC in this BP? (check documentary evidence for availability and implementation)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
How would rate the implementation of SOPs on IPC in this BP?	1. <input type="checkbox"/> not good 2. <input type="checkbox"/> fair 3. <input type="checkbox"/> good 4. <input type="checkbox"/> very good
How adequate is the current training/capacity level on IPC for the staff?	1. <input type="checkbox"/> adequate 2. <input type="checkbox"/> somewhat adequate 3. <input type="checkbox"/> inadequate 4. <input type="checkbox"/> very inadequate
How adequate is the current training/capacity level on IPC for the cleaning staff?	1. <input type="checkbox"/> adequate 2. <input type="checkbox"/> somewhat adequate

	3. <input type="checkbox"/> inadequate 4. <input type="checkbox"/> very inadequate
Are there adequate of cleaning equipment?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are there SOPs related to cleaning regimes?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If Yes, are the cleaning regimes and SOP's being implemented to the latter?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you think there are unmet training needs for the cleaning staff?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

E. IPC: Personal Protective Equipment

Question	Response
What types of PPE are available at the BP for IPC? (Check all that apply)	1. <input type="checkbox"/> full gown 2. <input type="checkbox"/> face masks 3. <input type="checkbox"/> hand gloves 4. <input type="checkbox"/> others (explain) ..
Are there guidelines for the use of PPE in terms of who uses what?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Have you ever experienced any stockouts or shortages of the supply of PPE in the past two months?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Have you distributed facemasks to BP clients over the past two months?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Have you experienced any challenges in the supply chain for PPE?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are there IPC rules such as compulsory wearing of face masks or prohibition of eating inside facility?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are there any plans or policies to reduce handling of cash or promote the use of mobile payments?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

Are there mental health/ psychological support systems for the frontline staff during the COVID-19 pandemic?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are the guidelines for waste management in this BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

The End

Thank You!

Border Post Port Health Department Questionnaire

The respondent should be incharge of Port Health Departments at the border post (BP) to answer these questions.

Target: Policy Implementers

Introduction

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The purpose of the assessment is to identify the policy and regulatory gaps, infrastructure and capacity building needs to make recommendations for intervention and pilot activities.

We take this opportunity to thank you for agreeing to participate in the interview. Your participation is completely voluntary. Your identity will not be attached to your individual responses. Responses from the interviews will be analyzed in aggregate. Any quotes used in the report will be selected to ensure that no individual is identifiable from the quote.

The interview should take approximately one hour to complete. Please respond to each of the following questions.

a. Basic BP information *(provide the required information or tick as appropriate)*

Question	Response
Name of Border Point	
Location (Country)	
Department/section	
Name of respondent	
Sex (respondent)	3. <input type="checkbox"/> Male 4. <input type="checkbox"/> Female
“Position” or “job title” of the respondent	
Respondent’s contact details	Mobile: Email:
Open working hours	
Has there been a restriction of opening time in the past one year due to COVID-19 pandemic?	4. <input type="checkbox"/> No restriction 5. <input type="checkbox"/> Minor restrictions (changes in open gate time by 1-3 hours) 6. <input type="checkbox"/> Major restriction (changes in open gate time by 4 or more hours)
Has this department/section/unit been closed since COVID-19 started?	1. <input type="checkbox"/> Never 2. <input type="checkbox"/> Partially 3. <input type="checkbox"/> Fully
Is there a staff backroom in this department?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

Is there a napping room or a rest room in this department?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If yes, does the napping/rest room have sleeping bed to accommodate the staff?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

- b. **Border Post Infrastructure at the Department Level (e.g. Water, Hygiene and Sanitation—WASH.** (The research assistant will ask for permission and assistance to complete the observational checklist including taking pictures where indicated)

Question	Response
Does the BP have port health services	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
<i>Give the number of staff for each of the following carders?</i>	
Medical officers (doctors)	
Clinical officers	
Nurses	
Public health officers/technicians	
Laboratory technologists	
Other categories (explain)	
Do you have SOPs/guidelines for COVID-19 prevention and management?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Have the staff members received any COVID-19 training since the pandemic started?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you have a criterion for screening suspected COVID-19 cases?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If yes, is it different from the national guidelines?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there a pre-screening form for COVID-19?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there a non-contact/ or facial biometric thermometer for temperature measurement?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

c. COVID-19 Testing

Question	Response
Is there a separate testing room for COVID-19 testing?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What type of test is used in this BP?	1. <input type="checkbox"/> Molecular test (RNA/PCR) 2. <input type="checkbox"/> Antigen test (rapid test) 3. <input type="checkbox"/> Antibody test (blood/serology) 4. <input type="checkbox"/> Other (explain) ...
What is the cost of a COVID-19 test?	1. <input type="checkbox"/> None 2. <input type="checkbox"/> State the amount in local currency here
Is a laboratory available on the premise?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is the laboratory permanent, mobile, temporary, or donated? (tick where appropriate)	1. <input type="checkbox"/> Permanent 2. <input type="checkbox"/> Mobile 3. <input type="checkbox"/> Temporary 4. <input type="checkbox"/> Donated
What is the average turnaround time between sample collection and obtaining of the results?	1. <input type="checkbox"/> Same day 2. <input type="checkbox"/> 1 day 3. <input type="checkbox"/> 2-3 days 4. <input type="checkbox"/> More than 3 days
Is it possible to access the test results online?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What is the name of the main laboratory dealing with COVID-19 samples?	
How many samples can this laboratory handle in a day?	
When are the samples sent the laboratory?	1. <input type="checkbox"/> Within 2hrs 2. <input type="checkbox"/> After 2-6hrs 3. <input type="checkbox"/> After 12 hrs. but within a day (daily) 4. After every 2-3 days 5. <input type="checkbox"/> Others (explain)

	...
How are the samples sent to the laboratory?	1. <input type="checkbox"/> Private means arranged by the BP 2. <input type="checkbox"/> Private means arranged by the laboratory 3. <input type="checkbox"/> Public means 4. <input type="checkbox"/> Other (explain)
Method of reporting to the national database	1. <input type="checkbox"/> Courier 2. <input type="checkbox"/> Email 3. <input type="checkbox"/> Telephone 4. <input type="checkbox"/> Other (explain) ...
Types of certificates issued after testing	1. <input type="checkbox"/> Digital 2. <input type="checkbox"/> Paper 3. <input type="checkbox"/> Other (explain) ...
Does this BP use the Regional Electronic Cargo and Driver Tracking System (RECDTS)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

d. Isolation/referral for COVID-19 suspected or confirmed cases

Question	Response
Is there an isolation/quarantine room available in this BP for suspected or confirmed COVID-19 patients?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there a provision for meals for those who have been isolated?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No 3. <input type="checkbox"/> Other (explain)
Is there a provision for regular cleaning of the isolation facility?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you have adequate space and the required items for isolation?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Do you have a referral system for COVID-19 cases from the BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If yes, please provide the name of the health facility	

Level of referral facility?	1. <input type="checkbox"/> Level 1: community facility 2. <input type="checkbox"/> Level 2: Health dispensary 3. <input type="checkbox"/> Level 3: Health centres 4. <input type="checkbox"/> Level 4: County hospitals 5. <input type="checkbox"/> Level 5: County referral hospitals 6. <input type="checkbox"/> Level 6: National referral hospitals 7. <input type="checkbox"/> Other (explain) ..
Is the referral facility public or private?	1. <input type="checkbox"/> Public 2. <input type="checkbox"/> Private 3. <input type="checkbox"/> Other (explain) ..
What is the approximate distance in KM of this facility from the BP?	
Number of beds in the referral facility?	
Number of ICU beds in the referral facility?	
How many COVID-19 tests are performed by the referral facility per day?	
Do they offer COVID-19 treatment?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What means of transport is usually available for the referrals?	1. <input type="checkbox"/> BP vehicle 2. <input type="checkbox"/> Ambulance 3. <input type="checkbox"/> Taxi 4. <input type="checkbox"/> Others (explain) ...
How many COVID-19 positive cases have been referred in the past one month?	
Is there a follow-up system put in place by the BP for the referred patients?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there contact tracing within the BP area currently?	2. <input type="checkbox"/> Yes 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Other (explain) ...

Thank You!

Observation Checklist for the Research Assistants

This information will be completed by the research assistant during their visits to the selected departments. After issuing the questionnaire, please request to visit the WASH facilities serving each department to complete this checklist (please tick and take pictures/photos where indicated).

A. Basic BP information (Fill the Required Information)

Question	Response
Name of Border Point	
Location (Country)	
Name of respondent	
Department/section/unit	
Observer's contact details	Mobile: Email:

B. BP Infrastructure (Water, Hygiene and Sanitation).

Was water available from the main water supply at the time of the survey? (check the taps or hand pumps have water)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
How many of water taps were available inside toilets?	
Are all taps working properly?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are the taps automatic or manual?	1. <input type="checkbox"/> automatic 2. <input type="checkbox"/> manual
Portable handwashing station present?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What type of toilets/latrines are at the facility for the public	1. <input type="checkbox"/> Flush/pour-flush toilet to sewer connection 2. <input type="checkbox"/> Flush/pour-flush toilet to tank or pit 3. <input type="checkbox"/> Pit latrine with slab 4. <input type="checkbox"/> Composting toilet 5. <input type="checkbox"/> Flush/pour flush toilet to open drain 6. <input type="checkbox"/> Pit latrine without slab/open pit 7. <input type="checkbox"/> Bucket 8. <input type="checkbox"/> Hanging toilet/latrine 9. <input type="checkbox"/> No toilet/latrine 10. <input type="checkbox"/> Other (specify)
Is at least one toilet usable (available, functional, private)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

Does the BP have a cafeteria, an eating area or kitchen for the staff or customers?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is the floor space large enough to accommodate the number of BP users and keep physical distance?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there a waiting room for passengers/drivers?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
If Yes, Is the floor space of the cafeteria/eating room/kitchen large enough to accommodate the number of BP users and keep physical distance?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

C. Infection, Prevention, and Control (IPC) measures

Availability of cleaning equipment?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Availability of SOPs related with to cleaning?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Proper use of PPE by cleaning staff?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Frequency of cleaning per day (ask the cleaner)	
Is there a non-contact/ or facial biometric thermometer for temperature measurement at the main entry point?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Disinfection of trucks taking place?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Presence of disinfectant (observe the entry points)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are there clear signs or voice guides to give direction at the BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there sufficient indoor ventilation (observe)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Are there signs for physical/social distancing on the floors or benches? (observe)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Is there a barrier at the counter where service delivery takes place? (observe)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

Are the guidelines for waste management in this BP? (Observe waste management options—take pictures)	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
--	---

D. Information Education and Communication (IEC) Materials (check and take pictures for each)

Question	Response
Are IEC materials available at the BP?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What types of IEC materials are available?	1. <input type="checkbox"/> posters 2. <input type="checkbox"/> flyers 3. <input type="checkbox"/> brochures 4. <input type="checkbox"/> social media posts 5. <input type="checkbox"/> tv/radio adverts 6. <input type="checkbox"/> Other (explain) ...
Are these IEC materials visible?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
Where are the IEC materials located?	1. <input type="checkbox"/> Main entry notice board 2. <input type="checkbox"/> lounges 3. <input type="checkbox"/> waiting bays 4. <input type="checkbox"/> Other (explain) ...
Appropriate design in terms of the mix between visuals/drawings and words?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
What is the language of the IEC materials?	1. <input type="checkbox"/> English 2. <input type="checkbox"/> Swahili 3. <input type="checkbox"/> French 4. <input type="checkbox"/> Arabic 5. <input type="checkbox"/> Other (explain) ..
Assess whether the messages are appropriate or relevant?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

The End

Thank You !

Border Post Individuals on Transit Questionnaire

The respondent should be truck drivers, transporters or passenger at the border post (BP) to answer these questions.

Target: Policy Compliers

Introduction

The East African Community in conjunction with Japan International Cooperation Agency, are conducting an assessment for strengthening infectious diseases countermeasures at the border crossing sites among the member states. TA Networking Corp and Palme Research and Training Consultants were hired to assist with the assessment.

The purpose of the assessment is to identify the policy and regulatory gaps, infrastructure and capacity building needs to make recommendations for intervention and pilot activities.

We take this opportunity to thank you for agreeing to participate in the interview. Your participation is completely voluntary. Your identity will not be attached to your individual responses. Responses from the interviews will be analyzed in aggregate. Any quotes used in the report will be selected to ensure that no individual is identifiable from the quote.

The interview should take approximately one hour to complete. Please respond to each of the following questions.

Please respond to each of the following questions truthfully and to the best of your ability. Your participation is important to help us take precautionary measures to protect you, other travelers and community.

Note: Any information you will provide shall remain confidential

Name of current Border Point	
Location (Country)	
Name of Interviewee	
Sex (Interviewee)-Tick as appropriate	1= Male <input type="checkbox"/> 2= Female <input type="checkbox"/>
Age category (Tick as appropriate)	1. 18-25 <input type="checkbox"/> 2. 26-33 <input type="checkbox"/> 3. 31-35 <input type="checkbox"/> 4. 36-43 <input type="checkbox"/> 5. 44-51 <input type="checkbox"/> 6. 52-59 <input type="checkbox"/> 7. 60 and above <input type="checkbox"/>
Current body temperature	
Phone number (Mobile/Home)	
Border Point of departure	
Location (Country)	
Final destination point	

KNOWLEDGE	
.	Mention any symptoms of COVID-19 that you are aware of. 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____
	How can you prevent yourself from acquiring COVID-19? 1. _____ 2. _____ 3. _____ 4. _____
ATTITUDE	

.	<p>Do you agree with this statement? "I have control over whether I will get COVID-19." 1. <input type="checkbox"/>Yes 2. <input type="checkbox"/>No</p>
PREVENTION PRACTICES	
	<p>When do you wear a mask? 1. All the time <input type="checkbox"/> 2. when going out <input type="checkbox"/> 3. When talking <input type="checkbox"/> 4. On re occasion <input type="checkbox"/> 5. Never <input type="checkbox"/></p>
.	<p>How do you ensure hand sanitization? 1. Hand washing using water <input type="checkbox"/> 2. Hand washing using soap and water <input type="checkbox"/> 3. using sanitizer <input type="checkbox"/> 4. Others <input type="checkbox"/> Please specify _____</p>
SUGGESTIONS	
	<p>Any other suggestions of what you would like us to consider to get through the COVID -19 situation 1. _____</p>
	<p>What other information should be provided to the public about COVID-19, travel restrictions and border control measures? 1. _____</p>

The End

Thank you !

Border Post Community Questionnaire

The respondent should be members of the neighboring BP Communities at the border post (BP) to answer these questions.

Target: Policy Compliers

Introduction

The East African Community in conjunction with Japan International Cooperation Agency, are conducting an assessment for strengthening infectious diseases countermeasures at the border crossing sites among the member states. TA Networking Corp and Palme Research and Training Consultants were hired to assist with the assessment.

The purpose of the assessment is to identify the policy and regulatory gaps, infrastructure and capacity building needs to make recommendations for intervention and pilot activities.

We take this opportunity to thank you for agreeing to participate in the interview. Your participation is completely voluntary. Your identity will not be attached to your individual responses. Responses from the interviews will be analyzed in aggregate. Any quotes used in the report will be selected to ensure that no individual is identifiable from the quote.

The interview should take approximately one hour to complete. Please respond to each of the following questions.

Please respond to each of the following questions truthfully and to the best of your ability. Your participation is important to help us take precautionary measures to protect you, other travelers and community.

KNOWLEDGE, ATTITUDE AND PARACTICE ON COVID-19 AT COMMUNITY LEVEL	
Name Initials: _____	
DEMOGRAPHIC INFORMATION	
What is your occupation?	1. <input type="checkbox"/> Housewife 2. <input type="checkbox"/> Farmer 3. <input type="checkbox"/> Civil Servant 4. <input type="checkbox"/> Student 5. <input type="checkbox"/> Health Care Worker 6. <input type="checkbox"/> Others (specify)
COVID-19 KNOWLEDGE	
What are the symptoms of COVID-19?	Choose all that are correct: 1. Cough 2. Fever 3. Loss of taste 4. Loss of smell 5. Shortness of breath 6. Sore throat 7. Runny nose 8. Headache 9. Fatigue 10. Muscle/body ache 11. Diarrhea
True or False: A person infected with COVID-19 who does not show symptoms cannot spread the coronavirus.	1. True 2. False

	What is the source of information on COVID-19?	1. <input type="checkbox"/> Radio 2. <input type="checkbox"/> Health Care Workers <input type="checkbox"/> Friends/Relatives 3. <input type="checkbox"/> Television 4. <input type="checkbox"/> Social Media 5. <input type="checkbox"/> Others (specify)
PRACTICE		
	Out of 10 people in your community, how many do you think do wear a face mask or covering when they go out in public?	1. Avoid close contact with anyone who has a fever or cough 2. Wearing face masks 3. Staying at least 1 meter away from other people 4. Washing hands regularly 5. Avoid touching face 6. Taking herbal supplements 7. Others
	How do you wash your hand?	1. <input type="checkbox"/> With water 2. <input type="checkbox"/> With water and soap 3. <input type="checkbox"/> With disinfectant
	Out of 10 people in your community, how many do you think do wear a face mask or covering when they go out in public?	
	Out of 10 people in your community, how many do you think do maintain a distance of at least 1 meter from others when they go out in public?	
	Do you cover your mouth when coughing/sneezing?	1. <input type="checkbox"/> Always 2. <input type="checkbox"/> Often 3. <input type="checkbox"/> Sometimes 4. <input type="checkbox"/> Rarely 5. <input type="checkbox"/> Never
	How often do you use face masks?	1. <input type="checkbox"/> Always 2. <input type="checkbox"/> Often 3. <input type="checkbox"/> Sometimes 4. <input type="checkbox"/> Rarely 5. <input type="checkbox"/> Never
ATTITUDE		
	Would you accept a COVID-19 vaccine if available?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No 3. <input type="checkbox"/> I don't know
	If you would not accept COVID-19 vaccine; what would be your reasons?	
	Do you agree with this statement? "I have control over whether I will get COVID-19." Yes/No	
Other		
	What aspects do you suggest border posts to improve the COVID-19 measures and services?	

The End

Thank you!

Appendix 6 - Materials in Pilot Activities

Appendix 6.1_Kenya Handwashing Station Operation and Maintenance Manual -----	page A6-2
Appendix 6.2_Rwanda E-Learning Module 1 & 2-----	page A6-6
Appendix 6.3_Rwanda Handwashing Signs (Rusumo BP)-----	page A6-23
Appendix 6.4_Uganda Action Plans (Psychosocial Support Workshop at Elegu BP)-----	page A6-24
Appendix 6.5_Uganda Training Materials (Psychosocial Skills for COVID-19 Responders)-----	page A6-26

The Project for Regional Data Collection Survey and Piloting of Proposed Activities aimed for the Prevention of Infectious Diseases at Border Posts in the EAC, Kenya

Handwashing Stations Operation and Maintenance (O&M) Manual

Preamble: This short document was prepared to support the Border Post (BP) staff and managers including the Port Health Officers, the Maintenance Department of the BPs and the Border Management Committees (The BMC) to help maintain the newly procured installed handwashing stations.

Depending on the specific needs of each BP, a 4-trough Knee-Press sink, 2 soap dispensers, a water tank, and the supporting pipe conveyance has been installed to support the handwashing stations.

We understand that depending on the situation, each BP might have its arrangements with regards to the operation and maintenance of its handwashing facilities. Therefore, this document acts as a general guideline to ensure that the newly handwashing stations remain operational to prevent the transmission of infectious agents including COVID-19.

Warranty for the knee press sinks: These handwashing stations have a one-year warranty as provided by the manufacturer, Sheffield Africa steel company (<https://sheffieldafrica.com/>). Inspection of the sinks was done by the installation company to ensure no flaws at the point of production. However, should there be any issues, please directly contact the installation company via the email: abugajn@gmail.com for corrective measures.

Purpose: As part of the handover of the handwashing stations to the selected BPs, we have prepared operation and maintenance guidelines to ensure a sustainable operation of the handwashing facilities in the BPs.

Why these guidelines are required: It is critical that all the handwashing facilities are kept fully operational and clean to reduce the transmission of disease-causing pathogens including COVID-19 viruses. Poorly maintained or dirty handwashing facilities will deter people from washing their hands, and therefore, become the epicentre in transmitting various infectious agents including the COVID-19 viruses.

Responsibilities: Operation and maintenance (O & M) will be carried out by the Port Health and Maintenance Departments with support from the Border Management Committee (BMC). We strongly recommend regular consultation and collaboration between these departments for the sustainable use of the newly installed handwashing facilities.

We have separated the recommendations on responsibilities for operation and maintenance into task charts and checklists for ease of interpretation of the expectations both from the managers and for those duties of operation and management will be delegated.

A Task Chart of responsibilities for Operation and Maintenance of the Handwashing Stations

Management arrangements		
1.	Border Management committee	a. Provide water for the handwashing stations.
2.	Port Health Department	a. Ensure that liquid soap is regularly refilled in the soap dispensers by the designated cleaners/cleaning agencies. b. Training and supervision of cleaning and disinfection of the handwashing stations. c. Find somebody to clean and maintain the handwashing facility when the designated cleaner/cleaning agency is on leave. d. Estimate soap and water usage per month so that the ministry of health /BMC can budget accordingly. (Ideally, O & M costs for the handwashing stations should be integrated into the existing framework of services) e. Sign off the cleaning schedules/rotas. f. Collect user feedback to help inform future improvements to the design, accessibility, and usability of the handwashing stations. g. Liaison with the BMC and maintenance departments for repairs and maintenance.
3.	Cleaning agency/cleaners employed by the port.	a. Refilling of soap b. Cleaning and disinfection of the handwashing stations. c. Sign the duty rota/schedule after cleaning, disinfection or refilling with soap dispenser.
4.	Port Maintenance Department	a. Plumbing repairs for the tank and piping system which has been installed.

Checklist for routine inspection of the handwashing station (SOP guideline to be kept at the wall)

Part of the system	What to inspect/corrective action	Frequency	Who to inspect and initiate corrective measure
Knee-press sink	Presence of water	Twice a day, for example, check in the morning and afternoon	Designated cleaner/cleaning company
	General hygiene conditions and cleaning	Daily preferably in the morning	Designated cleaner/cleaning company
	Knee-lever working properly	Daily preferably in the morning	Designated cleaner/cleaning company
	Wastewater draining into waste pipe	Twice a day, for example, check in the morning and afternoon	Designated cleaner/cleaning company
	Disinfection of all surfaces using 0.1% (1,000ppm) chlorine solution for all surfaces	Mondays, Wednesday, Fridays & Sundays	Designated cleaner/cleaning company
Soap dispensers	Working properly	Once a day	Designated cleaner/cleaning company
	Refill soap	Once a day	Designated cleaner/cleaning company
Water tank	Tank inlet and outlet ok	Once a week on Mondays	Port Maintenance Department
Plumbing system	No leakage of water along piping between tank and the knee-press troughs	Check every Mondays	Port Maintenance Department



Module 1

Detecting public health threats at Points of Entry

OVERVIEW



Learning Objectives

At the end of this module participants will be able to:

- Describe the roles of agents working at points of entry (POE) to avert public health threats.
- Apply the appropriate methods for detecting public health threats at ports of entry

OVERVIEW



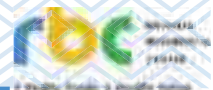
Target Audience

Personnel with direct contact with the travelers at Point of Entry, including, but not limited to:

- Immigration staff
- Customs agents
- POE security
- Ground handlers
- Clearing agents

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Key roles in protecting the health of people at POE



- Identify potential public health threats
- Notify Port Health of potential public health events
- Collect and share information
- Distribute health information

It is everyone's responsibility to **RECOGNIZE** and **ISOLATE** an ill traveler, and **NOTIFY** and **GIVE SUPPORT** to Port Health.

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Detecting public health threats at POE



RECOGNIZE:

Look for, listen for, ask about



FEVER*

AND



ONE or more of the following conditions:

- Continuous coughing
- Difficulty breathing
- Continuous diarrhea
- Continuous vomiting
- Skin rash
- New unusual bruising or bleeding (not from injury)
- Confused mental state
- Looking obviously unwell

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Detecting public health threats at POE



Confused mental state



Fever



Continuous coughing

RECOGNIZE:

+Ve Signs and symptoms



Continuous vomiting



Continuous diarrhea



New unusual bruising or bleeding (not from injury)



Skin rash

Detecting public health threats at POE



RECOGNIZE:

Fever

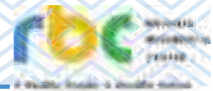


- Shivering
- Sweating a lot
- Wearing abnormally warm clothing
- History of feeling hot and having taken medication to prevent fever

Fever is a common symptom for many infectious diseases (Ebola and other hemorrhagic fevers, influenza, measles, meningitis, SARS-CoV-2 (COVID-19), etc.)

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Detecting public health threats at POE



RECOGNIZE:

Continuous Coughing

- Frequent and severe enough to catch attention of port health officials or another person

Continuous cough may indicate pertussis (whooping cough), tuberculosis, pneumonia, influenza, SARS-CoV-2 (COVID-19), etc.



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Detecting public health threats at POE



RECOGNIZE: Difficulty Breathing



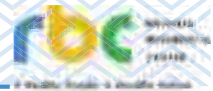
- May be gasping for air
- Unable to “catch” their breath
- Feels “short of breath”
- Breathing too fast or too slow



Difficulty breathing may indicate pneumonia, diphtheria, influenza or SARS-CoV-2 (COVID-19),

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Detecting public health threats at POE



RECOGNIZE: Continuous Diarrhea

- If diarrhea is frequent and severe enough that the employee or another person notices (for example, a person has been to the toilet numerous times)

- Continuous diarrhea may indicate the person has a foodborne or waterborne infection such as cholera*
- Diarrhea is also a common symptom of viral hemorrhagic fevers such as Ebola*



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Detecting public health threats at POE



RECOGNIZE: Continuous vomiting

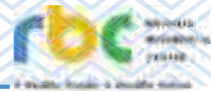


- Anyone who has vomited two or more times (not due to airsickness) or expresses concern to either the employee or others

- Continuous vomiting may indicate the person has a foodborne or waterborne infection, such as cholera
- Vomiting is also a common symptoms of viral hemorrhagic fevers such as Ebola

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Detecting public health threats at POE



RECOGNIZE: Skin rash

- Abnormal areas on the skin that are often red or pink
- Rash may be flat, raised, blister-like, and/or crusted
- Rash may consist of separate spots, or it may run together; it may include one area of the body, such as the face, or more than one area

Examples of diseases that cause fever and rash include measles, rubella (German measles), and varicella (chickenpox)



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Detecting public health threats at POE



RECOGNIZE: New unusual bruising or bleeding

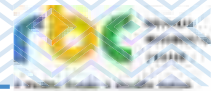


Noticeable and unusual bruising or bleeding from the gums, ears, nose, or areas on the skin for which there is no obvious explanation

Bruising or bleeding, especially in the presence of fever, may indicate that the person has a hemorrhagic fever, such as Ebola

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Detecting public health threats at POE



RECOGNIZE: Confused mental state



- Not aware of surroundings
- Does not respond normally to questions or painful stimuli
- May appear to be sleepy or groggy or confused about who they are, where they are going, or the time of day or week

Confusion may indicate meningitis or a serious infection in another body system

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Detecting public health threats at POE



RECOGNIZE: Observations and/or questions to consider

Observations

- You notice a person who seems unwell
- You notice a person who appears to have a flushed face
- You notice a person who is coughing continuously

Sir. For how long have you had a cough

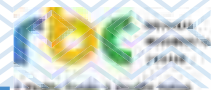


Questions

- How are you feeling?
- How long have you felt sick?
- Do you feel feverish?

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QUIZ



Potentially ILL traveler

An immigration officer is processing a traveler in customs. He notices that the traveler has a cough and breathing difficulty .

What questions should the officer ask?

Choose True or Falls for each of the following questions:

- 1 How are you feeling? (T)
- 2 Do you have Tuberculosis? (F)
- 3 How long have you felt sick? (T)
- 4 Are you on medication? (T)

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QUIZ



Why should the immigration officer processing a traveler in customs ask these questions?

Choose True or false for each of the following responses

- 1 To identify potential public health threats (T)
- 2 To be able to notify Port Health of potential public health events (T)
- 3 To provide medical advice (F)
- 4 To collect and share information about the traveler (T)

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Ministry of Health



Module 2

Responding to public health threats at Points of Entry

OVERVIEW



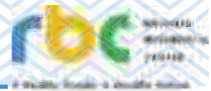
Learning Objectives

At the end of this module participants will be able to:

- Describe the roles of agents working at Points of Entry (POE) to avert public health threats.
- Apply the appropriate methods for responding to public health threats at ports of entry

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OVERVIEW



Target Audience

Personnel with direct contact with the travelers at POE, including, but not limited to:

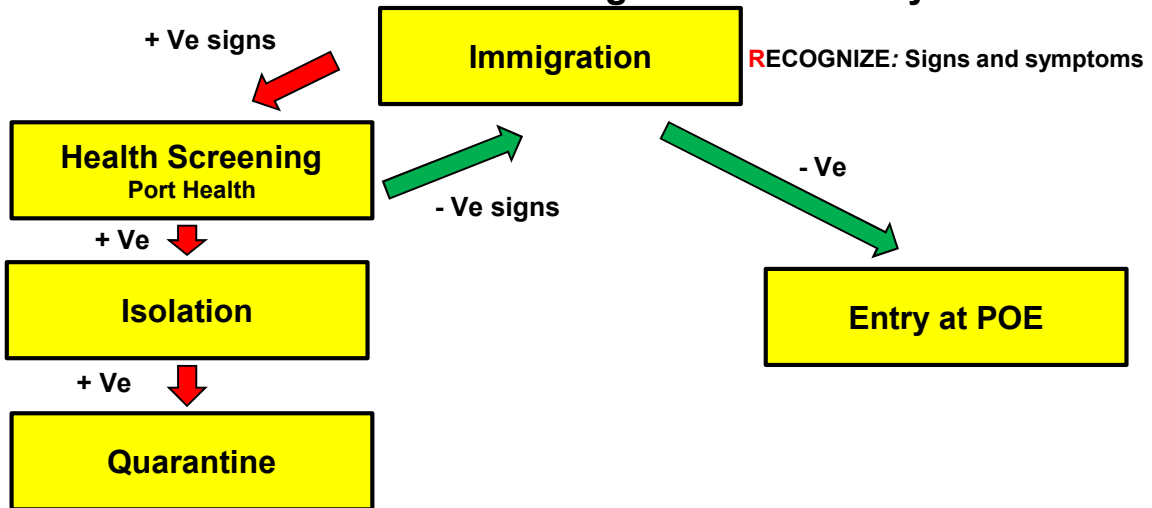
- Immigration staff
- Customs agents
- POE security
- Ground handlers
- Clearing agents

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Responding to public health threats at POE

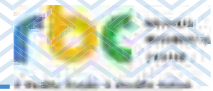


Routine Health Screening at Ports of Entry

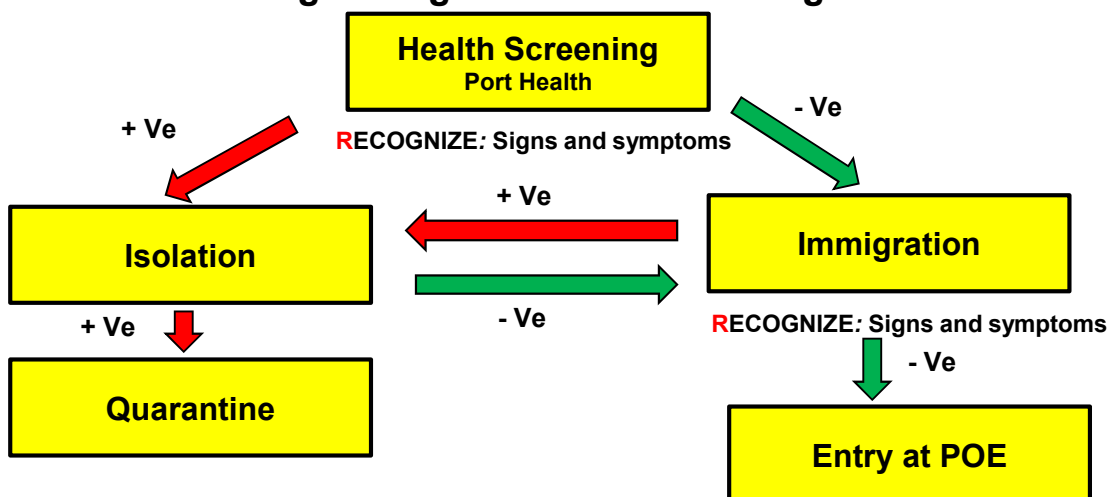


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Responding to public health threats at POE



Screening During Public Health Emergencies



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Responding to public health threats at POE



ISOLATE if screening is +Ve

Separate

At least 2 meters from others OR in an empty room

- Provide a surgical mask (if available), or tissue, or ask the person to cover their nose and mouth if the person looks ill and:
 - Is coughing or sneezing
 - Has a rash



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Responding to public health threats at POE



ISOLATE

Information

- Provide information to patients and their family about the need for isolation, and address patients' and families' concerns.

Infection prevention and control

- Frequently touched surfaces in the isolation area need to be cleaned by personnel wearing appropriate Personal Protective Equipment (PPE).
- Cleaning should be done with regular household soap or detergent containing 0.5% sodium hypochlorite.



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Responding to public health threats at POE



ISOLATE

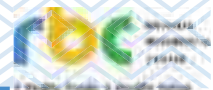
Not the same as quarantine!

Isolation and quarantine are public health practices used to stop or limit the spread of disease.

- **Isolation:** Separating sick people with a contagious disease away from people who are not sick
In your role, this may just mean asking the person to remain in a less crowded area
- **Quarantine:** Separating and restricting the movement of people who were exposed to contagious disease to see if they become sick
This is beyond your role at POE

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Responding to public health threats at POE



ALWAYS REMEMBER
TO
PRACTICE HAND
HYGIENE!!!!



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Responding to public health threats at POE



Verify Entry Screening Forms



Entry Screening Form Entering Rwanda

Point of Entry: _____ Date of Interview (DD/MM/YYYY): _____

Reason(s) Referred for Secondary Screening: Fever, signs and/or symptoms Exposure

SECTION I. TRAVELER INFORMATION

Family name: _____ First name: _____

Other name(s): _____

Age: _____ Date of Birth: _____ (DD/MM/YYYY) Gender: Male Female

Passport Country: _____ (If Passport #: _____ Phone: _____

Email: _____ Profession: _____

Country of Residence: _____ SSN (if): _____ Village/Town: _____

Place of Residence (if not in SSN & work): _____

Disease (if not under control): _____

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Responding to public health threats at POE



NOTIFY

- Port Health
- Immediate supervisor
- Other relevant stakeholders at point of entry

Provide ill person's:

- Signs and symptoms
- Any information about potential contacts (other individuals in traveling party who may have been exposed)
- Other relevant information you received

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QUIZ



NOTIFY: Which situation should be reported to Port Health?

- A drunk traveler who vomits



- Traveler suffering from continuous diarrhea



- Airport worker suffering from a fever and cough



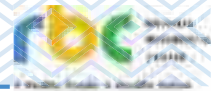
- A pregnant woman who is vomiting

(T)



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QUIZ



GIVE SUPPORT: Which situation should be reported to Port Health?

Choose True or falls for each of the following responses

- There may be other tasks you can perform to help Port Health during a potential disease threat (T)
- Port Health or other agencies may ask for your assistance (T)
- There maybe instances where you need to quarantine suspected cases (F)
- There maybe instances where you might need to communicate with relevant stakeholders at point of entry (T)

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Responding to public health threats at POE



GIVE SUPPORT:

Examples of support during a public health event

- Gather information from ill person
- Separate ill person from others
- Provide security assistance
- Distribute or collect health forms/information

Additional information may be requested from law enforcement, airline, or shipping agencies to assess whether to take steps to:

- *Prevent further travel*
- *Contact those who were potentially exposed*

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END

www.rbc.gov.rw

References



1. International Health Regulations (2005) Third Edition: World Health Organization; International Health Regulations (2005) Third Edition (who.int)
2. Standard Operating Procedures for preparedness and response to Covid-19 (rbc.gov.rw)
3. Management of ill travellers at points of entry – international airports, ports and ground crossings – in the context of the COVID-19 outbreak: Travel advice (who.int)
4. Standard Operating Procedures for management of humanitarian volunteers/Staff and Other Health Care Workers from Ebola affected areas in DRC, entering Rwanda
5. Global Handwashing Day: What it is and why it's important | One Drop Foundation
6. Connolly, Máire A & World Health Organization. (2005). Communicable disease control in emergencies: a field manual. World Health Organization. <https://apps.who.int/iris/handle/10665/96340> January 26, 2022
7. Communicable disease toolkit 20005: Microsoft Word - 0_NIGER CDprofile_FINAL_October.doc (who.int)
8. Harmonized Sub-Regional Essential Infection Prevention and Control (IPC) services at Points of Entry and within-country IPC Interventions for Transnational Truck Drivers within East African Community
9. WHO Guide to Ship Sanitation for Ships
10. WHO Guide to Aircraft Sanitation

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IRINDE INDWARA ZITERWA N'UMWANDA
Karaba intoki n'amazi meza n'isabune

JILINDE MAGONJWA YANAYO SABABISHWA NA UCHAFU
Nawa mikono kwa kutumia maji safi na sabuni

PROTECT YOURSELF FROM POOR HYIEGENE BORN DISEASES
Clean your hands with a soap and clean water

- | | | | | |
|---|--|--|--|---|
|  <p>1 Tosa ibiganza
1 Weka maji kwenye mikono
1 Wet your hands</p> |  <p>2 Bisige neza isabune
2 Peka sabuni
2 Apply enough soap on your hands</p> |  <p>3 *Kuba intoki hamwe
*Oza inyuma y ibiganga
*Oza hagati y'intoki no hagati mu nzara
3 *Sugurwa mikono
*Ulosha nyuma ya kiganja
*Safisha vizuri katikati ya vidole na kucha
3 *Rub your hands palm to palm
*Clean backs of your fingers
*Interlace your fingers and clean in between</p> |  <p>4 Iyonyuguze n'amazi meza
4 Suuza kwa maji safi
4 Rinse your hands with clean water</p> |  <p>5 Umutsa mu muyaga
5 Kausha mikono na upepo
5 Dry your hands i n air</p> |
|---|--|--|--|---|

Appendix 6-4

During the Psychosocial Support training 3 December 2021, representatives of each department at Elegu BP gathered and created action plans. Below is a compilation of these proposed action plans.

Proposed action	Department Name	Why it is important	Responsible person (position)	Who should be involved (stakeholders)	Resources needed	Timeline					Expected output
						1	2	3	4	5+	
Working in two shifts continuously	Immigration & Customs	-Reduces stress -Increase productivity -Spare enough time to maintain the family bond	Station Heads and deputies	Security, Clearing agents, Port health, Ministry of East African Community Affairs, Ministry of Agriculture and Animal Fisheries, local community	Financial continuity to fund working in shifts Human resource to maintain current shifts	x	x	x	x	x	Increased performance and productivity Maintained stress levels and well-being
Promote physical exercises like jogging as a team for 3 times a week	Cross Border Traders	Relieves stress, sound sleep, good mood, good physical and mental health, physical fitness Avoid diseases such as high blood pressure and heart diseases	Chairperson Truck Drivers	Local Council 1 leader EASSI, INVESCO Uganda Ltd, EAC	Canvass Shoes, gym attires, water bottles, drinks (e.g. water), fruits, exercise mats	x	x	x	x	x	Good health Productive team Improved well-being Reduced stress level
Recruit a full-time psychosocial support staff at Elegu Border	Port Health	To address PSS challenges & initiate support for the mental	In-charge Port Health	Customs, Immigration, JICA, District, Other IPS, other agencies, and clients at the border	Financial, Human resources, Working tools (computer and	x					Stress management Conflict mitigation

Appendix 6-4

Promote peer counseling		health of Elegu BP staff Promotes inter-department cooperation, relieves stress & increases work output	Heads of Department	All border agencies	clients at the border) Time, Human resources, hall, partner support		x	x	x	x	Hold regular team building activities and improve workflow at OSPB
Establish counselling structure Promote games and Sports Create awareness on Psychosocial support	Security	To relieve stress Unites the team (team spirit) Promotes good health	Commanders Medical in charge Political Commissar/PRO	Port Health, Community, Security, JICA & BSH	Resource centre (Furniture & shelter, Counsellors, Training kits/Gym Finance for fuel	x	x	x	x	x	Relieving stress, improved productivity at work, improved health and unity



Psychosocial Skills for COVID-19 Responders

Regional Data Collection Survey and Piloting of
Proposed Activities aimed for the Prevention of
Infectious Disease at Border Posts (BPs) in the EAC

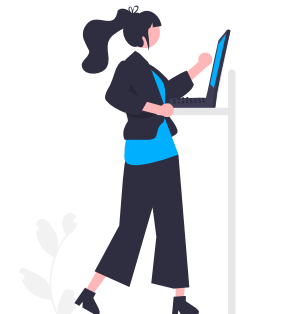
December 2021

@ Elegu BP



Outline of the session

1. Definitions
2. Common signs of and reactions to stress
3. Stressors for COVID-19 responders
4. Potential consequences of stress
5. Helping frontline workers cope with stress
6. Action planning



Objectives of the session

At the end of this session, participants will be able to understand how to:

- Cope with stress during the COVID-19 pandemic
- Provide peer support for workers experiencing stress
- Promote collective actions to enhance psychosocial support



Icebreaking

Q. Any changes to your workplace?

Q. Facing new challenges or demands?



Definition

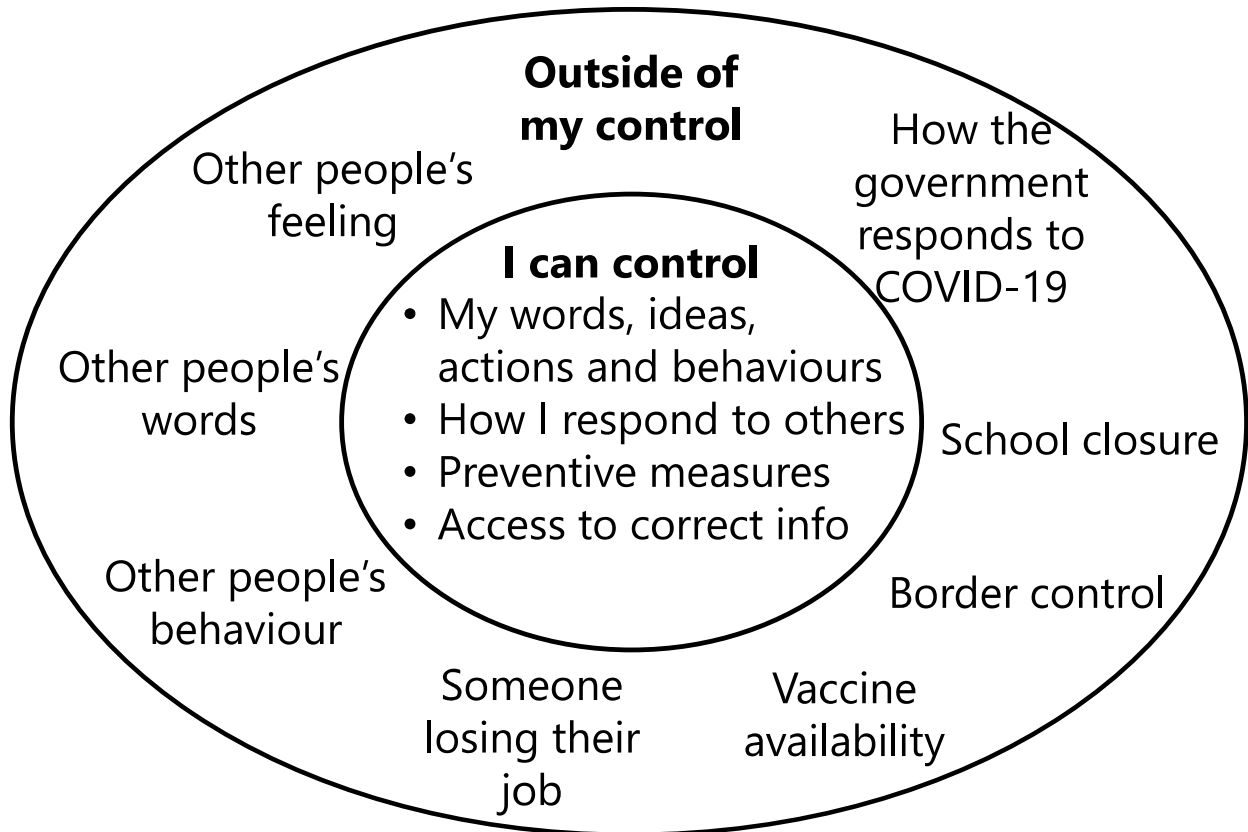
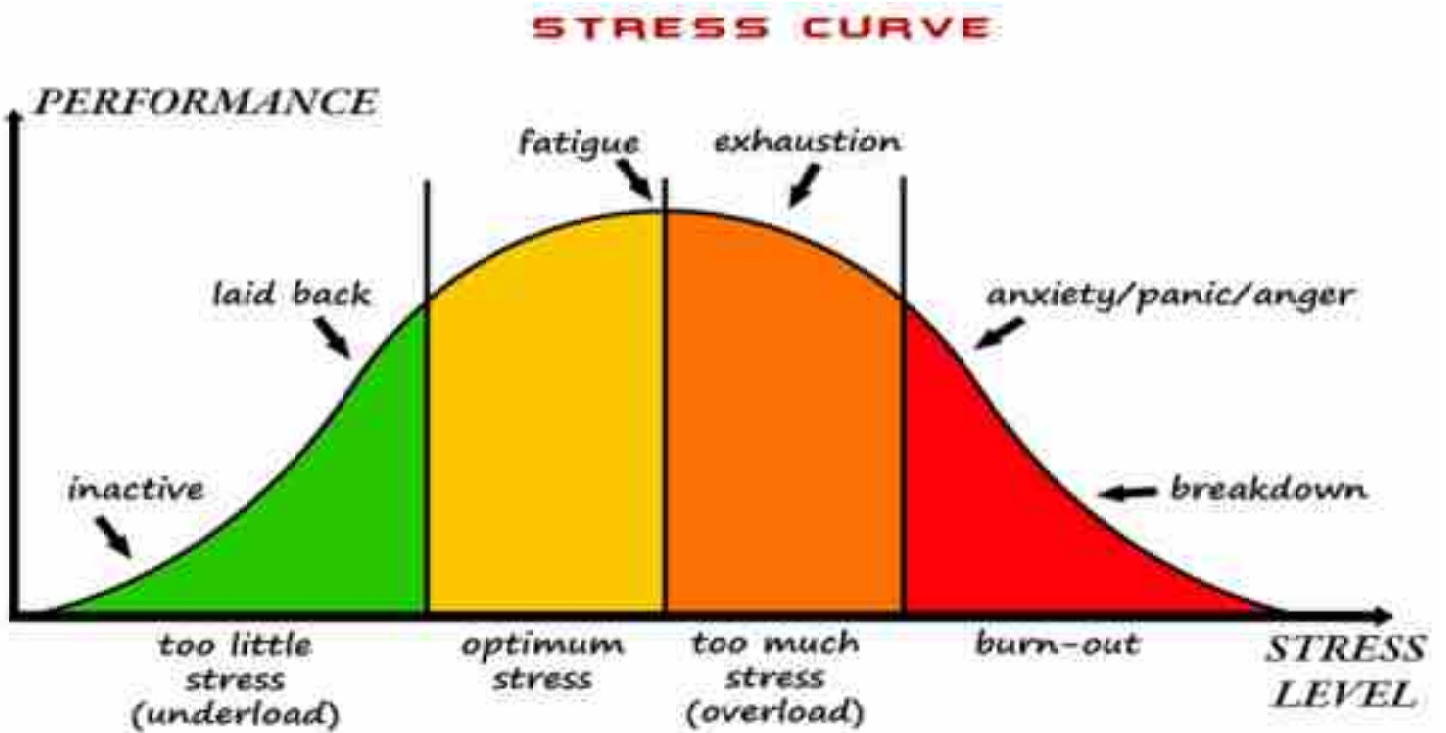
What is mental health and psychosocial support?

'Any type of local or outside support that aims to protect or promote well-being and/or prevent or treat mental health condition' (source: IASC MHPSS Guidelines)



Common signs of and reactions to stress





Exercise

- Good things that you have done to help yourself or others to cope with stress
- Bad things that you have done to contribute to stressing others



What are stressors for COVID-19 responders?

- Risk of being infected
- Constant awareness and vigilance
- Physical strain of protective equipment
- Higher demands in the workplace including long work hours
- New protocol and procedures
- Lockdown making it difficult to provide comfort to someone who is sick or in distress

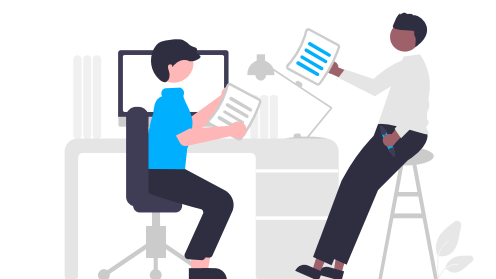
Exercise

What coping strategies have you heard of at the workplace such as border points?



Potential consequences of stress

- Burnout
- Mental disorder such as depression and anxiety
- Unhealthy behaviours like using tobacco, alcohol or other substances
- Frequent absence from work
- Reduced productivity while at work
- Frequent accidents and mistakes
- Breach of protocols and guidelines
- Increased risk of infections



Helping frontline workers cope with stress: Messages for peers

- Be considerate
- Check in and go the extra mile
- Offer support
- Strengthen social networks
- Encourage awareness and help-seeking
- Have zero tolerance for bullying and harassment



Helping frontline workers cope with stress: Messages for team leaders or managers

- Help them care for themselves
- Protect them on the job
- Be perceptive and supportive
- Create a healthy work environment
- Regularly and supportively monitor your staff for their wellbeing
- Encourage peer support



Helping frontline workers cope with stress: Messages for team leaders or managers

- Provide a brief and regular forum to allow workers to express their concerns and encourage peer-support amongst colleagues
- Facilitate access to mental health and psychosocial support services
- Be a good role-model to practice healthy coping strategies

Group work

Q. What psychosocial support are available at Elegu BP?

Q. What actions could the workers at Elegu BP initiate to enhance psychosocial support?



Action planning



Proposed action	Why it is important	Responsible person (position)	Who should be involved (stakeholders)	Resources needed	Time in months					Expected output
					1	2	3	4	5+	

References

This session is based on the materials as below:

- IASC (2020) Basic Psychosocial Skills: A Guide for COVID-19 Responders
- IASC (2020) Interim Briefing Note: Addressing Mental Health and Psychosocial Aspects of COVID-19 Outbreak
- WHO (2020) Frontline Workers and COVID-19: Coping with Stress
- WHO (2020) Helping Frontline Workers Cope with Stress during COVID-19: Actions for Peers
- WHO (2020) Helping Frontline Workers Cope with Stress during COVID-19: Actions for Team Leads



Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



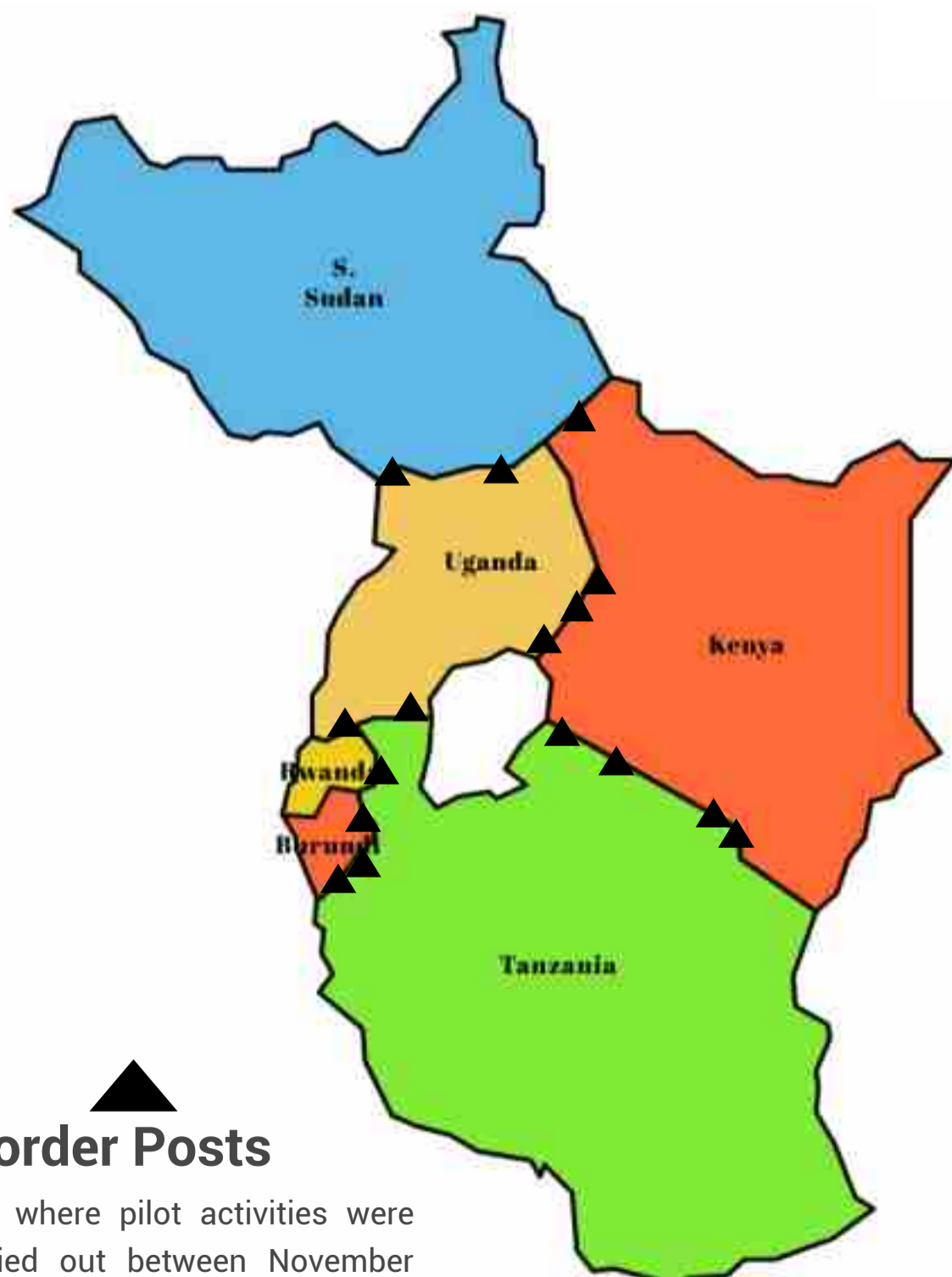
Lessons Learnt and Proposed Recommendations from the Pilot Activities

Introduction

The East African Community (EAC) and Japan International Cooperation Agency (JICA) conducted a baseline survey in the EAC Partner States to assess COVID-19 responses and countermeasures at the border posts to inform the planned Pilot Activities for the Prevention of Infectious Disease within the region. The survey collected data from 44 BPs within the EAC and looked at eight thematic areas namely: the National Policies, Regional coordination and Standardisation, Border Posts Administration and coordination, Human Resource Management and Capacity Development, Infection Prevention and Control (IPC) including Water, Sanitation and Hygiene (WASH), Port Health Department, Border Post Infrastructure, and systems and finally Community Awareness and Engagement.

The EAC member states discussed the survey findings and each partner prioritised the short-term and mid-term interventions that were then piloted based on the member states' preferences.

This booklet highlights the various challenges noted from the survey, the Pilot Activities carried out to mitigate them, the lessons learnt and the proposed policy recommendations for future interventions.



Border Posts

BPs where pilot activities were carried out between November and December 2021

Selected Border Posts for Pilot Activities



Gisuru, Gahumo, Ngomante, Mutwan, Gatonga Borderposts



Illasit, Lwakhakha, Nadapal, Suam River, Taveta, Busia, Malaba and Isebania Border Posts



All Rwandan Border posts impacted by developing E-learning modules for BP staff



Nimule Border post



Holili, Namanga, Kabanga and Rusumo Border posts



Busia, Malaba, Mutukula, Katuna, Cyanika, Mirama Hills, Oraba, and Elegu Border posts



Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



BURUNDI

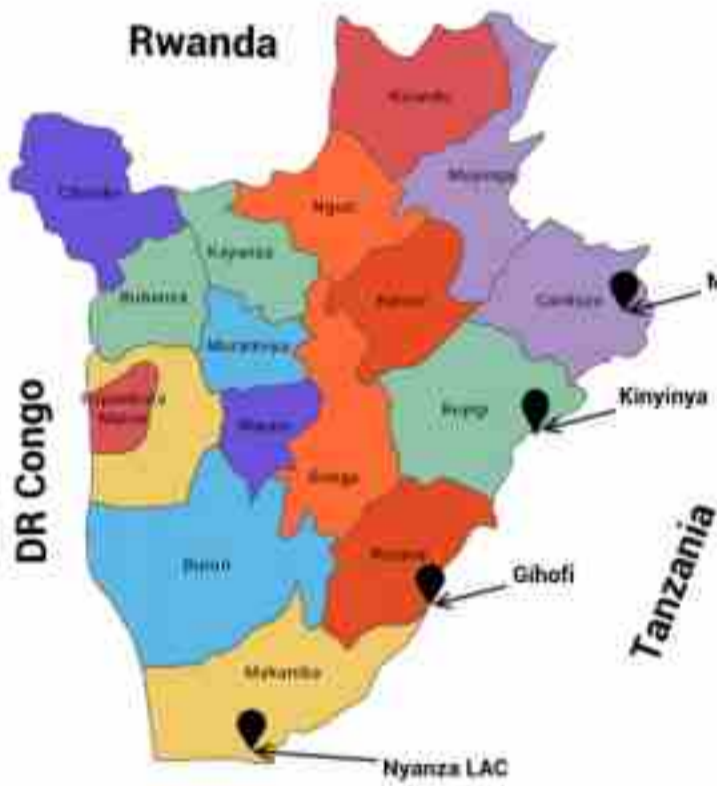
Introduction

In Burundi, the survey strongly recommended strengthening Community Based Surveillance (CBS) for early case detection, and effective case investigation, referral, and management of COVID-19 and other communicable diseases. This booklet delineates the Pilot Activities carried out and their out puts in infectious diseases response at the Border Posts.



Mugina Border Post, Burundi

Selected Border Posts



The Pilot Activity conducted workshops and CBS training sessions targeting Kinyinya, Murore , Gihofi , and Nyanza-LAC health districts linked with the following BPs respectively:

- Gisuru
- Kahumo
- Ngomante
- Mutwana
- Mugina
- Gatonga

Challenges



Inadequate knowledge and awareness of COVID-19 among the community members



Insufficient sensitisation activities for the community surrounding the borders



Many unofficial and illegal cross border movements putting the community at high risk of both importing and exporting COVID-19

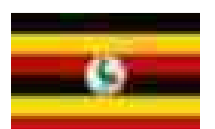
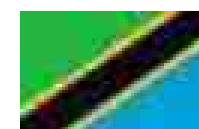
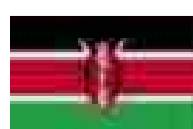
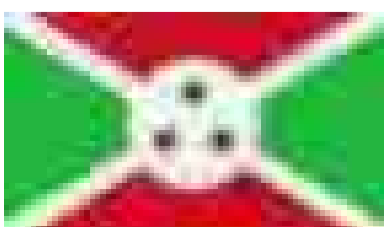
1 Training for Community Based Surveillance

The Pilot Activity conducted 2 workshops:

1. Information workshop for administrative and health authorities (District Officers and Health Promotion Technicians)
2. Training of Community Health Workers and Community Leaders from the border posts communities



Sensitisation workshop for administrative and health authorities Kinyinya District, Burundi



a Administrative & Health Authorities Workshop

This Pilot Activity aimed at training Administrative and Health Authorities in the provinces and health districts about the strategy for implementing Community Based Surveillance (CBS). Various stakeholders including; governor representatives, immigration officers, police officers, District Medical Officers, Provincial Medical Doctors and Director of the provincial hospital were brought together and trained on the stakeholders roles, CBS strategy, community engagement, methods of data collection, and the monitoring and evaluation of the activities of Community Health Workers (CHWs).



155

Total participants of this workshop and training were 155

b Community Health Workers Workshop

The community based surveillance's second component focused on the joint training of the Health Promotion Technicians (HPT) and the CHW's. The HPT's were recognised as the link between the Ministry of Health and the Community Health Workers. The workshop focused on community mobilisation, sensitisation and coordination of CHW activities as well as mentoring the CHW's and surveillance reporting. Practical sessions included; hand washing practice, application of hand sanitiser, and interpersonal communication.

Lessons Learnt

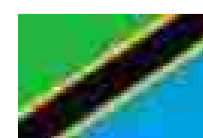
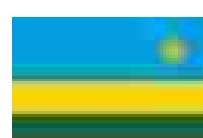
Stakeholders involvement and cooperation is key for effective implementation of CBS activities

Peer to peer sharing of information between the trained CHW's and their counterparts who did not get opportunity for training can help bridge the knowledge gap

Targeting different groups (Health authorities and CHW's) differently helps to contextualise the CBS strategy training thus better understanding and participation



Hand washing demonstration for CHW's and Community Leaders in Nyanza LAC District, Burundi carried out on 15th November to 26th November 2021.





Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



KENYA

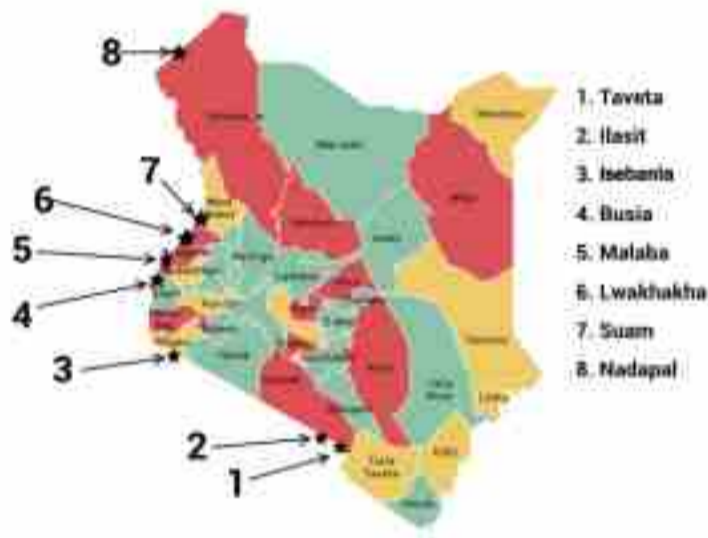
Introduction

This booklet delineates the pilot activities carried out in selected five border posts in Kenya. The activities include; the installation of sneeze guards at port health desks, fixing hand hygiene facilities at the Border posts and training Border Management Committees (BMC) on Infection Prevention Control (IPC) and multi agency coordination at the Border Posts.



Illasit Border Post, Kenya

Selected Border Posts



From the findings of the baseline survey, a total of 8 border posts were selected for Pilot Activities to strengthen prevention and infectious diseases response at the border posts

Challenges

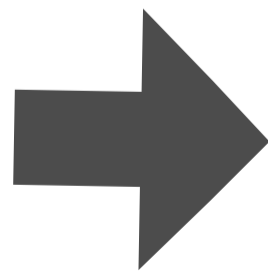
- ✓ Limited infrastructure and equipment investment in smaller BPs
- ✓ Inadequate access and maintenance of hand-washing Stations at Smaller BPs
- ✓ Limited opportunities for capacity development for smaller BPs
- ✓ Inadequate IPC training for non-health staff and BMC

★ 1 Hand Hygiene Facilities

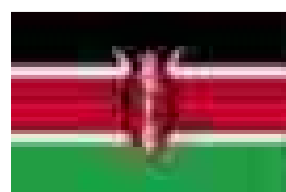
The Pilot Activity aimed at strengthening the effective utilization of hand washing facilities through the introduction of permanent and easy-to-maintain hand washing stations and 5000 litres water tanks reservoirs.



Hand wash station Before



Hand wash station After



2

Infection Risk Prevention

The Pilot Activity aimed at minimising infection risk at Port Health screening areas through the installation of sneeze guards and screening booth.

Pilot Activities Output

8 The number of sneeze guards installed in December 2021

1 The number of pre-fabricated Port health screening booth installed

5 The number of hand wash stations installed in December 2021

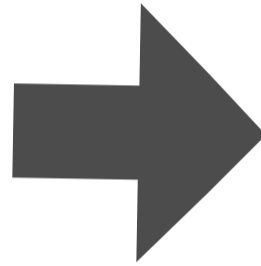
38 The number of BMC members trained from 4 BPs



Port Health Desk Fitted with Sneeze Guard



Port Health Desk Before



Port Health Booth After

3

BMC Training

The Pilot Activity aimed at developing a resilient BP workforce through training of BMC (Border Management Committees) on IPC and other relevant issues.

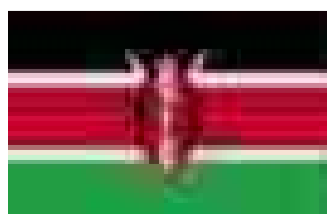
Lessons Learnt

Good communication, and collaboration between MoH, BP staff, and partners

Ownership and responsibility through consultative procurement and development of the Operations and Maintenance (O&M) manual

Inter-border and Bilateral alliances within and between neighbouring countries is critical for coordinated pandemic response

Strong leadership and local government involvement in multi agency coordination is key





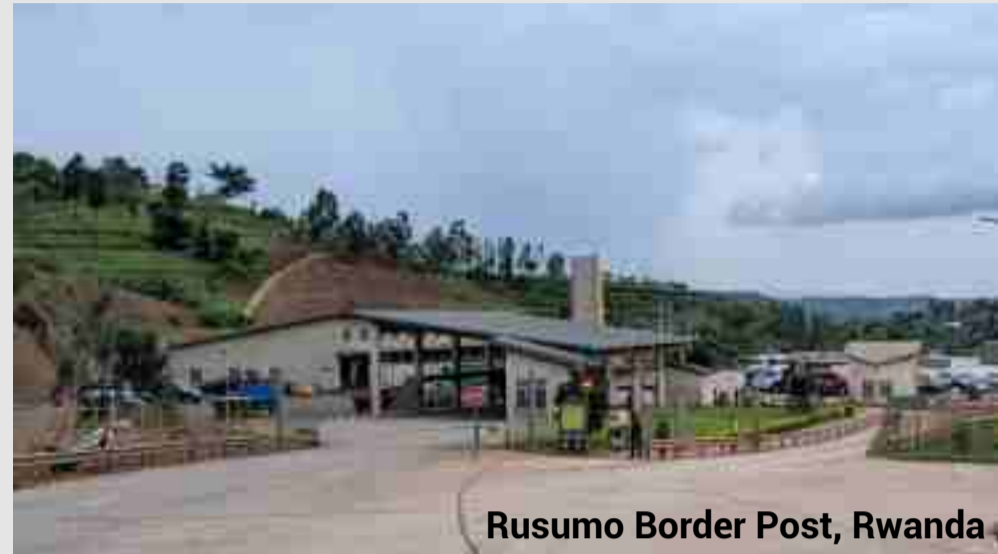
Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



RWANDA

Introduction

In Rwanda, the Pilot Activities focused on strengthening comprehensive Infection Prevention and Control (IPC) measures of Port Health and management of suspected positive cases and the development of e-learning modules for public health security and surveillance teams at the points of entry. This booklet shows the activities carried out in Rwanda.



Rusumo Border Post, Rwanda

Selected Border Posts



From the findings of the baseline survey Rusumo Border post was prioritised for the strengthening of comprehensive IPC measures of Port Health and management of suspected positive cases.

Challenges

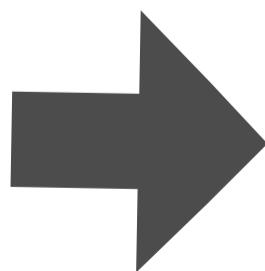
- Inadequate IPC measures at Port Health screening room
- Inadequate preparedness for management of suspected positive cases
- Inadequate WASH facilities such as fixed hand washing stations

★ 1 IPC Measures

Based on the findings of the Baseline Survey, the Pilot Activity aimed at implementing comprehensive IPC measures through refurbishing and equipping Port Health and WASH facilities for screening, isolation and management of suspected COVID -19 positive cases. The project operationalised isolation room beds, fixed electrical problems, installed pulse oximeter and blood pressure monitoring equipment, fixed the broken water supply network pipes, purchased waste management bins and installed soap dispensers and hand dryers at Rusumo Border Post.



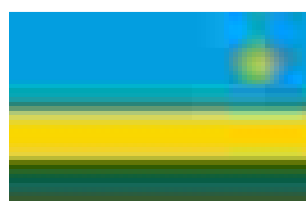
Waste management Before



Waste management After

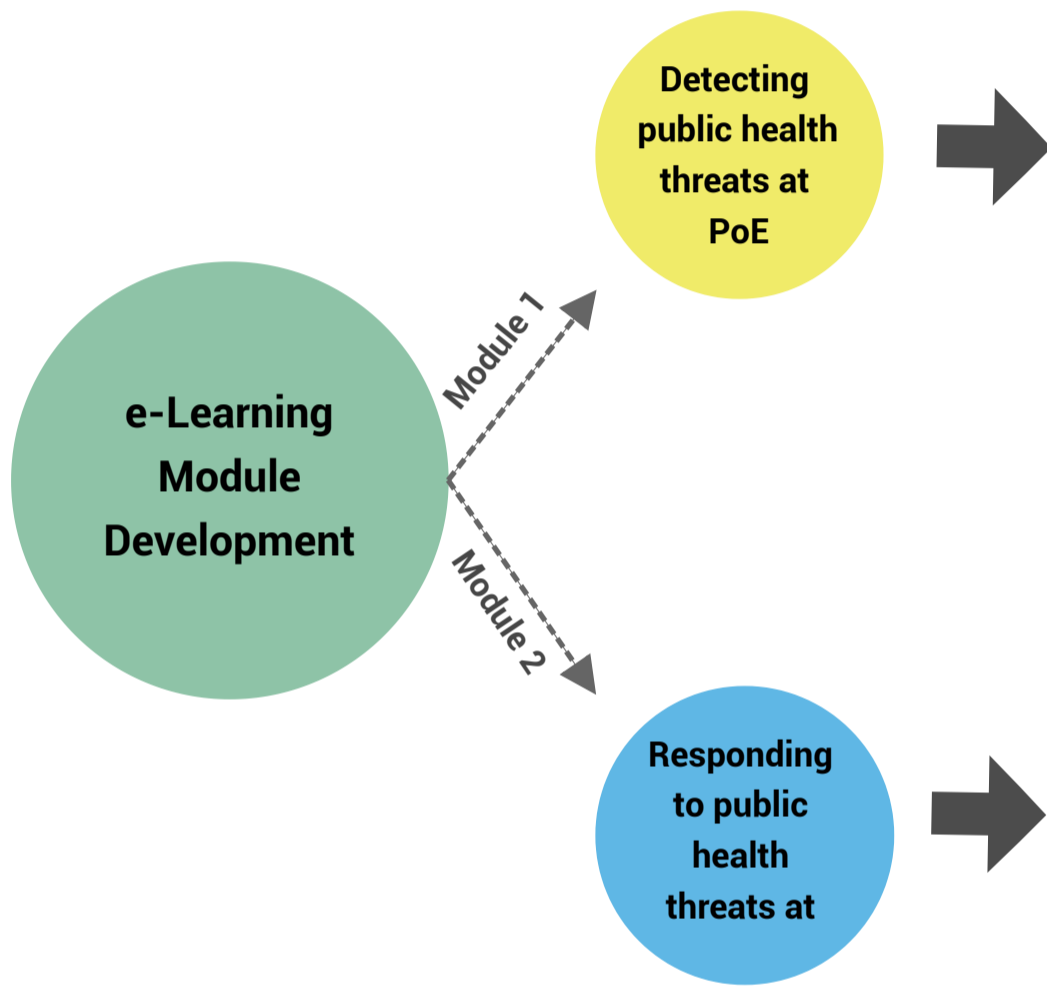
Lessons Learnt

- Importance of flexibility and preparedness for changeable situations of the pandemic
- Port Health operations with personnel from multiple agencies
- Need to build a permanent structure of waiting area



2 e-Learning modules Development

This Pilot Activity component aimed at developing e-learning modules to strengthen the national capacity of Rwanda to prevent, prepare for detect and respond to health emergencies. The developed e-learning training modules will help orientate all BP staff before their assignment hence provide an efficient and uniform capacity-building at all the BPs in a sustainable manner.



Challenges



High staff turnover at BP



Limitation of traditional training in terms of timing, budget, risk of infection and control of training quality

Module 1 Contents

Key roles in protecting the health of people at PoE

Detecting public health threats at PoE

Recognising signs and symptoms of communicable diseases and probing for the same

Module 2 Contents

Routine Health Screening at PoE Screening

During Public Health Emergencies

Isolation, Quarantine, and Verification

Lessons Learnt

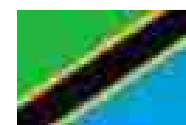
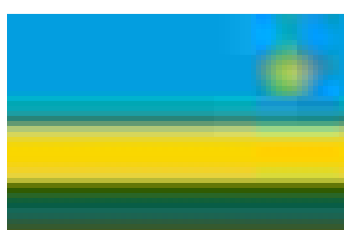
Need for standardised guidelines and SOPs for managing Public Health Threats at Points of Entry (POE)

Need for developing and harmonization training modules for EAC member states

Need for development of a web health portal for regular updates between the MoH and authorities at POE



Newly installed sneeze guards at the Port Health registration desk, Rusumo BP.





Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



SOUTH SUDAN

Introduction

In South Sudan, the survey prioritised the need to strengthen the capacity of BP staff and laboratory technicians on Infection Prevention and Control (IPC) measures in order to establish a more resilient BP workforce.

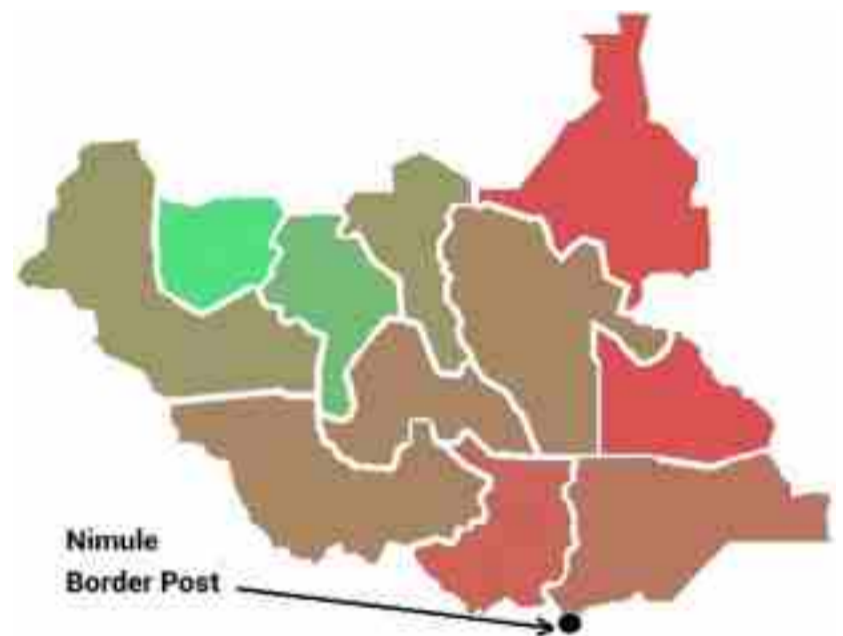
This booklet delineates the Pilot Activity carried out in at Nimule border posts to address the issues.



Nimule Border Post, South Sudan

Selected Border Posts

From the findings of the baseline survey, Nimule Border post was noted to be the busiest South Sudanese Border within the EAC.



★ 1 Capacity Development

The Pilot Activity aimed at developing the capacity of the border post staff at Nimule borders. Two types of trainings were conducted:

- a) training of BP staff on IPC and IPC enforcement conducted from 6th December to 8th December 2021 at Elegu BP
- b) training of lab technologists on PCR systems



PCR training for Lab technologists, Nimule BP December 2021.

8

The number of lab technologists trained

Challenges



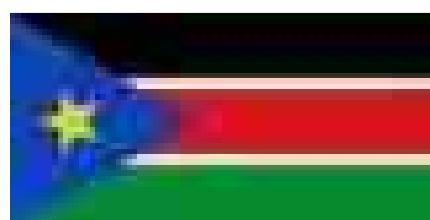
Inadequate number of lab technologists trained in Polymerase Chain Reaction (PCR) systems



No Infection Prevention and Control (IPC) training had been conducted for Nimule BP staff



Challenges with multi-agency coordination at the border post





Capacity Development

The Pilot Activity aimed the training of BP staff on IPC and IPC enforcement measures. A multi-agency team comprising of Police officers, National Security Services, Prisons officers, Customs officers, Immigration officers, South Sudan People's Defence Forces, Food and Drug, Standard, Commerce and Clearing agents were trained together.



Multi-agency Training on IPC and IPC Measures Enforcement Conducted at Elegu from 6th December to 8th December 2021



The number of border post multi-agency teams trained on IPC and IPC measures enforcement

Topics Covered

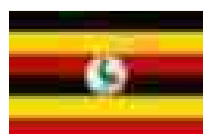
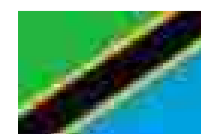
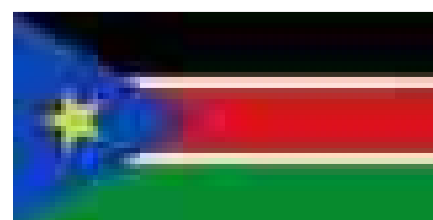
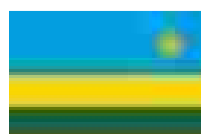
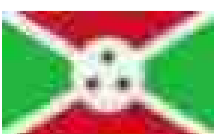
- Hand hygiene
- Multi-agency coordination
- Proper utilisation of Personal Protective Equipment (PPE)
- Respiratory hygiene
- Safe waste management



Small Group Assignment during the Training on IPC and IPC Measures Enforcement

Lessons Learnt

- Participant Commitment is very crucial for successful training
- Flexibility on training material and adaptability of facilitators to the participants contexts
- Good partnership among health-related partners, donors and the Ministry of Health





Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



TANZANIA

Introduction

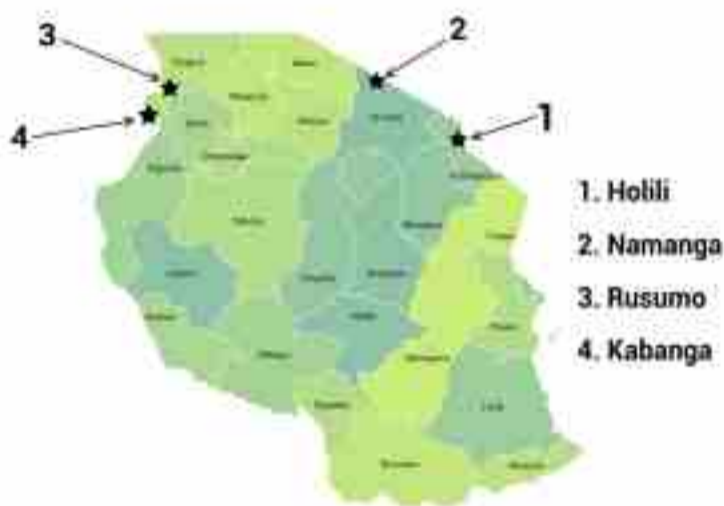
In Tanzania, the Baseline Survey showed that the majority of people do not practice Infection Prevention and Control (IPC) measures against the spread of COVID-19.

This booklet delineates the Pilot Activities carried out in selected border posts in Tanzania to address the issues.



Rusumo Border Post, Tanzania

Selected Border Posts







From the findings of the baseline survey a total of 4 border posts were selected for Pilot Activities to strengthen prevention and infectious diseases response at the border posts.

1 IPC MEASURES

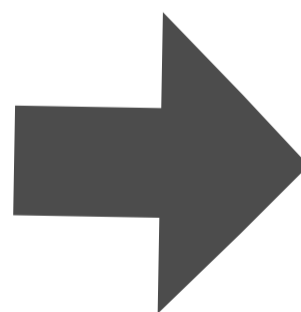
The Pilot Activities supported the procurement, installation and orientation on operation and maintenance of the IPC-related supplies to the selected BPs.

Challenges

-  Inadequate awareness of the IPC guidelines and Standard Operating Procedures (SOP) among BP staff
-  Unreliable, inadequate and stock-outs of IPC-related supplies
-  Inadequate waste segregation practices
-  Non-functional thermal scanners



Waste bin Before



Waste bin After



2 COMMUNITY AWARENESS

The Pilot Activity raised COVID-19 awareness among the BP communities and truck drivers through community gatherings, house-to-house visits, one-on-one discussions, use of local theatre groups and radio spots.



Local Theatre group educating members on COVID-19 in Namanga

Community Awareness Output

1,777	The number of people reached and sensitised at the 4 BPs
1,239	The number of people reached through one-on-one and house-to-house visits
492	The number of people vaccinated during the awareness and sensitization activities
37	The number of truck drivers vaccinated during the awareness and sensitization activities
2	The number of Radio stations with a reach of over 1,000,000 listeners use

IPC Measures supplies

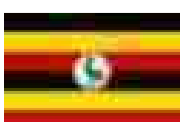
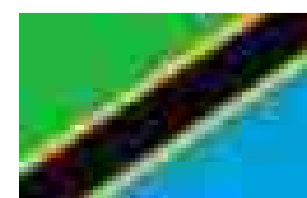
8	The number of Wall Mounted Thermo Scanners installed
12	The number of Waste Segregation Bins with Liners distributed
32	The number of Non-contact Forehead Thermometers installed
120	The number of Sharp Box Containers distributed
120	The number of Bottled Gel Sanitiser (500mL) distributed



Vaccination during the sensitisation Kabanga BP

Lessons Learnt

- ▶ Development and use of operations & Maintenance manual helps ensure sustainability
- ▶ Strong leadership bringing all stakeholders at the BP is key for successful cooperation and collaboration
- ▶ Prioritisation and harmonisation of activities based on available time and resources enhances responsiveness
- ▶ Collaboration and coordination between BP staff and community members is important for proper mobilisation and sensitisation





Regional Data Collection Survey and Proposed Pilot Activities for the Prevention of Infectious Disease at Border Posts (BPs) in the EAC



UGANDA

Introduction

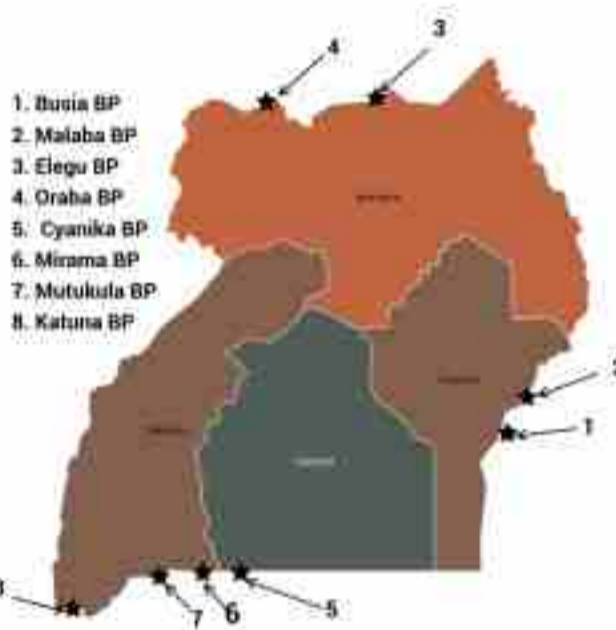
In Uganda, the findings highlighted inadequate psychosocial support for frontline workers and inaccurate thermal scanners for body temperature screening as the most pressing issues. This booklet delineates the Pilot Activities carried out in selected border posts to address the issues.



Elegu Border Post, Uganda

Selected Border Posts

From the findings of the baseline survey, a total of 8 border posts were selected for Pilot Activities.



Thermo Scanners Calibration

The Pilot Activity aimed developing a user reference manual and training Port Health staff to calibrate, trouble shoot and maintain thermos canners for reliable screening for symptomatic COVID-19.



Fixing and calibrating thermo scanner at Mutukula BP

Lessons Learnt



The need for thermo scanner user reference manual for maintenance



The need for active screening through the digital travel health questionnaire



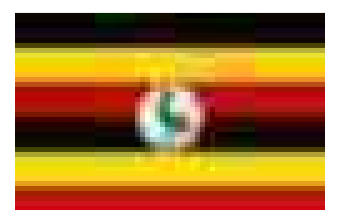
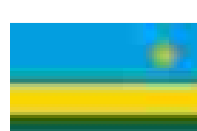
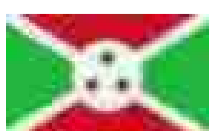
The need for integrated screening approach for both symptomatic and asymptomatic COVID-19

24

The number of Port Health Staff Trained on Calibration



Thermo Scanner Calibration Training





Psychosocial support Training

The Pilot Activity aimed enhancing the capacity of frontline workers at the Border Posts to cope with the increasing stressors at work occasioned by the COVID -19 pandemic and its containment measures.



Psychosocial training for frontline staff Elegu BP.

35

The number of front line staffs trained on psychosocial support and coping mechanisms

Topics Covered

Self Care: stress coping mechanisms, and healthy lifestyles

Healthy work environment: sources of stress, workload management, skills and tasks matching

Peer to peer support: formal or informal platforms for knowledge sharing and basic psychosocial support through peer networks



Front line workers drafting action plans for peer to peer psychosocial support

Lessons Learnt

Need to deploy the psychosocial support trained workers at regional and district levels for scalable impact

Need to create and support an enabling environment to provide peer support for workers

Need to mobilize more resources to create awareness about mental health among frontline workers

