

COVID-19 African Innovation Compendium



World Health
Organization

REGIONAL OFFICE FOR
Africa

Innovation Program

© WHO Regional Office for Africa

This is not an official publication of the World Health Organization.
Correspondence on these reports may be directed to:

COVID-19 IMST Innovation Unit
WHO Regional Office for Africa
PO Box. 06 Cité du Djoué
Brazzaville, Congo
Email: Dr Moredreck Chibi chibim@who.int

Requests for permission to reproduce or translate this publication – whether for sale or for non-commercial distribution – should be sent to the same address.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate borderlines for which there may not yet be full agreement.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or its Regional Office for Africa be liable for damages arising from its use.

ACKNOWLEDGEMENTS

The WHO Regional Office for Africa COVID-19 IMST Innovation team gratefully acknowledges Member States' Ministries of Health that provided data and information for this report as well as the support and contributions made by the respective WHO Country Offices.

INTRODUCTION

Innovation at the center of COVID-19 response in the African region

Innovation is broadly defined as a new solution with the transformative ability to accelerate impact. This entails a new product; new processes for delivering services and products; improved ways of working with new and diverse partners; or new social, business and organizational models. In the context of health care, innovation is aimed at enhancing life expectancy, quality of life, diagnostic and treatment options, as well as the efficiency and cost-effectiveness of the health system.

The COVID-19 has increased demand for innovations that stem from the extreme need to find immediate and sustainable solutions to response to the pandemic. These innovative solutions are required at every level of the health systems- policy, governance, service delivery, diagnostics and treatment, etc. It has been noted that COVID-19 has resulted in worse health outcomes

especially in fragile contexts, rural areas, urban slums, and conflict zones, and among marginalized groups, including poor people and those with disabilities. These disruptive consequences have severely threatened the gains made in these areas and leveraging innovations would be an important way to accelerate health improvements.

It is however encouraging to note that since that COVID-19 sets its foot on the African continent, countries developed and deployed innovative home grown approaches as part of their COVID-19 response strategies. Therefore, this compendium seeks to highlight a selection of the home grown innovations that emerged from Africa in addressing the challenges of COVID-19. Many of these innovations can be scaled effectively within the region or repurposed in a post-COVID-19 context to further advance health and development goals.

This compendium reinforces the need for a comprehensive regional strategy for scaling health innovations by underscoring the importance of innovation as a transformative approach to accelerating progress towards the achievement of both UHC and the SDGs. Therefore countries need to build capacities and institutional mechanisms to harness and manage innovations that are tailored to local needs through supporting the development and scale-up of locally-tailored innovations to accelerate and sustain better health outcomes in the African Region.



COVID-19 Innovations

WESTERN AFRICA



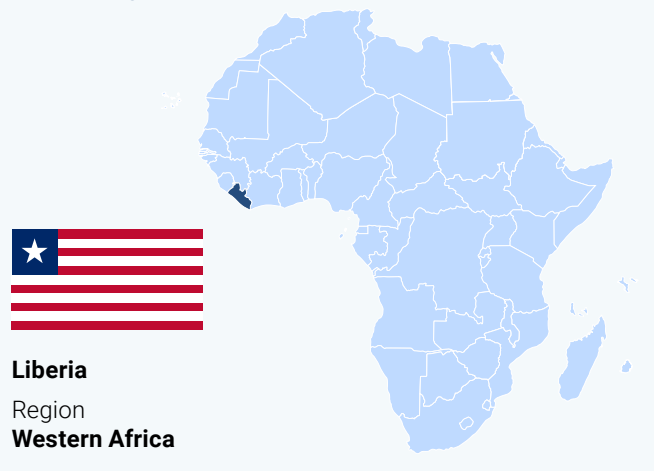
mHero



BACKGROUND

mHero is a two-way, mobile phone-based communication system that connects ministries of health and health workers. mHero brings together existing health information systems with locally popular communication platforms to facilitate the exchange of important health information. IntraHealth International and UNICEF created mHero in August 2014 to support health-sector communication during the Ebola outbreak in Liberia. Today, mHero is being deployed as a key tool for coordinating COVID-19 response in several countries.

Country Focus



CURRENT IMPACT

Lessons learned from the Ebola response pointed to how fast, informative communication to frontline health workers and their immediate, precise case reporting helped tackle the health emergency. mHero was useful in engaging communities, managing rumors, and mitigating public health threats.

Given mHero's origin, it is uniquely suited to fulfill communication needs during the COVID-19 pandemic. The mHero platform is being used for myriad government health communications needs, segmenting health workers into specific groups to:

- Coordinate health promotion strategies and public health emergency responses
- Train health workers on infection prevention and control and risk communication
- Test health worker knowledge of COVID-19 responses through mini-quizzes
- Report suspected COVID-19 cases and other high-priority diseases
- Relay unanticipated stock-outs of essential commodities such as sterile gloves, masks, and respirators; and
- Reveal local health and safety concerns, including mental health and physical risks



SCALING

Since the end of the Ebola crisis, the Ministry of Health and Social Welfare in Liberia has integrated the platform into its health information system infrastructure to meet ongoing communication needs for various health services. Several other countries have also tested or deployed mHero. The technology behind mHero has also evolved since the initial deployment in Liberia. Both advancements in technology, as well as varying conditions and needs in other countries, inspired IntraHealth to make mHero more interoperable. It can operate with other communication platforms and any health information systems compliant with the global Fast Healthcare Interoperability Resources (FHIR) standards.



SUSTAINABILITY

IntraHealth led the development and deployment of the tool and now the team has updated the platform to enable remote assistance with implementing it anywhere in the world including DRC, Guinea, Kenya, Uganda, Mali and Sierra Leone.

Alerte COVID-19 Niger



BACKGROUND

The platform ALERT-COVID19-NIGER has been designed and implemented to respond to a concern of efficient and real-time management of alerts related to COVID-19 and to allow to solve complaints from the population related to delays in screening, classification of suspicious subjects and identification of positive cases of COVID-19.

Country Focus



CURRENT IMPACT

This platform has various advantages, among others:

- The collection of data on alerts in a structured manner ensuring the effectiveness and completeness of investigations throughout the national territory;
- The improvement of the promptness of notifications;
- Reduction of response time as a global view (country / region / district) of the situation becomes apparent in real time through the platform;
- Adaptation to the hierarchical and decentralized structure of the response to COVID-19 in Niger with a national warning center and regional warning cells.
- Alerts from a region are immediately transferred to the corresponding Regional Response Team for investigation;
- The availability of a dynamic prioritization system based on color codes that gives an order of importance / urgency in the investigations



SCALING

This application was put into operation on April 28, 2020 first in Niamey the capital as a pilot center. The 7 other regions started using the platform between 1–2 months after Niamey. As described above, this application has a national alert center with a team of epidemiologists trained for this purpose who receive all the alerts and make a first treatment to rule out obvious false alerts and who in turn transfer the alerts received to the regional alert cells. Alerts received at the level of a region are processed and immediately transferred to the response teams of the corresponding districts according to their local organization which is in charge of investigation; and decision making according to the situation. This application can be used on laptops, smartphones and tablets.



SUSTAINABILITY

According to health professionals:

It is very easy to use, and the next steps are:

- Deployment in Integrated Health Centers and Hospitals;
- Adding other diseases under surveillance to the platform.
- Using the platform in community surveillance (with community health workers)
- Geolocation integration
- As a limitation, this application requires internet connection which is difficult in some remote areas or areas not connected to the GSM network. However, this limit is surmountable because data can be entered offline and sent once the connection is re-established or retrieved.

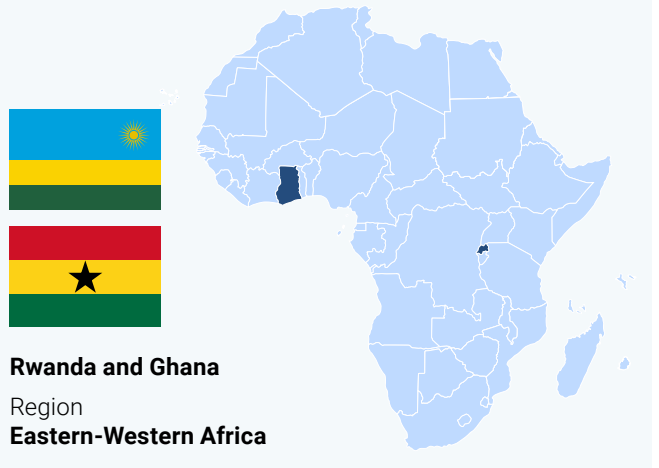
Drone conversion for COVID-19 Services



BACKGROUND

Already used for supplying blood to a network of 21 remotely located transfusion clinics in Rwanda and carrying more than 35% of Rwanda’s blood supply, Zipline high speed drones are being used to tackle the COVID-19 pandemic by delivering vital packages to clinics and hospitals over up to 85km in Ghana and Rwanda, in about one-third the time it would take by car.

Country Focus



CURRENT IMPACT

Zipline is helping our public, private, and philanthropic partners around the world develop and execute national-scale responses to COVID-19. Zipline drone delivery complements truck delivery for vaccines, medicines, and supplies – helping to keep people at home and manage scarce supplies for health workers. Zipline can respond to demand surges and prevent stock-outs by immediately increasing delivery volumes. Each

Zipline Distribution Center can make hundreds of deliveries per day anywhere across an 8,000 square mile area. This allows health systems to precisely target the distribution of more than two tons of critical and lifesaving health products, each and every day. If a health worker needs a single mask, we can cost effectively deliver it within minutes.



SCALING

As new treatments and vaccines become available in the next 18–24 months, they will continue to be in scarce supply amid growing global demand. Zipline’s medical drone delivery service could help make sure distribution is targeted in real-time, at national-scale, to the people and populations that need it most, helping to save lives and prevent further outbreaks. Is currently operating in Rwanda and Ghana.



SUSTAINABILITY

Zipline is working with local Ministry of Health to have the innovation (Robotics) streamlined into the ministry roadmap for COVID-19 response as it is being used in the transfusion clinics.

COVID-19 Innovations

EASTERN AFRICA



mSafari



BACKGROUND

In March 2020, Kenya launched an application for contact-tracing. Public service vehicle operators and passengers are required to provide information that helps trace the movements of people who have contracted the corona virus. All public drivers or operators are required to enroll using their vehicle registration numbers and collect details of every passenger.

The solution is USSD based thus will cover all commuters even those with non-smart phones.

Country Focus



Kenya
Region
Eastern Africa



CURRENT IMPACT

The application is expected to trace all the contacts made by an infected person inside public vehicles. An estimated 50% of the Kenyan population uses public transport daily. The application is also intended to enforce a rule on the maximum number of passengers allowed on matatus (minibuses) and buses.

The solution has also incorporated digital payments, and with the Kenya government having published digital payments in public transport regulations in July, cash will soon NOT be accepted in public transport.

Provision of passenger data and public transport data will help the Government, regulators and other partners improve urban planning for movement of people.



SCALING

Through the application, Public Service Vehicles (PSV) operators and passengers are required to provide critical data that help trace back the movements of infected or suspected cases. All PSVs, including their owners and respective SACCOs are required to enroll on the platform using their vehicle registration numbers. The service is free across all networks through the provided user code *483*82#.

mSafari has now been integrated to a payment gateway and partnered with Cooperative Bank of Kenya to ensure security and integrity of all digital payments

An iOS and Android app are also now available.



SUSTAINABILITY

The mSafari application is a joint programme of the Ministries of Health and Transport and approved by the National Emergency Response Committee setup for COVID-19 response.

It has recently received regulatory approval from the National Transport and Safety Authority (NTSA).

The government established COVID-19 ICT Innovations Committee has also picked it as a top innovation in Kenya responding to COVID-19.

UN Habitat is also now a partner in scaling mSafari as an innovation for urban mobility and better urban planning.

The UK-Kenya Tech Hub has also provided support.

Balloons to Deliver Emergency Internet Across Kenya

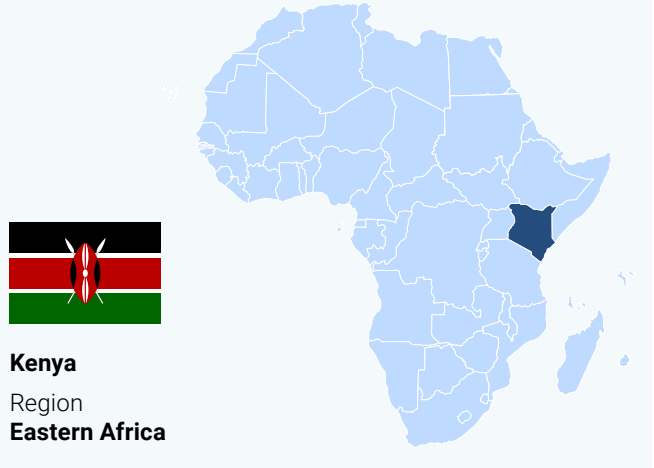


BACKGROUND

With the introduction of restrictions of movement and social gatherings as part of the COVID-19 response, there was an urgent need to expand access to ICT infrastructure in order to provide internet access for continued services such as commerce, teleworking and virtual education services.

The solution of balloons to provide a relatively low cost expansion of internet service was created. These balloons—floating cell sites that hover about 60,000 feet (about 20km) above ground—are equipped to offer 4G connectivity to about 25 million Kenyans who lack coverage especially during the COVID-19 to stay safe by working from home.

Country Focus



CURRENT IMPACT

The balloons, made from sheets of polyethylene, are the size of tennis courts. They are powered by solar panels and controlled by software on the ground. While up in the air, they act as “floating cell towers,” transmitting internet signals to ground stations and personal devices. They last for well over 100 days

in the stratosphere before being returned to earth. The balloons are being used to enable the connection of remote health clinics to the country’s national referral hospitals, other medical facilities, and emergency services.



SCALING

The Kenya venture is being closely watched by telecom providers in other countries as a test of whether the technology is reliable and the service can be profitable. Some technology experts have said the balloons would be better deployed elsewhere, since it has been successful in the different parts of Kenya where it has been deployed.



SUSTAINABILITY

After the health crisis abates, the government committed that the balloons will remain in Kenya to fulfill the original commercial agreement on a sustained, non-emergency basis, connecting the country’s unserved and under-served communities. Telkom Kenya will have access to impact capital to keep the project afloat in a post-pandemic world to reach remote communities.

Integrated Laboratory Reporting System (Results Dispatch System)



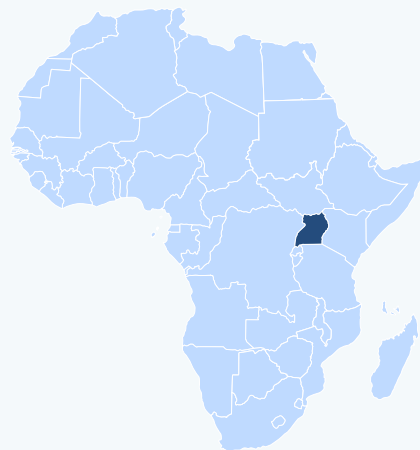
BACKGROUND

At the start of COVID-19 outbreak in Uganda at the end of March 2020, followed up by the lockdown of Uganda's borders, 90% of the COVID-19 samples were collected from more than 20 out of 53 (now more than 80) points of entry, specifically from track drivers from more than 10 districts. These samples were initially all tested at only one national reference laboratory, Uganda Virus Research Institute (UVRI) in Entebbe. The Results would then be shared in an excel sheet to the Emergence Operation Center (EOC). These results would be transformed into a result report and sent by email to the districts.

Country Focus



Uganda
Region
Eastern Africa



CURRENT IMPACT

The above method of emailing results to the District Health Officers (DHOs), could only work as long as there were only few samples from few sample collection sites.

As the number of collection sites increased to about 124 districts in Uganda, which include 15 Regional Referral Hospitals (RRH) and the community including isolation and quarantine centers sending samples to 3 national reference laboratories, it became important to have accounts to the centralized results dispatch system and can access the results in real time. As soon as the results are released from the laboratory, the results are uploaded to the central results dispatch system and are immediately available to the focal persons at the districts, hubs, RRH, quarantine / isolation centers. This has significantly improved the Turn Around Time

from the results release to access by the requesting site. The surveillance and Case management teams are able to receive the results and intervene in real time. All the testing laboratories have all the results in one place. The collection sites do not have to follow up on where the testing was done because every testing laboratory uploads to the same place.

Results dispatch officers were initially recruited and trained on the administration and operation of the centralized results dispatch system. These then became Trainers of Trainers who trained other teams that travelled to the districts and points of entries to train the district teams on how to access the portal, download and print results. They were able to grant access to the District Health Teams comprising of the DHOs, District Laboratory Focal Points (DLFPs) and Biostatisticians.



SCALING

More laboratories are being validated to test for COVID-19, including the private laboratories, and more sample collection centers are being added on the radar. These laboratories, collection sites and personnel are being trained to integrate their LIMS into the centralized results dispatch system and capture data electronically.

To improve on the data quality, electronic data capture at the point of collection is being scaled from points of entry to the community.



SUSTAINABILITY

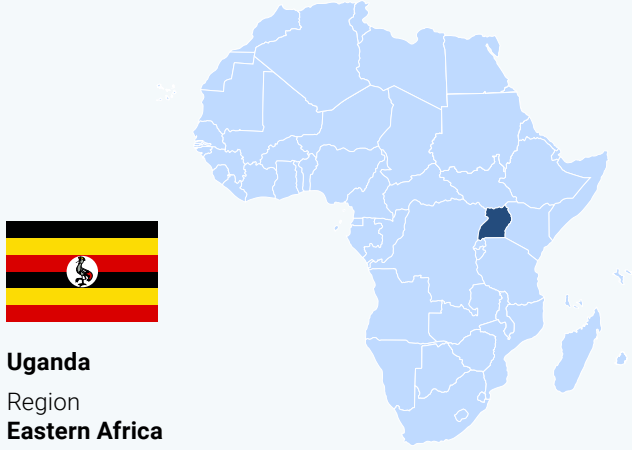
The inclusion of the district teams and the existing work force in the scale up as well as incorporation of the innovations into the existing work flows is one way to ensure sustainability. Procurement of tools and supports like tablets and smart phones at the district level is another. There is a plan to incorporate the Internet package as part of the health system delivery to ensure Internet availability at the collection sites. Advocacy for acceptance and adoption of electronic systems by the response teams at the operational level and budget allocation to include e-health innovations as part of the health service delivery package is ongoing.

GoData and ODK – Data collection tools

BACKGROUND

WHO supported the deployment of GoData and ODK during this COVID-19 response. Both innovations are open source, online tools which are deployed on desktops and mobile devices. GoData is an outbreak investigation and contact tracing tool, which works around the core data record of a case, a set of contacts linked to a case and set of follow-up records created for each contact. The tool includes functionality for case investigation, contact follow-up, visualization of chains of transmission including secure data exchange and is designed for flexibility in the field, adaptable to a range of outbreak scenarios. ODK is a repository which holds assessment forms and checklists, to facilitate supervision and various assessments for response.

Country Focus



Uganda
Region
Eastern Africa

CURRENT IMPACT

The need for use of these digital innovations grows by the day. The outbreak has evolved overtime, from a matter of concern to just a few hotspots to the whole country. This has resulted in health care workers, at national, district and health facility levels trained to be able to use these innovations in performing different aspects of the response at their level.

GoData has enhanced data collection, in turn improving preparedness and response. The tool has achieved this by strengthening contact tracing, follow-up and data management for contacts and cases during this COVID-19 outbreak.

With GoData, there is a shift to digital real-time data collection, analysis and communication during COVID-19 outbreak

preparedness and response. Visualization of chains of transmission or report generation is done easily thus enabling decision-makers to make informed decisions. In addition, case management and contact data are also collected, analyzed and communicated to improve the response.

These digital innovations are gradually replacing the use of paper forms, integrating data collection and entry with additional capabilities such as validation.

At the end of each day, data submitted through various forms on the ODK platform is aggregated and is key to informing daily response pillar updates and interventions.

SCALING

The use and management of these innovations is currently being decentralized to districts. For instance, the Biostatistician and / or District Surveillance Focal persons should be in positions to manage users (add users, assign roles) within their respective districts and generate district-specific reports from the platform.

In some instances, mobile phones have been procured to facilitate data collection, especially where health care workers lack a smartphone.

Specific to GoData, the smartphone app has been optimized to run on even low RAM (at least 1.6GB of RAM) mobile devices.

SUSTAINABILITY

These innovations have been embraced and adopted by the Ministry of Health, partners and stakeholders. GoData is hosted on the Ministry server, supported and maintained by the Ministry IT staff. ODK on the other hand is hosted on AFRO servers, a situation that should change in future, with Uganda-specific data being migrated to country servers.

Health care workers, at all levels, have and are being trained to extensively use these innovations in performing their roles. The approach is to require them to use their own mobile devices, rather than procure and distribute to them.

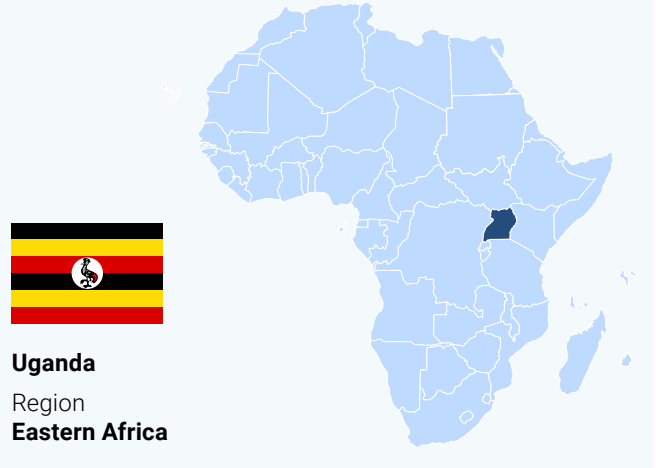
Regional Electronic Cargo and Drivers Tracking System (RECDTS)



BACKGROUND

Uganda has been responding to COVID-19 since March 2020 and truck drivers have been a significant cluster of the infection. Ministry of Health started testing of all interstate truck drivers at Points of Entry (POEs) for COVID-19 in a bid to prevent increased importation of cases. The testing generated extra costs to the COVID-19 response and delays at the POEs. To solve this the EAC secretariat with the support from the EA Trademark developed the Regional Electronic Cargo and Drivers Tracking System (RECDTS).

Country Focus



CURRENT IMPACT

The RECDTS is directly linked to the National Laboratory repository for all COVID-19 results for each Partner State. Only the negative results are automatically linked to the application and information is shared across all transport corridors through a secure mechanism.

Ministry of Health has ceased all COVID-19 testing of truck drivers at the POEs. The RECDTS is being used to monitor the digital certificates, reducing costs previously generated associated with testing, delays at the POEs and the importation of COVID-19 cases into the country.

This has allowed for the country to divert the COVID-19 testing resources to other priority areas like the COVID-19 treatment units which are fast filling with patients.



SCALING

The need for use of these digital innovations grows by the day. The outbreak has evolved overtime, from a matter of concern for just a few hotspots to the whole country.

RECDTS has been rapidly decentralized through interstate collaboration at all POEs. The system has directly been linked to the National Laboratory repository for all COVID-19 results for each Partner State. Then an app optimized for smart phones using QR code scanning was designed to validate digital COVID-19 certificates. Focal persons of different cadres have been trained at all POES of the partner states to use the app and scan the results.



SUSTAINABILITY

- RECDTS have been embraced and adopted by all the partner states.
- The National Laboratory repositories are hosted on the individual partner state servers, supported and maintained by the respective IT staff.
- Designated Focal people at the POEs have been thoroughly and extensively trained in the use of the applications on their smartphones.

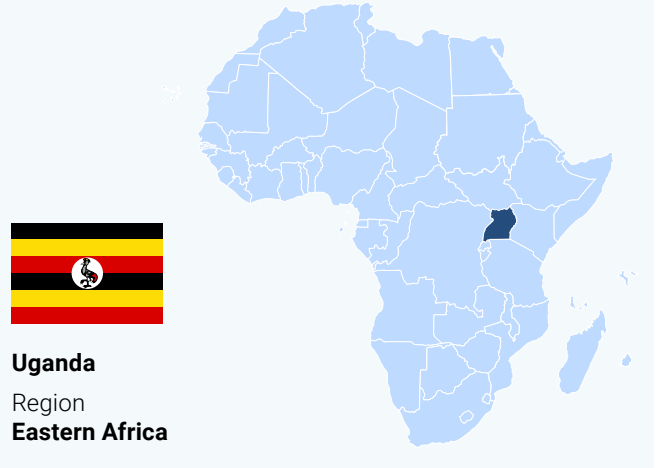
Integrated Laboratory Reporting System (Sample and Results Tracking)



BACKGROUND

The Central Public and Health Laboratory (CPHL) through Ministry of Health designed a cost effective transport system dubbed the National Hub Transport Network (NHTN), to harmonize the sample and results transportation mediums, but, difficulties tracking referral samples collected from lower health facilities to reference testing laboratories remained. A light weight Android App (RESTRACK-UG) was developed to track samples and test results, provide real-time location, contact information, and calculate the TAT for specific sample in transit. This enabled timely detection, preparedness and appropriate response, and reduced delays in transportation / processing of samples from epidemic-prone infectious diseases investigations.

Country Focus



CURRENT IMPACT

Before COVID-19, RESTRACK was being rolled out across hubs in Uganda. Scale up of RESTRACK has been accelerated during the COVID-19 pandemic break out as it became paramount to reach PoEs. This required integration and inter-operability with other national health information management systems for end to end sample transportation and results relays. Work is ongoing to integrate with the LIMS and the results dispatch system so that the sample collectors can be able to track the sample to the point of sample processing and results release.

RESTRACK enabled tracking of all specimens transported through the (NHTN), identification of the location of an outbreak, tracking TAT of specimen transportation, and location tracking of a suspected case specimen in transit. Tracking

samples helped in reducing the number of samples lost in the transportation network as well as to closely monitor the TAT – a key component of the laboratory services. While it is possible to know from CPHL when a result was printed, it was not possible to know if the printed result was delivered to the lower facility. The results delivery tracking module in the mobile application can inform CPHL when the printed results are physically delivered to the lower health facility. The app successfully tracked suspected COVID-19 samples from a lower health facility and Points of Entry through the NHTN up to its testing Laboratories, making it possible to calculate the transportation TAT of the samples in transit. When results are ready, the same application is used to track the results back to the collection center.



SCALING

RESTRACK requires smartphones, Internet connectivity, data bundles and training of the users who include the hub riders, national sample transporters, and hub coordinators. The aim is to train and implement sample tracking at all points of entry, sample collection points at the facilities and quarantine centers.

Currently 58 hubs have been trained and 43 of these are actively tracking. Trained hubs are encouraged to adopt the app but there are challenges of data bundles in some cases. RESTRACK is now being used in 43 hubs and 32 PoEs tracking samples from the point of collection to the reference laboratories.



SUSTAINABILITY

Inclusion of the district teams and the existing work force as well as incorporation of the innovations into the existing work flows is necessary to ensure sustainability. Procurement of the necessary tools and supports should be centralized and distributed to the district and all points of sample collection. Introduction of a national unique identifier for all patients from whom samples are collected is being fast tracked to ensure longitudinal tracking. There is a plan to incorporate the Internet package as part of the health system delivery. Acceptance and adoption of electronic systems by the response teams at the operational level and budget allocation that remain a challenge.

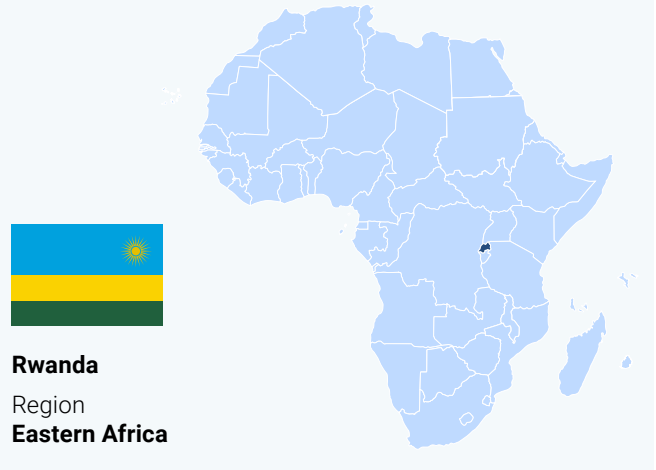
Use of drones for behavioral modification monitoring



BACKGROUND

During the first phase of lockdown that started on March 21 in Rwanda, the Government of Rwanda observed that some of the densely populated neighbourhoods and high-risk zones were not respecting very well COVID-19 preventive measures as it was difficult to reach them by awareness messages. The lack of compliance by residents to directives to stay home, wash hand and respect physical distancing, wearing mask was due to the low accessibility of the areas by community awareness teams and their messages. The Rwanda National Police intervened with Drones which were deployed to compliment radio / TV messages, community health workers and other community leaders by bringing educative messages directly to residents by air.

Country Focus



CURRENT IMPACT

Rwanda has been exploring the integration of drones in different sectors since 2018 from blood delivery and larvicide spraying, facilitating distribution of medicines for chronic patients during lockdown in Health sector, to topography in Agriculture, and taking pictures to promote tourism in the country.

In the case of COVID-19, as drones were used to spread messages they were also equipped with cameras. The recorded footage allowed law enforcement officers, local authorities to closely monitor areas for the need of any intervention or evacuation that would normally take longer to identify and organize. Drones were deployed by the Rwanda National Police to different areas of Kigali mainly high-risk zones and densely populated areas such as Kimisagara, Nyamirambo, Kanombe. Currently, they are being used in Rusizi and Rubavu where new

clusters are identified. Rwanda National Police procured drones with a capacity to broadcast sound and record high definition images. The drones deployed are worth \$5,000–\$6,000 each. Once the phase of curiosity passed residents started listening to messages being delivered by the drones.

Police was able to reach places that sono-trucks couldn't reach because of difficult terrain or lack of necessary manpower. Drones also allowed RNP to deploy Police officers directly to areas – were needed most – as identified thanks to a close monitoring and treatment of the imaging data provided captured. This strategy supported much in compliance of COVID-19 prevention measures especially in remote and very densely areas where it would be difficult to halt the spread of the pandemic.



SCALING

- Buy a good drone that can cover a big geographical area
- Take time to review the images
- Tailor the message to the community
- Make sure that the message includes a warning to stop people from gathering together to see the drone.



SUSTAINABILITY

The system for drone technology is well established in Rwanda. It is therefore possible to repurpose the use of drones whenever its applicable.

Smart Anti-epidemic Robots



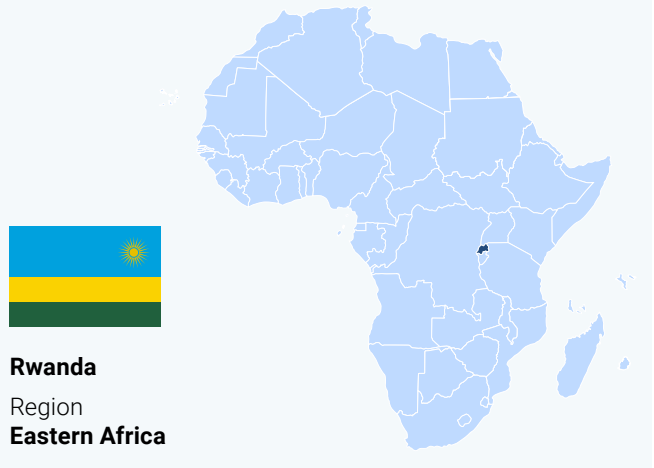
BACKGROUND

One of the challenges being faced worldwide is the rate of infection of health professionals while treating COVID-19 patients. 2016 statistics show the following picture of Rwanda's health sector:

- 1 / 50,505 ground ambulance / population ratio
- 1 / 10,055 doctor / population ratio
- 1 / 1,094 nurse / population ratio
- 1 / 10,500 laboratory technicians / population ratio

Although Rwanda is on track to meet most of the required quotas, the country cannot afford the set back that a pandemic like COVID-19 would cause. To minimize contact time with confirmed cases and reduce the risk of contamination of health professionals in COVID-19 treatment centres, robots were deployed.

Country Focus



CURRENT IMPACT

At Gatenga and Kanyinya treatment centres visits by medical staff to patients went from 3–4 to 2 per day since May. The 5 human-size robots are programmed to perform temperature screening, take readings of vitals, deliver video messages and detect people not wearing masks then instruct them to wear them properly.

Urumuri is currently deployed at the Kigali International Airport with the capacity to screen 50–150 people per minute and report abnormalities to officers on duty. As Rwanda is

progressively reopening its airport, Urumuri will allow to speed up mass screenings of fever for passengers as they land.

On Tuesday, May 19 at the Kanyinya COVID-19 Treatment Centre, the 5 robots were launched by the Ministry of Health.

Akazuba, Ikirezi, Mwiza, Ngabo, and Urumuri were made by Zora Bots, a Belgian company specialised in robotics. They were acquired through a partnership between the UNDP Rwanda Accelerator Lab (AccLab) and the Ministry of ICT and Innovation. Each robot costs about \$30,000.



SCALING

To support further scaling, there is a need to:

- Acquire robots based on the number of treatment centres and entry points
- Explore new features for the robots to respond to patient needs
- Train the medical personnel on how to use and work with the robots. They are not meant to replace each other but to complement each other.
- Establish a maintenance mechanism for the robots.



SUSTAINABILITY

Smart anti-epidemic robots have been used in Asia to help flatten the COVID-19 curve. The pandemic has proven to be a crosscutting challenge affecting Rwanda in all sectors (Health, Economy, Education, Agriculture, etc.). It therefore requires innovative solutions with available resources for which robots are a good example.

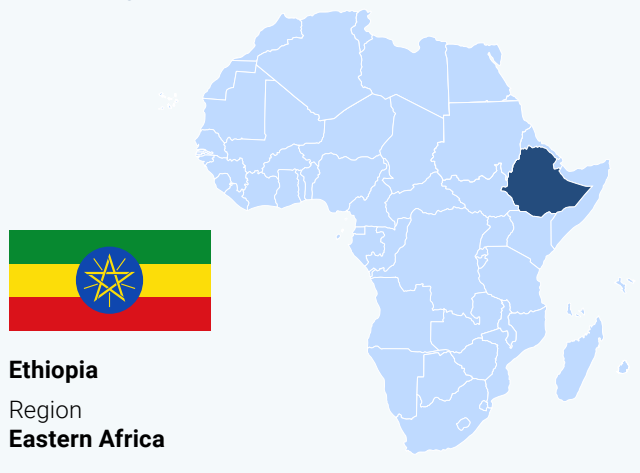
The ComBAT strategy: Enhancing Community based actions and testing



BACKGROUND

Ethiopia reported its first confirmed case of COVID-19 on March 13, 2020. With increasing community transmission, it became critical to re-energize the response and further enhance rapid detection, isolation, contact tracing and treatment of the cases. The Community Based Actions and Testing (ComBAT) strategy implemented was inaugurated by the Deputy Prime Minister on the August 7, 2020 with the aim to strengthen the capacity to detect and manage COVID-19 at the lowest administrative level – woreda (district) level with a heightened whole of government, whole of society approach.

Country Focus



CURRENT IMPACT

The ComBAT strategy is multipronged and consisted of six components; (i) the Detection strategy – reaching out to over 80% of woredas with 17.5 million households in 2 weeks, and in over 1,000 congregate settings; (ii) Protection strategy – improved case management capacity, protection of front line health workers, protect the poor and vulnerable groups; (iii) Continuity Strategy – other health emergencies services, essential health services, essential businesses; (iv) Solidarity Strategy - whole of government with political leadership at all levels, whole of Society: all citizens, CSOs, FBOs, local community institutes, Whole of businesses: both public and private; (v) Communication Strategy – Mask and hand hygiene campaigns; (vi) Normalization strategy with COVID-19 oriented new norm, map of super spreaders activities by sector and design preventive modalities for super spreader activities. Through this strategy, communities in over 80% woredas

(over 20 million people) were reached, including vulnerable populations in refugee or confinement settings, elderly, and other high-risk groups. Over 650,000 rT-PCR tests were conducted nationwide within a period of one month. Active case search were conducted in refugee camps where suspect COVID-19 cases were detected from the house-to-house visits and e-referred to nearby health facilities for sample collection, contributing to an increase in the number of samples collected. Facility readiness for COVID-19 treatment and implementation of the home-based isolation and care was enhanced with the district and community leaders taking the lead role in organization. Increased awareness of the COVID-19 pandemic and required mitigation measures has contributed their practice at community level. The continuity of essential health services enables the community to identify ways to support economic activities in addition to other social services.



SCALING

The ComBAT strategy was initiated in all regions and city administrations in the country. Several capacities were built during the implementation that will continue to be scaled-up based on the needs at the individual district levels.



SUSTAINABILITY

The implementation of the ComBAT strategy through existing administrative structures will ensure sustainability of the actions. Continued political commitment and community engagement will contribute to reinforcing the strategic actions implemented through the ComBAT strategy. Moreover, strengthened collaborations and partnerships with UN agencies, donor communities and implementing partners will provide the much-needed guidance and resources to ensure availability of adequate technical assistance and medical supplies, and effective response to future health emergencies beyond COVID-19.

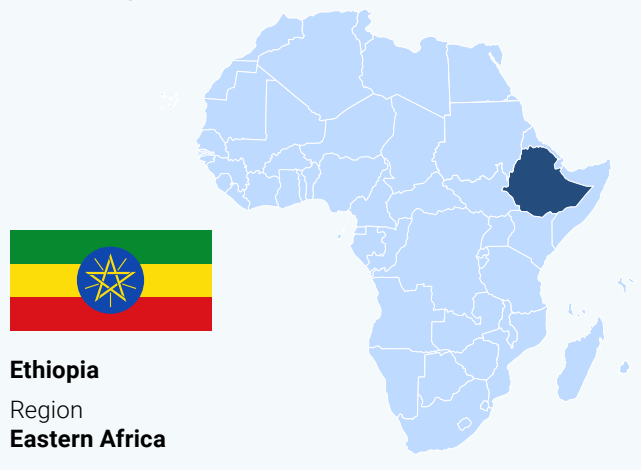
Establishing a Community Engagement Framework (CEF)



BACKGROUND

In Ethiopia, a country with an estimated population of 110 million and widely varied cultural background, it was critical and urgent to reach and empower communities with COVID-19 preventive measures to curb community transmission of the disease. To this end, a simple, quick and effective method of engaging communities and delivering preventive messages was developed – a three process Community Engagement Framework (CEF).

Country Focus



CURRENT IMPACT

This included formation of community-led coordinating teams at Kebeles, the smallest administrative unit, leveraging the Health Extension program and use of social network. The community-led coordination teams led by the kebele leaders played a facilitating role in mobilization of local support in the community; Health Extension Workers (HEW) delivering COVID-19 preventive education to families in an interactive approach while observing physical distancing protocols, and engage youth, women and “Edirs”, a community-based association of residents of a specific locality integrating messages through their social networks. Extensive capacity building using mobile phone platforms were engaged to support the three processes in the implementation of the strategy. With the use of the CEF in three regions of the country

(Amhara, Diredawa and SNNP) nearly 800,000 households with an estimated 3 million people were reached with community-based surveillance and COVID-19 prevention awareness creation messages. There has been a growing trend of behavior change coverage overtime in terms of proper use and wearing face masks, protection of the elderly, and handwashing practices. The important role of the influential leaders helped to counsel, involve, encourage communities to own the process. Engaging social networks of youth, women and “Edirs” facilitated the wide reach of COVID-19 prevention messages to the population in the communities. Health Extension Workers delivered educational messages and screened community members for COVID-19 like symptoms.



SCALING

The lessons learnt from this Community Engagement Framework initially conducted in three out of the twelve regions of the country are being scaled up. With the currently increasing circulation of misinformation and disinformation about COVID-19 motivated by a multitude of interests, maintaining and scaling up the implementation of the framework with the needed resources will prevent reversal of the gains made in adopting COVID-19 preventive practices and help to curb further spread of the disease.



SUSTAINABILITY

Maintaining the level of community-led engagement observed with the systematic, integrated engagement of Health Extension Workers, leaders / key influencers and social networks of youth, women and “Edirs” will build resilience. Utilization of the existing community structures such as the community, religious, and kebele leaders will ensure the sustainability of this intervention. Integration into the delivery of other risk communication services will contribute to its sustainability. Existing community engagement, if supported with continued advocacy and support, contribute to social capital for communities to address other community health and development challenges during future health emergency responses.

Ubongo



BACKGROUND

Ubongo leverages the power of entertainment, the reach of mass media, and the connectivity of mobile devices, to deliver effective, localized learning to African families at low cost and massive scale. It has been rolled out in Ghana, Kenya, Malawi, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia.

Country Focus



Tanzania
Region
Eastern Africa



CURRENT IMPACT

Amidst the COVID-19, Ubongo has had an impact in over 17 million households across Africa watch, listen and learn from the Ubongo cartoons every week. Research shows that watching Ubongo’s edutainment leads to significantly improved learning outcomes for kids and positive behavioural change for caregivers. Ubongo is committed to continually measuring the impact to ensure that they are preparing kids for success in school and life especially during the COVID-19 pandemic.



SCALING

Ubongo takes a results-oriented approach to evaluating and improving the impact of their work as they grow across various countries and demographics in Africa, including rural non-electrified communities. Currently Ubongo cartoons are in 5 languages (English, French, Kiswahili, Kinyarwanda & Hausa), in 40 countries in Africa covering over 17 million households.



SUSTAINABILITY

The team believes that the best way to develop effective content, products and services is to design WITH the user. The in-house user-testing team conducts research, focus groups, and prototypes ideas with kids (core audience), in order to craft content that is relatable and meets their needs. The program is currently self sustaining.

COVID-19 hotline - Afya Call Center



BACKGROUND

The Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) with support from partners established a 24-hour national hotline to provide latest information and advice on COVID-19. The Minister for Health launched the hotline number and call center dubbed Afya Call Center in May 2020 as part of the country's COVID-19 Risk Communication and Community Engagement response plan. The Call Centre is designed to accommodate 1000 concurrent calls, with the possibility to connect with stations at subnational level and includes an Interactive Voice Response (IVR) System for automated answers. The center has at least 20 operators for every 8-hour shift, responding to a minimum total of 60,000 calls each day.

Country Focus



Tanzania
Region
Eastern Africa



CURRENT IMPACT

For COVID-19, the hotline has served three critical purposes: establishing a link between responders and people; understanding people's risk perceptions and concerns and providing public health advice.

Through the call centre, the community has been able to alert responders on suspected COVID-19 cases and / or deaths in the community, guiding response operations at national and subnational level. A Frequently Asked Questions database compiled by call center operators were useful in guiding message development as well as design of targeted risk communication and community engagement interventions.

Through the call center, the public has been provided with up-to date advice on COVID-19 signs and symptoms, mode of transmission, safety precautions to be practiced, outbreak

trends and response measures being implemented by the government and partners. Thousands of community members have been reached with timely and accurate information about COVID-19 and other essential health services through this interactive medium. The hotline has also simplified access to health advice for people in the rural areas who may be distant from the health care services. Unnecessary and unsafe travel by COVID-19 suspects was also reduced because through the hotline, those with COVID-19 symptoms were able to be advised on how to isolate and protect others in the home and at the health facilities.

In tackling the COVID-19 infodemic, the Call Centre has been instrumental in correcting misinformation and dispelling rumors as well as reaching people who cannot read or have visual impairment.



SCALING

Initially, the hotline number in Mainland was operated through one handset phone assigned to one Ministry of Health staff. All calls were directed through the phone and data collected manually. It was difficult to ensure data accuracy and completeness with this system. The hotline number was not reachable 24 hours a day and only had capacity to respond to about 100 calls a day. Through support from partners, the Ministry of Health in Tanzania Mainland has been able to establish an advanced, digitalized call center with the capacity to respond to a 1,000 calls at a time and connect with up to 5,000 other satellite Call Centres at subnational level. For Zanzibar, efforts are underway to mobilize resources a similar Call Center and extending the services to subnational levels.



SUSTAINABILITY

The call center is currently providing public health advice on other health conditions and guidance on how to access other well as essential health services such as immunization, sexual and reproductive health, HIV / AIDS, TB, Malaria and non-communicable diseases. There is a plan to employ trained medical personnel from the health training institutions and other government departments to expand the service offering. With technical support from partners, the Ministry of Health will continue to ensure that operators receive regular refresher training based on new guidance and recommendations that become available and adopted by the country.

Engaging Community Health Workers to combat COVID-19



BACKGROUND

To bridge the health workforce gap in the country, the CHW programme was initiated in 2014 as guided by the National CBHP Policy Guidelines (2014) and the National Costed Community-Based Health Programme Strategic Plan 2015–2020 in Tanzania Mainland; and the 2019–2025 National Community Health Strategy in Zanzibar. Since then, efforts to implement Community Based Health Care Programmes have been fragmented mainly driven by vertical programmes without CHWs / CHVs being duly recognized, integrated and rewarded for the crucial role they play.

To address these gaps and ramp up COVID-19 response, the Ministry of Health in March 2020 launched new National CBHP Policy Guidelines (2020) to harmonize training, deployment, remuneration and management of community health workers. In response to COVID-19, the country is using the policy guidelines to ensure uniform recruitment, training, remuneration and deployment of CHWs to assist with response operations. Similarly, the Ministry of Health in Zanzibar embarked on developing a standard training package for CHVs to streamline their training and deployment for COVID-19 response operations.

Country Focus



Tanzania
Region
Eastern Africa



CURRENT IMPACT

Following the launch of the new CHW policy guidelines, a new CHW training package was developed by the Ministry of Health in collaboration with partners. The 5-day training package covers topics ranging from COVID-19, HIV / AIDS, RMNCH, Nutrition as well as risk communication and community engagement. To date, through the support of partners, 1,572 CHWs have been trained and deployed in four regions (Mwanza, Arusha, Kilimanjaro and Pwani) in Tanzania Mainland and 5 districts in Zanzibar to assist with COVID-19 contact

tracing, community awareness and promotion of essential health services (e.g RMNCH, Nutrition, ECD, etc.). Under the supervision of the village executive officers and mentorship by health facility supervisors, both CHWs and CHVs report on COVID-19 suspect cases, scale up community awareness interventions through household visits to communities in hard to reach areas and those who cannot easily be informed through radio and television.



SCALING

In line with the CHW operational plan and the CHVs strategic guidelines, the Ministry of Health is planning to train and deploy CHWs in all 26 regions and 169 districts in Tanzania Mainland and 5 regions and 11 districts in Zanzibar as part of broader efforts to strengthen primary health care and the health workforce more generally.

Depending on funding availability, both CHWs and CHVs will be equipped with new digital working tools to facilitate data collection and reporting and receive a monthly stipend of about 100,000 TZS (45 USD). Refresher trainings are also planned in relation to identified gaps and to update CHWs on evolving needs of the health sector.



SUSTAINABILITY

Recruitment and remuneration of CHWs is coordinated by the Ministry of Health and Local Government authorities with support from partners. The selection process is supervised by community leaders as trusted members of the community. Mentorship and remuneration plans are integrated within respective Health Facility and Council Plans. Leadership and coordination between various levels of government ensures uniform implementation. Health facility supervisors collaborating with communication engagement coordinators provide supervision and mentorship. With these various levels of engagement and ownership throughout the health system we hope to see this model be sustainable in the longer term.

COVID-19 Innovations

SOUTHERN AFRICA




RapidPro for Nutrition Services

BACKGROUND

The COVID-19 pandemic has resulted in restrictions to mitigate the spread of the virus and continuity of lifesaving nutrition interventions were limited with lack of data making it difficult to monitor the double emergency. This drove adaptation of nutrition programming approaches and information systems to ensure that they remain functional, while minimizing the transmission risk of COVID-19 as much as possible. With technical and financial support from UNICEF Zimbabwe, the Ministry of Health and Child Care has achieved this through scaling-up RapidPro system to collect high-frequency nutrition data of 9 selected indicators in the prioritized 25 districts across all the country's provinces to monitor the nutrition situation.

Country Focus



Zimbabwe
Region
Southern Africa

CURRENT IMPACT

Originally developed for the Cyclone Idai response, RapidPro is an open source software that allows the setting up of a workflow logic to collect any kind of data via SMS. The software has features for managing users' contacts, sending messages in multiple languages and inter-operating with external systems. The RapidPro software can be hosted as a service on a local computer server, or on the cloud. The SMS facility is widely available on all types of phones, hence can reach a wide and diverse audience. RapidPro does not require an active internet connection, making the SMS platform a cost-effective approach.

RapidPro provides a continuous stream of weekly geo-referenced data for monitoring malnutrition caseloads,

coverage of implemented activities, and prompt use and prioritization of resources. RapidPro system collects data on a set of high-frequency indicators thereby allowing monitoring of trends at facility level and early identification of hotspots. In addition, data is collected on the status of supplies for health facilities to ensure no stock-outs and facilitate emergency ordering. Through the monitoring of indicators using the system, the nutrition cluster was able to promptly see changes in essential nutrition services at health facilities following the COVID-19 induced lockdown. RapidPro is not a replacement of the routine information system (DHIS2), which continues to function as normal in the districts using RapidPro. It is rather designed to fast track the data flow from frontline workers to the national / central level.

SCALING

RapidPro is now operational in 25 drought-affected districts and 2 emerging hotspots for acute malnutrition out of the total 63 districts in Zimbabwe. Lessons learned have been shared with the other countries. Of the 655 health facilities registered to report using RapidPro during the first week, 83 (13%) reported correctly. By the thirteenth week, the reporting rate had increased to 60% of the registered 655 health facilities. At community level, 5,928 village health workers reported in the 13th week. Screening of acute malnutrition in Zimbabwe has continued in the current COVID-19 lockdown with some reporting done through RapidPro by the Village Health Workers. In June 2020, 439,857 children were screened for acute malnutrition at community level in the 25 districts.

SUSTAINABILITY

Building on the experience and learning from the use of RapidPro post Cyclone Idai, Zimbabwe has been able to quickly re-start and scale-up use of this reporting platform in the current context of the COVID-19 pandemic and the associated travel restrictions and lockdowns, to ensure the continuity of reporting of nutrition information. not undermine, the routine reporting system. To ensure this, it is important to engage with the HMIS and monitoring and planning departments in the relevant line ministry, and to ensure that the data feeds into the national system at the national level.

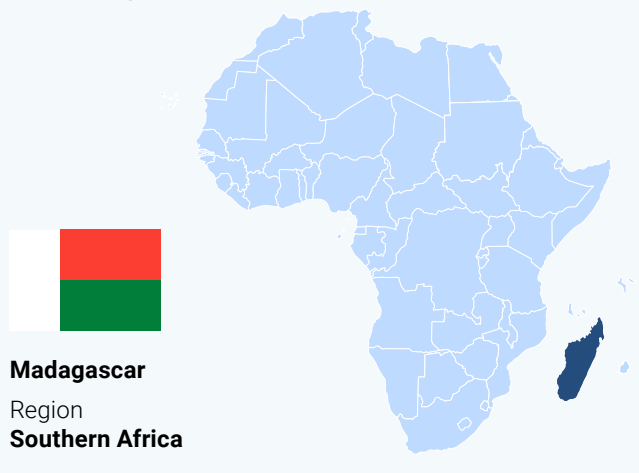
Remote Integrated Phase Classification for Acute Malnutrition Analysis



BACKGROUND

The Integrated Food Security Phase Classification (IPC) is an innovative multi-partner initiative for improving food security and nutrition analysis and decision making. IPC aims to inform decisions on resource allocations and programming. The approach has been that stakeholders gather data and converge at national level with IPC experts. However, because of the restrictions as part of containment measures to curb COVID-19, this approach was not feasible. COVID-19 containment measures have restricted income, reduced food availability and have disrupted supply chains and essential services, the role of IPC analyses is even more critical now than ever in identifying populations who are food insecure and nutritionally vulnerable.

Country Focus



CURRENT IMPACT

Given the chronic nature of nutrition vulnerability of populations in the southern parts of Madagascar, the Ministry of Health and nutrition partners, leveraged existing technologies and successfully conducted a virtual IPC analysis for acute malnutrition (IPC-AMN) in May 2020. The virtual IPC-AMN analysis brought together 23 participants comprising 18 locally based partners and 5 external IPC experts.

Under normal circumstances, IPC analysis sessions start with trainings before the actual analysis over a period of up to 10 days to ensure all analysts have a standard approach to the analysis. Adapting the protocols for a virtual analysis, the IPC team focused the exercise on the analysis steps only and concluded the activity in 5 days. The reduced number of days was key in ensuring that participants remained motivated and committed. The remote analysis was conducted by a devoted core team of analysts with commitment from their member

organizations to fully attend the entire processes including working group and presentations.

The new fully virtual approach involved creative utilization of online platforms. A mixed approach was implemented, with the creation of a common working Dropbox folder for keeping and sharing all documents throughout the process. Working group sessions were conducted on Skype, while Zoom was used for plenary presentations and discussions before the validation of each IPC-AMN step. Each working group was led by focal persons from different organizations. Partners coordinated logistics related matters and created working groups, distributed internet data bundles and coordinated validation of results with other clusters. Ministry of Health provided participants with access to the country's health information system and nutrition related indicators.



SCALING

The IPC AMN team in Madagascar leveraged on existing local opportunities and the prevailing political will to better organize the remote IPC acute malnutrition analysis. The IPC Global Support Unit (GSU) as well as the IPC Cross Country Learning Exchange (CCLE) participants remotely connected from Niger, Burkina Faso and Rome provided all the necessary technical support.



SUSTAINABILITY

With prompt guidance and technical support from the IPC-GSU as well as the IPC Cross Country Learning Exchange (CCLE), the IPC team in Madagascar managed to do all the necessary preparations and, in the end, conducted a successful and credible analysis remotely which is now being used for planning the nutrition response.

Many of the lessons learnt and new tools and ways of working discovered through this forced evolution and innovation in the mechanisms for conducting IPC acute malnutrition analysis can be used well beyond the COVID-19 content.

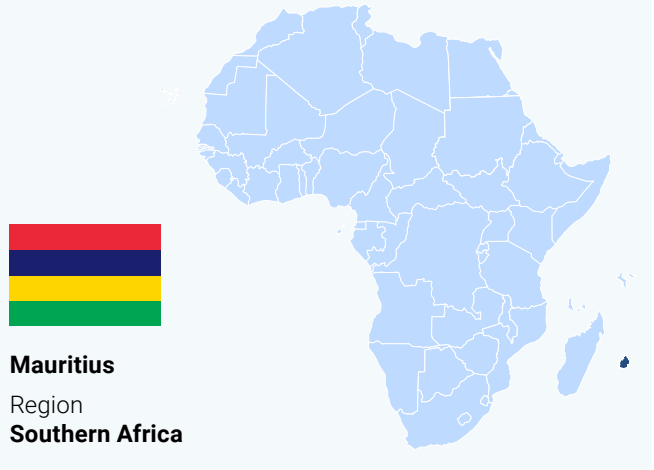
Work access permits to monitor population movement



BACKGROUND

Various legislations was made and amended in the wake of the COVID-19 outbreak in Mauritius to produce a legal framework for IPC measures. The Prevention and Mitigation of Infectious Disease (Coronavirus) Regulations 2020 was created by the MoHW in March 2020 by virtue of section 79 of the Public Health Act and amended several times since its creation to adapt to the fast-changing measures. The regulations provide for several measures such as isolation and quarantining of infected and suspected cases, curfew order, closing and restricted activities of trade premises, restricted areas, unlawful exposure to coronavirus; amongst others.

Country Focus



CURRENT IMPACT

The regulation 14(2) of the Prevention and Mitigation of Infectious Disease (Coronavirus) Regulations 2020 of the Public Health Act allows the Commissioner of Police to issue a permit to a person to be outdoors for the sole purpose of leaving his place of residence to his place of work, and leaving his place of work to his place of residence. The work access permit was applicable to employees of the essential services of the public sector and employees of the private sector providing essential services. The rest of the population were strongly instructed to not remain outdoors unless they

needed urgent medical treatment, essential supplies, foodstuff, medicine or any other item essential for their subsistence or livelihood. Any breaches of these conditions or the misuse of the work access permit were considered as an offense and subject to a fine not exceeding Rs 500 and to an imprisonment term of not exceeding six months. This innovative measure led to a more controlled implementation of the sanitary curfew by allowing the Police Force to easily verify the reasons behind the circulation of individuals during the curfew.



SCALING

A phased deconfinement was implemented to cautiously monitor the evolution of the epidemic before a complete lifting of restrictions. The first phase was from May 15–June 1, 2020 with the reopening of several economic activities including public sector, carers, baby-sitters, planters, fishermen and the self-employed and all persons involved had to have a valid work access permit. The application and delivery of the work access permit were digitalised to facilitate quicken the process. General public could only access these opened services as per alphabetical order. Employers who implemented telework were encouraged maintain this practice while planning a phased return to working at the office.



SUSTAINABILITY

Sanitary curfew was eased on May 31, 2020, the public was allowed to go out and all commerce could operate without the alphabetical order rule. The work access permit was not needed anymore. Wearing of protective masks and respect of physical distancing still applied. Restaurants, coffee shops, food courts, shops and shopping malls were allowed to reopen with the provision of hand sanitisers and body temperature checks at the entrance. Food markets resumed operations too. This incremental approach managed through the use of permits was successful and can be used in the future if needed for other epidemic events.

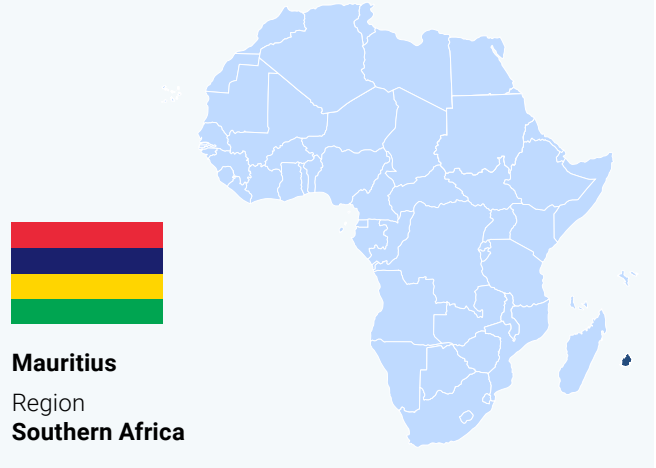
Creation of new COVID-19 media platforms



BACKGROUND

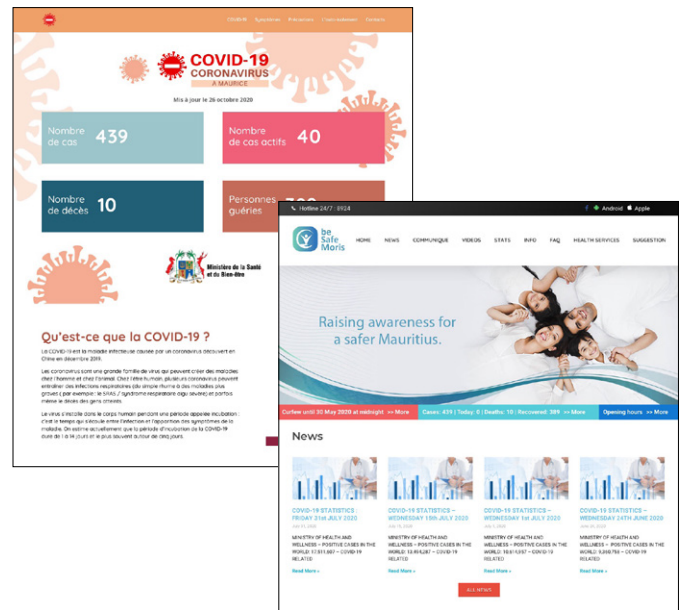
The government of Mauritius demonstrated a rapid response to the COVID-19 outbreak and moved quickly to managed the outbreak locally with the use of an early sensitization program with many communications tools. These tools included pamphlets at ports of entry, the use of short informational videos, establishment of a COVID-19 hotline, creation of a National Communication Committee for centralized COVID-19 communications, a daily televised press briefing and community feedback mechanisms dedicated to risk communications and public understanding. These efforts also included the development of new apps, websites and social media pages.

Country Focus



CURRENT IMPACT

A mobile application, beSafeMoris and a related website were developed jointly by the Ministry of Information Technology, Communication and Innovation, MoHW and Mauritius Telecom (national telecommunication service provider) was launched on March 26, 2020. It could be downloaded for free from IOS and Play Store and had sections on 'New and Communiques', 'Healthy tips', 'Map and Directory of health centre', 'Quick Access to Hotline numbers', 'Push notification' and 'FAQ'. The contents were regularly updated to provide for real time information. A new weblink was also enabled on these platforms for the online application of the Work Access Permit during the first phase of deconfinement.



SCALING

Developed by Mauritius Telecom in collaboration with the Ministry of Information Technology, Communications and Innovation, and the Ministry of Health and Wellness, the beSafeMoris mobile application is scaled to the rest of the population to allow users to get real time information from the Ministry of Health and Wellness regarding topics about public health and safety measures that can be taken to stay healthy in Mauritius.



SUSTAINABILITY

The application offers many practical features that can be applied even after COVID-19, including access to all health related news; informative and preventive videos; information on the location of hospitals and quarantine centers in the country, as well as the hotline number of the Ministry of Health and Welfare and a FAQs to find answers to common questions. All information comes from the Ministry of Health and Welfare, the Ministry of Information Technology, Communication and Innovation and other relevant ministries. beSafeMoris can be downloaded for free.

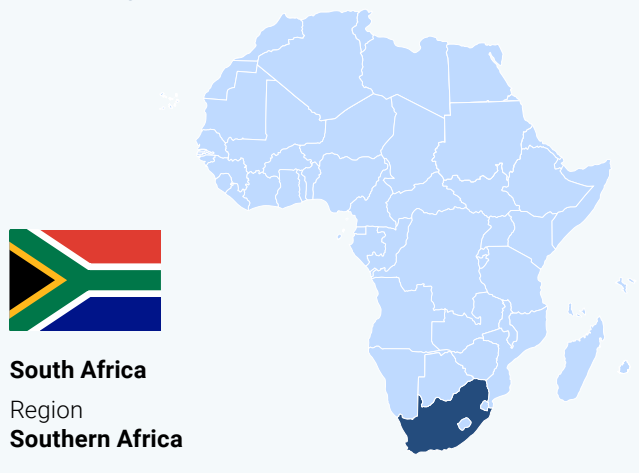
Increasing Laboratory Testing Capacity to Address Community Transmission



BACKGROUND

The rapid identification and isolation of infected individuals is one of the key strategies to control and contain COVID-19. The establishment of large scale testing programmes in many countries has led to increased demand for test kits and reagents, which has led to severe shortages. In South Africa, the diagnostic pathology services in the private sector are provided by various privately owned laboratories, while public sector diagnostic needs are served by the National Health Laboratory Service (NHLS). While both the private laboratories and the NHLS have sufficient capacity to cope with routine demand, the anticipated scale of the COVID-19 burden required innovative and proactive measures to ensure the efficient management of the additional testing demand.

Country Focus



CURRENT IMPACT

In March the United States Food and Drug Administration (FDA) issued an emergency use approval for the Xpert® Xpress SARS-CoV-2 assay which is used on the Cepheid GeneXpert platform and has a turn-around-time of 35 minutes. The NHLS had, at the time, 286 GeneXpert systems across its laboratories, with a combined maximum expected daily throughput of approximately 20,000 tests. This allowed for the immediate scale-up of available capacity to about 35,000 tests per day. The NHLS also introduced 67 mobile laboratories, fully-equipped with GeneXpert machines for use during active case-finding within communities. The response also involved push and pull techniques by the NHLS to prepare PPP through service level agreements in order to mobilize additional laboratory testing as a standby with a corresponding new schema for assessing their readiness (quality and connectivity). Laboratories were assessed for readiness using

a web-based rapid laboratory assessment tool, ReadILAB-COVID. The tool was developed by the NHLS and allows Laboratory Managers to easily evaluate their laboratory's state of readiness for adopting COVID-19 testing, in less than an hour. The mobile application is accessible on a smart device or a desktop or laptop and is hosted on ArcGIS Online, a secure and reliable geographic information system (GIS) managed by Esri. The information collected from this assessment is then automatically displayed on a dashboard at the NPP's Data Command Centre (DCC) which can relay to the NHLS. The activities described were still ongoing at the time of reporting, but the NHLS has been able to rapidly increase public-sector capacity for SARS-CoV-2 testing through the repurposing of PCR testing platforms that were already available at the start of the outbreak.



SCALING

At baseline, the NHLS could test approx. 15,000 tests per day; the capacity was increased to approx. 35,000 tests per day through the adoption of the Xpert® Xpress SARS-CoV-2 assay. In the first five weeks of testing, no more than 100 tests were conducted per week. Testing for SARS CoV-2 in the NHLS started on March 2, 2020. In the first four weeks since NHLS started testing the number of tests conducted weekly ranged from 401–25,240. In subsequent weeks, the number of tests done weekly increased exponentially reaching 97,124 tests in one week at the time of reporting. This rapid upscale demonstrated how the South African diagnostic laboratory system was able to respond to rapidly changing diagnostic needs.



SUSTAINABILITY

The NHLS faced and continues to face a challenge in accessing adequate stock as per volumes procured necessary to satisfy the high testing demand. The testing kits and consumables shortages especially RNA extraction kits, resulted in exploration of innovative methods like heat inactivation or lysis to testing. These methods have now been optimised and are used by most testing laboratories. Secondly, the country is exploring local development and manufacturing capabilities of some of these consumables. There has been a recent funding call by the SA Medical Research Council for projects addressing local development of these testing assays.

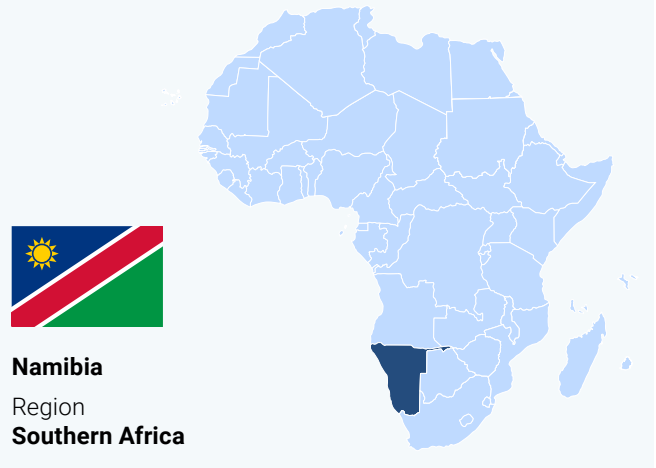
Decentralized ART Services



BACKGROUND

The National HIV Care and Treatment Program has achieved relatively high ART coverage. An estimated 85% of all people living with HIV (PLHIV) were on ART and 78% of PLHIV were virally suppressed. In Namibia, public health facilities provide HIV care and treatment services to the majority of HIV-infected patients. Currently, more than 409 health facilities that provide ART in Namibia. Being a sparsely populated, PLHIV in Namibia face difficulty of accessing HIV care and treatment services from public health facilities. To address access challenge, the 2019 national ART guidelines included various differentiated HIV service delivery models. Hence, MoHS was rolling out a mix of HIV care and treatment service delivery models that decentralized ART services.

Country Focus



CURRENT IMPACT

In order to ensure continuity of ART services delivery while ensuring Infection Prevention and Control (IPC) measures as recommended by WHO and social distancing as per the National lockdown guidelines, Directorate of Special Program established a committee which comprised of representatives from many key stakeholder groups to develop interim guidance on how to provide health care and other essential services during the COVID-19 pandemic. Social distancing, decongesting ART facilities and providing Multi-Month Dispensing (MMD) were the key strategies / approaches to respond to COVID-19 while maintaining continuity of care for PLHIV. The ART National Team assessed the stock level of ARVs commodities at all levels, including the Central Medical Store (CMS), the regions, districts, and health facilities. It also assessed the readiness of health facilities to implement social

distancing. Following these assessments, the team came up with an interims measures to address HIV care and treatment issues on the ground caused or aggravated by COVID-19.

- ART facilities through fast-tracking differentiated services delivery models such as MMD approach, the use of Primary Health Care (PHC) outreach, Comprehensive Community Based Health Services (CCHBS, Community Adherence Groups (CAGs), and the establishment of new ART distribution points to promote accessibility and ensure social distancing.
- Providing supplies for increased duration, modification of regulation for paediatric services and regimen adaptation
- Coordination of high and low volume sites with close and consistent patient follow up and tracing by phone



SCALING

The team engaged the Ministry of Home Affairs, Safety and Security regarding the challenges of cross border patients in accessing HIV care and treatment and its consequences. The Ministry opened the boarder for boarder residents to collect their medication from health facilities in Namibia. Liaising with regional governments, immigration, and police officials, the ART team in the bordering regions established ART outreach points along the border to allow patients across the border to pick up their ART medicines. Patients who miss their appointments were traced via telephone. ART hotline and WhatsApp group were used to communicate ways for patients to access medicines.



SUSTAINABILITY

The coordinated and timely efforts among a large number of key stakeholders enabled Namibia to develop new guidelines and prevent disruption to care and treatment services particularly in poor and disadvantaged groups

Effective communication between the national, regional and facility teams assisted by available technology enabled the implementation of the interim guidance throughout the country.

Many of the modifications made due to COVID-19 can be leveraged for continued use but challenges remain. There is a need to increase stock for pediatric formulations, improve follow up of cross body patient populations, increasing resourcing for community dispensing points and improved data management tools.

Experience with Early Relaxing Social and Physical Distancing Measures



BACKGROUND

Angola introduced early restriction to the passengers arriving to Luanda with source in countries arriving from community transmission areas as early as end of January 2020. This measure together with self-quarantine proved highly efficacious in preventing significant transmission from infected travellers and gain valuable time to implement further preparedness and response mechanisms. Angola had limited resources to implement a full contact tracing and isolation of contact based on the availability of molecular test. For the country was essential to prevent transmission through use of quarantine for travellers until a lockdown was initiated countrywide to address community transmission.

Country Focus



CURRENT IMPACT

The lockdown was analysed by the Multi-sectorial Committee and the Civil Society attending the impact of the restrictions of the essential economic activities in the population welfare. The focus was on the population dependent on daily wages of providing services and basic street commercial activities that were highly affected by the lockdown. The main effect was in the people below the national poverty line with emphasis in suburban slums and rural populations, the unemployed and informal sector.

How and where the activities were carried out (including indicators)

- Partial Lockdown in Luanda, wider flexibility at other provinces countrywide
- Legal framework implemented
- Ensuring compliance through the security forces

- Active participation in the production of homemade mask countrywide by public and private sector with increase from two enterprises to more than twenty up to now

Benefits to the population

- The return of essential economic activities has been extended to non-essential activities
- Increased social mobilization
- Increased access to transport services allowed more access to health services and diagnosis and treatment of endemic disease
- Transport of public health logistics
- Technical assistance was restored to main health programs as well as those provided to the NGOs



SCALING

Early interventions, as the travel restrictions, allowed time for preparedness and sustain essential activities. The early organization of the Multisectoral Committee enable the implementation of the major intervention on the drivers of the COVID-19 transmission and the strong performance of the Health Pillar was essential to allow early relaxing public health social and physical distancing measures.

The close monitoring of the current status of the transmission and compliance with social distancing, handwashing and use of mask is essential to take decision in increase or decrease the public health social and physical distancing measures. The experiences of Luanda should be disseminated to province and local levels.



SUSTAINABILITY

In the future, to ensure successful implementation of these types of measures, there is a need for:

- Continued coordination between the Health Response area, the Productive Sector and the Partners to disclose early changes in strategies according to the risk analysis of the COVID-19 transmission
- Strengthen the alliance with the Civil Society and community leaders to ensure engagement to sustain the gradual relaxing public Health Social and physical distancing measures
- Monitoring closely the transmission pattern and compliance with prevention measures

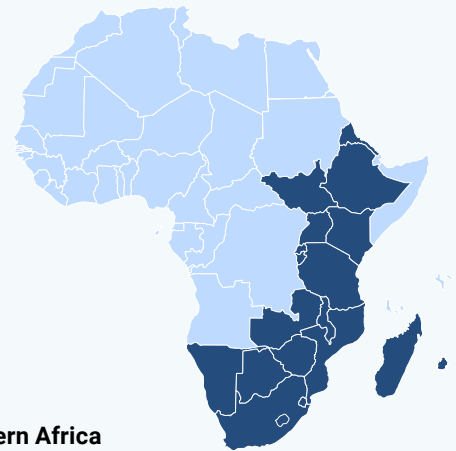
Delivery of essential nutrition services



BACKGROUND

The unpredictable evolution of the novel Coronavirus (COVID-19) pandemic poses a significant risk to nutrition outcomes in low- and middle-income countries (LMICs). Reduced coverage of health and nutrition services associated with the COVID-19 pandemic and a projected two-fold increase in the number of people facing acute food insecurity by the end of 2020 are expected to contribute to increased malnutrition. In Eastern and Southern Africa Region (ESAR), the pandemic was superimposed on existing triple threats to food security, namely drought, floods, and desert locusts.

Country Focus



CURRENT IMPACT

COVID-19 has added pressure to the already fragile systems responsible for delivering nutrition services at community and health facility levels. Measures by governments to minimize the spread of the virus such as repurposing of health care staff and facilities to respond to the pandemic has reduced the availability of services for existing health conditions including the management of wasting, at the same time, the uptake of both preventive and curative services has been reduced due to fear, stigma and inaccessibility resulting from movement restrictions and reduced income amongst others.

To support the continuity of nutrition services delivery, several guidance materials have been developed at the global and regional level covering management of wasting, maternal infant and young child nutrition, micronutrient supplementation,

nutrition information management and surveillance, and nutrition and school feeding in the context of COVID-19. Ministries of health and partners have continued to collect data on service delivery and uptake as well as treatment outcomes through routine health management information systems (HMIS), in some countries adopting innovative approaches such as Rapid Pro, U-report and Kobo Collect to further strengthen the routine system. The availability of this data and the ability to analyse trends in intervention coverage is key in assessing the impact of the pandemic on continuity of essential nutrition services. Adoption of the use of various digital platforms for capacity building of health workers as well as use of various communication for development approaches and communication channels, has proven effective to reach mothers with key IYCF messages.



SCALING

COVID-19 has proven that we are able to create and adopt innovative solutions, such as remote training, counselling and monitoring, to enhance access to quality nutrition care, particularly for those harder to reach. As many of these innovations deliver remotely and use existing infrastructure, there is opportunity to continue to scale and integrate into existing programs for nutrition services in ESA.



SUSTAINABILITY

Additional funding is required to operate innovative communication and social media platforms, and enhanced investments to improve routine reporting etc. Several countries highlighted lack of timely and reliable information as a bottleneck to assessing continuity of nutrition services. During the pandemic this has included reduced access to data collected by routine systems, unavailability of necessary data elements and indicators in routine systems and delays in reporting but has also created opportunity to have more responsive and modernized reporting systems built on what was developed in response to COVID-19.

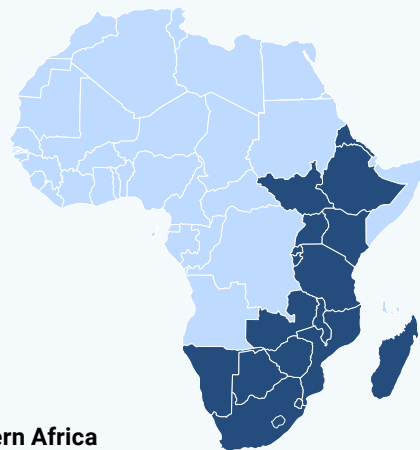
Continuity of Essential Services (CES) Sub-Working Group



BACKGROUND

Since the World Health Organization declaration of COVID-19 as a pandemic, cases have continued to increase globally putting intense pressure on health systems, including in the East and Southern African region, where many health systems are already weak and / or overstretched. Evidence from the West Africa Ebola disease outbreak and early estimates for COVID-19 show that indirect impacts due to disruptions in access to essential health services can result in even higher mortality than that directly related to the outbreak. On March 2–3, 2020, WHO conducted a regional partners' meeting to formally establish a coordination mechanism to support ESA countries to enhance their readiness to respond to COVID-19.

Country Focus



ESA Region
Region
East and Southern Africa



CURRENT IMPACT

The Continuity of Essential Services Sub-Working Group (CES-SWG) was established in April 2020 to provide an innovative, inter-agency platform to support ESA countries to sustain the delivery of essential health and nutrition services in the context of the COVID-19 pandemic. It brings together a range of regional stakeholders to provide collective strategic technical support to countries to mitigate the collateral impact of COVID-19 on continuity of essential health and nutrition services. Membership of the sub-working groups was initially drawn from WHO, UNICEF and UNFPA but has since expanded to include Africa CDC, other UN agencies including UNHCR, IOM, WFP, UNOCHA; implementing partners working in member states including VSO International, Save the Children, Action Against Hunger and ECHO representing regional donors. The group allows for a vibrant discourse

tackling issues pertaining to continuity of essential services informed by the group members' knowledge and interaction with country level counterparts. It allows for the interrogation of existing global, regional and national health and nutrition approaches to service delivery, exploring their adaptation to the COVID-19 context in the subregion. The group engages with member states in a coordinated manner to review progress, guide on new approaches, table emerging issues and resolve system bottlenecks to ensure sustained delivery of quality health services. Key achievements included: development of new quantitative and qualitative mechanisms for monitoring disruptions in continuity of essential health and nutrition services, development and virtual dissemination of interim CES guidance based on tailored pulse surveys, CES logistical support, cross-country learning through deep dive sessions.



SCALING

Group cohesion and good working relationships between the ESA member institutions and countries had to be developed quickly to enable effective performance of the group's work. This required time and dedication of the members amidst their other work at their institutions, however, with effective leadership and commitment, this was achieved. Due to conflicting demands within the member institutions as well as from national counterparts, at times deliverables were delayed. Finally, the CES-SWG does not have an independent funding source or financing mechanisms, and is thus reliant on member institutions to undertake agreed upon actions in their own capacity. This limits the nature and timeliness of country support.



SUSTAINABILITY

Since its formation, the CES-SWG has established itself as a unique forum for collaboration of partners working in the region in health, nutrition, child protection and humanitarian programmes to discuss regionally relevant issues and innovative approaches to supporting member countries in sustaining essential health and nutrition services in the context of the COVID-19 pandemic. The structure and approach has provided a model for regional response tackling of what would have otherwise remained a peripheral issue, especially given the competing pressures of responding to a global pandemic. Consideration should be given to sustaining and further developing this group to support focus on continuity of essential health services during other emergencies in the ESA region.

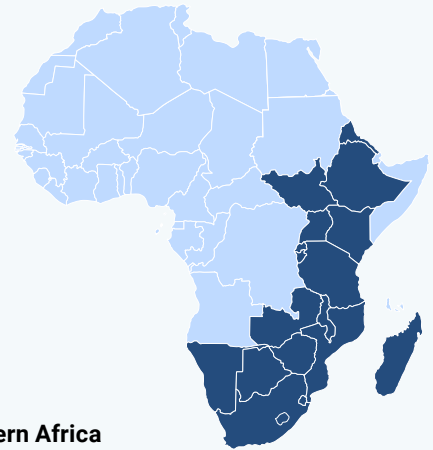
Coordinating Risk Communication and Community Engagement



BACKGROUND

Risk Communication and Community Engagement (RCCE) is crucial for effective public health emergency response, with coordination of RCCE essential to avoiding duplication, resource wastage and possible confusion at community level. We describe the structure and operational modalities of the regional RCCE coordination mechanism for COVID-19 in Eastern and Southern Africa since the declaration of the first cases in countries in the region. Under the co-leadership of UNICEF and the International Federation of Red Cross and Red crescent societies (IFRC), over 30 agencies including UN agencies, Non-Government organisations, media, and interfaith councils have collaborated to jointly share information on their interventions and support the regional COVID-19 response.

Country Focus



ESA Region
Region
East and Southern Africa



CURRENT IMPACT

Through the technical working group, joint guidance and reports have been developed. Products from the different sub working groups including monthly community feedback reports, Fact sheets, Theme specific Guidance notes, media webinars, and Social science evidence reviews. Coordination of RCCE partner activities at regional level is essential in ensuring collective approaches, engagement with other pillars as well as establishing linkages with national coordination mechanisms for effective response. Upon establishment of the Working group, there was a need to identify a common and neutral platform for sharing content on the groups work, including meeting minutes, guidance and other correspondence. Already in existence was the READY initiative, a multi-agency platform to enhance global capacity to respond to major outbreaks of

infectious disease with epidemic or pandemic potential, where some of the group members belonged. The RCCE working group leveraged on this platform, to set up a dedicated webpage on the READY Initiative website, to support all the information management needs of the group. Initial technical support was provided by the READY Partners with subsequent management of the webpage assigned to the group members. The shared space is used to post minutes of the group meetings, Partner information on Who is Doing What, Where, community feedback and social science Evidence review reports as well as facilitating online discussions among members. With over 3000 visits, the platform has provided the needed neutral and shared space, devoid of a particular agency interest.



SCALING

With an average membership of about 30 agencies, weekly one-hour virtual meetings have been held since March using a standard agenda developed and agreed upon by the members. Members of the working group include UN agencies, media organizations, interfaith council and Non-government organization. The group has attracted resources from the Bill and Melinda Gates Foundation to ensure strengthened support to countries, through an inter-agency collective service mechanism for RCCE.



SUSTAINABILITY

Coordination of RCCE partner activities at regional level is essential in ensuring collective approaches, engagement with other pillars as well as establishing linkages with national coordination mechanisms for an effective response. The combined expertise from the various partners, including the diverse mandates and respective geographical coverage of partner activities ensures synergy, complementarity and effective collaboration. The use of a neutral platform for managing information and correspondence from the working group ensures trust and a safe and conducive space for sharing of information, thereby increasing partner contribution of content.

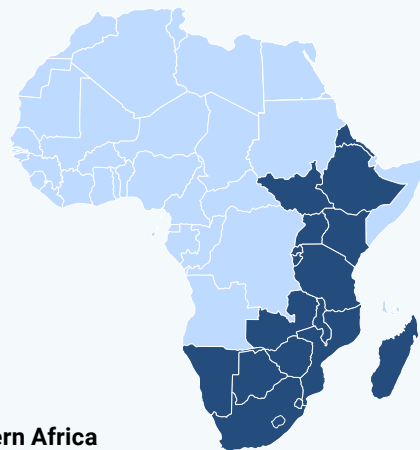
Development of cross-border strategy to manage COVID-19 among truck drivers



BACKGROUND

From March 2020 when the East and Southern Africa sub-region recorded its first COVID-19 cases to September 2020, the disease has spread to all countries, with most member states reporting community transmission. To curb its spread, almost all countries instituted timely non pharmaceutical / public health interventions, including internal movement restrictions and border control / closure while all countries allowed movement of cargo, mainly by road. As a result, transnational truck drivers and their crew continued to commute across the region's borders to deliver essential goods and supplies.

Country Focus



ESA Region
Region
East and Southern Africa



CURRENT IMPACT

The challenges with road transportation of cargo became increasingly apparent, due to the evidence of COVID-19 transmission among truck drivers, lack of a regional agreement on managing the movement and processing of this population. There was mounting negative perception in communities in the corridor, particularly where lockdown prevented almost all mobility and most COVID-19 cases were still imported. Challenges in coordination between health and non-health officials at several borders were additional impediments, causing long wait times at borders, where truck drivers, their crew and cargo would often stay for days waiting for COVID-19 tests and results, which were necessary for clearance to proceed. The ESA regional COVID-19 surveillance, Points of Entry and laboratory technical working group (TWG) held consultations with regional partners to identify bottlenecks and propose ways to address them. The TWG developed

a strategy to assist member states to prevent, control and suppress cross-border transmission of COVID-19 among truck drivers and transnational corridors in ESA countries. Harmonized guidance documents for infection prevention and control, surveillance and laboratory testing at points of entry, risk communication and community engagement and a framework for information exchange were also developed. The strategy and guidance documents were disseminated to member states of the EAC and SADC advocating for implementation of the strategy. Success in the implementation of the cross-border strategy is evidenced by the development of electronic platforms for information management and effective collaboration and information sharing between countries at their points of entry. At the time of reporting, there was a decline in the proportion of cases accounted for by truck drivers within the ESA sub-region.



SCALING

Collaboration between UN agencies and RECs was conducive for identifying and addressing the COVID-19 risk exposure along transport corridors in a timely way. Partners were engaged to include including regional economic communities such as the East African Community (EAC) and the Southern Africa Development Community (SADC). In the consultations headed by this team 10+ countries in the ESA region were engaged.



SUSTAINABILITY

While the strategy is at different levels of implementation ESA countries, it is becoming more relevant, as countries progressively lift lockdown measures including border closures, and permit resumption of long-distance travel.

Regional efforts become a priority during outbreaks and epidemic response. Lessons learnt from COVID-19 and coordination mechanisms led by WHO have created a solid ground for the way forward to strengthen regional coordination in ESA.



**World Health
Organization**

REGIONAL OFFICE FOR **Africa**