

11 May 2021



## **DIGITAL CONVENE EVENT**

**Locally manufacturing Covid-19  
preventive equipment in UGANDA**

**organized by Field Ready & Response Innovation Lab,  
with the support of the Ministry of Science, Technology and Innovation**

# Why this event?

- Share learning
- Map challenges emerging from past and ongoing projects
- Ideate and be inspired
- Create a multipartite community of practice



# Agenda

- RIL Intro
- Ministry of Science, Technology and Innovation
- A global partnership for COVID-19 Response: Protecting the Frontline (Field Ready, HOT, NeedsList)
- Learning from: Local Production & Local Solutions
- Protecting the Frontline – Zoom on Uganda
- Q&A
- Breakout groups & ideation (30min)
- Innovation Demo: virtual reality for PPE training
- Q&A and Conclusion





# Our Approach

A network of field-based labs that:



Map and convene actors



Matchmaker and broker partnerships



Support and scale innovation



Generate and share evidence



# Our Current Partnerships

## Global Core Partners



## Global Strategic Partners



## Sample Local Partners



## Sample Funding Partners





**FIELD READY**



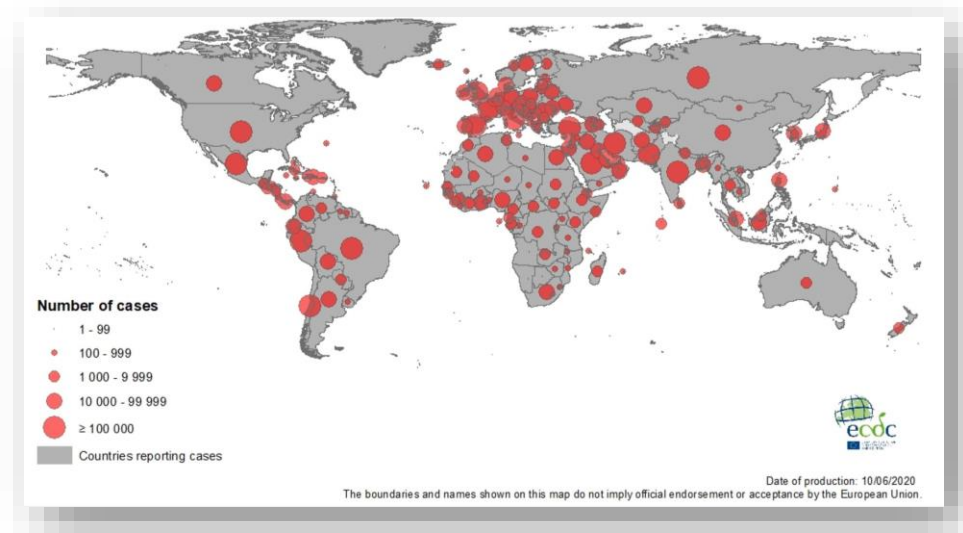
Creating Hope in Conflict: COVID-19 Response  
*Protecting the Frontline: Mapping  
Needs & Manufacturing Capabilities*

# The Challenge: Globalized Pandemic



	Population in need of assistance	COVID-19 Cases	Last 14 days
<b>Uganda</b> (South Sudanese & DRC refugees)	<b>1.2m</b>	<b>42,308</b>	<b>571</b>
<b>Bangladesh</b> (Rohingya refugees)	860,000	761,943	42,993
<b>Iraq</b> (War affected/IDPs)	6.5m	1,074,930	97,755
<b>Kenya</b> (Somali and South Sudanese refugees)	480,000	160,422	8,769

Source: 10<sup>th</sup> May 2021 data from Gov. of Uganda COVID-19 Response Information Hub & European Centre for Disease Prevention and Control



*“The worst public health disaster of our generation”*  
 UN Secretary General, António Guterres

# The Solution: Localized Supply



1

**Combine three humanitarian innovations**

2

**Map needs & manufacturing capabilities**

3

**Make PPE & items to reduce transmission**

*“the answer lies in more networked ways of working”*

Editorial, The New Humanitarian



**NEEDSLIST**

LIRA NGO FORUM COVID-19 RESPONSE & OTHER COMMUNITY NEEDS

- Register Hand-NHS Type
- Gloves Nitrile Powder Free
- Surgical Mask - Level 3
- Disposable Medical Gowns
- Surgical Mask - Level 3
- Surgical gloves

A Name	A s...	A Places	Notes
Makerbot Digitizer 3d Printer	2	FNU: Fiji National University	
Makergear M2	2	ARC: American Resource Centre Suva	
RocknRoll Rotomoulder	2	Water Solutions Ltd, Rotomoudd Fiji Ltd	DSC_0034.JPG (https://dla.ir
Ultimaker 2+	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos), FAB LAB Mindanao	Thickness: 2.85 Filament: AB
Da Vinci 1.0 Pro	6	Fablab Caraga, Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos)	Working Area: 4ft x 3ft
CNC Laser 48	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos)	Soft metal
Modela MDX	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos)	Working Area: 4inx8in
CNC ROUTER 48	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos)	
Roland Print and Cut 640i	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos), Fablab UP Cebu, Fab...	
Embroidery Machine	6	Negosyo Center - Fabrication Laboratory and Co-Working Space Ilocos Region (FabLab Ilocos)	24in x 12in Working Area 3in
Epilog Fibermark (Metal Laser Cutter)	6		3 Units- mindanao 6 Units L



# Mapping Needs & Manufacturing Capabilities

**SANITARY TOWELS**

- Sleeping Bags
- Sewing machines for designing clothes
- Blankets
- Sweaters for children aged 0-12 years
- Solar lamps

**FIELD READY**

**COVID-19 RESPONSE**

GET PPE | MAKE/GIVE PPE

**UGANDA** | 
 **KENYA** | 
 **BANGLADESH** | 
 **IRAQ**

**Key Questions Answered (FAQs)**

Have a question about the PPE program? Want to know if you

**Issue Page**

**Uganda COVID19 Response**

SEARCH BY: Search by...

ADD NEEDS | POST OFFERS

VIEW ALL (7) | NEEDS (48) | OFFERS (2)

- NEED-SUPPLY** Face Mask - DIY (Non-medical)
- NEED-SUPPLY** Bar of Soap
- OFFER-WHOLESALE SUPPLY** Face Shields
- NEED-SUPPLY** Ventilators
- NEED-SUPPLY** N95 Face Masks
- NEED-SUPPLY** Hand Washing Facilities

[www.makeitlocal.org](http://www.makeitlocal.org)

Face shields



Goggles



Face masks



# Making PPE & Items to Reduce Transmission

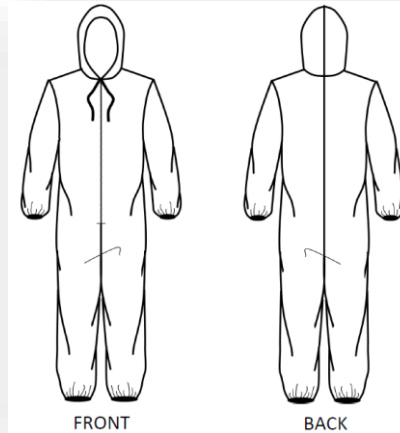
Intubation boxes



Foot operated taps



Gowns



Elbow tap adapters



Sanitizer



# Impacts of the Innovations



**\$ Cost: average of 50% reduction**

**🕒 Procurement: Hours/Days not Weeks/Months**

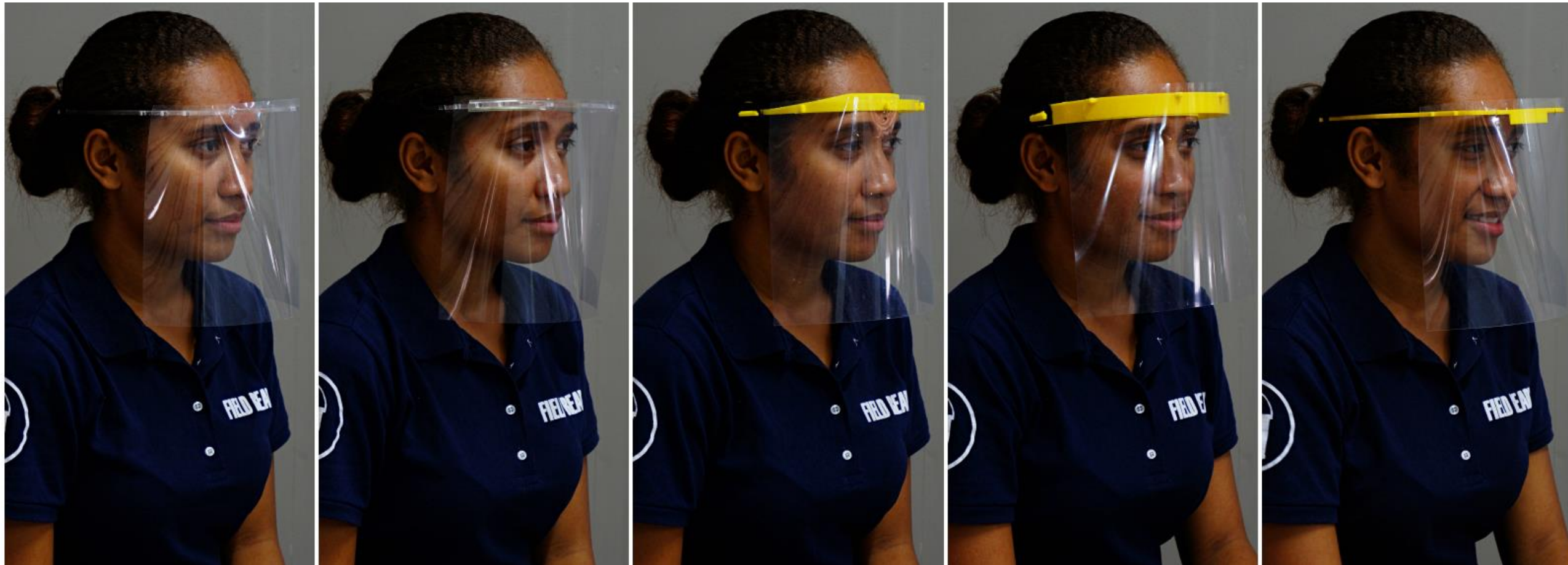
**🏪 Livelihoods and local businesses supported**

**Lives saved, reduced suffering & increased resilience**

# Thank You



Humanitarian  
OpenStreetMap  
Team



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[www.fieldready.org](http://www.fieldready.org) @FldRdy



**Software and Solutions**  
**Powering faster, more sustainable**  
**humanitarian action**

[www.needslist.co](http://www.needslist.co)

[@needslist4good](https://twitter.com/needslist4good)





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**A new era of crisis...  
Requires new tools for  
resilience.**

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## WHAT WE DO

# Software solutions, consulting, & design workshops



**LOCALLY-POWERED**



**COLLABORATIVE**



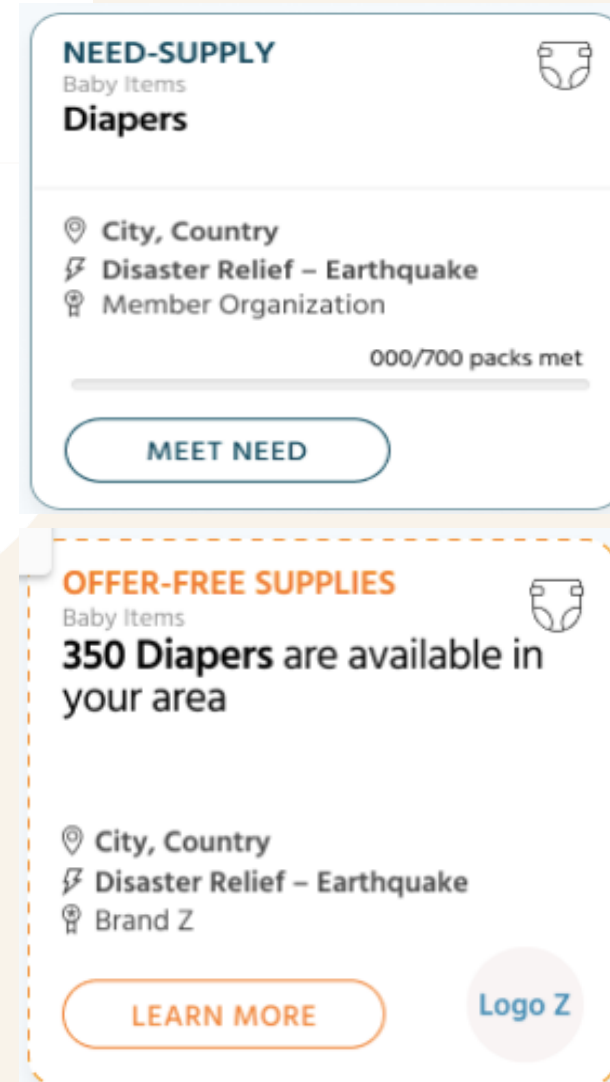
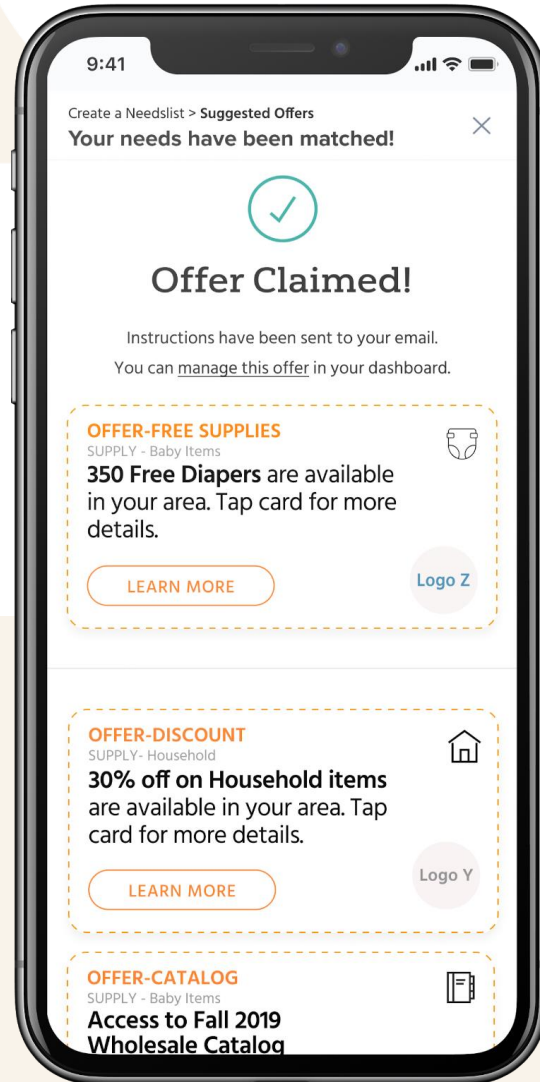
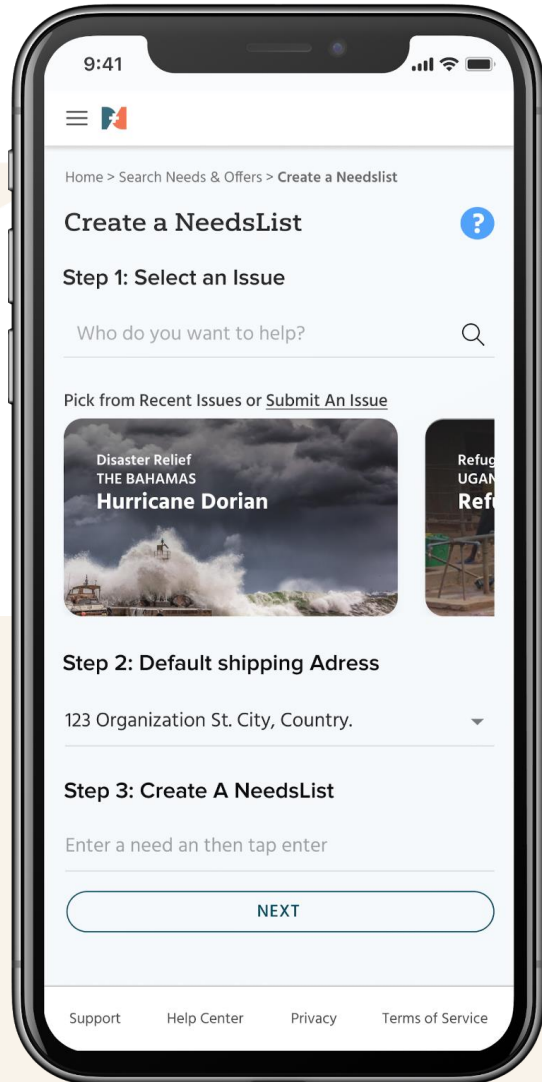
**TECH-ENABLED**



**GROUNDING IN DIGNITY**

# 21<sup>ST</sup> CENTURY, LOCALLY POWERED, AND DIRECT

## RespondLocal: Our Real-Time Crisis Coordination Software



Needs from vetted local nonprofits



Offers from private and public sector





## UGANDA PROJECT

# SOURCING, MAPPING & MANUFACTURING AID LOCALLY

- Aggregating needs from local NGO partners LIRA NGO Forum and AYAN
- Matching needs with local manufacturers to produce items
- Delivering items quickly

To date:

- ~10,000 needs met



# GLOBAL AUTO SYSTEMS LTD

Welcome to Global Auto Systems. Where unbreakable  
software is born

LEARN MORE ABOUT US



DREAM



BUILD



TEST



DEPLOY

*We Never Bargain with Quality*

***Research Oriented IT & Engineering Company***

<https://globalautosystems.co.ug/> , Plot 3 Bananuka Drive, Mbarara Uganda



## Digital Health

We are revolutionising the health care system in Uganda with AI, Cloud Computing and Blockchain technologies to improve patient outcomes.

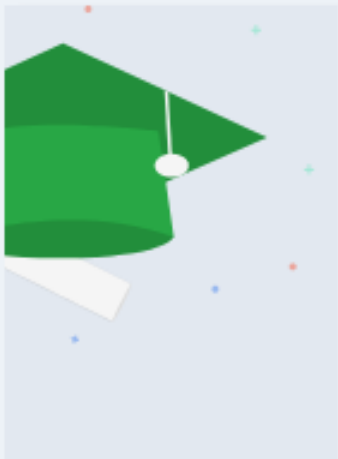
[Read more ..](#)



## Electronics & Robotics

Our embedded systems and Robotics design and Innovations Centre in Uganda with cutting edge Electronics, Robotics and Technology Education .

[Read more ..](#)



## Glo-Academy

Our Education Services unit that provides Package based / paced learning and training for all individuals at affordable rates and convenient times

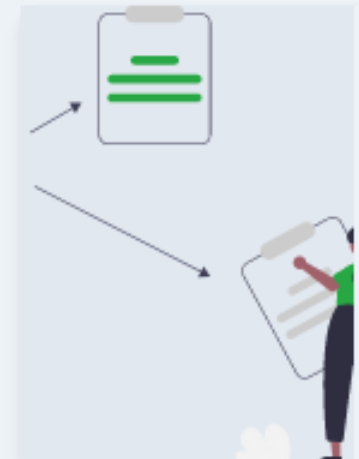
[Read more ..](#)



## Glo Waste Manager

gloWaste manager is a waste management system that is utilized by the waste management site at Kenkombe (the municipal council waste management site)

[Read more ..](#)



Our aspiration is to revolutionize the **health care system** in Uganda with Emerging technologies including **AI, Cloud Computing, 3D printing and Block chain technologies** to improve patient outcomes while reducing the total cost of care

## COVID-19 RESPONSE

GLOBAL AUTO SYSTEMS HAS JOINED HANDS WITH THE REST OF THE WORLD TO PROVIDE SOLUTIONS TO THE ONGOING COVID-19 PANDEMIC. TAKE A LOOK AT OUR FEATURED COVID-19 RESPONSE SOLUTIONS

### YOUTH CONNECT UG

An Intelligent Digital Platform to Empower Youth post COVID-19 lockdowns with access to potential employers, business partners, tailored trainings, our innovation hub, mentorship and support to solve the challenges in their own communities.

[More](#)

### TAKE AWAY

Takeaway is a mobile application built for ordering and delivery of products including groceries, drugs and Personal Protective Equipment with dieting and nutrition recommendations

[More](#)

### NETGENCOVI AI

In partnership with WHO, Mbarara Regional Referral Hospital, and Mbarara University of Science and Technology, we are implementing NextGenCoviAI, an Integrated Digital National COVID-19 Health Information Management Platform.

[More](#)

### 3D PRINTED MASKS

In partnership with the Royal Academy of Engineering UK, we are implementing the CARE project seeking to improve local development and supplies of personal protective equipment, specifically CARE masks and Corran visors (PPE Items) in Africa

[More](#)

### ONCIMS

An Integrated Oncology Information Management Systems



USAID  
FROM THE AMERICAN PEOPLE



Uganda Cancer Institute  
Research is Our Resource



NextGenCoviAI

NextGenCoviAI, is a series of next generation COVID-19 AI Empowered Management Platforms for Resource Constrained Areas

IN PARTNERSHIP WITH



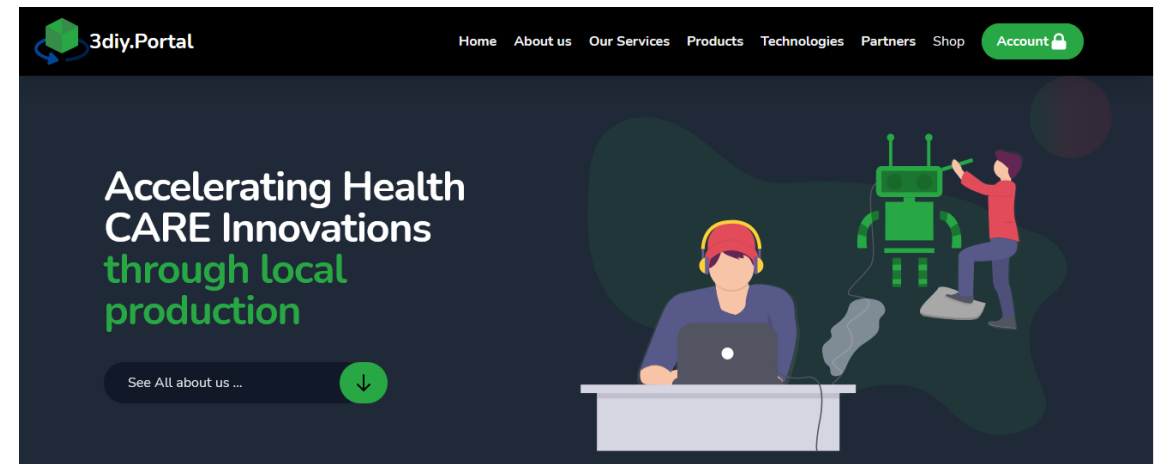
World Health Organization



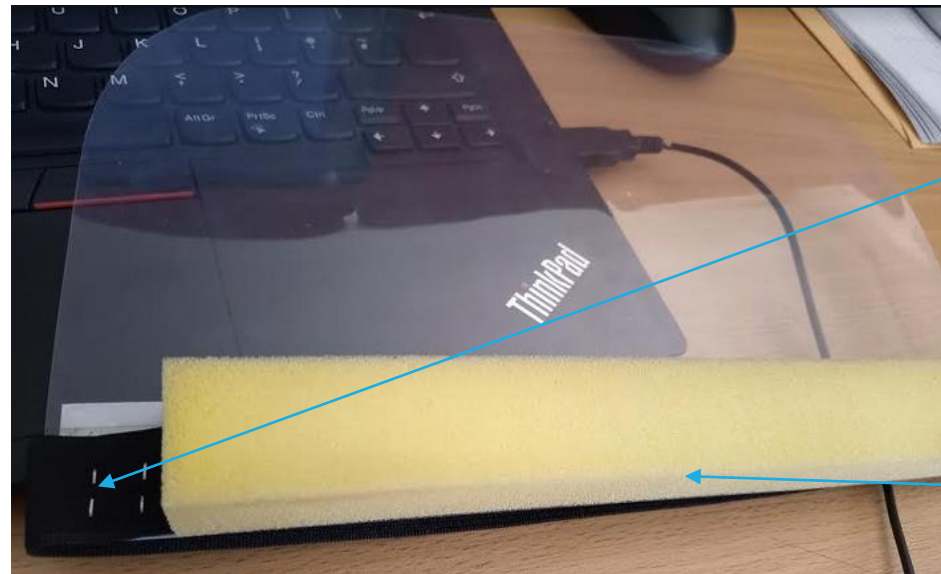
LOCAL PRODUCTION  
LOCAL SOLUTIONS

# OBSERVATIONS AND OUR WORKS

- **Limited availability** of Locally Manufactured PPEs in Uganda
- **Limited Utilization of emerging technologies** like 3D printing & Molding
- **Need to empower community like schools** and other startups to respond to similar pandemics through utilizing of Emerging Technologies.
- Local **production of PPEs** (Face shields, 3D printed Masks; and Vacuum Molded
- Development of a 3DIY digital platform



# GLOSHIELDS — FIXED FORM (TYPE 1A)



Stapling wires

## Community Feedback

- ❖ Stapling wires get off very quickly
- ❖ The spongy form gets dirty within 7 days – based on our environment with DUST and High temperatures leading to sweating

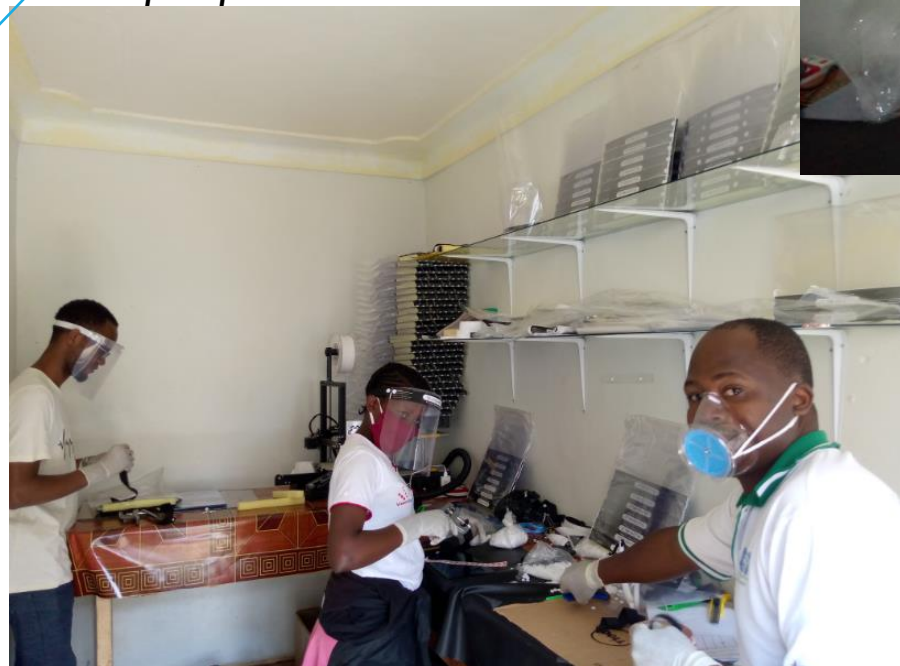
## Impact

Assembled and Distributed over 300 of this type with GLOSHIELD sticker

# GLOSHIELDS — DETACHABLE FORM - TYPE 1B



The form can be detached and replaced.  
Stapling wires replaced with Jumper pins to hold the elastic



**Sold and Donated** over 10,000 this type of face shields.  
Production capacity of **500 per day**



# GLOSHIELDS — 3D PRINTED/ MOLDED FORM- TYPE 1C



Long lasting Molded Using Mayku Molding machine  
Foldable shield  
3D printed



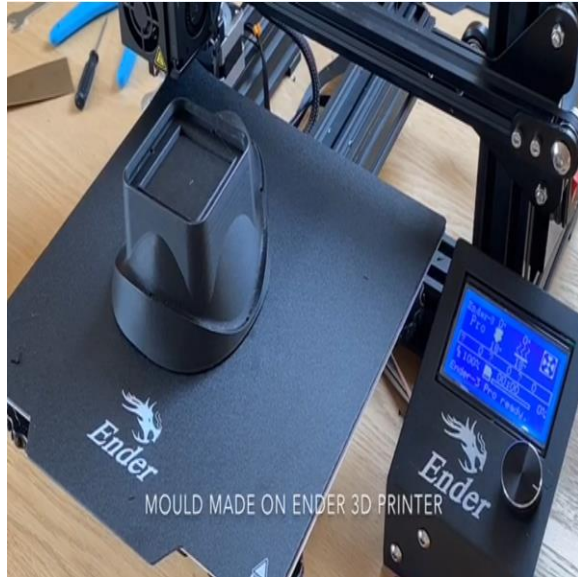


# PRODUCTION UNIT WORK IN PROGRESS



# FIELD (REGUGEE CAMP, MOES)





**Injection Molded Version**



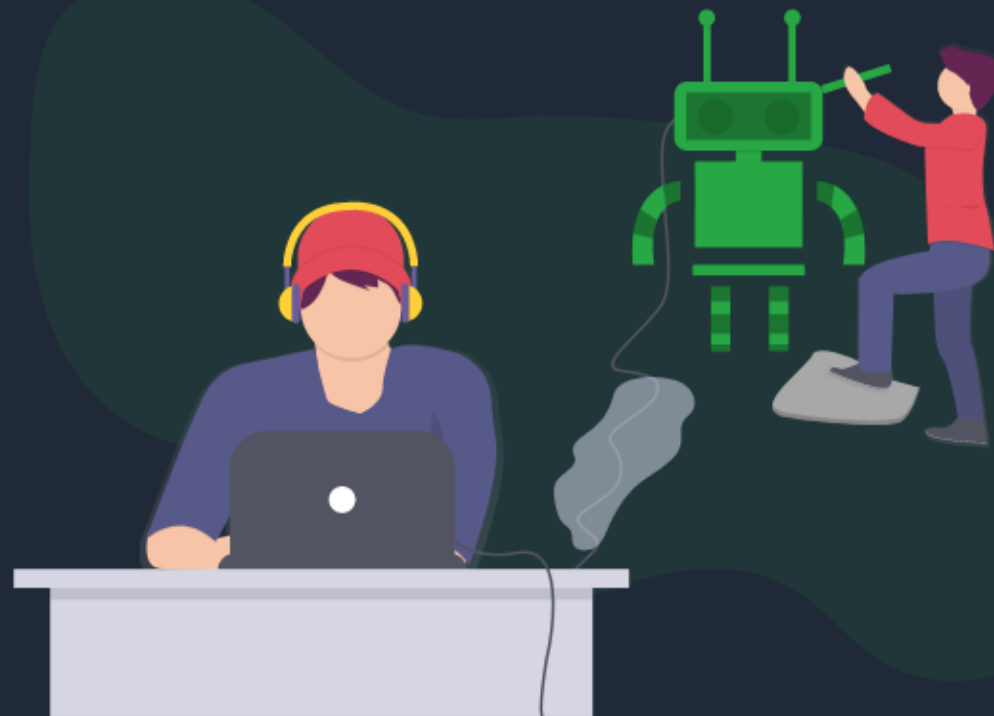
**Vacuum Molded Version**



**3D Printed**

# Accelerating Health CARE Innovations through local production

See All about us ...



## Shopping

Select Product to preview



Select Product

Face Shields 

Small text description of the product and what its all about

Product Type

Product TYPe 1 

Amount

20 

Product : Ugx.100,000

 ADD TO CART

# FUTURE PLANS AND CHALLENGES

## *Future Plans*

- Establish a *regional center of Excellence* in Local production of PPEs using Emerging technologies
- Create an *innovative supply chain* of 3D printing services and products in Africa.
- *Empower* the community to participate in 3D printing through trainings
- Leverage 3D printing lessons from COVID-19 to create a sustainable business through local production of materials. **3DBTK Tool kit**

## *Challenges*

- Limited *Partnerships* and Networks in Uganda.
- *Weak National Innovation ecosystem*
- Limited access to *heavy machines* like injection molding machines for commercial use
- Limited *recognitions and support* from Government and its Authorities
- 3D printing materials are still expensive

**BIOGENICS LTD**

**UGANDA**

# Company Brief

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- **Biogenics Limited is a company focusing on manufacturing of medical sundries, and refurbishing medical imaging equipment**
- **It is registered under the laws of the republic of Uganda where we are headquartered.**
- **Our Mission is to become the leading producer and supplier of medical equipment, and sundries in Africa**



# Organization Structure

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- **Two Divisions (Imaging and Sundries)**
- **5 Departments**
- **3 Directors**
- **46 employees**

# Products

## 1. Surgical Masks KN95 masks

3 PLY SURGICAL MASKS



5 LAYER K N95 MASKS



### 3 PLY SURGICAL MASKS



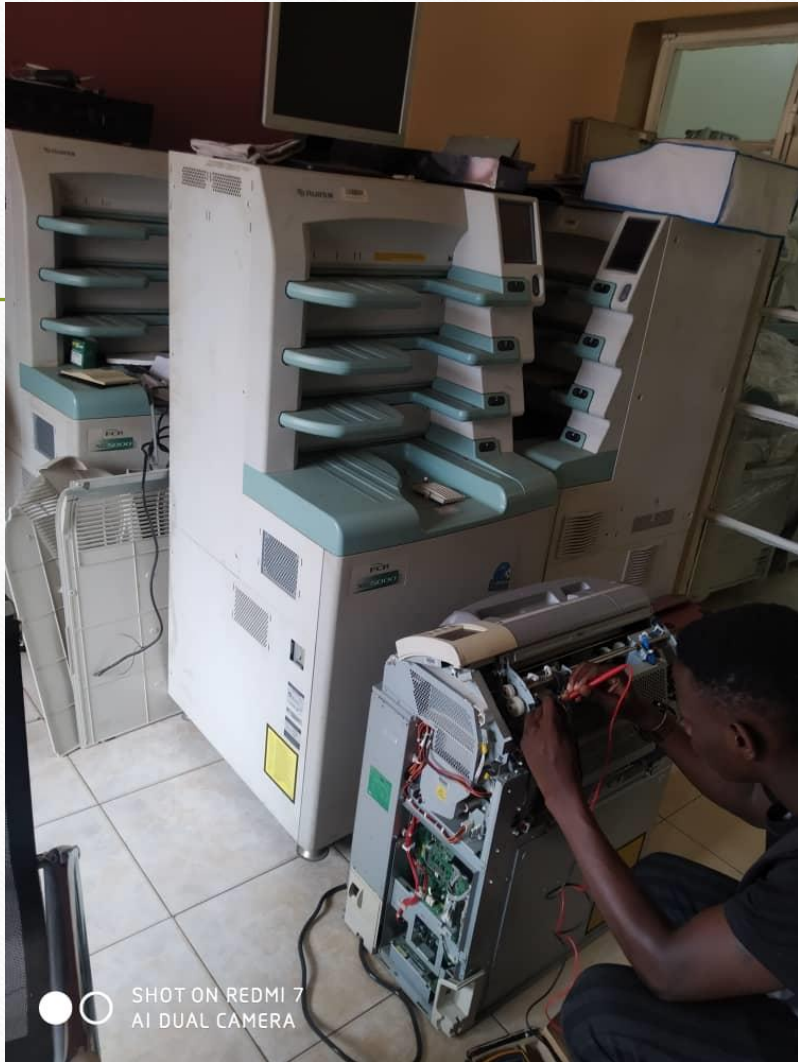
### 5 LAYER KN95 MASKS







- 
- **2. Refurbishment of Medical equipment**
    - **X-ray machines,**
    - **CT scan,**
    - **ultrasound machines, CR, Endoscopy**



# Our impact

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1. Job creation
2. Reliable supply of PPEs that were in short supply
3. Price stabilization for PPEs, due to consistent supply
4. Supporting other local businesses that supply us material
5. Building vital skills in production management, engineering, etc
6. Contributing to the economy through taxes



# CONTACTS

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- [hastonnii@yahoo.co.uk](mailto:hastonnii@yahoo.co.uk)
- **Whatsapp +256-787888267**

# COVIDaction

## Local Production & Local Solutions



COVIDaction is building  
a technology and  
innovation pipeline to  
support the pandemic  
response and recovery



*How have pivots in local production and novel approaches met local needs?*

*What is the role of technology in building resilient health systems?*

*What are the best tools for using data to inform decision-making?*

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# Local Production, Local Solutions (LPLS)

Crowdsourcing and mapping innovative responses to dealing with demand for unavailable products

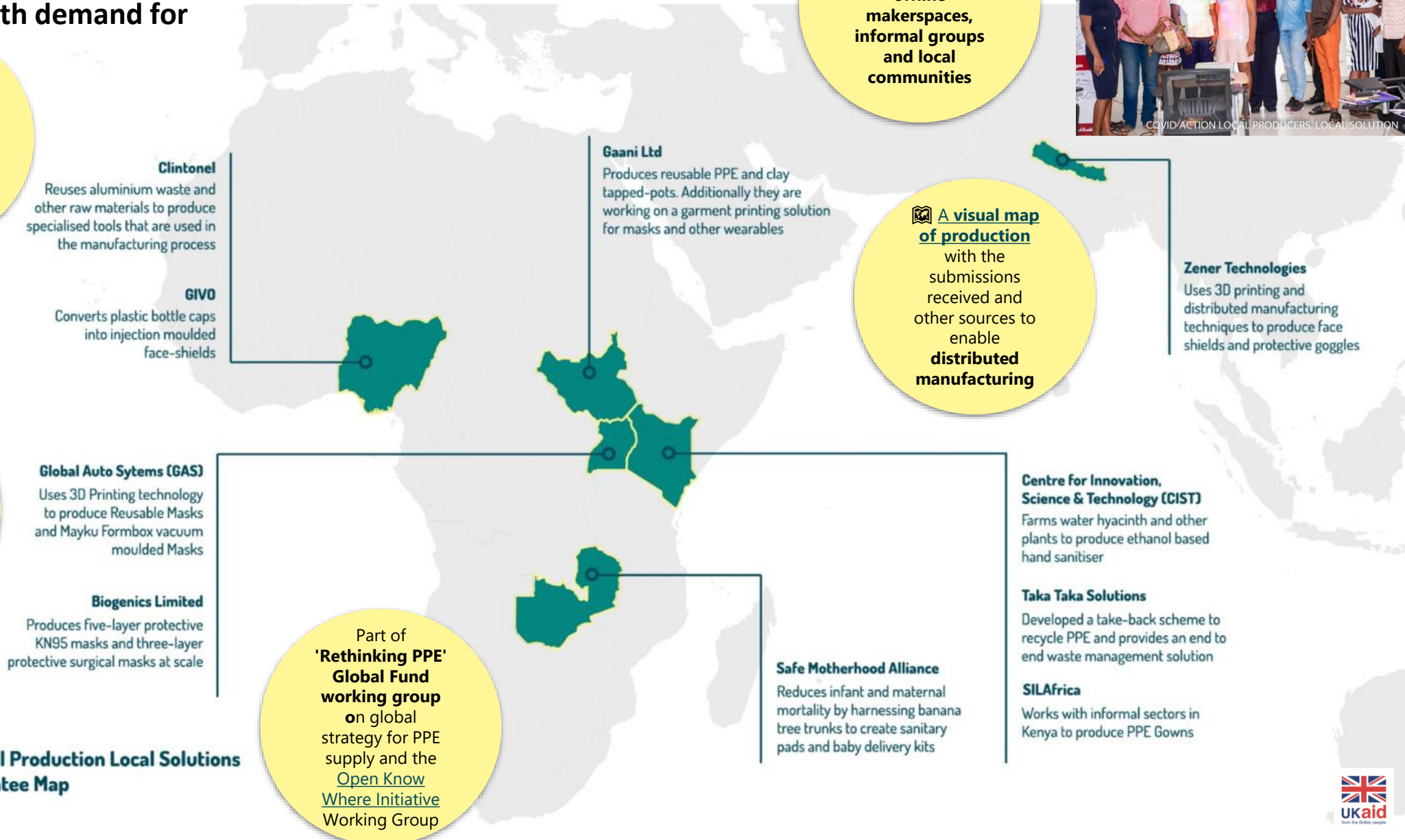
Community Building for peer to peer learning

Over 500 submissions across 3 rounds

Building an Accelerator for Local Production in partnership with AfriLabs



## Local Production Local Solutions Grantee Map



AfriLabs scouting and support to offline makerspaces, informal groups and local communities

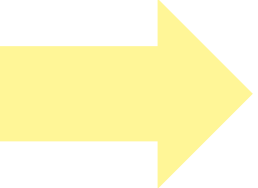
A visual map of production with the submissions received and other sources to enable distributed manufacturing

Part of 'Rethinking PPE' Global Fund working group on global strategy for PPE supply and the Open Know Where Initiative Working Group

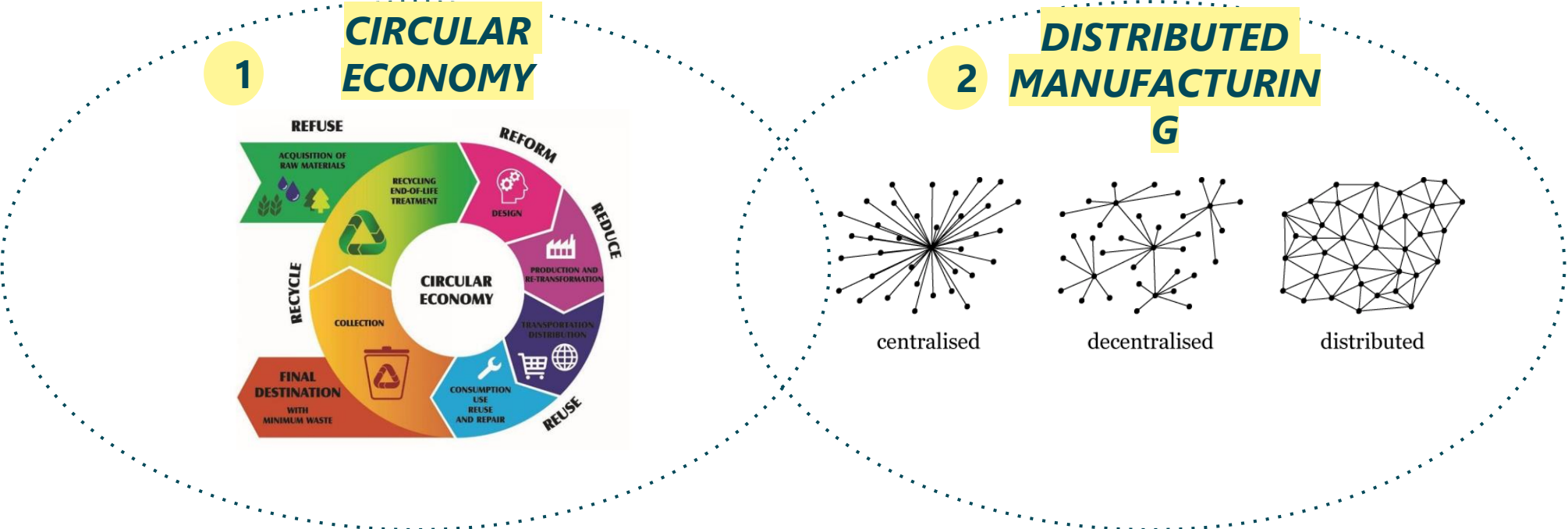


# Local Production & Local Solutions

**Short term**  
COVID-19 response addressing supply chain issues and demand of critical products in local communities



**Long term**  
Resilient local production systems



# We have surfaced and invested in remarkable pivots and solutions across the entire circular supply chain



# Offline Scouting with Afrilabs & Capacity Building with MIIC

## the goal

To engage with offline communities and uncover local producers

## the process

In person scouting through local relationships

## the outcome

85 applications collected across 7 focus countries: Nigeria, Ghana, Cameroon, Uganda, Zambia, Kenya, South Sudan

### Offline Community Training at three hubs:

- *FabLab Winam* - Kisumu, Kenya
- *Impact Hub Lagos* - Lagos, Nigeria
- *Makerere Innovation and Incubation Centre (MIIC)* - Kampala, Uganda

### Outcomes

- Increase resilience to the impact of COVID-19 restrictions and similar scenarios.
- Increase confidence in growing their businesses.
- Increase knowledge of local support systems and networks.
- Increase self-reliance to lower concerns about competing businesses.
- Increase understanding of inputs and outputs with direct control within their businesses.



*"This knowledge is very good in marketing and customer development by developing strategic plans"* - Kizza Ruth Anne, Bukoto Friendly and Fashion Designers, Uganda.

*"It has really been massive and I have acquired a lot"* - Nantongo Jackeline, Boss baking world and Jackie's closet, Uganda.



# Map of Production

We want to map and understand what production is where, so designers, innovators or whoever wants to make something can easily see how to do that within their local area

Part of the [Open Know Where Project](#), which aims to allow different mapping initiatives to cooperate more easily, with a common data standard.

## Get connected!

Want to put yourself on the map so people can find you and work with you? You can submit your details to be included on our map.





# Thankyou!

## Follow our story

 @COVIDactionTech

 [medium.com/COVIDaction](https://medium.com/COVIDaction)

## Subscribe to our newsletter:

 <https://covidaction.substack.com/>

## Add to our map of production:

 [www.innovationaction.org](http://www.innovationaction.org)

LPLS Partners &  
Friends





**FIELD READY**



Creating Hope in Conflict: COVID-19  
Response

*Protecting the Frontline: Mapping  
Needs & Manufacturing Capabilities*

... by Country, Territory, or Area

Uganda

Nigeria

Cameroon

Gabon

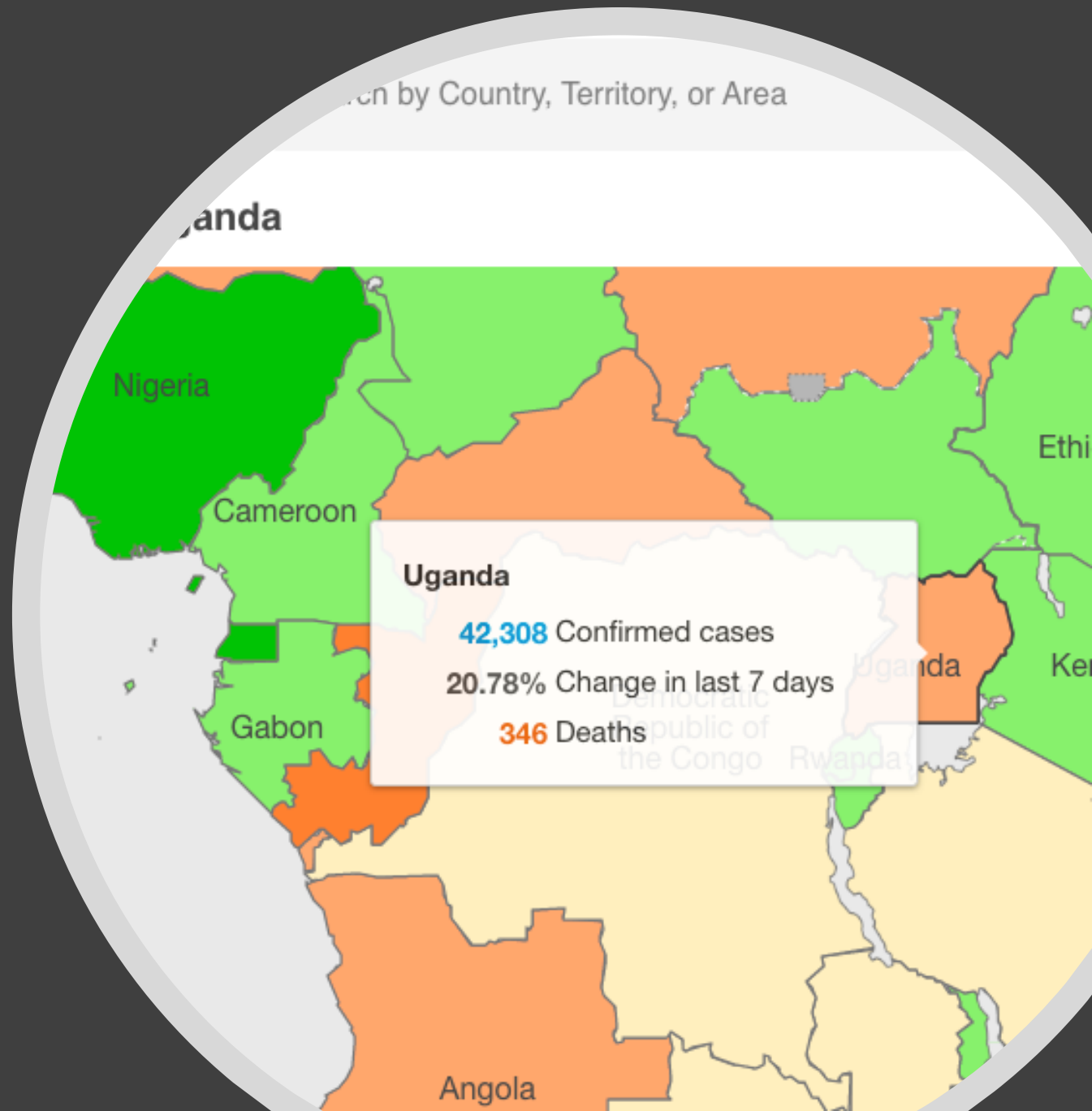
Angola

Ethi

Ken

**Uganda**  
**42,308** Confirmed cases  
**20.78%** Change in last 7 days  
**346** Deaths

# COVID-19 in Uganda





# The Program

- Mapping PPE/infection control items needs amongst NGOs working with refugees
- Mapping local manufacturing capabilities able to meet those needs
- Making PPE/infection control items to reduce COVID -19 transmission



**FIELD READY**

**HOT**

**NEED-SUPPLY**  
Medical Devices  
**Respirator Masks-N95 Type**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/10000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Surgical Mask - Level 3**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/5000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Gloves Nitrile**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/5000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Disposable Medical Gowns**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/10000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Medical Gowns**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/1000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Surgical Mask**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/1000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Protective Face Shield**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/1000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Water & Sanitation  
**Sanitary Towels**

📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/1000 Units

[LEARN MORE](#)

**NEED-SUPPLY**  
Medical Devices  
**Surgical Gloves**

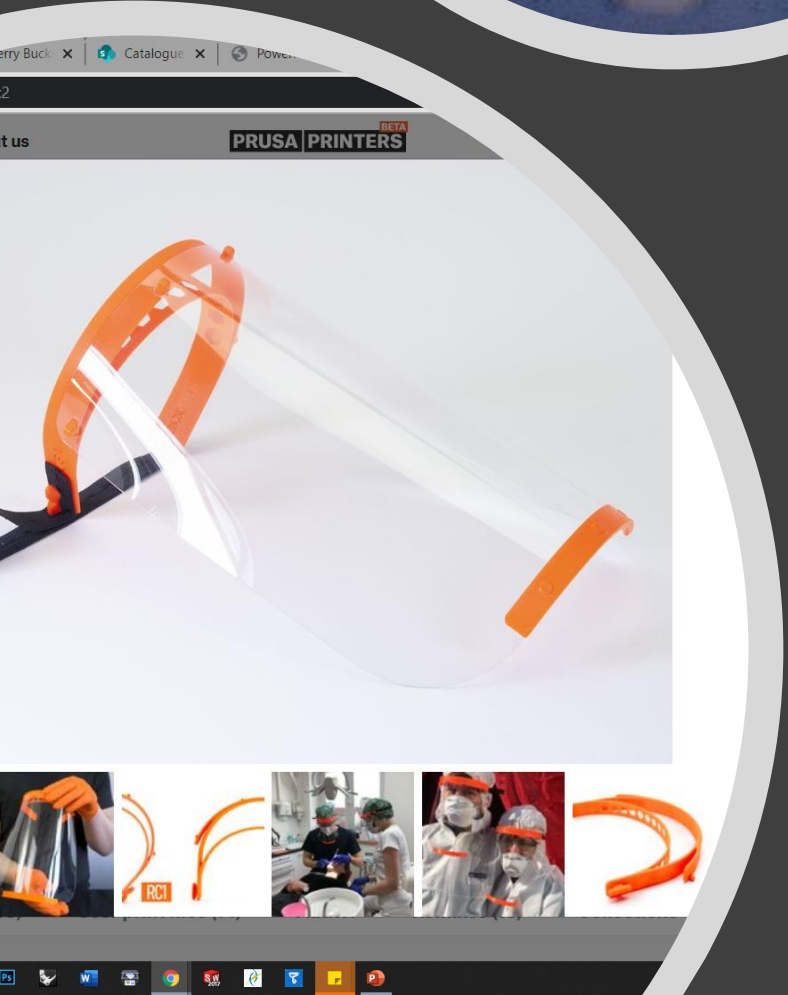
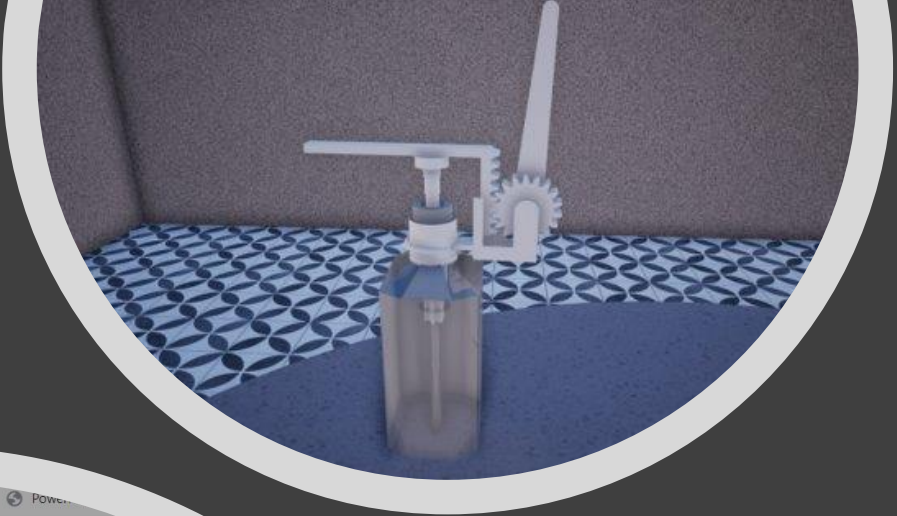
📍 Uganda. Uganda COVI...  
👤 Lira NGO Forum

0/1000 Units

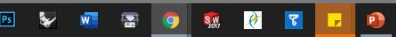
[LEARN MORE](#)

Using Needslist to map & match 200K+ PPE & infection control items needed by NGOs in Uganda





Working with local makers & manufacturers to provide PPE & infection control items from our opensource catalogue





Working through local program partners to identify what's needed and to make items locally



# Program Impact



COST – reduced by 50% on average



PROCUREMENT TIMES reduced from months/weeks to days/hours



PROCUREMENT CHANNELS – working with large NGOs such as World Food Program to introduce local manufacturers to their supply chain



LIVELIHOODS – supporting local to make quality items and opening the door to NGO supply chains





**FIELD READY**



Humanitarian  
OpenStreetMap  
Team

Thank you

For more information  
please contact:

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[www.fieldready.org /](http://www.fieldready.org/)

[@fldrdy](#) OR

[john.asiinwe@Fieldready.o  
rg](mailto:john.asiinwe@Fieldready.org)



Humanitarian  
OpenStreetMap  
Team



Hi,  
I'm

**Kiggudde Deogratus**

HOT Country Manager, Uganda



# Who We Are

The **Humanitarian OpenStreetMap Team (HOT)** is an international team dedicated to humanitarian action and community development through open mapping. We work together to provide map data which revolutionizes disaster management, reduces risks, and contributes to achievement of the Sustainable Development Goals

# What We Do

## MAPPING & TRAINING

Remote disaster activations and field deployments to train, build capacity, map for most complex challenges

## PEOPLE & COMMUNITY

Building the HOT global network, development of mapping communities & peer to peer knowledge exchange

## TECH INNOVATION

A home for leading free and open source humanitarian map/geodata tools

## PARTNERSHIPS

Relationships with NGOs, multi-laterals, donors, private sector, tech industry, and academia in support of all pillars



MISSION:

# WE MAP EACH CORNER OF THE WORLD SO NO ONE IS LEFT BEHIND

To be on a map is to be acknowledged, to be known, to be recognized, to be counted. It is for the world to know that you are there and that you have needs, you have rights, and you exist.

# GCC - Field Ready

## Protecting the Frontline (PtF)- Local Manufacturers Mapping Manufacturing



Humanitarian  
OpenStreetMap  
Team

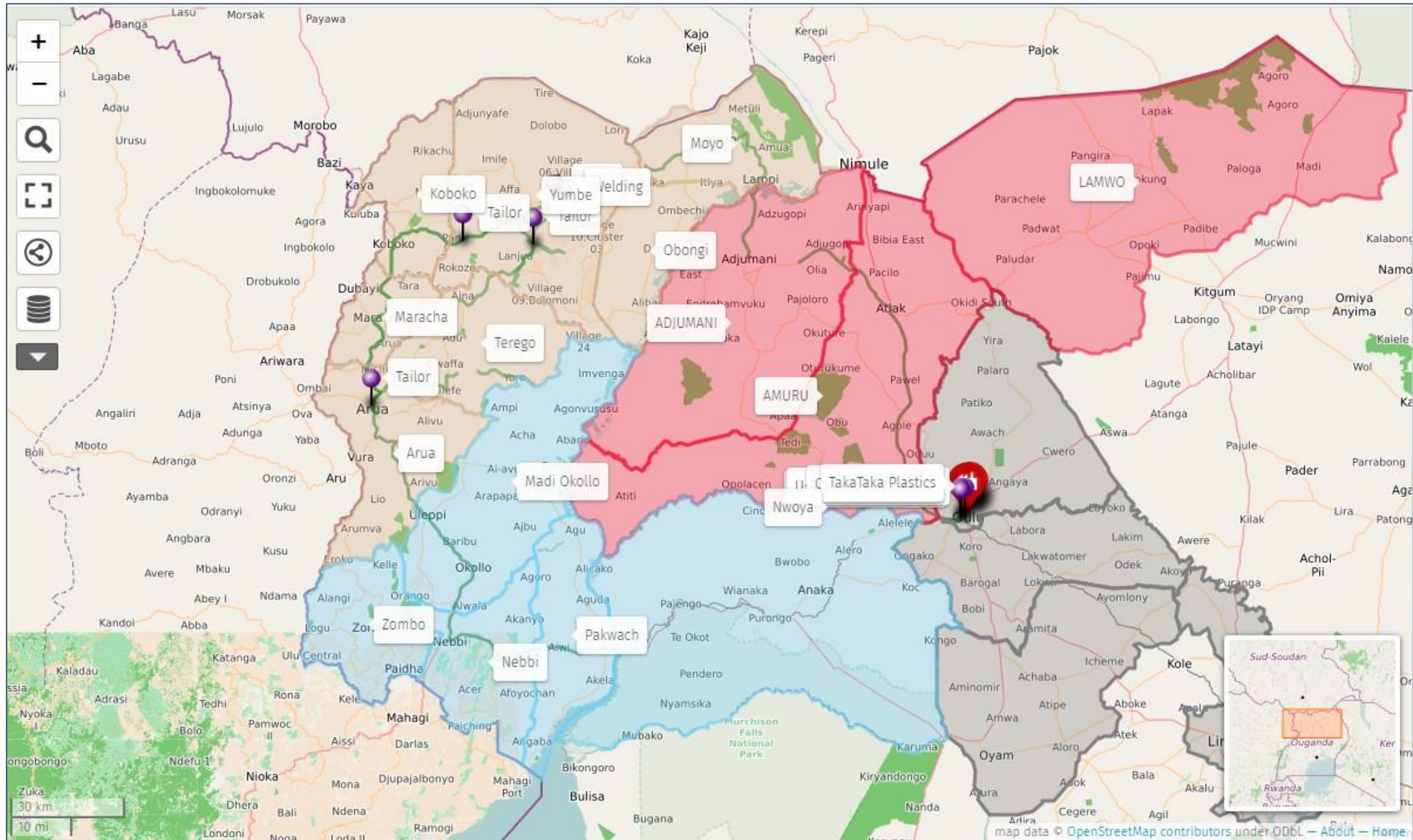




# North and North Western Uganda

## Refugee Settlements

- Palabeck, BididBidi and Rhino refugee settlements



# Open Know Where Data model- ODK/Kobo

4/27/2021 GGC\_Field\_Ready\_Form\_v1.0

Specify other.

The size or floor size of a manufacturing facility.  
In Square Metres (sqm)

What are some of the major materials you using at this facility?

Storage Capacity of the manufacturing facility.

Certifications obtained by the facility.

Do you have a back up generator?

- Yes  
 No

Do you have uninterrupted power supply?

- Yes  
 No

Whether a manufacturing facility has road access.

- Yes  
 No

Whether a manufacturing facility has a loading dock.

- Yes  
 No

The maintenance schedule of a manufacturing facility.

Typical products produced by the facility.  
List them by separating with a comma.

The Agent which partners or funds the facility.

Customer reviews of the facility.

4/27/2021 GGC\_Field\_Ready\_Form\_v1.0

Postcode

Please record GPS coordinates of this facility.

latitude (x,y \*)

longitude (x,y \*)

altitude (m)

accuracy (m)



Owner

An Agent who owns or manages the facility

Phone Number

077786534 of an Agent who is the contact for enquiries about making.

Affiliation

The Agent(s) who the manufacturing facility is affiliated with. An affiliation can be used to define the facility type, for example an affiliation with FabLabs.org implies that the facility is a FabLab

## Facility Status

Status of the facility

- Active  
 Planned  
 Temporary Closure

4/27/2021 GGC\_Field\_Ready\_Form\_v1.0

What are the facility operational hours?

- Business Hours  
 24/7  
 Other

Specify other.

Please describe what the facility does.

Which Year was the facility founded?

yyyy-mm

## Access Type

How is the manufacturing equipment accessed?

- Restricted  
 Restricted with Public Hours  
 Shared Space  
 Public  
 Membership

Does the facility support Wheelchair accessibility?

- Yes  
 No

The equipment available for use at the manufacturing facility.

## Manufacturing Process

What is your typical batch size output?

- 0 - 50 Units  
 50 - 500 Units  
 500 - 5000 Units  
 5000+ Units  
 Other



# Partnerships

Uganda  
Manufacturers  
Association.

TakaTaka Plastics.

Community  
Technology  
Empowerment  
Network. (CTEN)

Youth Empowerment  
Foundation. (YEF)

Youth Social  
Advocacy  
Team.(YSAT)

Kulika



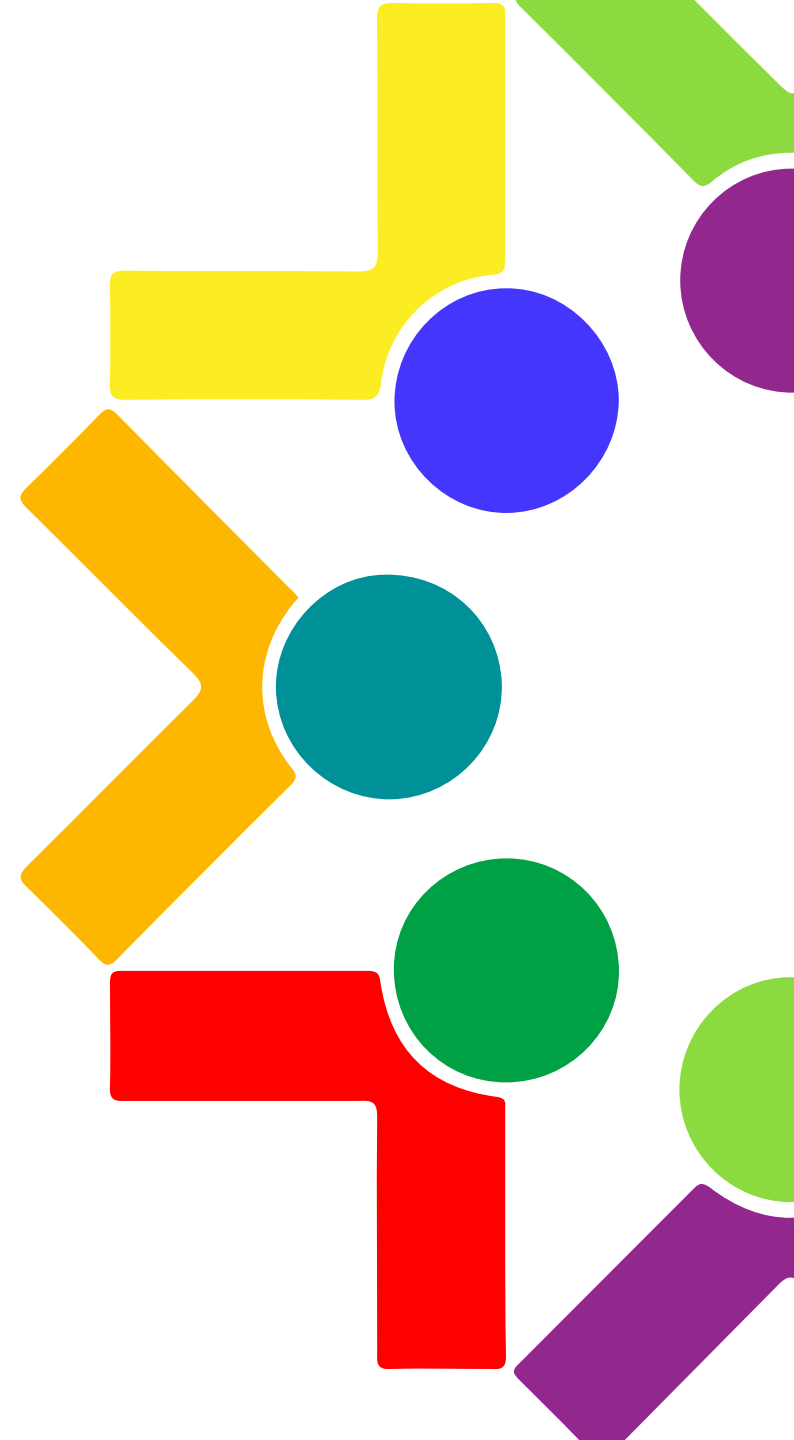


HOT

Thanks



Q&A



# Breakout groups

**1:** challenges and opportunities for local makers to enter humanitarian supply chains

**2:** challenges experienced by manufacturers in Uganda for the production of C-19 protective equipment - including when working with 3D printing

**3:** opportunity mapping - what else could the participants do to improve local manufacturing opportunities & connect humanitarian needs with suppliers





**AFRICAN CENTERS OF EXCELLENCE  
IN BIOINFORMATICS**  
KAMPALA, UGANDA

# Immersive Virtual Reality for Training of PPE Usage during the COVID-19 Public Health Emergency

11th May 2021

*Mike Nsubuga & Grace Kebirungi*

African Center of Excellence in Bioinformatics & Data Intensive Science, IDI

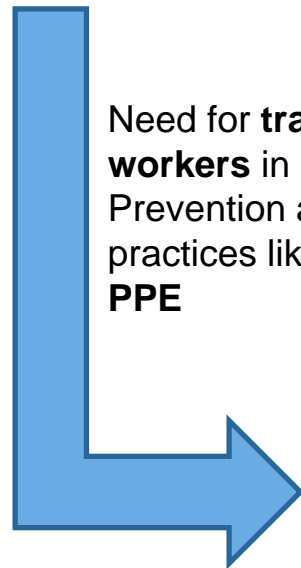
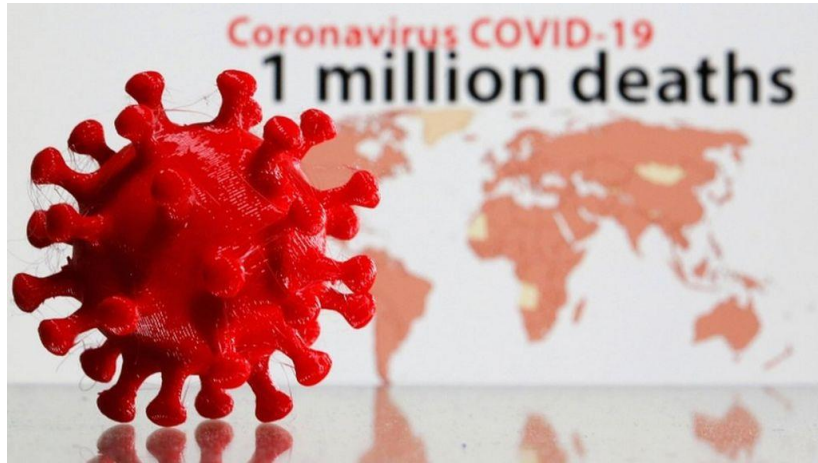


**MAKERERE UNIVERSITY**

**Infectious Diseases Institute**  
College of Health Sciences, Makerere University, Uganda  
Investing In The Future – Impacting Real Lives



# PROBLEM



Need for **training of health workers** in proper Infection Prevention and Control practices like **correct use of PPE**

Health worker mode of training:  
**Traditional Classroom setting**

**Challenges**



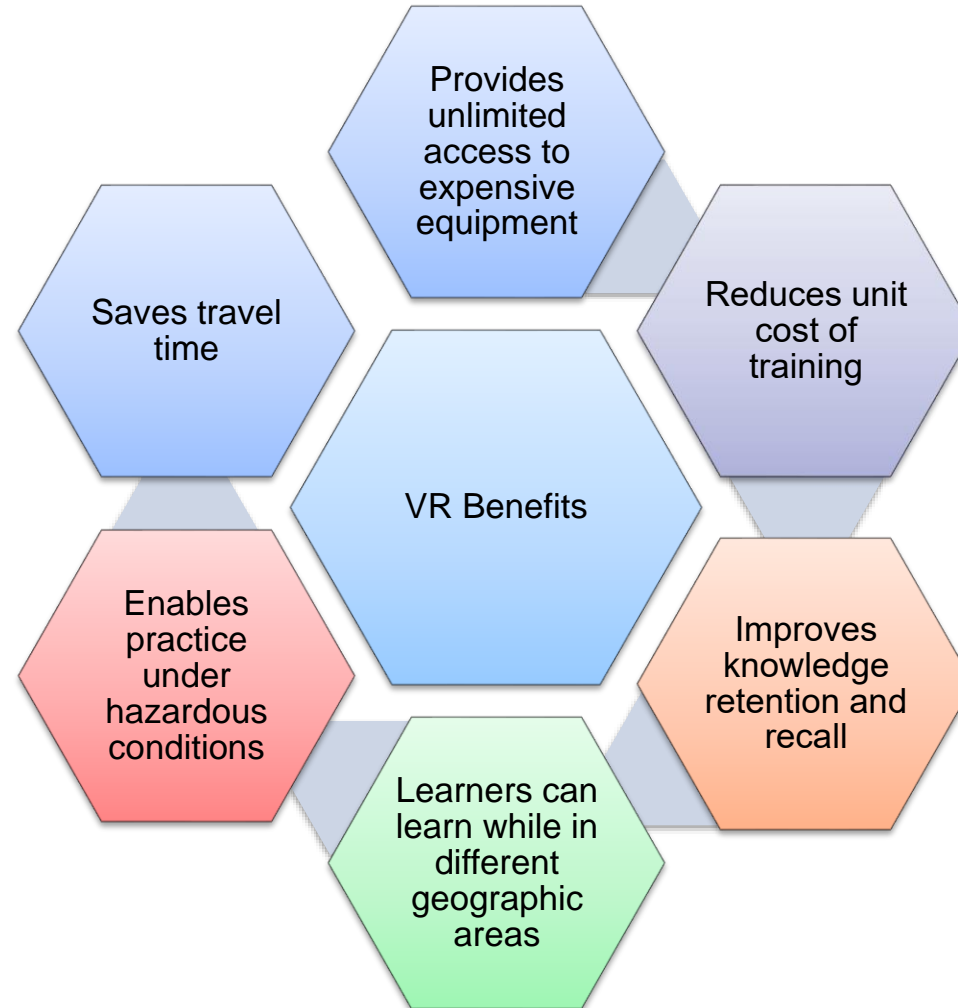
Doesn't allow for enough social distancing

Need much space for large number of health workers with social distancing

# SOLUTION



Virtual Reality  
Technology for  
health worker  
training in  
correct use of  
Personal  
Protective  
Equipment(PPE)



# METHOD

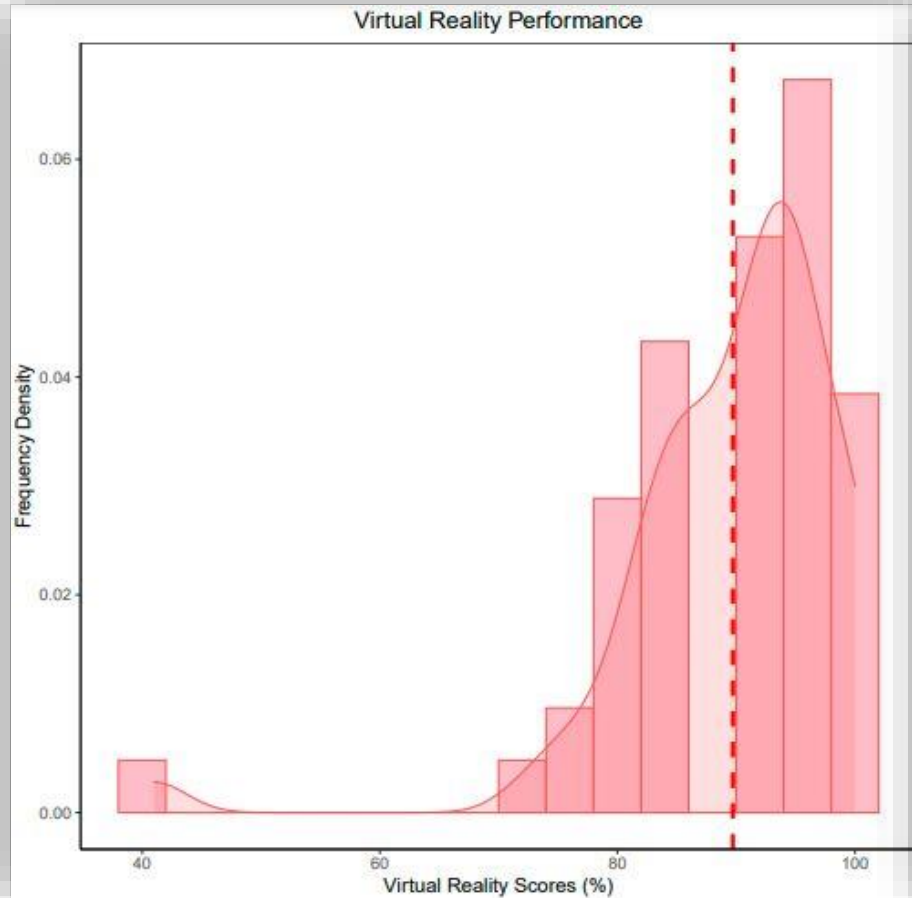


Creating  
modules in  
Virtual reality



Pilot training  
of developed  
VR modules  
with select  
health  
workers

# SUMMARY STATISTICS

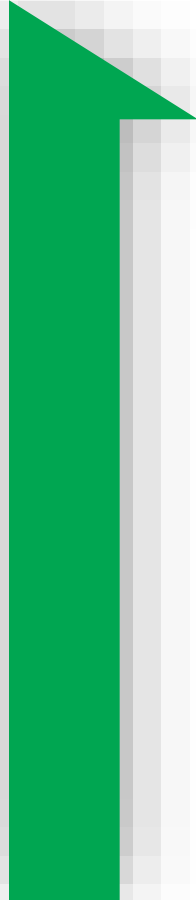




# PROJECT SHOWCASE

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# NEXT STEPS



To develop custom platforms appropriate for local needs



Need to enhance the VR lab with additional accessories



VR content creation for different fields



VR capacity building in the country (VR Programmers, 3D artists Video producers)



Looking to partner and collaborate with interested parties

# OUR TEAM



*Dr. Daudi Jjingo*  
*Senior IT specialist*



*Dr. Umaru Ssekabira*  
*Physician*



*Arinaitwe Walter Joseph*  
*E-learning specialist*



*Dr. Elizabeth Katwesigye*  
*Physician*



*Grace Kebirungi*  
*Microbiologist*



*Mike Nsubuga*  
*IT & VR specialist*

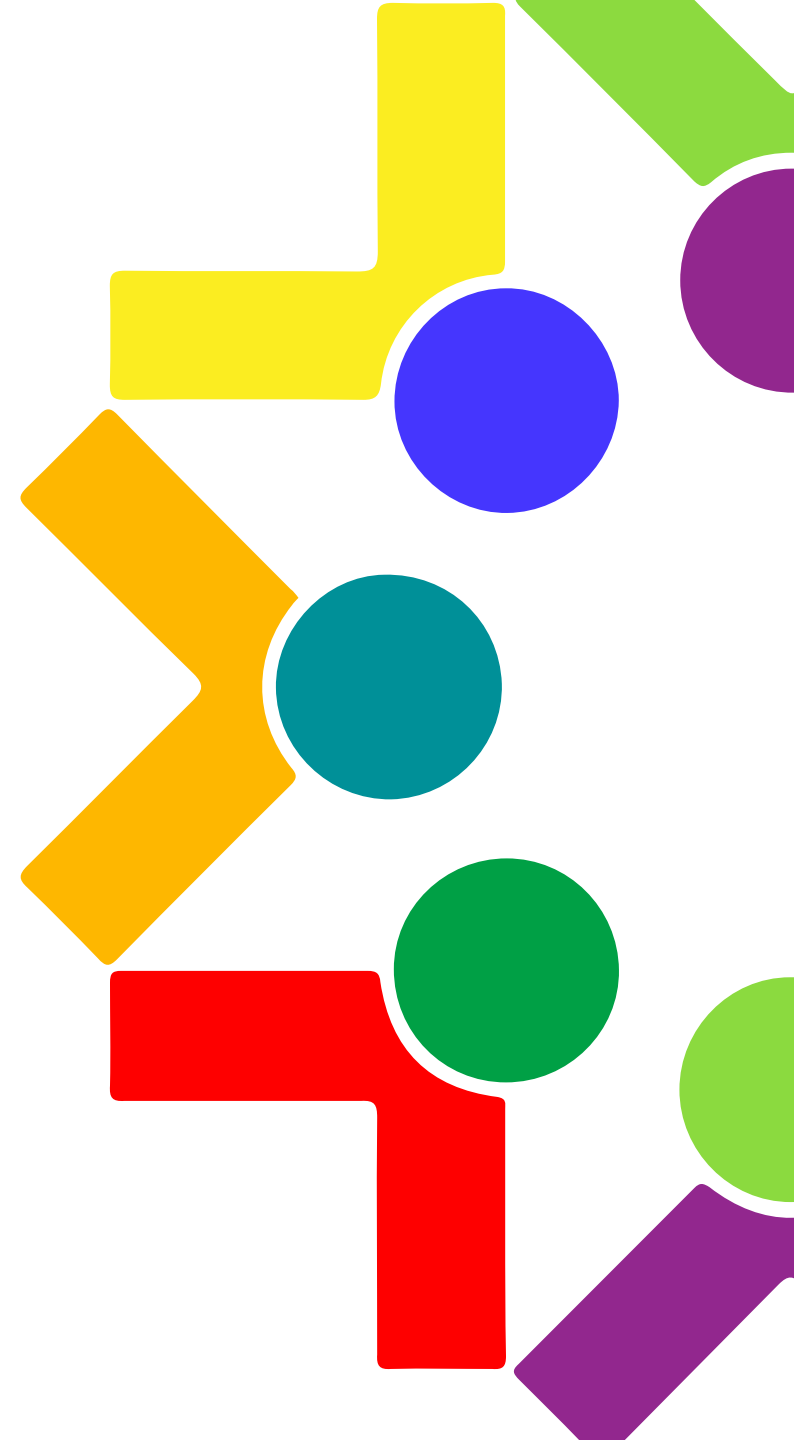


*Dr. Paul Buyego*  
*Physician*



*Mujib Tusuubira*  
*Graphics Designer*

Q&A



Thank you!

Feedback to [uganda@responseinnovationlab.com](mailto:uganda@responseinnovationlab.com)

