

GEO WEEK & MINISTERIAL SUMMIT 2023

Flash Talk: Driving Diversity and Inclusion through
Technical Challenges across Africa

6 November 2023 11am



#TheEarthTalks

Kenneth Mubea, PhD

Capacity Development Lead

Digital Earth Africa

kenneth.mubea@digitalearthafrika.org



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



GEO WEEK
2023 MINISTERIAL
SUMMIT

GO GROUP ON
EARTH OBSERVATIONS

Driving Diversity and Inclusion through Technical Challenges across Africa

6 November 2023 11am GMT +2

Kenneth Mubea, PhD

Capacity Development Lead, Digital Earth Africa
kenneth.mubea@digitalearthafrica.org



**Kenneth
Mubea**





Digital Earth Africa



Powered by partnerships, Digital Earth Africa provides a public infrastructure and accessible analytics to **unlock the value of Earth observations.**

Empowering countries across Africa with Earth observation data to enable climate adaptation and mitigation, greater food security and more sustainable development.

Kenneth Mubea, PhD

Capacity Development Lead
Digital Earth Africa

kenneth.mubea@digitalearthafrica.org



3.5 PB

17+ African-based organisations

aws

Digital Earth Africa Sandbox

34+ technical, strategic and delivery partnerships

6 Continental Services

- Digital Earth AFRICA**
- GeoMAD
 - Cropland Extent Map
 - Fractional Cover
 - NDVI Climatologies
 - Water Observations
 - Coastlines
- Digital Earth AFRICA**

Technical challenge



 Challenge	 Solution	 Impact
<ul style="list-style-type: none"> • Lack of access to data • More inclusion of women and youth in earth observation • Improve learning curriculum • Connect mentors and mentees 	<ul style="list-style-type: none"> • Partnership with YouthMappers and African Women in GIS in Technical challenge • Free virtual sessions on how to use DE Africa platform • Inclusion of women and youth in DE Africa learning • Technical support in their use cases: Malawi, Nigeria, Sierra Leone, South Africa, Uganda, and Tanzania. • Close the digital divide 	<ul style="list-style-type: none"> • Local: the youth and women lead research grounded in local issues and develop solutions benefitting their communities. • Regional: this collaboration acts as a bridge, connecting untapped potential with access to advanced technology, thereby promoting inclusivity. • Global: this initiative serves as a compelling example of the transformative impact of youth and women in driving innovation and effecting positive change.

Diversity and inclusion



Congratulations
TO THE WINNERS



2022 TECHNICAL CHALLENGE



Jokotola Omidiji 
Winner

Monitoring mangrove forest degradation in parts of Niger Delta

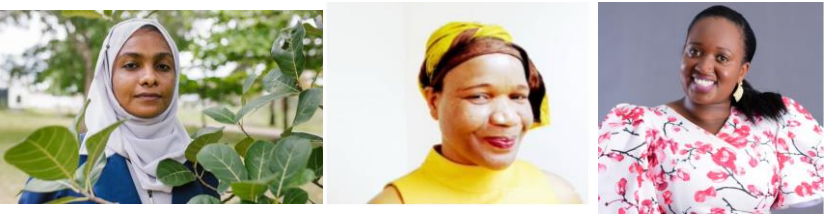


Sinethemba Mtshali 
First Runner - Up

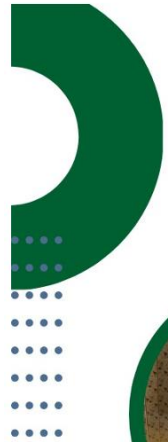
Effects of the Migrant Crisis on the African Continent



Copyright © African Women in GIS



Africa Women in GIS Mentorship Program



Congratulations
TO THE WINNERS



Jokotola Omidiji 🇳🇬

Winner

Monitoring mangrove forest degradation in parts of Niger Delta



Sinethemba Mtshali 🇿🇼

First Runner - Up

Effects of the Migrant Crisis on the African Continent



Copyright © African Women in GIS





2022 TECHNICAL CHALLENGE

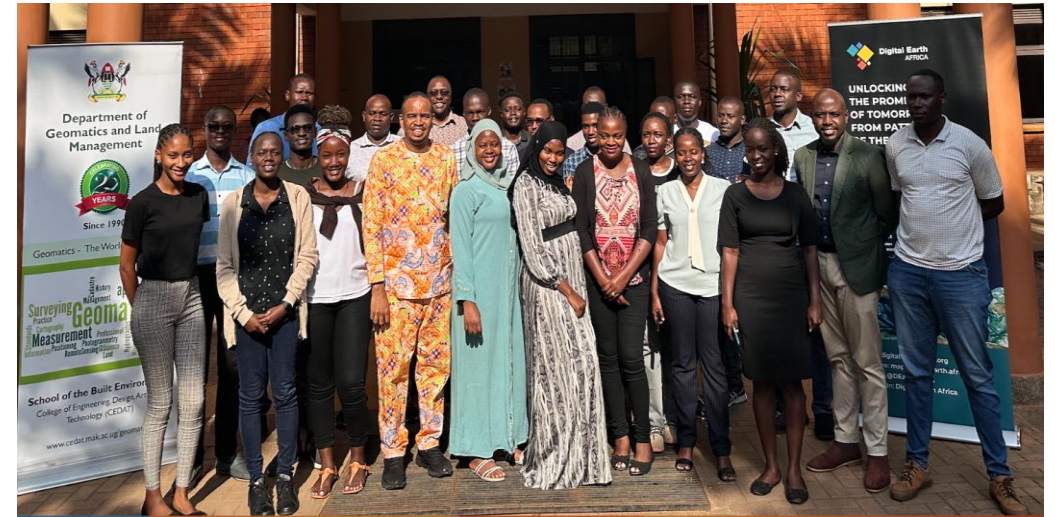


@DEarthAfrica and @youthmappers
Technical Challenge 2022. #YouthMappers

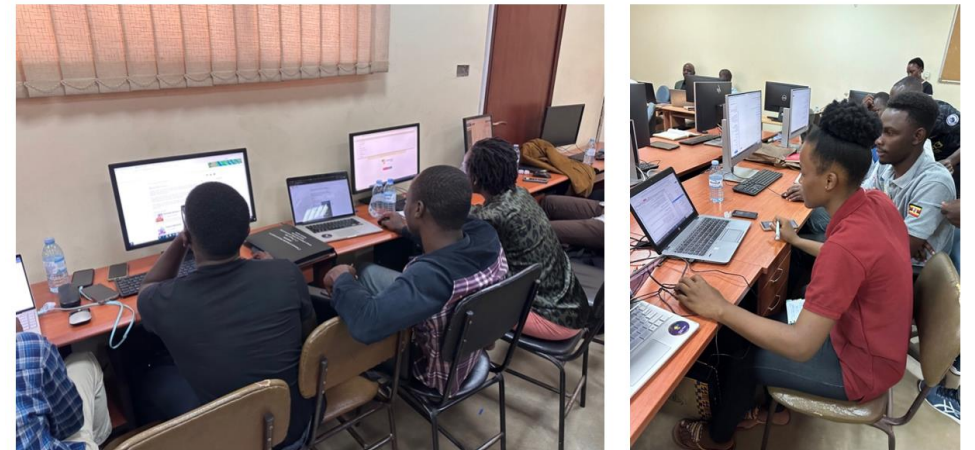
- **GeoYouthMappers** at Makerere University in Uganda will use the Digital Earth Africa Jupyter Sandbox to acquire and process high quality and timeless satellite imagery over the Budongo Central Forest Reserve to detect and map regions of deforestation.
- **#YouthMappers Technical University East** at Eastern Technical University of Sierra Leone will map rural water resources and will create geospatial data reflecting the needs of rural communities in Kenema, Sierra Leone that lack clean and safe water.
- **YouthMappers at Jordan University College** in Tanzania are using the Digital Earth Africa platform to select suitable sites for the construction of wastewater treatment ponds. Urban wastewater management is a major local environmental issue and the study area includes popular areas where residents deposit wastewater that leaks into groundwater.
- **MUST YouthMappers** at Malawi University of Science and Technology are mapping deforestation, climate change impact, and food insecurity in the Dzalanyama forest.



University of Johannesburg, South Africa



Makerere University, Uganda



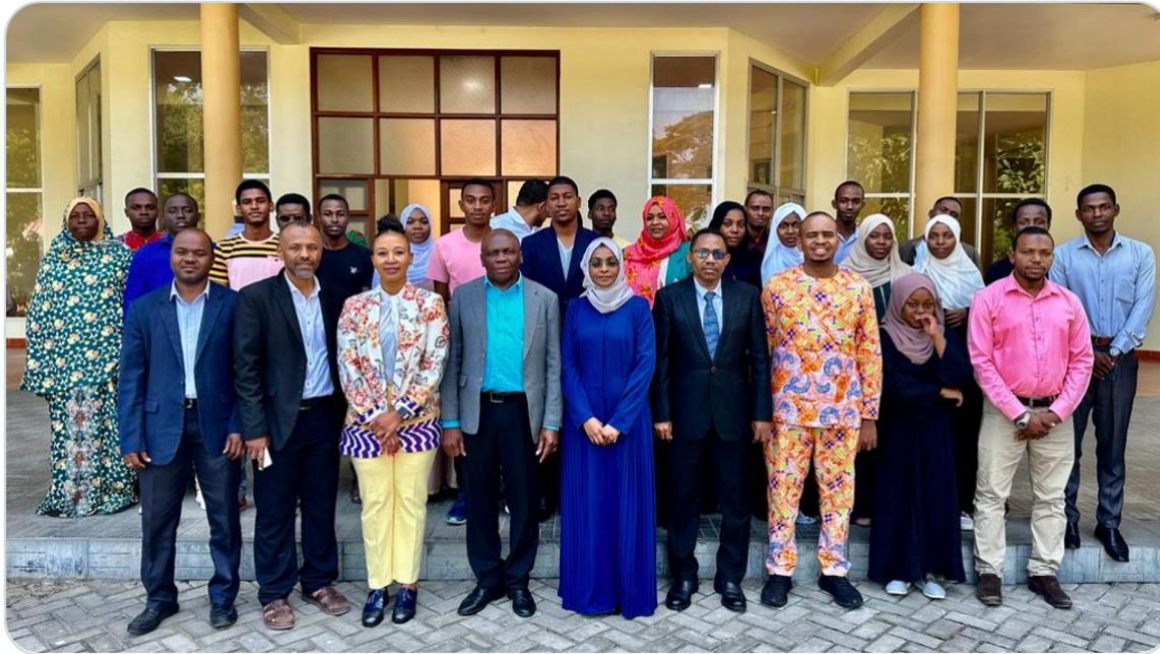
Engagement with universities as part of Capacity Development Strategy: support curriculum, training, projects (YouthMappers, Africa Women in GIS),

Digital Earth Africa Industrial Training Programme at the State University of Zanzibar, Tanzania



The DE Africa SUZA Industrial Training Programme has officially launched at @StateSuza, will be coordinated by SUZA staff under the guidance of the DE Africa team, with 20 students from across various programmes participating. #Zanzibar #Tanzania #Africa

@DEarthAfrica @StateSuza joint internship #Zanzibar, #Tanzania students learning #DEAfrica products & services to solve real world challenges in #Zanzibar including restoration of #mangroves #ClimateActionNow #SDGs #LeaveNoOneBehind @SUZAYouthMapper @SUZA_DEAfrica @awscloud





**NextGen
Space Challenge**

Calling all young and aspiring
space innovators in South Africa!

Apply today by clicking here



**INTRODUCING
AFRICA EARTH OBSERVATION
2023 FINALISTS**

-  **Thioube Samba**
SOTILMA Farm
Dakar, Senegal
-  **Wessam Fayz**
Geosport
Cairo, Egypt
-  **Manuel Ntumba**
Tod'Aérs
Lome, Togo
-  **Walter Mbonyimwami**
SYNCHROS
Goma, DRC

2023 AFRICA
**EARTH
OBSERVATION**
CHALLENGE



Opportunity to join [Innovate UK](#), the [South African National Space Agency](#), and [Digital Earth Africa](#) on a sponsored tour of the UK space industry.

Upon your return, you'll also receive mentorship and training from Digital Earth Africa, to help take your idea to the next level.

Partners and Affiliations



Thank you Merci obrigada

#TheEarthTalks



6-10 NOVEMBER

CAPE TOWN, SOUTH AFRICA



Kenneth Mubea, PhD

Capacity Development Lead

Digital Earth Africa

kenneth.mubea@digitalearthafrika.org

Connect:

Website: <https://www.digitalearthafrika.org>

Twitter: [@DEarthAfrica](https://twitter.com/DEarthAfrica)

LinkedIn: [digitalearthafrika/](https://www.linkedin.com/company/digitalearthafrika/)

YouTube: [digitalearthafrika](https://www.youtube.com/channel/UCqj8K1p1p1p1p1p1p1p1p1p)



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

