



## The WHO GIS Centre for Health

• Geographic Information System •

[www.who.int/data/gis](http://www.who.int/data/gis)

20

June  
2022

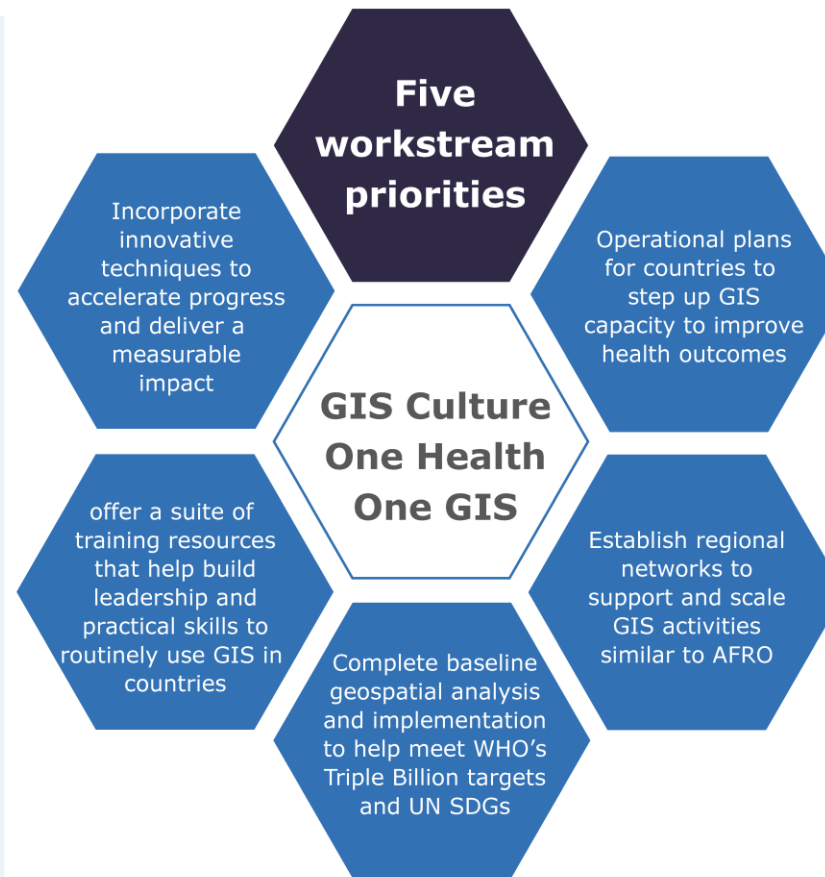
Enable · Partner · Serve



*"By connecting maps, apps, data and people  
the WHO GIS Centre for Health  
is dedicated to support countries to make  
better informed public health decisions faster"*

## Workstream priorities for WHO GIS Centre for Health

By connecting maps,  
apps, data and people,  
the WHO GIS Centre is  
dedicated to  
supporting countries  
to make better  
informed public health  
decisions.



**The overarching aim will be met through the following goals:**

**Goal 1:** Enable WHO, through its Regional and country offices, to operationalize and scale geospatial data and technologies

**Goal 2:** Foster meaningful partnerships that allow WHO and Member States to use fit-for-purpose GIS supported solutions

**Goal 3:** Establish and maintain a consolidated repository of geospatial data, tools and best practices for effective deployment to priority WHO missions



**World Health  
Organization**



# Meet the team



Abigail



Adam



Anna



Annette



Asela



Bodour



Catherine



Chris



Chris Ian



Daniel



Guy



Inge



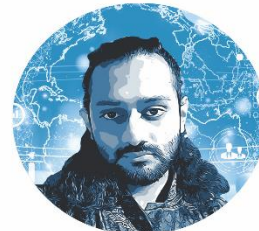
Jon



Julia



Kathleen



Kshitij



Lucy



Michael



Michael



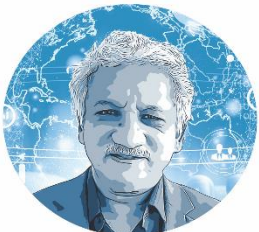
Naomi



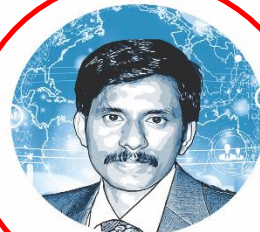
Nomsa



Noor



Prashant



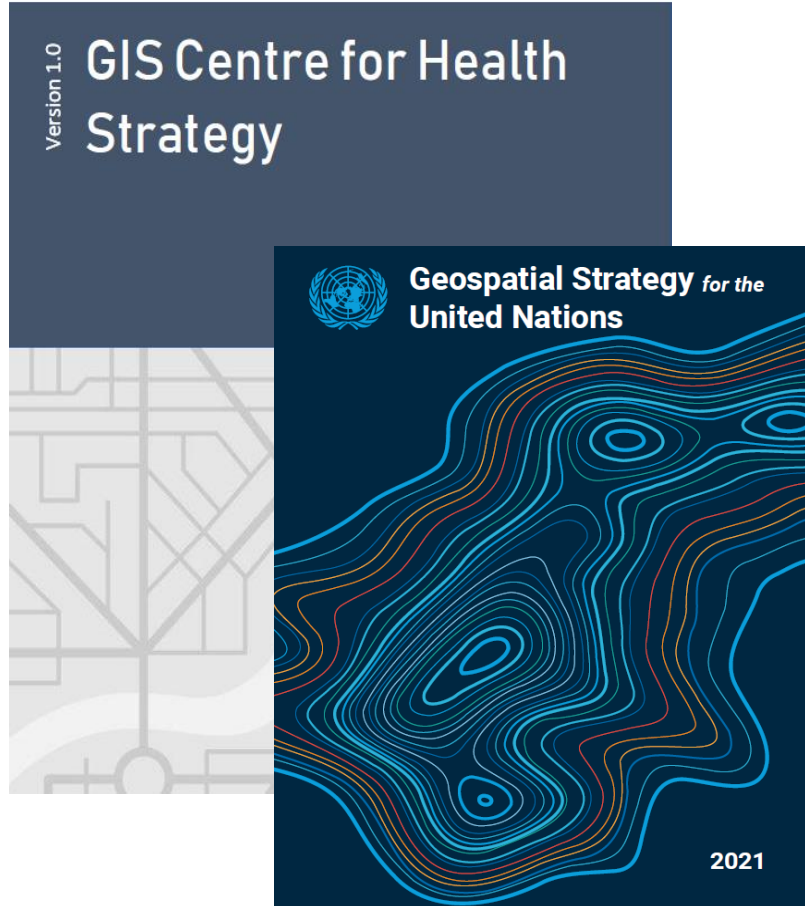
Ravi Shankar



Resmun



Samuel



## Three focus areas

Tools and technology

Technical exchange and  
partnership

Technical support &  
Capacity Development

## First focus area

### Tools and technology

Provide geospatial infrastructure and baseline information.

Introduce cutting edge tools and technology.

Improve compliance & stewardship.

#### Geo Location

A gateway for  
geospatial  
datasets



#### Geo Workspace

Provide a  
geo-enabled  
workspace

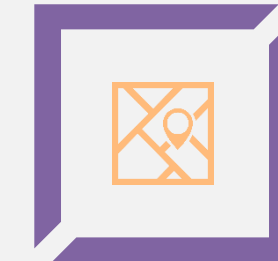


Provide baseline  
and  
infrastructure



#### Geo Mart

Visualization  
and  
dissemination



#### Geo Visualization

# Geolocation



Integrate real time data



Workforce distribution



Track and manage



Supports field work and data collection

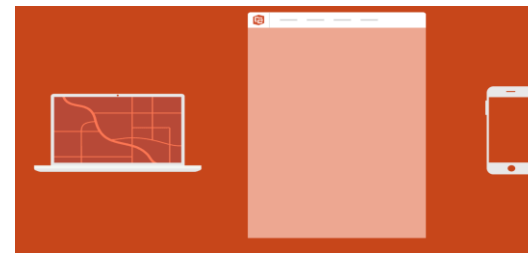
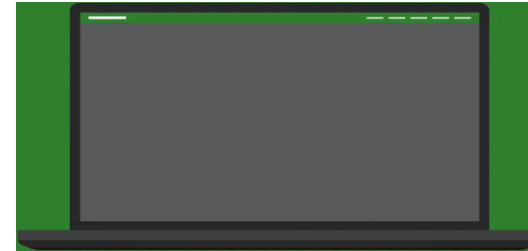


Plan sampling locations for surveys using spatial data frame



Drone delivery

Geolocation tools would provide the perfect gateway to collect geospatial datasets and monitor assets.





# GeoMart

-  Enterprise server
-  Image server, GeoEvent server, GeoAnalytics & Notebook server
-  Health facility
-  Health boundaries
-  Spatial population
-  Building footprints
-  High resolution imagery

GeoMart would provide the infrastructure and storage capabilities for baseline datasets





# GeoWorkspace



Geo-enrichment



Processing large scale datasets



Geospatial modelling



Integrate with external data sources at organization level



QGIS, ArcGIS Pro, Desktop, ArcGIS Online, Mapbox.

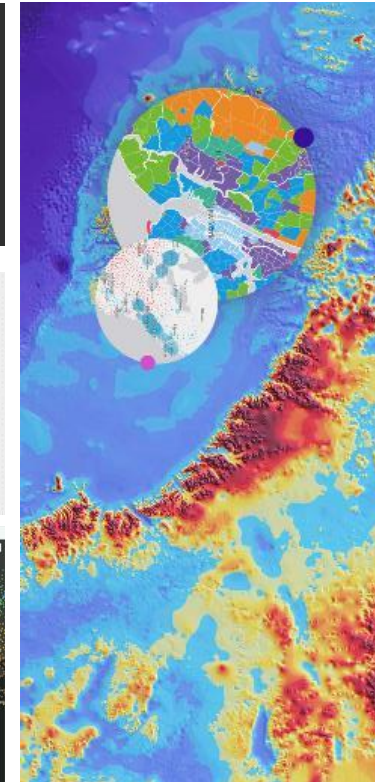
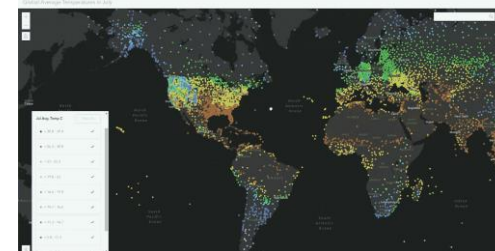
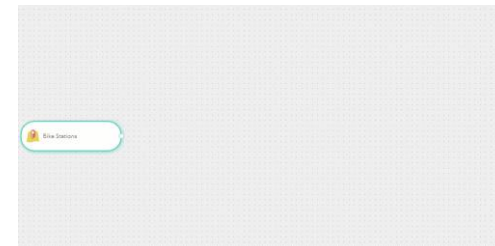
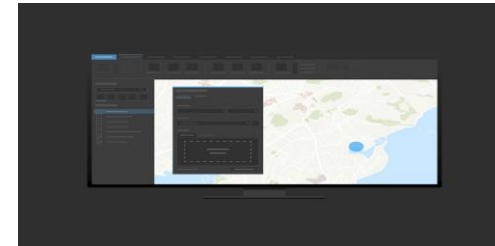


Data interoperability



Map production

GeoWorkspace would provide the tools needed to support Geospatial data analytics



# GeoViz



WHO Legal complaint basemaps



Map repository



JavaScript, React, Angular, D3



Dashboards



Exploratory work

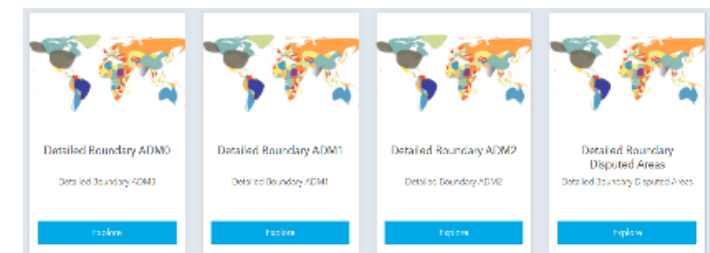
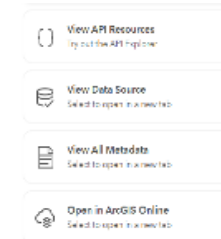
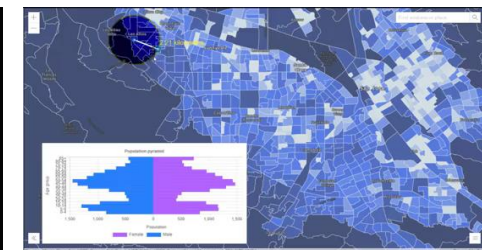


StoryMap



API and geodata downloads

GeoViz would provide the tools for visualization and Geospatial data dissemination



## Second focus area

### Technical exchange and partnership

augmenting timely assistance and expertise through a network of UN agencies and trusted geospatial partners;

“**Gavi**, as a beneficiary, needs the WHO GIS Centre in place to provide GIS support to countries, establish a global health facilities database, and progress immunization coverage so we can measure the progress of our own strategy.”

Carine Gachen, Gavi

The WHO GIS Centre is co-leading the COVAX GIS working group together with UNICEF, with partners The Global Fund, Gavi, BMGF, CDC, and the World Bank to leverage geospatial technology for equitable vaccine distribution through digital microplanning, for COVID-19 response and beyond.



BILL & MELINDA  
GATES foundation

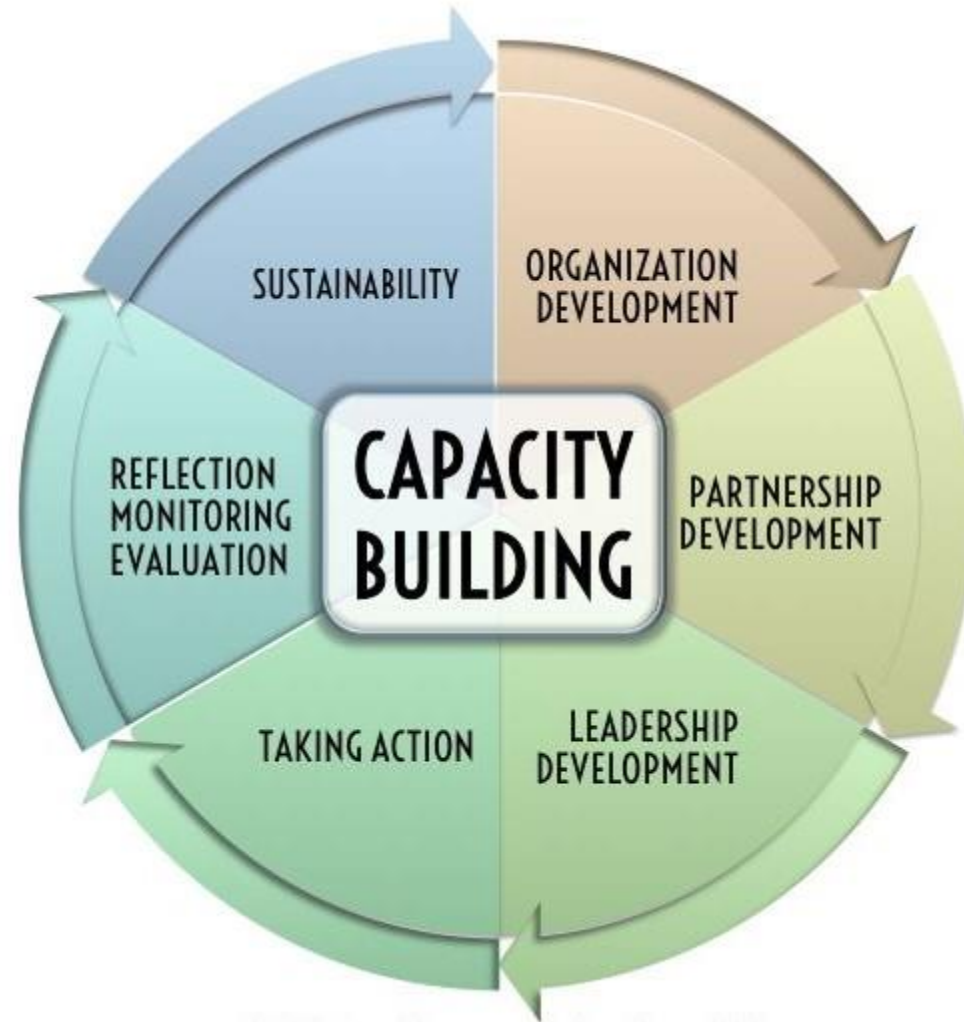




## Third focus area

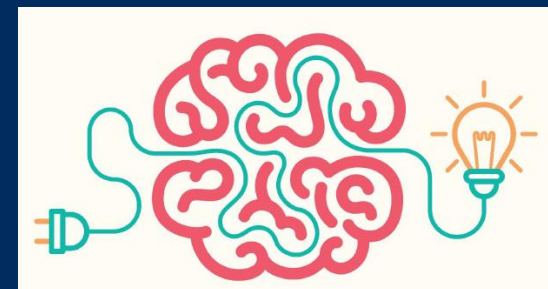
### Technical Support & Capacity Development

Promote geospatial culture and community of practice;  
Provide training and technical expertise in innovative technology;  
Efficient use of GIS by member states & partners.



# TRAINING AND CAPACITY DEVELOPMENT

*For increased capacity across WHO regions and Member States to leverage proven geospatial methods and resources for health outcomes.*



## Activities 2021

GIS Centre website maintenance

4 Story maps

Audiovisuals for events and documentation

9 Knowledge Series

4 Learning Series (EN, SP, FR) in AGOL

4 Open Office hours

Open House on World GIS DAY

## GIS Centre for Health

Geospatial data and techniques are also an effective tool to monitor progress and provide a strong basis for policy making to achieve the SDGs and deliver the GPW 13 Triple Billion targets.

Learn more about the centre

Explore GIS story maps

## Activities 2022

### AIM

1) To facilitate the use of GIS at global, regional, and country level by providing needs-based training across the organization.

2) To enrich the health-related GIS culture by providing regular opportunities for Member States and individuals to receive support, advice, and engagement across the organization

3) To provide a service with customised maps and support the visualization of health data

### STRATEGY

I) GIS Training and Capacity Development at country level for pilot countries and creation of workplan for 2022 around country needs assessment.

- Nepal
- Laos

II) Quarterly Learning Series in AGOL

III) Timely granting of license requests

I) Monthly Knowledge Series on GIS-related topics open to all-staff  
 II) Open Office - weekly availability of GIS Centre staff for custom interaction  
 III) GIS Centre Open House – quarterly webinar open to partners, NGOs, collaborators  
 -March, June, September, December  
 IV) Monthly regional coordination call  
 V) Networking and GIS Centre ambassadors through all activities of the Centre – ie GIS team as a whole.  
 => identification of resource persons for training and content delivery.  
 Open-door policy and a two-way feedback system.

I) Daily support with map request system  
 II) Open office with GIS Centre colleagues

World Health Organization

# Make your own map in ArcGIS Online!

Various sessions to choose from on 7 & 8 October 2021

<https://gis-who.hub.arcgis.com/pages/gis-training>

Questions? Write to [gissupport@who.int](mailto:gissupport@who.int)

*Brought to you by the Division of Data, Analytics and Delivery for Impact*

**245**

**Io Blair-Freeze**  
Supporting Geospatial Datasets for Global Health

GIS Knowledge Series: Partnerships - Supporting Geospatial Datasets for Global Health

Thursday, 21 Jan 2021 at 2:30pm (CET)

**375**

**Andrew Tate**  
How spatial population model can play a role in COVID vaccination planning?

GIS Knowledge Series: "How spatial population models can play a role in COVID vaccination planning"

Thursday, 21 Jan 2021 at 2:30pm (CET)

**621**

**Allen Carol**  
How to tell a story with data?

ArcGIS StoryMaps

**350**

**Mary Angus**  
The 5-point plan (AMRC)

WHO GIS KNOWLEDGE SERIES

**550**

**Bern Szukalski**  
How to create an online map?

ANYONE CAN MAKE A MAP

**450**

**Mark Levy**  
GRID3 - Population Data Partnership

LEAVE NO ONE OFF THE MAP

**400**

**Este Geraghty**  
How GIS can help in equitable & Efficient vaccine distribution

ESTE GERAGHTY

**400**

**COVAX GIS Group**  
GIS Digital Microplanning for Covid Vaccine rollout

Funding options & GIS digital microplans for COVID-19 vaccine rollout

**300**

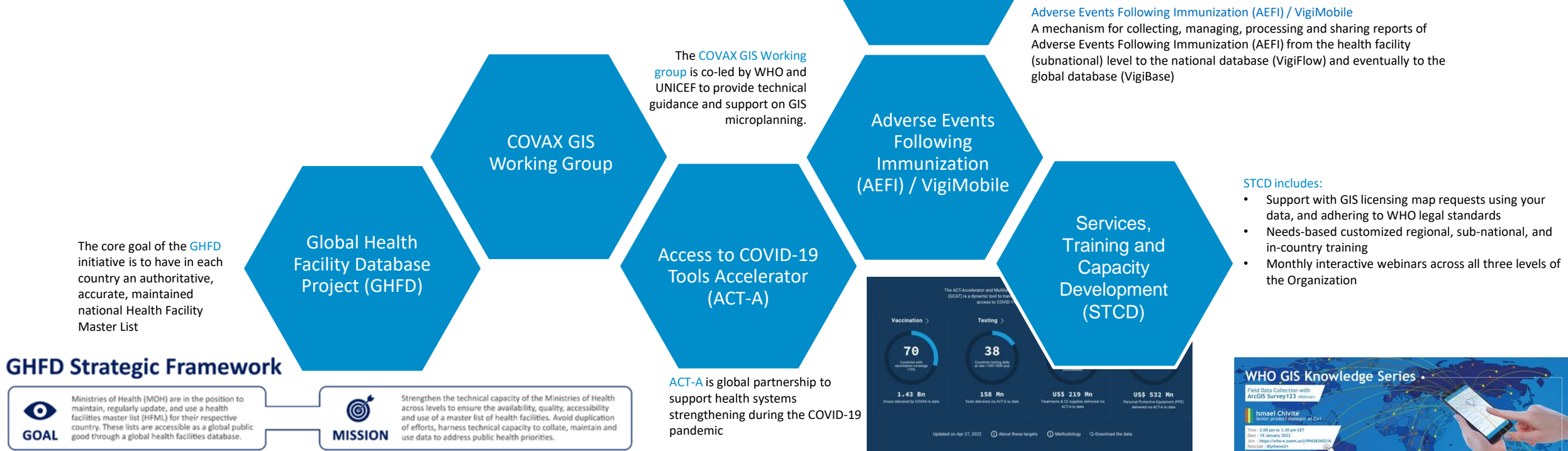
**Nicolas Ray**  
AccessMod - Geospatial Tool to Model Accessibility

AccessMod

## Department of Data And Analytics

Since August 2020, WHO GIS Centre for Health has been focusing on high-impact delivery and supporting relevant topics in the health sector.

## GIS CENTRE FOR HEALTH





# GHFD Strategic Framework



Global Health Facilities Database





# International Conference on Health Statistics