The WHO GIS Centre for Health

Geographic Information System

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

**Workstream priorities for WHO GIS Centre for Health**

**Five workstream priorities**

- Incorporate innovative techniques to accelerate progress and deliver a measurable impact.
- Offer a suite of training resources that help build leadership and practical skills to routinely use GIS in countries.
- Complete baseline geospatial analysis and implementation to help meet WHO’s Triple Billion targets and UN SDGs.
- Establish regional networks to support and scale GIS activities similar to AFRO.
- Operational plans for countries to step up GIS capacity to improve health outcomes.

**GIS Culture One Health One GIS**

- 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.

For inquiries, please contact: gissupport@who.int
Meet the team

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Bodour  Catherine  Chris  Chris Ian  Daniel  Guy  Inge
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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.
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 would provide the tools for visualization and Geospatial data dissemination

- WHO Legal complaint basemaps
- Map repository
- JavaScript, React, Angular, D3
- Dashboards
- Exploratory work
- StoryMap
- API and geodata downloads
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.
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

### Activities 2022

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<th>AIM</th>
<th>STRATEGY</th>
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<td>1) To facilitate the use of GIS at global, regional, and country level by providing needs-based training across the organization.</td>
<td>i) GIS Training and Capacity Development at country level for pilot countries and creation of workplan for 2023 around country needs assessment.</td>
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<td>• Nepal</td>
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<td>ii) Quarterly Learning Series in AGOL</td>
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<td>iii) Timely granting of license requests</td>
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<td>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.</td>
<td>i) Monthly Knowledge Series on GIS-related topics open to all-staff</td>
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<td>ii) Open Office - weekly availability of GIS Centre staff for custom interaction</td>
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<td>iii) GIS Centre Open House – quarterly webinar open to partners, NGOs, collaborators</td>
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<td>-March, June, September, December</td>
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<td>iv) Monthly regional coordination call</td>
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<td>v) Networking and GIS Centre ambassadors through all activities of the Centre – if GIS team as a whole.</td>
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<td>➔ Identification of resource persons for training and content delivery.</td>
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<td>Open-door policy and a two-way feedback system.</td>
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<td>3) To provide a service with customised maps and support the visualization of health data</td>
<td>i) Daily support with map request system</td>
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<td>ii) Open office with GIS Centre colleagues</td>
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### GIS Centre for Health

- Geospatial data and technologies 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 target.
- Learn more about the Centre
- See our GIS story maps

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**WHO GIS Centre for Health Learning Series**

Various sessions to choose from on 7 & 8 October 2021

https://giswho.hub.arcgis.com/pages/gis-training

Questions? Write to gissupport@who.int
Since August 2020, WHO GIS Centre for Health has been focusing on high-impact delivery and supporting relevant topics in the health sector.

**GHFD Strategic Framework**

- **GOAL**: Ministries of Health (MOH) are in the position to maintain, regularly update, and use a health facilities master list (HFML) for their respective countries. These lists are accessible as a global public good though a global health facilities database.
- **MISSION**: Strengthens the technical capacity of the Ministries of Health across levels to ensure the availability, quality, accessibility and use of a master list of health facilities. Avoid duplication of efforts, harness technical capacity to collate, maintain and use data to address public health priorities.

**AccessMod** is a WHO tool (developed with partners at University of Geneva) that has been developed to assist countries to examine the geographic aspects of their health system and used to determine accessibility to healthcare facilities.

**COVAX GIS Working Group** is co-led by WHO and UNICEF to provide technical guidance and support on GIS microplanning.

**Adverse Events Following Immunization (AEFI) / VigiMobile**

A mechanism for collecting, managing, processing and sharing reports of Adverse Events Following Immunization (AEFI) from the health facility (subnational) level to the national database (VigiFlow) and eventually to the global database (VigiBase).

**Access to COVID-19 Tools Accelerator (ACT-A)**

ACT-A is a global partnership to support health systems strengthening during the COVID-19 pandemic.

**Services, Training and Capacity Development (STCD)**

- **STCD includes**:
  - Support with GIS licensing map requests using your data, and adhering to WHO legal standards
  - Needs-based customized regional, sub-national, and in-country training
  - Monthly interactive webinars across all three levels of the Organization

**Global Health Facility Database Project (GHFD)**

The core goal of the GHFD initiative is to have in each country an authoritative, accurate, maintained national Health Facility Master List.

**Snakebite Information and Data Platform (SIDP)**

The SIDP platform includes a database of over 300 venomous snake species as well as a library of over one thousand venomous snake photos.

**Travel times Malawi**

Map of the Bungaris fasciatus distribution in Malawi.
EXAMPLE: GLOBAL HEALTH FACILITIES DATABASE PROJECT
International Conference on Health Statistics