

The Geography of Universal Health Coverage (UHC)

Equitable access to quality health and measurements of progress towards Universal Health Coverage (UHC) are central to the health Sustainable Development Goal (SDG 3).

In this context, geography is key to understanding the spatial distribution of the population and health services and Geographic Information System (GIS), the ICT solution that allows generating, integrating, and analyzing geospatial data from different sources to address health system inefficiencies and improve health service delivery planning and management.¹

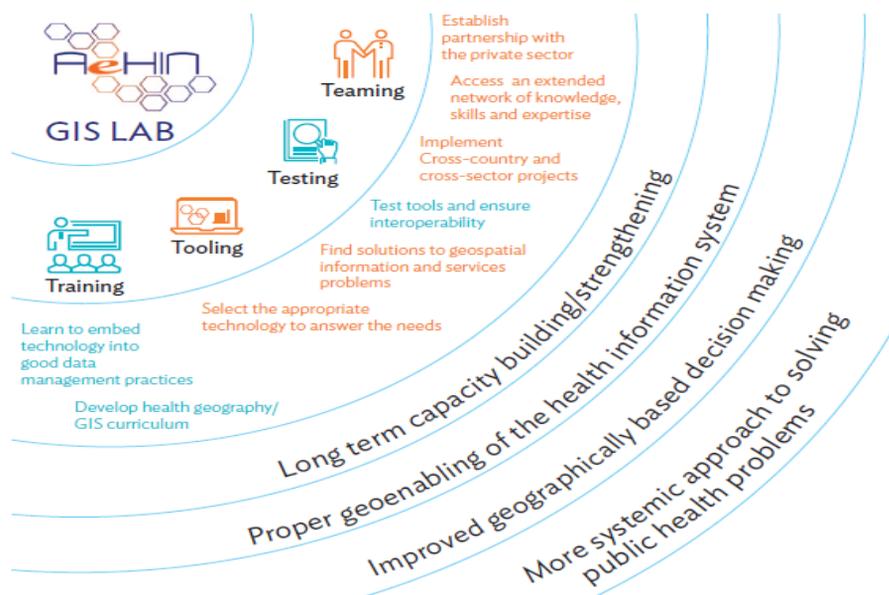
Geo-enabling the Health Information System (HIS)

The health sector (government and partners) can only fully benefit from the power of geography and GIS to support UHC if its health information system (HIS) is “geo-enabled”, meaning that:

1. A clear **vision, strategy and plan** have been defined on the basis of an **assessment**;
2. A **governance** structure and a minimum **technical capacity** have been established;
3. Geospatial data **specifications, standards and protocols** have been defined and are being implemented to ensure the availability, quality (completeness, uniqueness, timeliness, validity, accuracy and consistency) of geospatial information across the whole data life cycle;
4. The **master lists** for the core geographic objects (health facilities, villages, administrative and reporting divisions) and their associated geography have been developed and an updating mechanism put in place for each of them;
5. The appropriate **Geospatial technologies** have been identified and are being used in accordance to good geospatial data management practices;
6. Geography, geospatial data and technologies are **used** to support the implementation of programs towards reaching SDG 3 and improving Universal Health Coverage in countries;
7. **Policies** supporting and enforcing all of the above as well as geospatial data accessibility have been released;
8. The necessary **resources** to ensure sustainability on the long term have been identified and secured.

The AeHIN GIS Lab – A new approach to capacity building

The GIS Lab established under the umbrella of the Asia eHealth Information Network (AeHIN) uses the 4Ts (Training, Tooling, Testing, Teaming) approach to strengthen in-country capacity for a proper and sustainable geo-enabling of the Health Information System (HIS). This approach supports geographically based decision making and therefore a more systemic approach to solving public health problems and implementing SDG 3.



Supporting UHC through effective geospatial data management and GIS

In collaboration and with the support of:



1. Roth S., Landry M., Ebener S., Marcelo A., Kijisanayotin B., Parry J. (2016): The Geography of Universal Health Coverage: Why geographic information systems are needed to ensure equitable access to quality health care. ADB brief No. 55, April 2016.

Major achievements after 6 months of activity

Since its launching in June 2016, the AeHIN GIS Lab has:

1. Provided on-site technical support to the Department of Public Health of Myanmar for the geo-enabling of its HIS;
2. Supported the geospatial component of ADB's Malaria and Dengue Risk Mapping project in Bangladesh, Cambodia, Myanmar, and Thailand;
3. Contributed to the HIS geo-enabling component of the AeHIN convergence workshops in Bhutan and Indonesia;
4. Released the first 4 volumes of the guidance documents series for the collection and use of geospatial data in health;
5. Operationalized access to Esri GIS technology (desktop and online) for eligible AeHIN Member countries;
6. Been part of UNICEF's Steering committee for the use of GIS in Immunization Programs;
7. Contributed to the development, testing, and documentation of version 5.0 of AccessMod; and
8. Launched its LinkedIn groups which already counts 80 Members.

Way forward

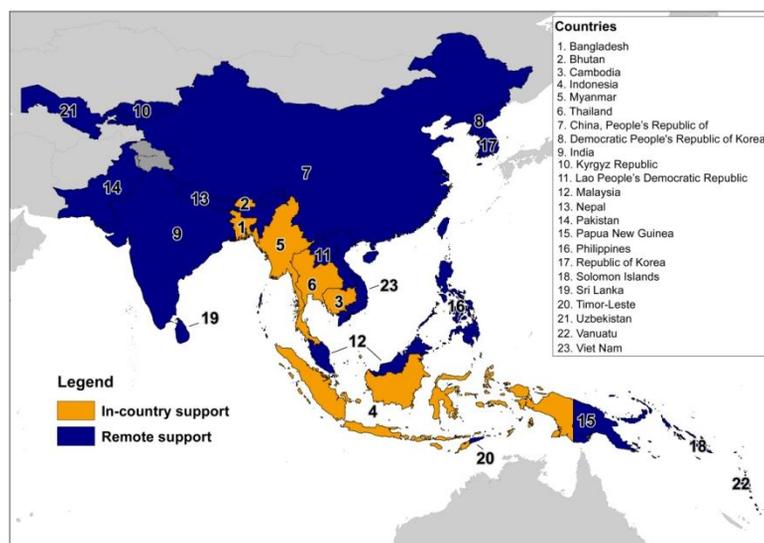
The AeHIN GIS Lab will continue supporting the geo-enabling of the HIS in countries across Asia and the Pacific by:

1. Prioritizing **one-on-one** in-country capacity strengthening activities adjusted to the specific needs and capacities;
2. Providing **longer term "coaching"** as part of pilot projects instead of one-off training events;
3. Using regional gathering mainly to cover concepts and processes and allow for countries to **share their experience and knowledge** as well as identify common needs and challenges;
4. Organizing software specific **training with professionals** when needed;
5. Developing a **curriculum** on geospatial data management/medical geography/GIS for public health schools for long term sustainability;
6. Establishing **public-private partnerships** aiming at facilitating access to GIS technology; and
7. Developing a **network of GIS professionals** across the Region.

Operation coverage and resource mobilization

Thanks to the support provided by ADB, WHO, AeHIN, UNICEF, and Esri, the AeHIN GIS Lab is in the position to provides technical support to 23 countries either on site (6) or remotely (17).

The current total operating cost of the GIS Lab is of \$285,000 per year, amount which we are aiming at expanding over the coming years to cover new activities and increase the support being provided to countries.



For more information

Web site: <http://aehin.org/Resources/GISLab.aspx>

LinkedIn group: <https://www.linkedin.com/groups/10311235>

Email: info@aehingislab.net

Supporting UHC through effective geospatial data management and GIS

In collaboration and with the support of:

