

Questionnaire on the use of space science and technology for global health

1. Contact Person

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2. Question

2.1 Please describe existing or planned formal cooperative agreements and other institutional arrangements (memorandums of understanding, letter of agreement, frameworks of collaboration, etc.) between the health sector and other sectors directly involved in space activities at the national level.

The Faculty of Public Health cooperates with GISTDA and with NECTEC to provide a platform and information of health and health-related issue on a basis of space such as community, village.

2.2 Please provide recommendations regarding the establishment of a dedicated platform of effective coordination among United Nations entities, other international organizations and relevant actors on space and global health issues.

Space information is crucial for global health in particular identifying health risk map which can provide significant information for global health protection and prevention. United Nations can simply organize a platform of health sectors and academia to share spatial information, spatial health information such as risk map, land use map

2.3 Please describe existing or planned policy-enabled environmental and governance mechanisms for removing barriers to the effective use of space-based technologies in support of global health.

I do not know this issue clearly, so cannot respond to the issue.

2.4 Please describe existing or planned policies on open data -sharing and participatory approaches to developing and improving access to geospatial information relevant to global health.

Based on my knowledge, the GISTDA offers a service to provide geospatial information to public use with permission.

2.5 Please describe existing or planned efforts related to the geotagging of all assets relevant to health systems, including health information systems.

I do not know this issue clearly, so cannot respond to the issue.

2.6 Please describe existing or planned intersectoral coordination and cooperation for effective international, regional, national and subnational capacity-building activities relevant to the application of space science and technology in the field of global health.

AIT, GEOspatial group by KMIT and GISTSA offer several short training courses in line with spatial technology and spatial health information to public.

2.7 Please describe existing or planned mechanisms to engage educational institutions and other capacity-building mechanisms in motivating young health professionals to acquire skills and abilities required to efficiently use advantages provided by space technology, science and applications at an early stage in their careers.

I do not know this issue clearly, so cannot respond to the issue.

2.8 Please describe existing or planned mechanisms to better integrate space-derived data and information into decision-making processes related to global health, and to harmonize and share such data.

The ministry of public health applies space data for human resource allocation, and infectious diseases prevention and control.

2.9 Please describe how space technology and applications are integrated into health-related emergency planning and management and disaster management plans.

Space technology can be used to identify level of health risks which can be used to prevention and protection plan. Also, the information of space can provide information of a whole context and system to support integrated plans of prevention, protection, and evacuate plan to reduce life lost and disaster-related lost.

2.10 Please describe key activities, reference documents and plans relevant to the topic "Space for global health"

To develop a platform of space and health data sharing; to provide capacity building of using health-related space technology.

2.11 Please provide an overview of existing and planned practices and initiatives in the current uses of space (technology, applications, practices and initiatives) in support of global health and identify gaps, if any, in the following areas;

- a. Telemedicine and tele-health; (see Annex 1)
- b. Tele-epidemiology and environmental health;
- c. Space life sciences;
- d. Disaster and health emergency management; (see Annex 2)
- e. Other.

At the faculty of public health, we do not have yet any current planned of all above issues.

Telemedicine and Tele-Health in Thailand

According to World Health Organization standards, communities should have one doctor for every 439 people, but in Thailand there is only one doctor for every 2,065 people. To solve this problem, the Government of Thailand began development of its telemedicine program which "Using digital infrastructure to provide public health services is crucial for Thailand, which is rapidly ageing and will take just 20 years, from 2002 to 2022, to go from an ageing to an aged society, the fastest among developing countries. This program joint effort of the Public Health Ministry and the National Broadcasting and Telecommunications Commission (NBTC), is a vital part of addressing concerns over rising medical costs and deficient healthcare access at 32 hospitals in rural areas in eight provinces, encouraging adoption of new technologies and remote medical care. To operate telemedicine, it run through the NBTC's USO (universal service obligation) Net. The USO Net infrastructure cover 3,920 remote villages nationwide or 600,000 households by June 2019.

The project focused on four illness types: high blood pressure, diabetes, eye disease and skin disease. These account for over 70% of hospital cases. The eight provinces seeing the service first are Chiang Rai, Kamphaeng Phet, Kanchanaburi, Kalasin, Phetchabun, Surin, Songkhla and Surat Thani.

The budget is part of the NBTC's five-year funding for the operation of hospitals. In the pioneer phase, budgeted 180 million baht to purchase and install digital equipment for telemedicine. Additionally, telemedicine is expected to reduce expenses for both patients and state-run hospitals by a combined 38 billion baht annually after full implementation within four years.

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<https://www.bangkokpost.com/tech/1648204/state-launches-telemedicine-in-rural-areas>

Disaster and health emergency management

Thailand becomes first in SEAR with WHO classified emergency medical team"

31 July 2019, Bangkok, Thailand

Thailand found an Emergency Medical Team (EMT) which EMT was developed from Medical Emergency Response Team (MERT), established in every province in 2013 to respond to disasters in the country. The Department of Medical Services, Ministry of Public Health was the EMT coordinator and focal point in response to emergency situations and disasters in the country and in the region. EMTs are an important part of the global health workforce. Arriving where needed in the shortest time by using GPS, and delivering quality care appropriate to the context, EMTs can help substantially reduce loss of lives during public health emergencies.

Prone to natural disasters and at risk of climate change related and other health hazards, WHO South-East Asia Region has been investing in strengthening emergency response capacities as a flagship priority since 2014. Last year the Region passed a resolution to strengthen EMT capacities to further bolster emergency response. These efforts are also in sync with WHO's global goals to ensure one billion more people have better protection from health emergencies.

Thailand today became the first in WHO South-East Asia Region to get WHO classification for its emergency medical team (EMT). This classification makes Thailand EMT the 26th team in the international roster of WHO classified, internationally deployable medical teams.

Besides, Thailand set up a three –year plan (2019-2021) to become the internationally-recognized learning center and training center in cooperation with the WHO.

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