

EO and AI for Health and Urban Resilience Workshop

10 March 2020

Strengthening national capacities for utilizing Space science and technologies to advance national health-related SDGs

Dr Ramesh S. Krishnamurthy World Health Organization

ESA UNCLASSIFIED - For Official Use

Key Messages



- Integration of space science and technology to health systems strengthening efforts shall be more widely practiced by countries in the context One Health, SDG 2030 and UHC.
- At national-level, closer collaboration between Health authorities and other sectors along with space agencies is essential to leverage the benefits of space science, technology for health gains.





R. Krishnamurthy | WHO | 10 March 2020 | Slide 3

ESA UNCLASSIFIED - For Official Use





























10 March 2020



ESA UNCLASSIFIED - For Official Use



One Health

the interconnectedness of human health, animal health and the ecosystem







One Health







Source: OIE, 2016; http://www.oie.int/for-the-media/onehealth/

One Health





of existing human infectious diseases are zoonotic



At least

of emerging infectious diseases of humans (including Ebola, HIV, and influenza) have an animal origin



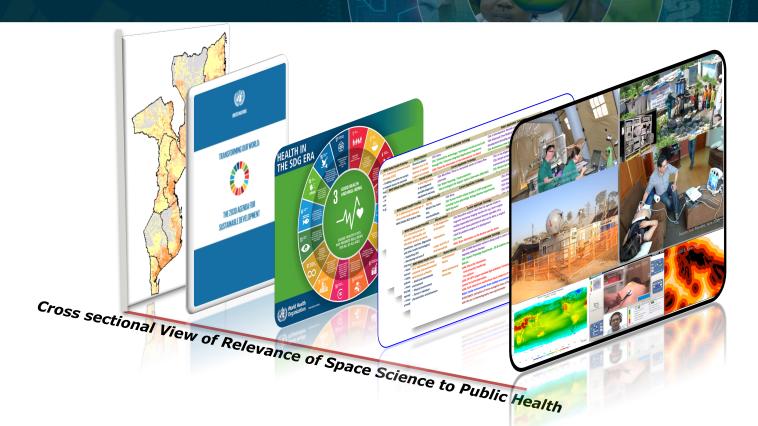
new human diseases appear every year. Three are of animal origin 80%



of agents with potential bioterrorist use are zoonotic pathogens

Source: OIE, 2016; http://www.oie.int/for-the-media/onehealth/





ESA UNCLASSIFIED - For Official Use

Space Science and Public Health



Area 1: Space science and technology and epidemic intelligence

Area 2: Space science and technology and health emergencies

Area 3: Shaping the research agenda on the benefits of space science and technology to pubic health

 ${\sf ESA\ UNCLASSIFIED\ -\ For\ Official\ Use}$

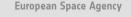




Strengthening national capacities for utilizing Space science and technologies to advance national health-related SDGs

Conceptual Framework





Components of the Framework



- 1. National readiness for using earth observation data in conjunction with routine health systems data
- 2. Multi-sectoral engagement for establishing earth observation data utilization environment in the national context
- 3. Alignment of stakeholders, strategies, and efforts



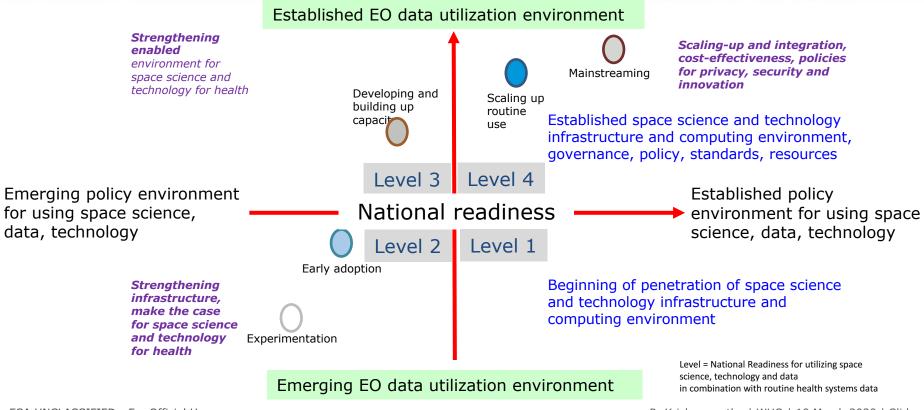
UNCLASSIFIED - For Official Use



Conceptual Framework for Country Capacity Development

esa

for utilizing Space Science and Technology for advancing health-related SDGs



ESA UNCLASSIFIED - For Official Use





for utilizing Space Science and Technology for advancing health-related SDGs

Multi-sectoral engagement

Examples of Partners within Health Landscape

Ministry of Health

Ministry of Finance

Ministry of Education

Ministry of Labour

Ministry of Telecommunications

Ministry of Infrastructure

Ministry of Science and Technology

Academia and Private Health Sector

Donors and Implementing Partners

Coordination is essential to owning and sustaining data analytics capacities at National and Sub-national Levels



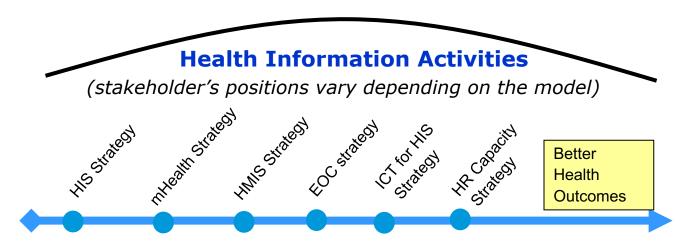
Align Stakeholders



Value Chain of Solutions driven by Public Private Partnerships



Align Strategies



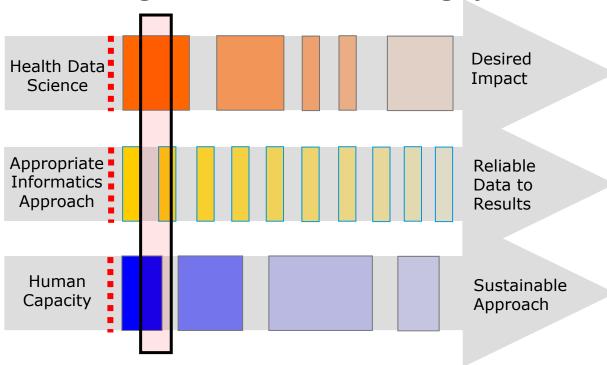
Value Chain of Solutions driven by Public Private Partnerships

Conceptual Framework for Country Capacity Development



for utilizing Space Science and Technology for advancing health-related SDGs

Align efforts to reduce gaps



ESA UNCLASSIFIED - For Official Use



























Key Messages



- Integration of space science and technology to health systems strengthening efforts shall be more widely practiced by countries in the context One Health, SDG 2030 and UHC.
- At national-level, closer collaboration between Health authorities and other sectors along with space agencies is essential to leverage the benefits of space science, technology for health gains.



Thank you

ESA UNCLASSIFIED - For Official Use































