

24th session of ICC on RESAP
18-19 August 2020

Leveraging Space Applications for Sustainable Development in Asia and the Pacific

Report of the Secretariat

18 August 2020



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I. Meeting regional needs through enabling and integrative technologies, geospatial data and tools

- Contributed to ESCAP's framework to support member States socio-economic response to COVID-19 “protecting people and enhancing resilience” and “building back better with resilience”
- Organized two webinars with member countries of RESAP and UN-GGIM-AP and WG-Disasters of UN-GGIM on how space technology applications contributed to combatting COVID-19
- Supported countries to develop a single integrated geo-spatial platform for geo-referenced aggregated data related to COVID-19.

Integrated geo-spatial platform for geo-referenced aggregated data related to COVID-19

Hotspot of pandemics and vulnerable communities

Characteristics of risk hotspots:

- High population density
- High population mobility
- Poor sanitation and polluted environment
- Low connectivity and awareness

Relevant data:

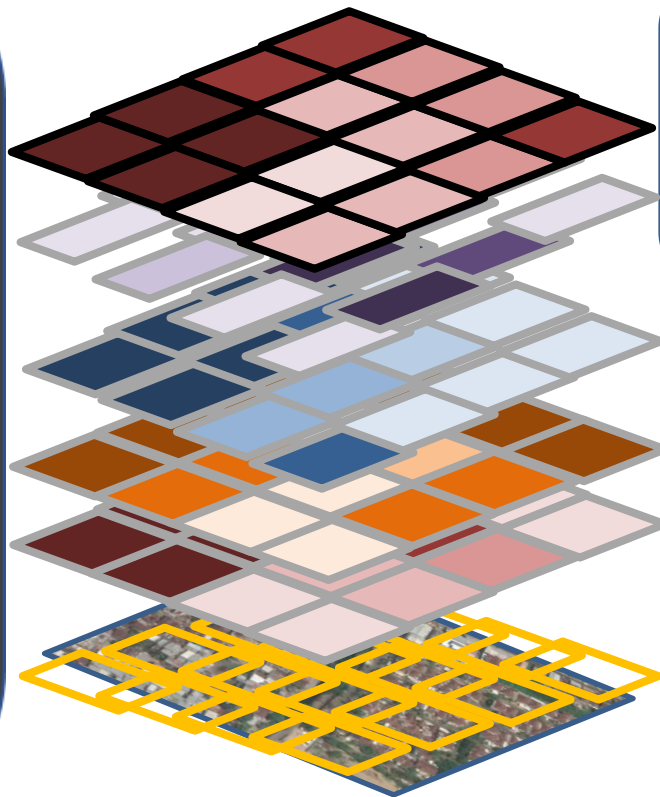
- Census and household surveys
- Population mobility
- Sanitation and pollution
- Internet access & information dissemination

GIS Analysis



Where is awareness enhancement needed?

Who needs it?



Results showing hotspot

- Population density: high
- Population mobility: high
- Sanitation: poor
- Awareness about COVID 19: low
- Internet access
- Infections: yes
- Elderly people: %
- Poverty people: %

Awareness

Sanitary environment

Population mobility

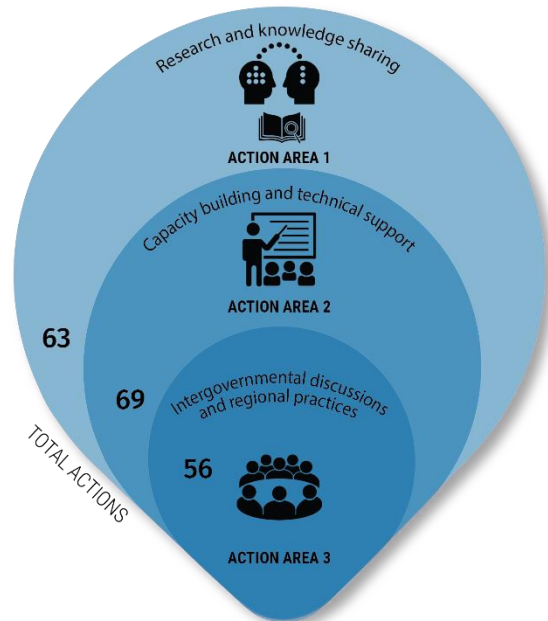
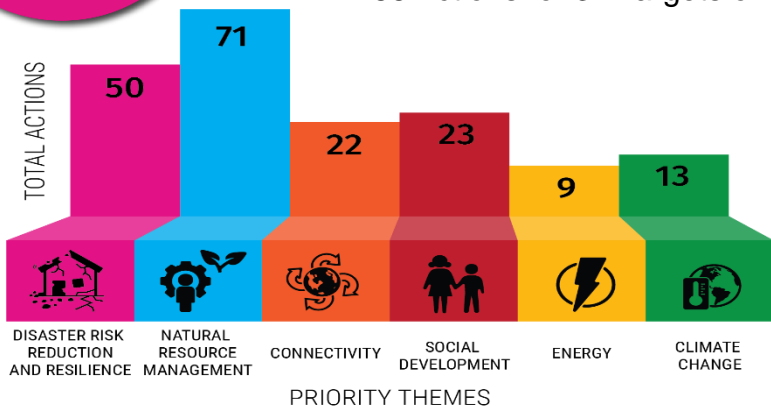
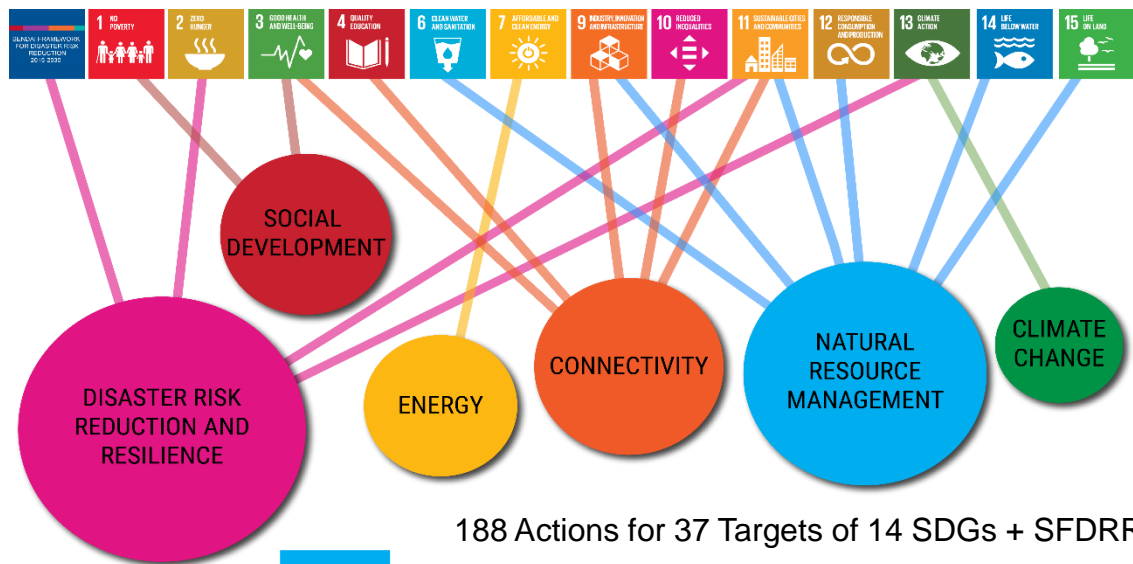
Population density

Communities

I. Meeting regional needs through enabling and integrative technologies, geospatial data and tools

- Continued provision of satellite imagery for disaster affected countries, even during COVID-19, with support of RESAP member countries and UNITAR/UNOSAT, for flood in Iran, cyclone Harold in Pacific (Fiji and Vanuatu), recent floods in Southeast Asian countries (Myanmar) and South Asian counties (Bangladesh, Nepal)
- Promoted sharing of good experiences for better integrating the geospatial information applications to support achieving SDGs, through webinars, publications and training workshop
- Explored innovative approached to support countries with specific needs, through online support, thematic training and field missions

II. Implementation of the Regional Space Plan of Action (2018-2030)



Vision

Member States in the Asia-Pacific region can access and use space science, technology and its applications to the fullest extent at the national and regional levels to achieve the goals set out in the 2030 Agenda for Sustainable Development.

II. Implementation of the Regional Space Plan of Action (2018-2030)

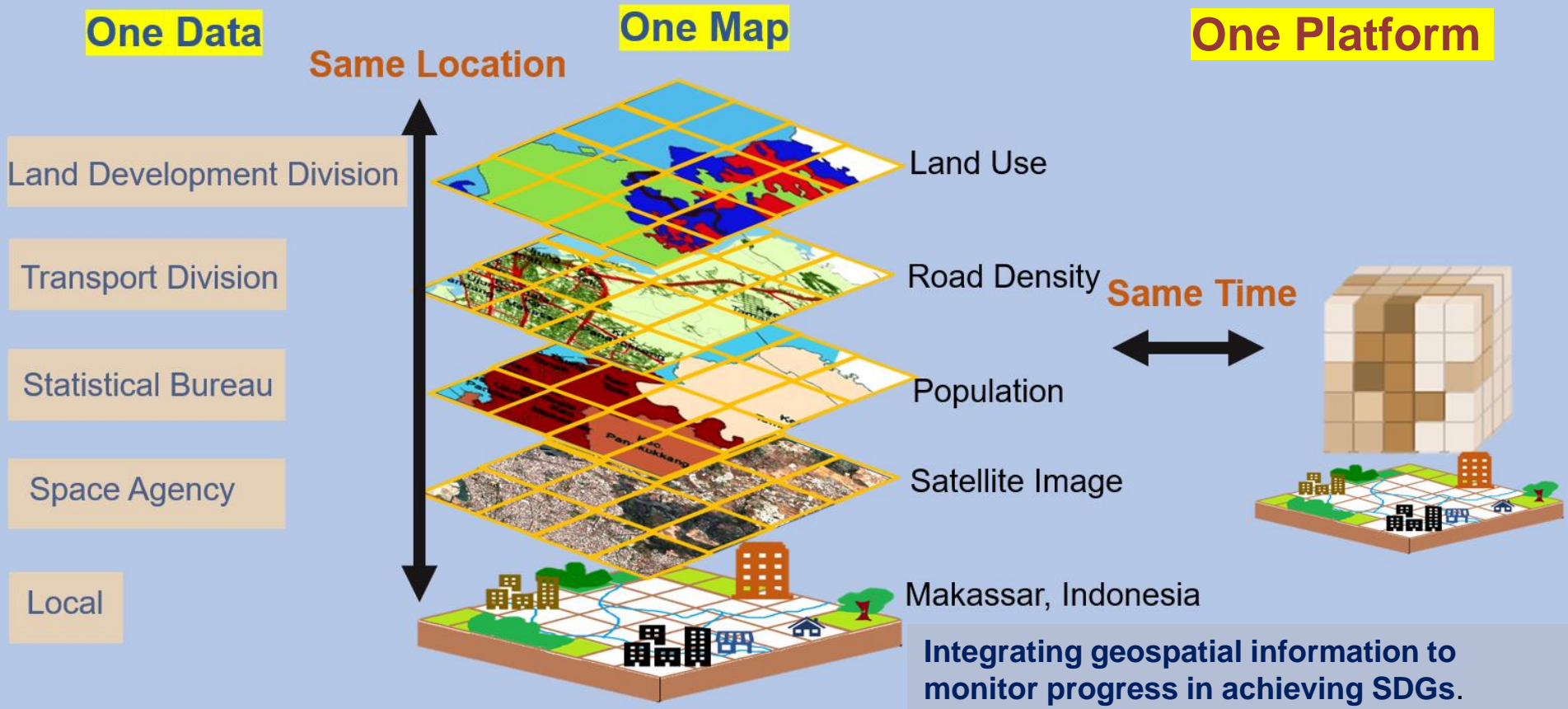
- Conducted regional survey on needs and contributions for implementation of the Plan of Action, 20 priority actions up to 2022 from 20 member States and associate members
- 1,532 requests for specific priority needs in natural resource management; 1,328 requests for disaster risk management, and 1,267 requests for connectivity, social development, energy and climate change
- Continued capacity development, through technical assistance and training programme in CSSTEAP, ARTSA, RADI, GISTDA and online training workshops

II. Implementation of the Regional Space Plan of Action (2018-2030)

- Promoted drought and crop monitoring in the region with support of China, India, Russian Federation and Thailand, in Northeast Asia, Central Asia, South and Southeast Asia
- Demonstration of integrated geospatial information platform for covid-19 response and smart city in three pilot cities in Indonesia and Thailand, will share with other countries
- Prepared study on geospatial information applications in Asia and the Pacific (launch in November 2020) with over 100 good practices from countries in six thematic areas
- Contributed to global initiatives on Integrated Geospatial Information Framework, as Secretariat of UN-GGIM-AP

II. Implementation of the Regional Space Plan of Action (2018-2030)

Building a regional gateway for sharing geospatial data and operational modalities



II. Implementation of the Regional Space Plan of Action (2018-2030)

Strengthen regional cooperation in geospatial data sharing for health and mitigation of pandemics

Social Development: SDG 3 (Good health and well-being)

- Research on how global, navigation and communication satellite systems, can be used to minimize the spread of health epidemics.
- Promote regional cooperation by leveraging existing mechanisms to share data and exchange expertise on big data analytics to contain present and future spread of disease and pandemics.
- Develop capacity to map health risk hotspots using geospatial information and big data.

Disaster Risk Reduction and Resilience: Sendai Framework for Disaster Risk Reduction

- Research on tele-health solutions using space technology applications to improve capacity of vulnerable countries to prepare for, mitigate and respond to emergency health situations.

II. Implementation of the Regional Space Plan of Action (2018-2030)

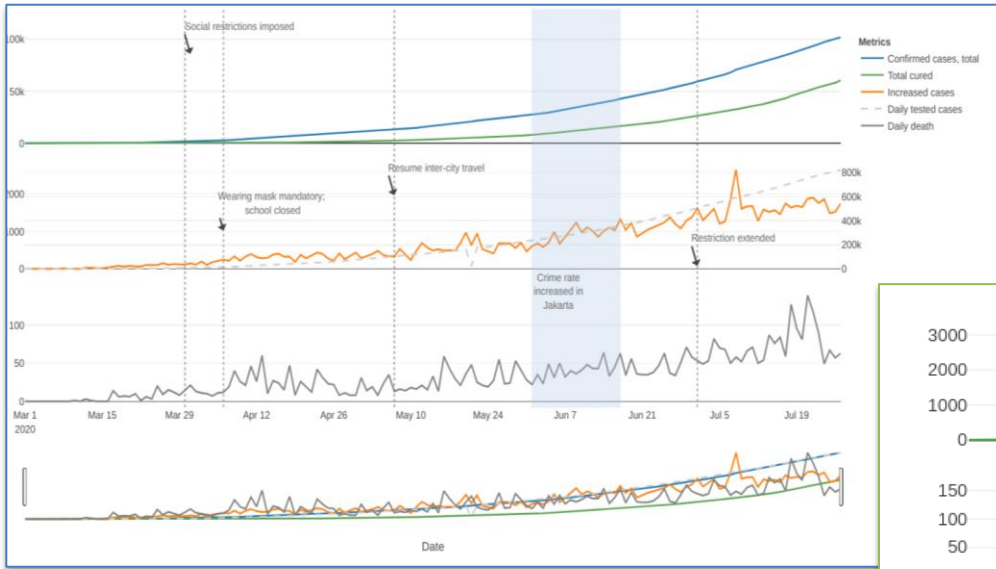


Figure 1. Time series metrics of COVID-19 in Indonesia with related policy

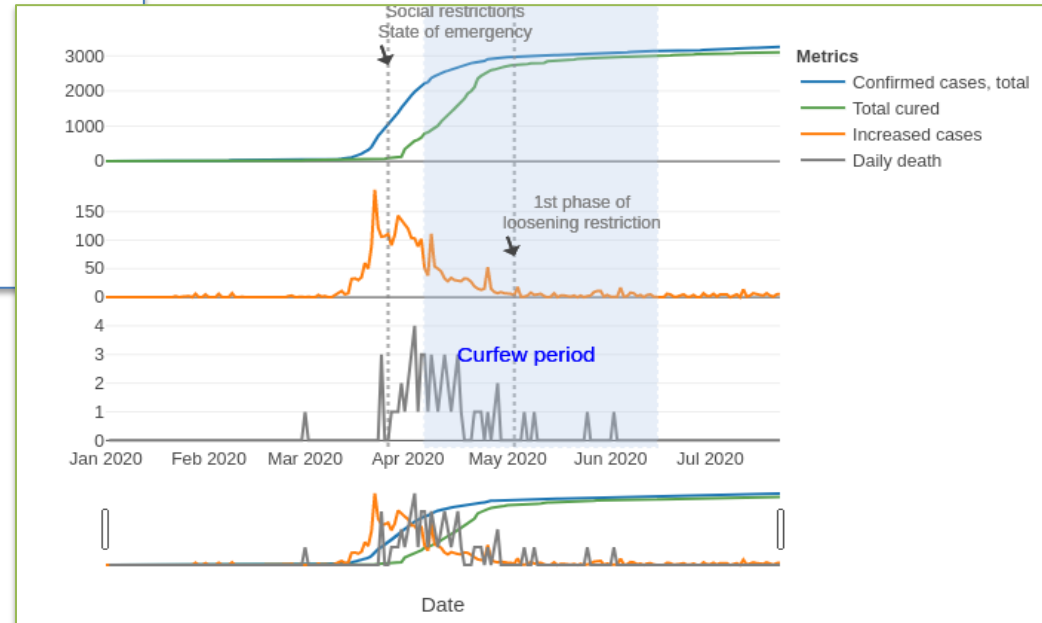


Figure 2. Time series metrics of COVID-19 in Thailand with related policy

III. Issues for consideration and guidance

- Enhance regional cooperation on SPACE+: digital innovations, youth, end-users, private sectors, and partnership
- One-data, One-map and One-platform initiatives and regional geospatial information platform
- Space-derived data for air and water pollution monitoring and regional partnership
- Prepare for the 4th Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific in second half of 2022 in Indonesia

III. Issues for consideration and guidance

- Deepen the collaboration with GEO/AOGEO in supporting Pacific countries to achieve SDGs
- More broadly share practices in an easy to use and update format online options/proposals, through a One-stop Portal: Geospatial innovations for sustainable development
- Develop or facilitate the participation of member States in various capacity building programmes for specific thematic priority areas
- Support Rapid Prototype Development by Japan and Thailand for youth on innovative space applications solution for disaster management

Thank you

