ESCAP Progress and Plan

3 November 2020

Information and Communications Technology and Disaster Risk Reduction Division

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

1. Asia Pacific Plan of Action on Space Applications for SDGs 2018-2030

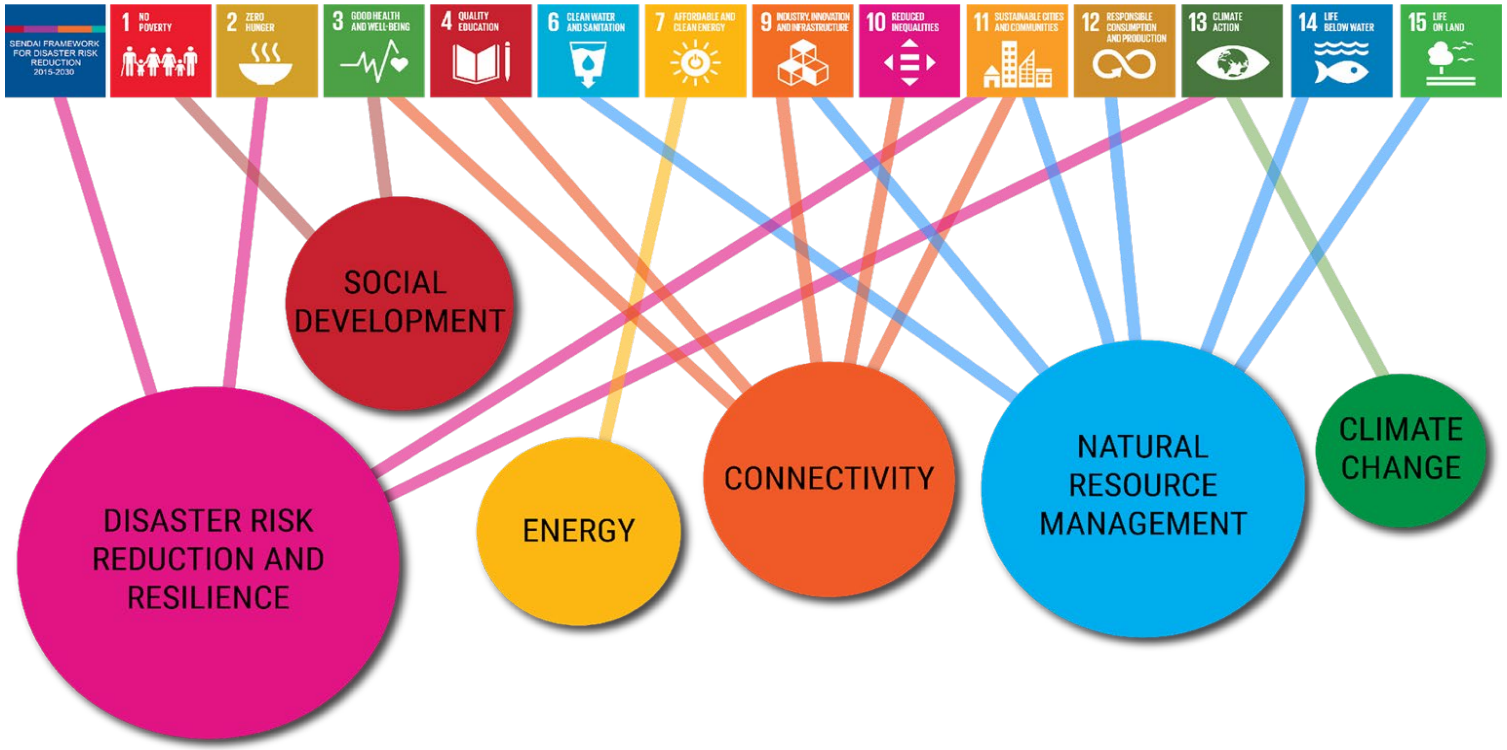
- Third Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific adopted two key documents on 10 October 2018.
  - ✔ Ministerial declaration
  - ✔ Asia-Pacific plan of action on space applications for sustainable development (2018–2030)
- The plan of action (POA) is a regionally-coordinated, inclusive and country-needs driven blueprint.
- POA covers the six thematic areas: (a) disaster risk management; (b) natural resource management; (c) connectivity; (d) social development; (e) energy; and (f) climate change.

1. Asia Pacific Plan of Action on Space Applications for SDGs 2018-2030

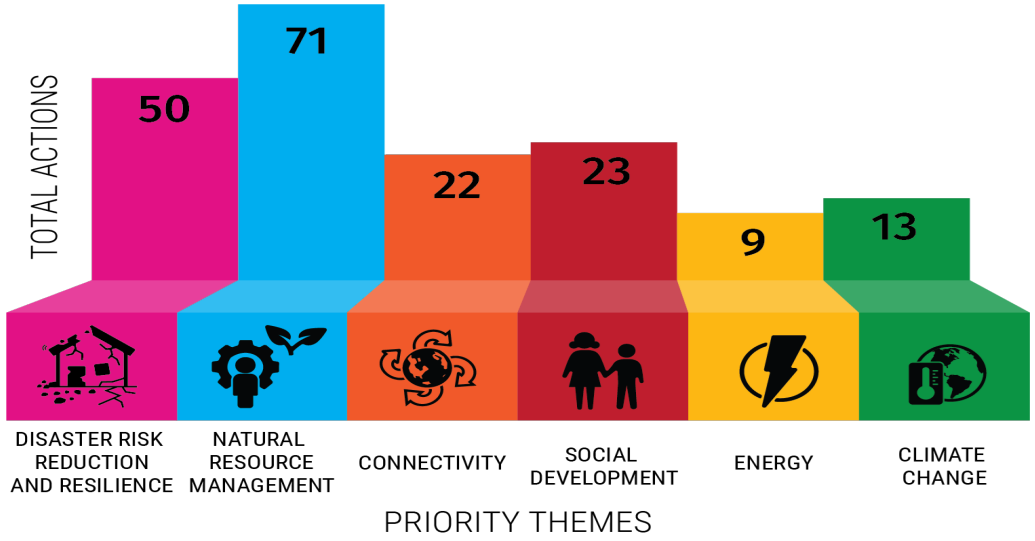
- Under the six themes, PoA set all 188 actions
  - Will contribute to 37 Targets of 14 Goals of the 2030 Agenda for Sustainable Development.

- 188 actions are (a) research and knowledge-sharing; (b) capacity-building and technical support; and (c) intergovernmental discussions and regional practices.

Integrating Geospatial Dimensions for a Sustainable Asia-Pacific



188 Actions for 37 Targets of 14 SDGs + SFDRR



2. 2020 Publication- "Geospatial Information for Sustainable Development: perspectives from Asia-Pacific"

Thank you for sharing over 100 country examples!

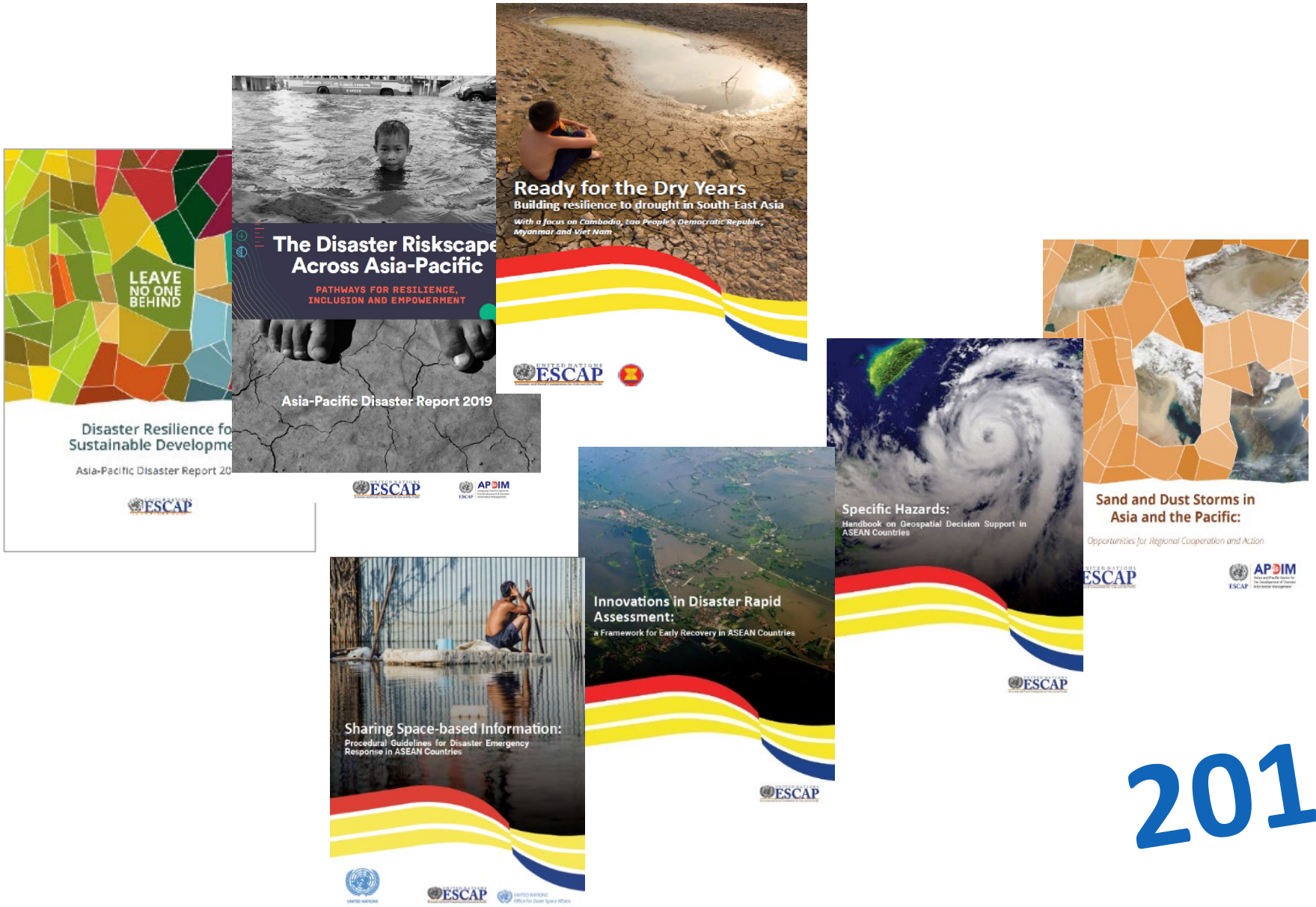
Purpose

- **Document** Phase I implementation of the Plan of Action
- Facilitate the **sharing of good practices**
- **Inspire actions** for development and management of geospatial information resources

Priorities:

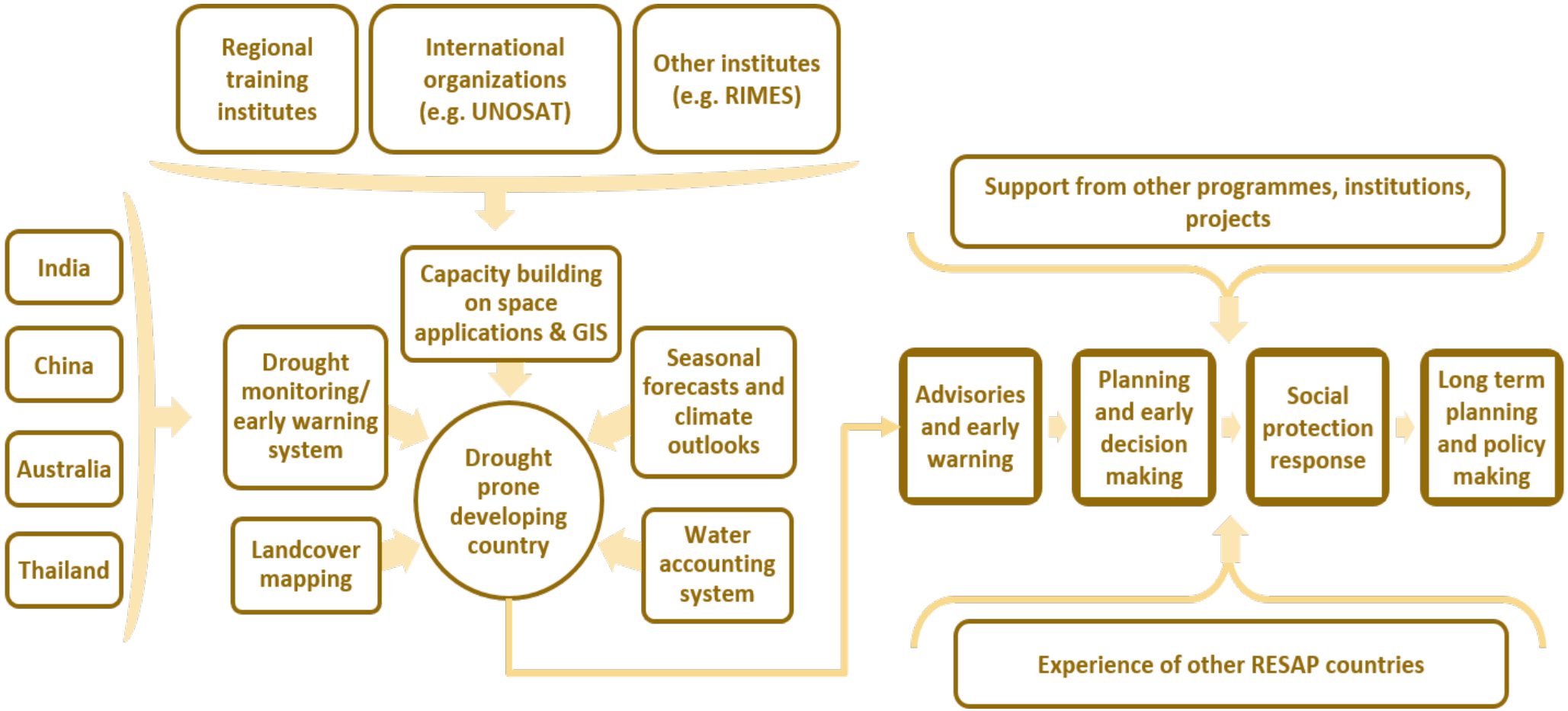
- Show **benefits** geospatial information provides to Asia Pacific member states
- Illustrate **value** of geospatial information to policy makers

2. Knowledge Products



2017-2019

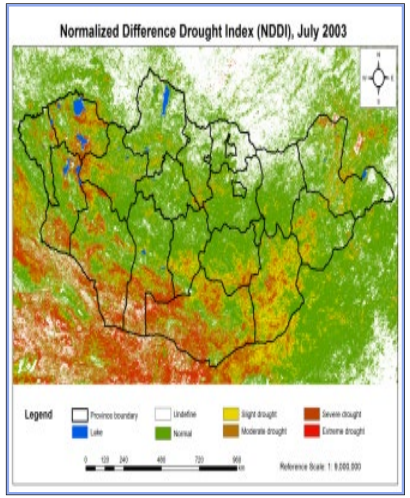
3. Structure of Regional Drought Mechanism

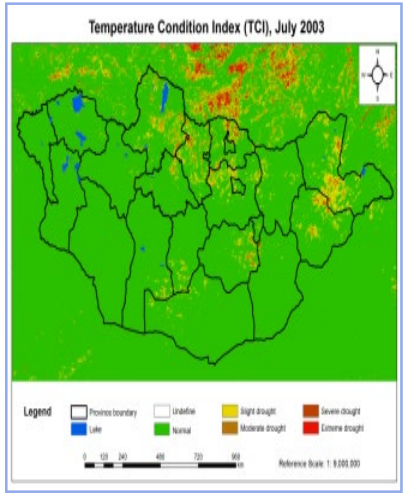


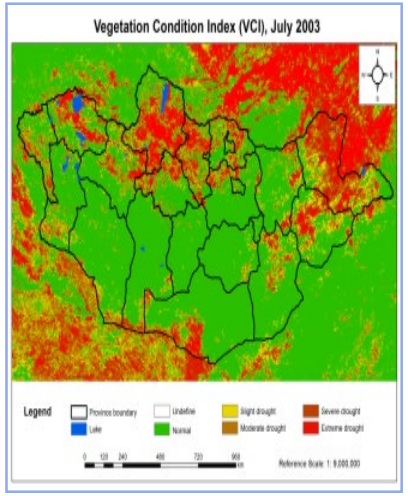
On-going Projects on Drought and Crop

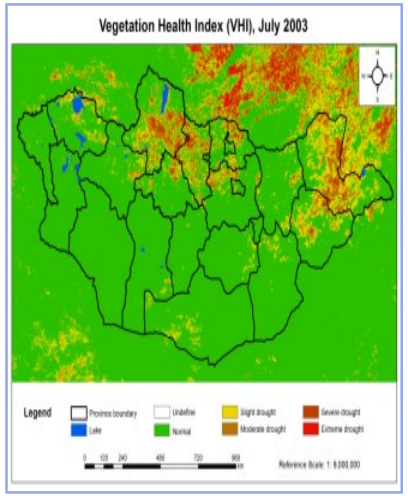
1. Project to **develop a drought monitoring tools** in Central Asia (2019-2021)
2. Project to build **a pilot Central Asia Drought Information System** (CADIS) / (2021-2023)
3. Project to enhance **capacity of crop monitoring** (2019-2021)

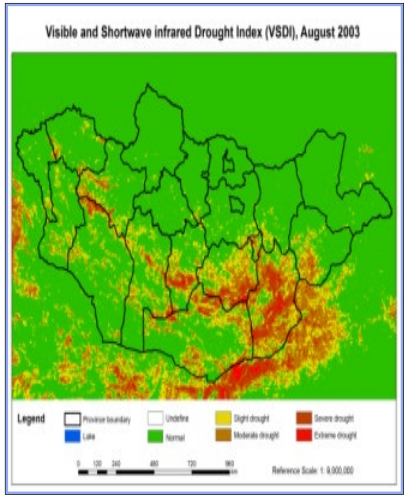
Technical Support for Drought Monitoring

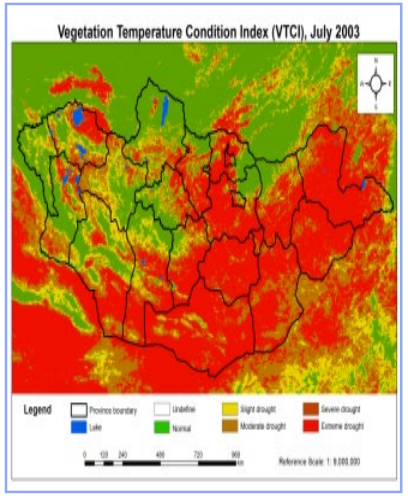


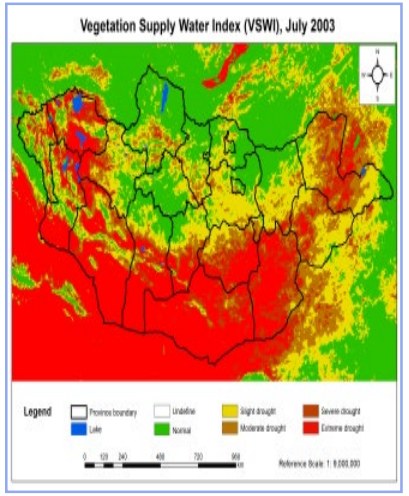


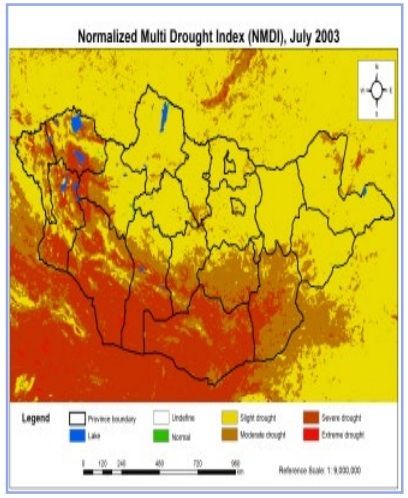


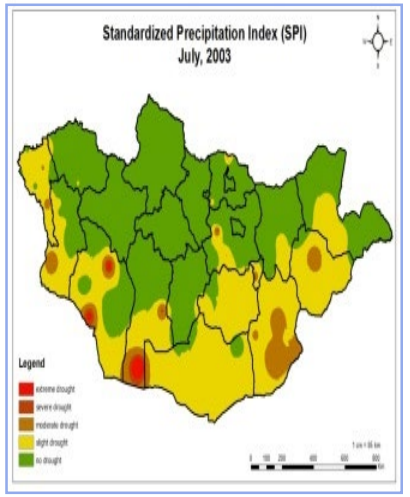


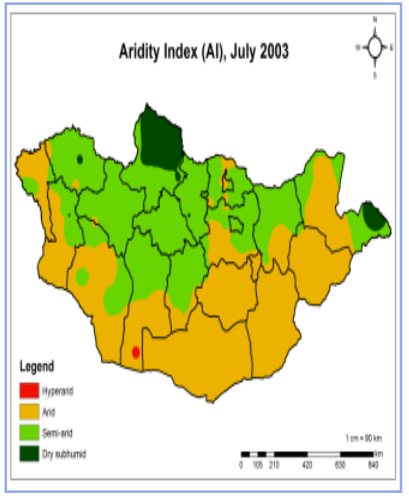












Training and Capacity Building

4. Contribution to COVID-19 analysis, monitoring and tracing

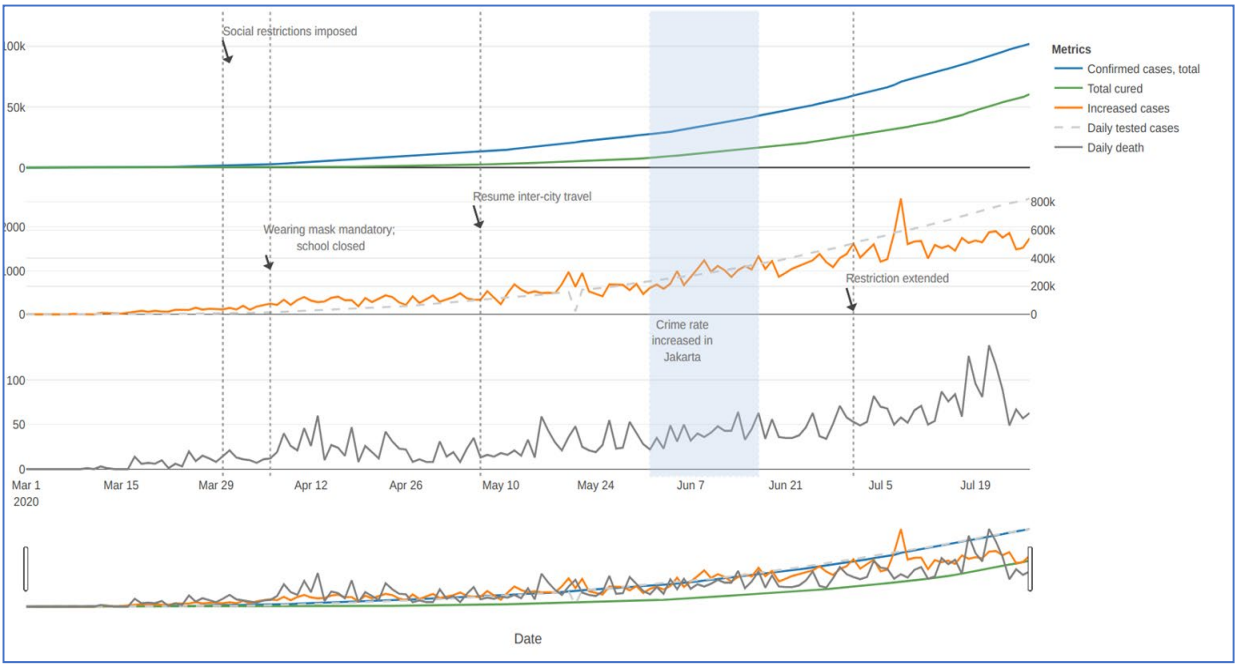


Figure 1. Time series metrics of COVID-19 in Indonesia with related policy

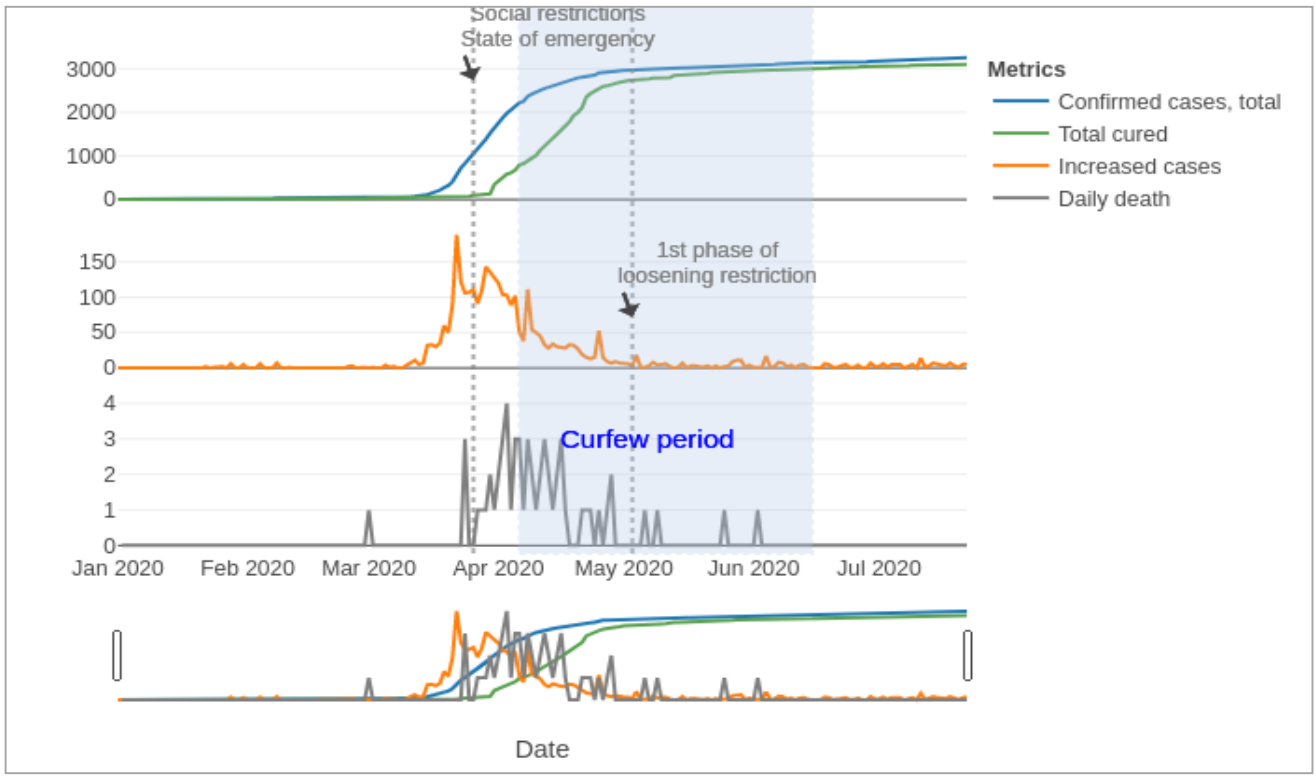


Figure 2. Time series metrics of COVID-19 in Thailand with related policy

5. Survey Results

Rank	Action Name	Thematic Area	Action Area
1	Share good practices from the health sector, and work with existing intergovernmental mechanisms, international and regional organizations and relevant implementing agencies that could benefit from the use of geo-information science.	Social Development	AA3
2	Develop capacity for mapping and modelling urban and peri-urban areas and settlements.	Management of Natural Resources	AA2
3	Develop capacity to map health risk hotspots using geospatial information and big data.	Social Development	AA2
4	Develop capacity in integrating and utilizing space and geo-informatics applications with new methods, tools and technologies, from other digital innovations, for the mapping process.	Disaster Risk Reduction	AA2
5	Research opportunities for including Global Satellite Navigation System for infrastructure and utilities mapping, relevant to disaster damage assessment and early warning systems.	Disaster Risk Reduction	AA1
6	Provide technical support on how to integrate, enhance and strengthen multi-hazard monitoring and early warning systems and real-time situational analysis for rapid-onset disasters, including flash floods from high-altitude lake and glacial outbursts, as well as slow-onset disasters, including drought and sand and dust storms.	Disaster Risk Reduction	AA2
7	Promote the use of geospatial information management systems, global navigation satellite systems and communications satellite systems towards disaster risk reduction and management at the policy level.	Disaster Risk Reduction	AA3
8	Identify interfaces between, and integration of, traditional space-based information and frontier technologies to address disaster risk management and build resilience.	Disaster Risk Reduction	AA1
9	Develop community-based hazard maps to raise awareness on preparedness and mitigation.	Social Development	AA2
10	Carry out risk mapping of highly vulnerable areas and communities by identifying hazards, vulnerabilities and exposure to risks.	Disaster Risk Reduction	AA2

Top 10 needs

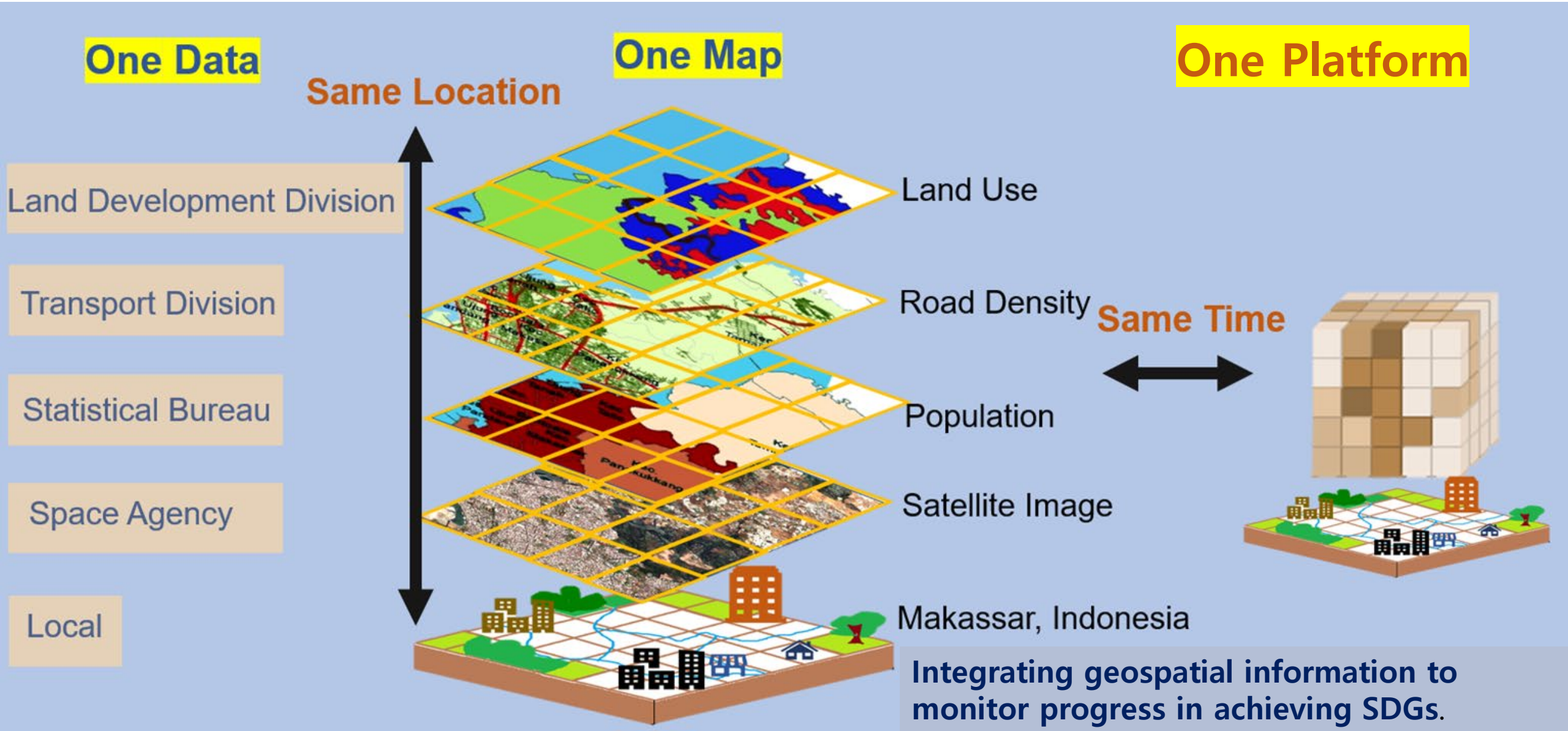
Priorities are health, urban development and disaster risk reduction

6. Regional Space Applications Programme for SD (RESAP)

1. Annual plenary meeting: 23rd Session of Intergovernmental Consultative Committee (ICC)

2. The Committee reconfirms
   - Support the implementation of the Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018-2030) and
   - Support to address emerging challenges such as COVID-19
   - Promote regional cooperation and sharing of geospatial data on SPACE+, One-data-One-map-One-platform and Asia Pacific geospatial information platform

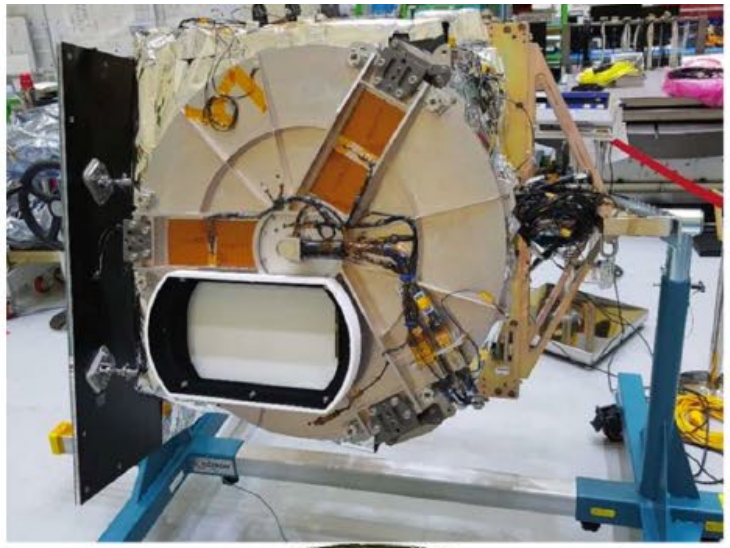
7. One data – One Map – One Platform



8. On-going Projects and Planned Projects

1. Project to develop **a drought monitoring tools** in Central Asia (2019-2021)
2. Project to build **a pilot Central Asia Drought Information System (CADIS)** / (2021-2023)
3. Project to enhance **capacity of crop monitoring** (2020-2022)
4. Project to promote **Asia Pacific Geospatial Information Platform** in support of UN-GGIM-AP (2020-2022)
5. Project to promote **the Pan-Asia Partnership for Geospatial Air Pollution** Information (2020-2022) from support of KOICA / GEMS (2020-2022)
6. Project on **GIS for Clean Air for Sustainable ASEAN (CASA)** / (2021-2023)

Project on GEMS



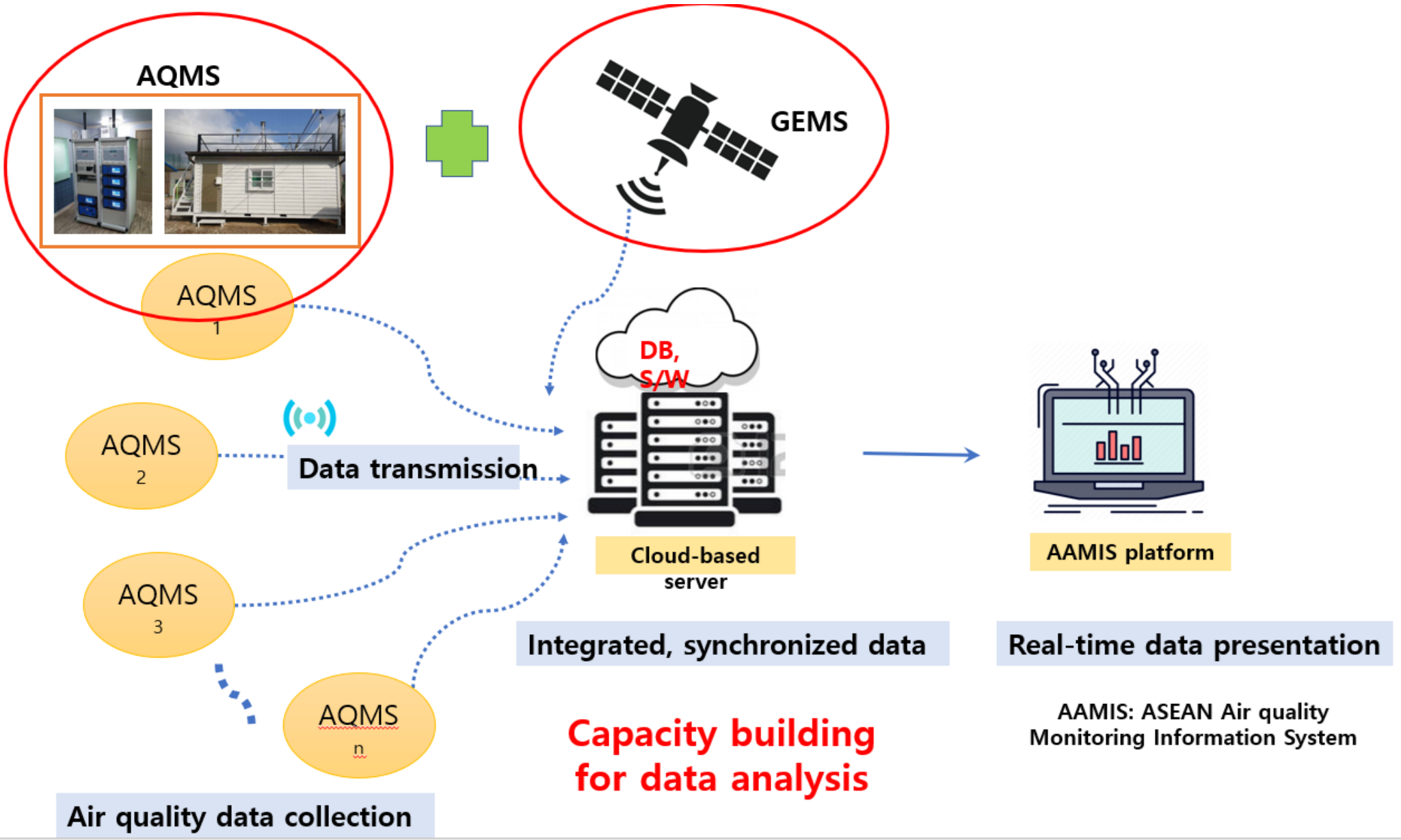
et al. (BAMS 2020)

GEMS :

Geostationary Environment Monitoring Spectrometer (GEMS) is **UV-visible spectrometers** to monitor **air pollutants** (O3, NO2, SO2, HCHO, CHOCHO, and aerosols) at an unprecedented spatial and temporal resolution from a geostationary Earth orbit for the first time.

20 Asian countries in GEMS domain

Project on CASA



Thank you very much