Promoting SPACE+ initiatives for geospatial information applications for sustainable development in Asia and the Pacific

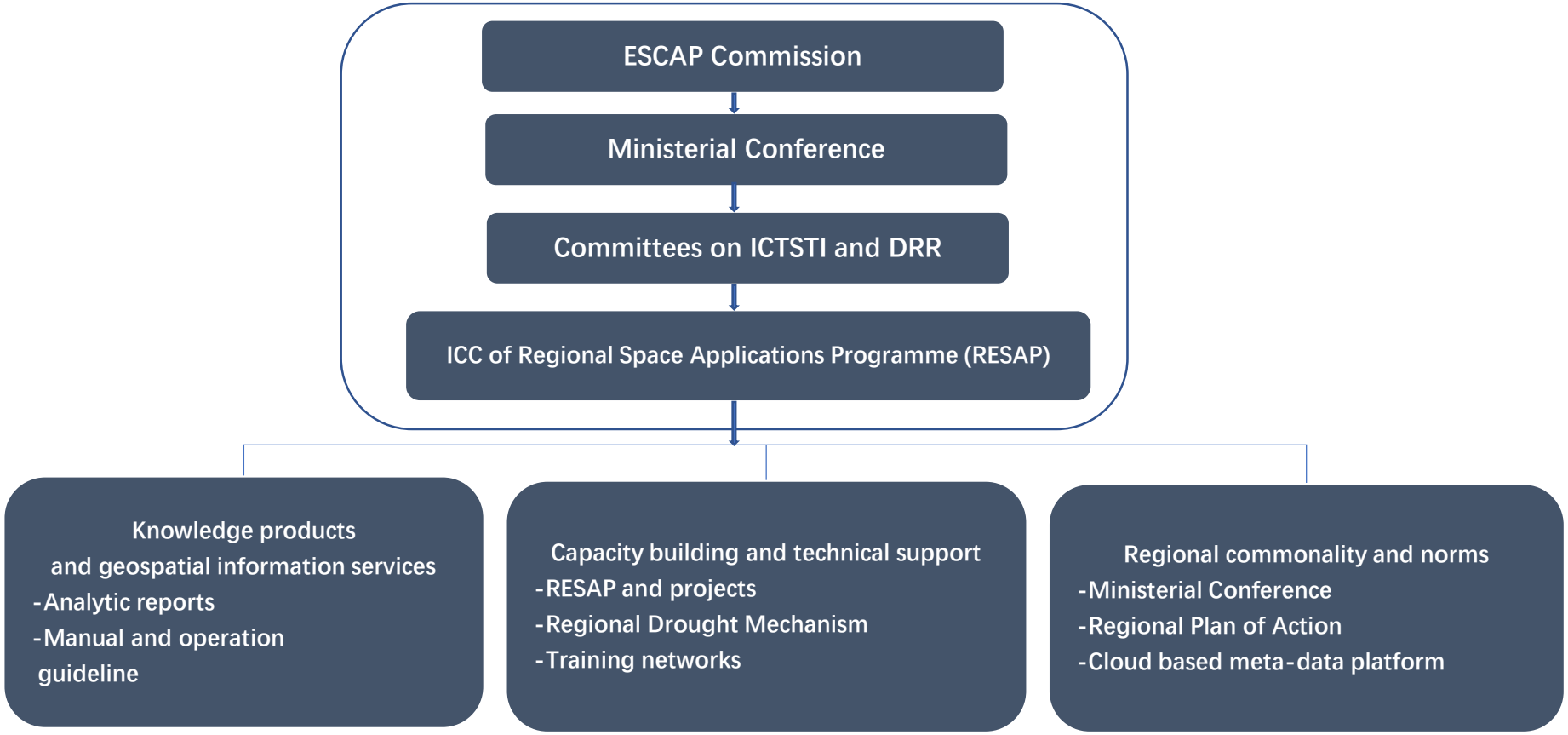
Keran Wang
Chief, Space Applications Section
ICT and Disaster Risk Reduction Division

21 October 2019

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

Our work in space applications

UNESCAP is the only UN Regional Commission has long-standing Regional Space Applications Programme for Sustainable Development



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

UN-GGIM-AP

is one of the five regional committees of UN-GGIM. As the representing body of the National Geospatial Information Authority of 56 countries in Asia and the Pacific region, the UN-GGIM-AP aims to promote the use of geospatial information for identifying problems and finding solutions, so that the economic, social and environmental benefits of geospatial information will be maximized in Asia and the Pacific region.

ESCAP has taken over the secretariat of UN-GGIM-AP since November 2018, in order to strengthen the capacity of the member States in geospatial information management and to facilitate the dissemination of the outcomes and benefits of the activities of the Committee to the member States in the region.

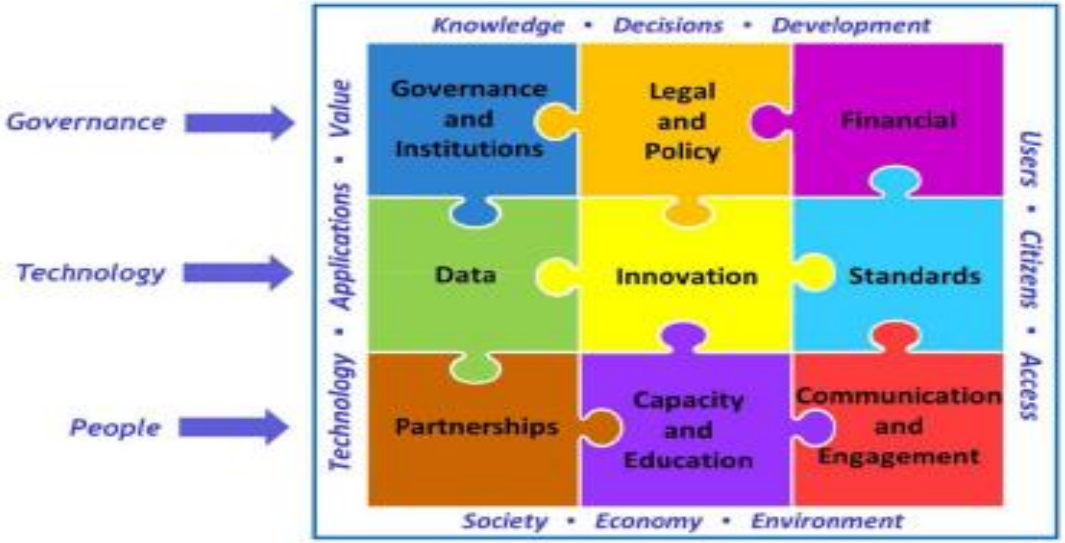
Working Groups:

- Geodetic Reference Frame
- Cadastre and Land Management
- Integrating Geospatial Information and Statistics

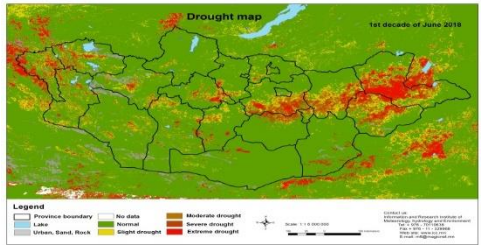
To support the global goals from the Sustainable Development Agenda and the Sendai Framework for Disaster Risk Reduction, UN-GGIM developed the

Integrated Geospatial Information Framework (IGIF).

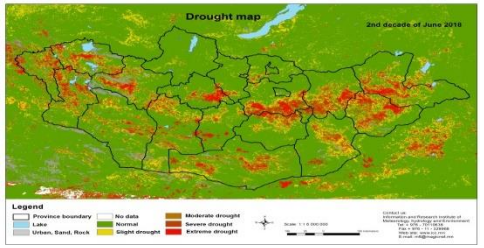
The IGIF provides a basis and guide for developing, integrating and strengthening geospatial information management. Anchored by 9 Strategic Pathways, the Framework is a mechanism for articulating and demonstrating national leadership in geospatial information, and the capacity to take positive steps.



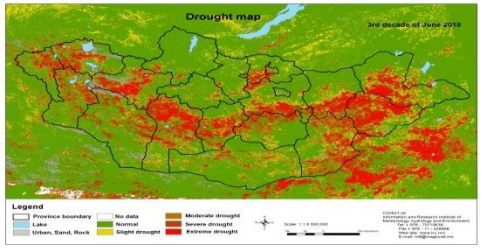
Operationalization of the DroughtWatch in Mongolia, September 2018



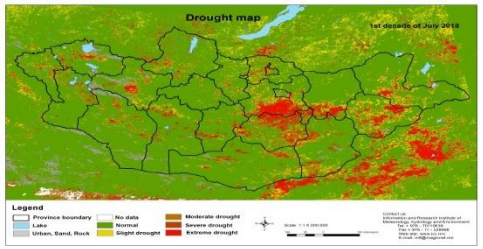
1st decade of June



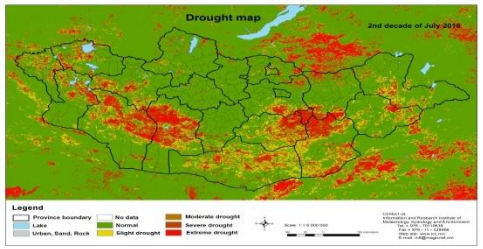
2nd decade of June



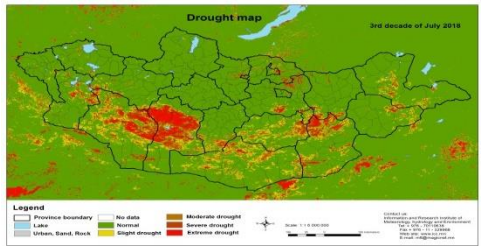
3rd decade of June



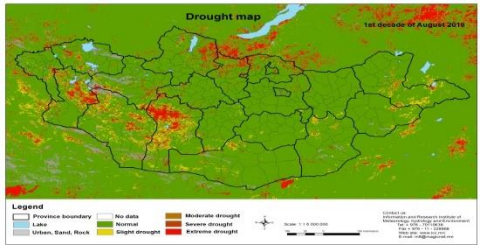
1st decade of July



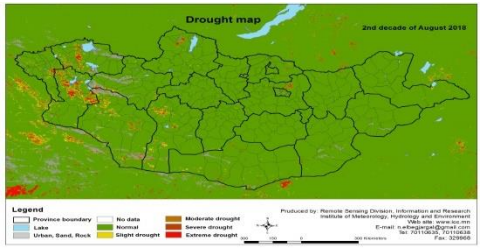
2nd decade of July



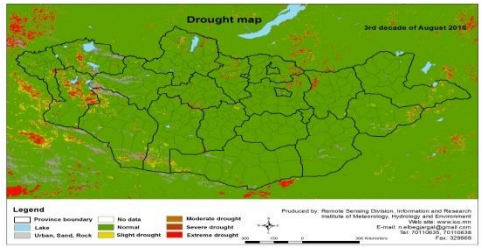
3rd decade of July



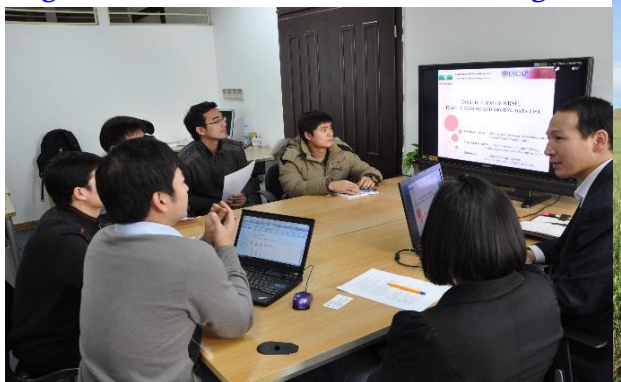
1st decade of August



2nd decade of August



3rd decade of August



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

Strengthening institutional capacity on integrating geospatial and statistical data, with a focus on land accounts in Central Asia 2019-2021

- Enhance policymakers' knowledge and institutional capacity on statistical geospatial data framework and methodologies, tools, models, and good practices for land accounts.
- Support the initial development of strategies or action plans to promote a statistical geospatial data framework for land accounts in follow-up projects and activities.

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

Developing common data format to improve the use and sharing of geospatial information for resilient and sustainable development 2018-2020

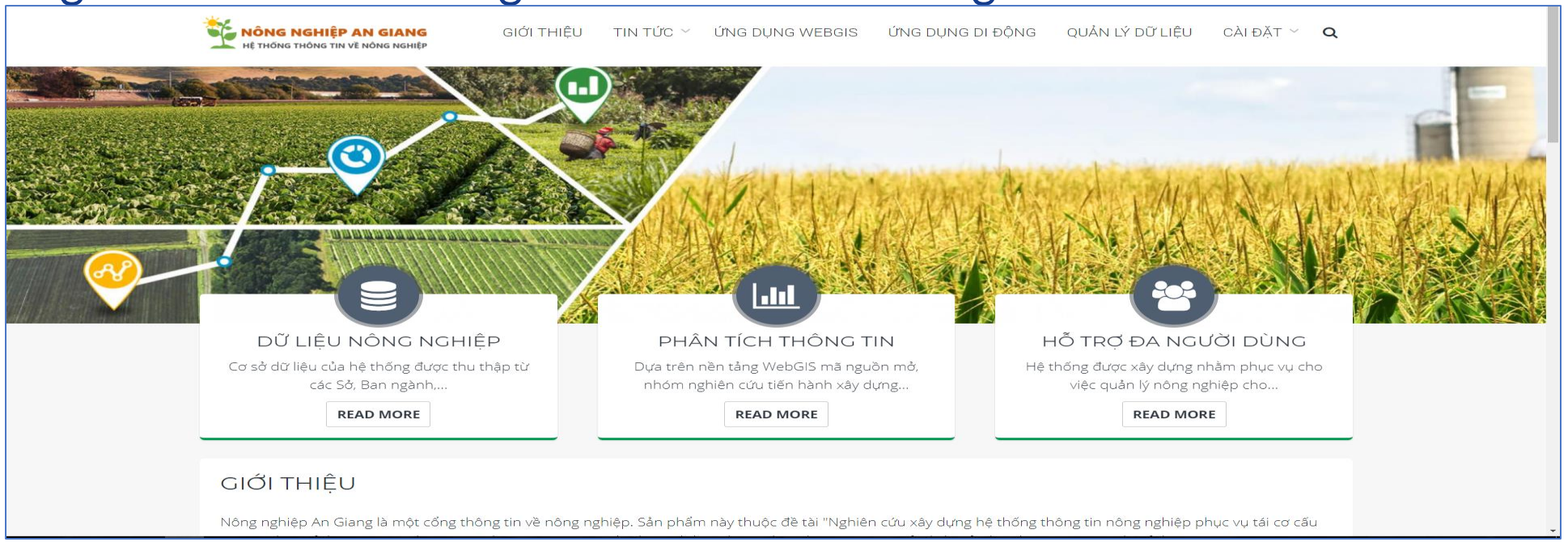
Pleiades imagery (10-10-2014)

SPOT imagery (29-03-2019)

- Build guidelines that would serve as point of entry for the storage, access and retrieval of geospatial data and information in a common format.
- Facilitate data sharing between end-users, providing them with crucial and commonly formatted information for better decision-making.
- Pilot countries in subregions: Cambodia, Indonesia, Thailand, Kyrgyzstan, Bhutan, Bangladesh, Mongolia, Fiji and Papua New Guinea.

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

Building resilient agricultural practices by integrating geospatial information for agricultural monitoring in the Lower Mekong Basin 2018-2022



- Strengthen the capacity of line ministries to identify suitable climate resilient agricultural practices through enhanced access to digital early warning monitoring information for climatic shocks.
- Develop a crop monitoring system and supporting data, information and applications which combines ground-based information with satellite data to calibrate the system to national conditions.

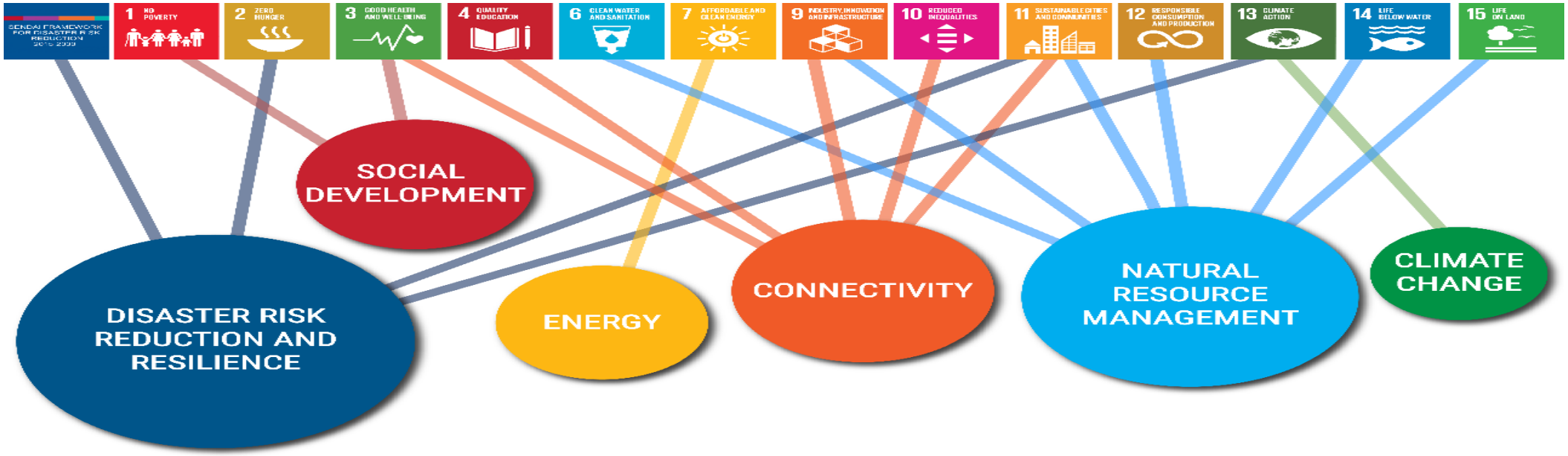
UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

- The Plan of Action was formulated by Asia-Pacific countries during 2016-2018 and was adopted at the 3rd Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific, held in Bangkok, Thailand on 10 October 2018.

- Indonesia offered to host the 4th Ministerial Conference in 2022.

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

Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018-2030)

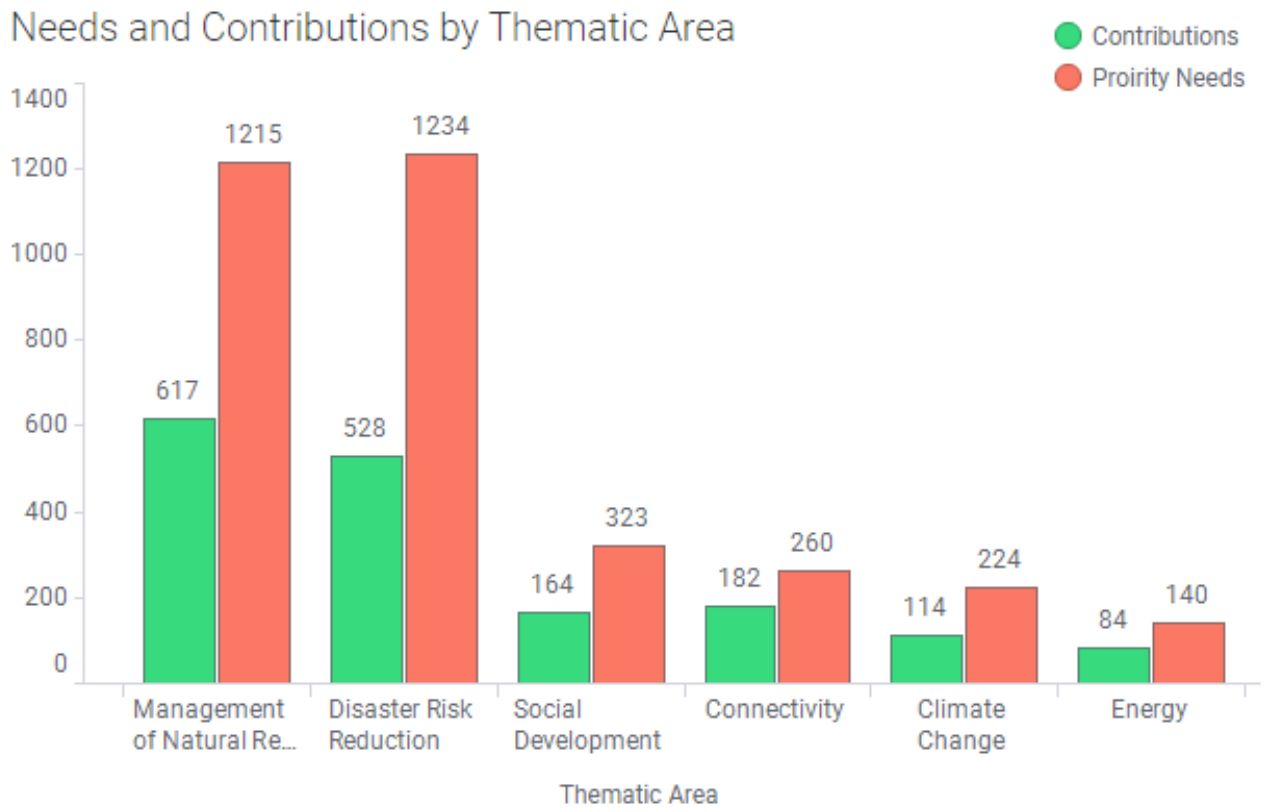


- Adopted by member States through a resolution 75/6 during the 75th session of the ESCAP Commission in May 2019.
- 188 actions in six thematic areas, regionally-coordinated, inclusive and country-needs driven blueprint.
- For 14 Goals of SDGs and Sendai Framework for DRR: where space applications can significantly contribute to global framework.
- 37 Targets: as prioritized by the space community for the Asia-Pacific region.

SPACE+ initiatives

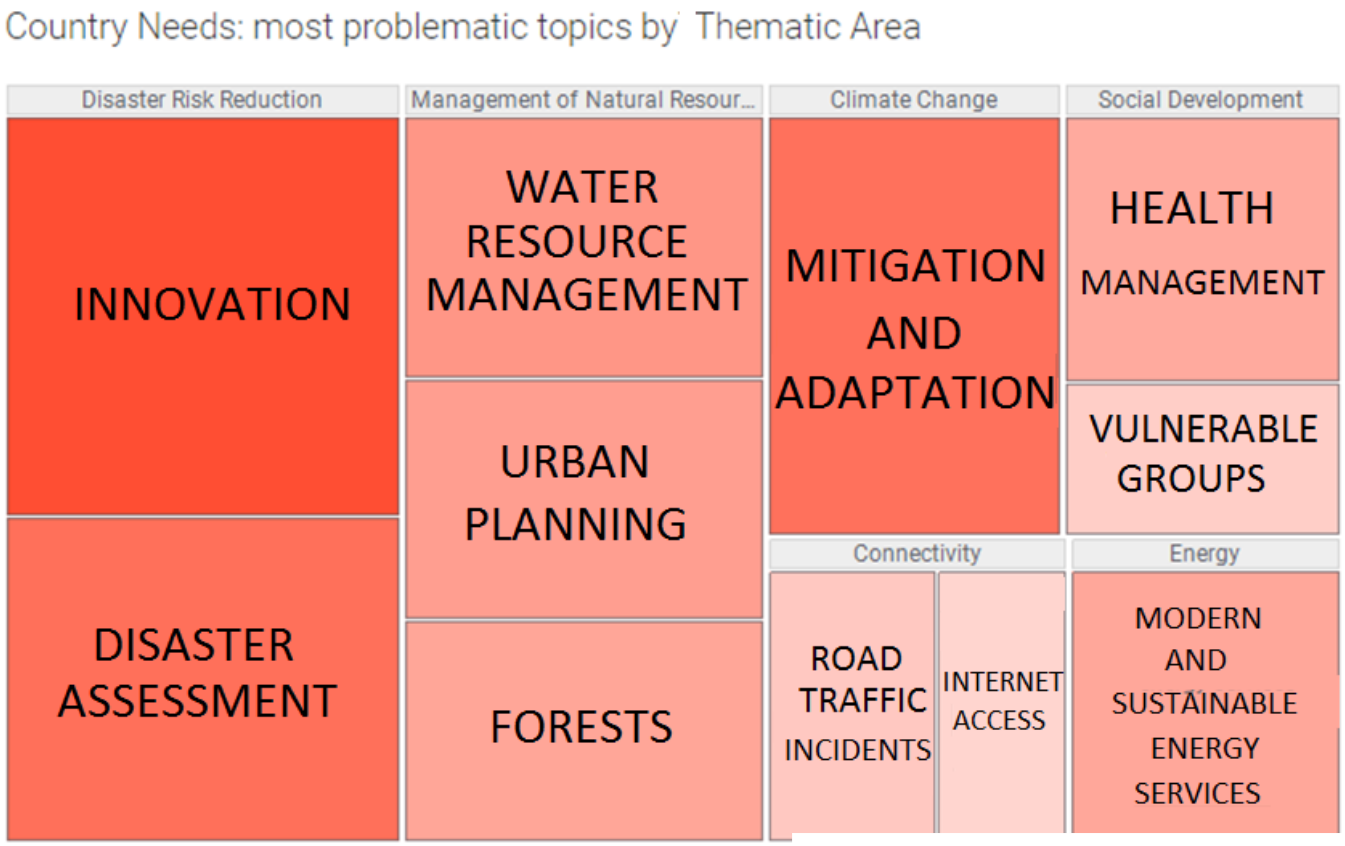
- Leveraging innovations in digitization, cloud computing, artificial intelligence, big data and IoT
- Engaging end-users in multiple sectors including youth and the private sector
- Bridging national demands/end users with regional information/service providers
- Strengthening implementation through enhanced partnership with global stakeholders
- Guiding national sustainable development and stimulating regional cooperation in support of global initiatives
- Contributing to global agendas, such as the UNISPACE+50 and the 2030 Agenda for Sustainable Development

Priority Needs outnumber the potential Contributions across all six Thematic Areas



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

50% of Country Needs are clustered under just 11 Activities out of 188



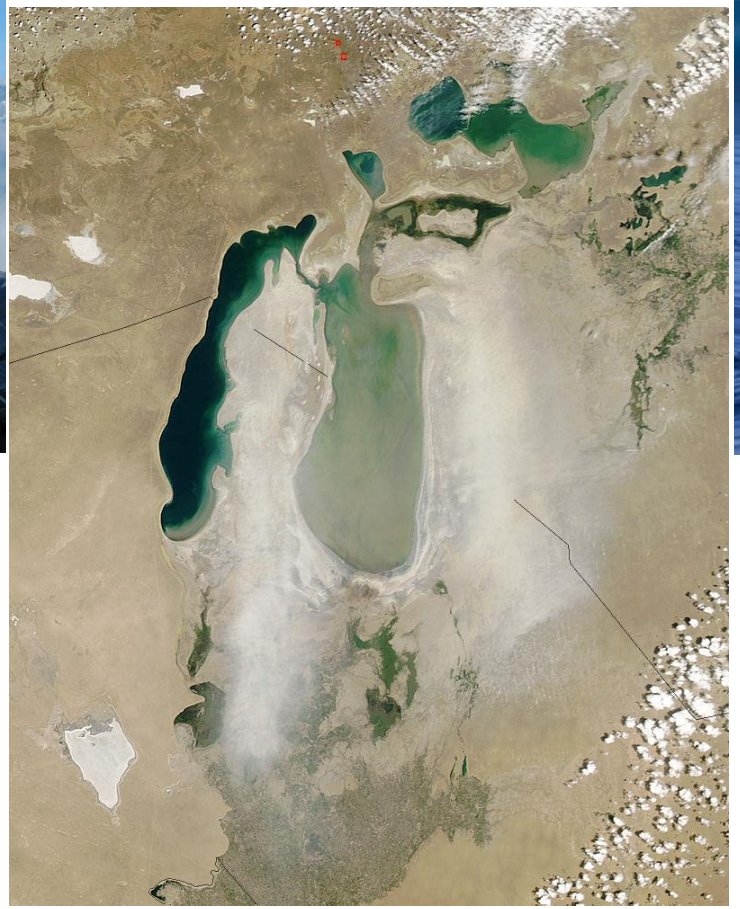
UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

Build common data format to facilitate geospatial data sharing between end-users in sectors for better decision-making and business

- Data has value, the value can be measured;
- Incorporate digital innovation such as AI, IoT, big data, cloud computing and cloud storage;
- Data+location+time allows interoperation of the data from difference sectors;
- Support monitoring and contribute to SDG implementation;
- Engage youth and business sectors to join the innovative applications;
- Building the Asia-Pacific Networked Geospatial Data Hub in support of UN-GGIM-AP and to contribute to IGIF and achieving SDGs;
- Potential cooperation partners: RESAP members, UN-GGIM, GEO/GEOSS, UNITAR/UNOSAT, global and regional partners.

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

Thank you for your attention



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