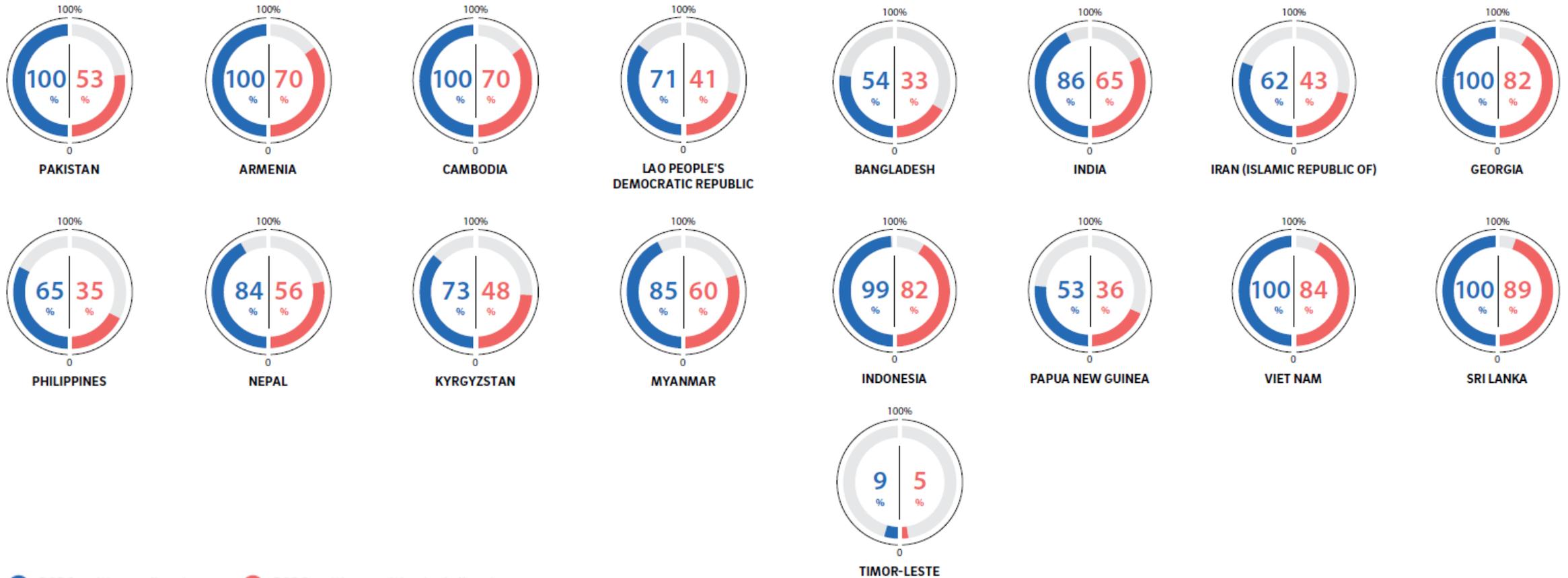


Special Joint Session: UN-Space – UN-SPIDER
Bangkok Workshop Panel on Space-based
Technologies for Disaster Risk Reduction

*Engaging users and delivering user-oriented space-
derived information*

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Disaster risk slows down progress in poverty reduction



● 2030, with no disasters ● 2030, with unmitigated disasters

Source: ESCAP calculations based on CGE model simulation.

See ESCAP's Asia-Pacific Disaster Report 2019 for details.

Providing the evidence for regional (ASEAN) policymaking (2020-2021)

2020 ASEAN DECLARATION ON THE STRENGTHENING OF ADAPTATION TO DROUGHT

Adopted on 10 November 2020

WE, the Ministers in-charge of disaster management and environment of Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic (Lao PDR), Malaysia, the Republic of the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand, and the Socialist Republic of Viet Nam, of the Member States of the Association of Southeast Asian Nations (hereinafter referred to as "ASEAN");

GUIDED BY the ASEAN Charter which sets out the purposes and principles of ASEAN in particular, to enhance regional resilience by promoting greater political, security, economic, and socio-cultural cooperation; and to promote sustainable development so as to ensure the protection of the region's environment, the sustainability of its natural resources, the preservation of its natural heritage, and the high quality of life of its people;

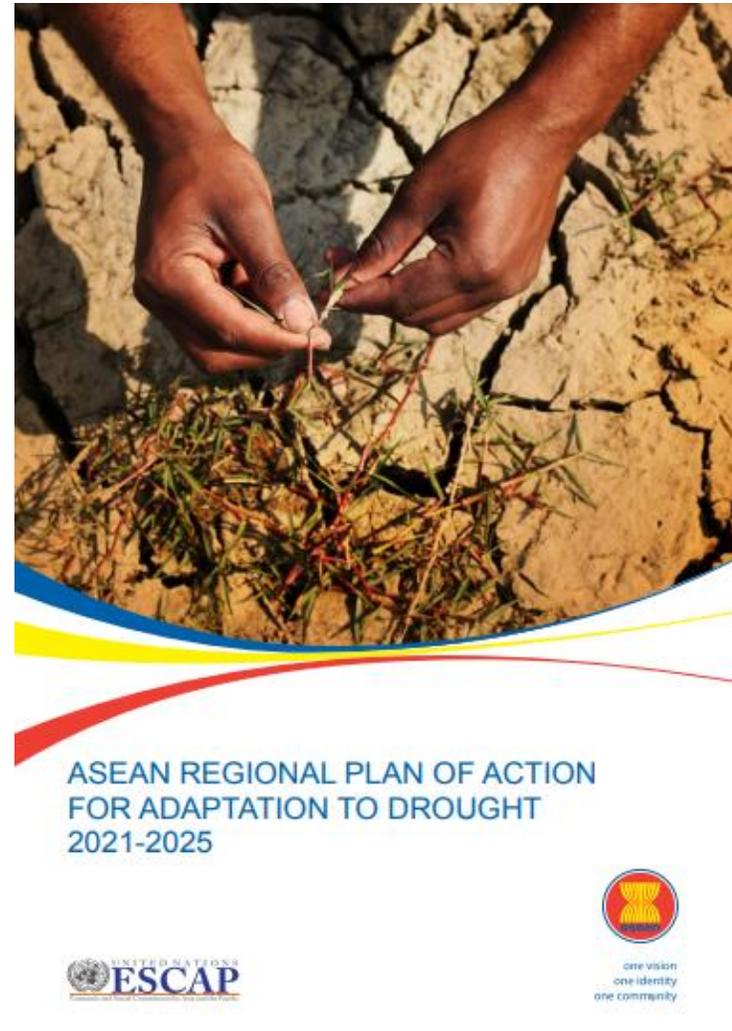
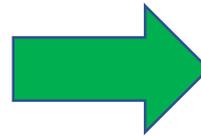
ADHERING TO the ASEAN Community Vision 2025 for a peaceful, stable, and resilient Community with the enhanced capacity to respond effectively to threats and challenges in the region;

RECALLING our commitment at the informal ASEAN Ministerial Meeting on Disaster Management on 22 May 2016 in Istanbul, Turkey to build our regional capacity and preparedness to address the challenges posed by drought;

CONCERNED WITH severe drought and its cumulative impact, especially from 2015 to 2016 and 2018 to 2020, which has had gradual but critical long-term implications on the people and the environment of the region in the social, economic, and environmental aspects such as poverty, agriculture, food security, human development outcomes, ecological integrity (e.g., environmental quality and natural resources), energy, and other economic sectors such as tourism;

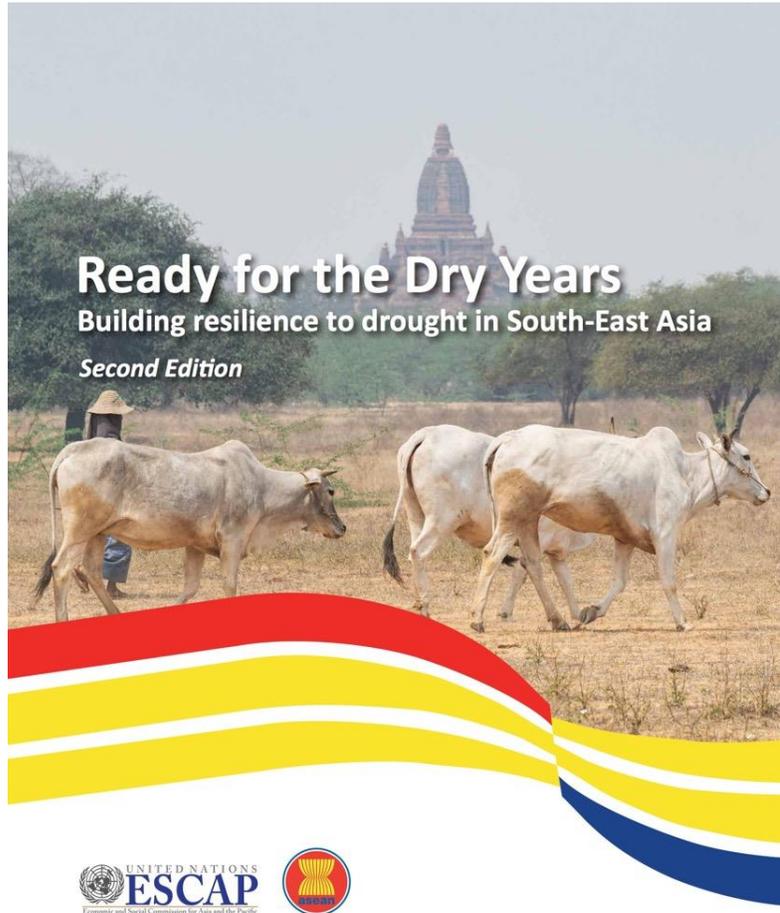
CONCERNED that the region is facing a double burden of disasters, namely the stress and the threat of climate change and extreme weather events, as well as the impact of successive droughts compounded by the unprecedented socio-economic impact of the COVID-19 pandemic exacerbating the vulnerabilities of specific groups in the population, such as low-income, small holder farmers and households dependent on agricultural livelihoods, the food insecure, workers in the informal economy and micro, small and medium enterprises (MSMEs); and

BUILDING ON our commitment in the ASEAN Vision 2025 on Disaster Management, and our commitment to implement the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), ASEAN Working Group on Climate Change (AWGCC) Action Plan and ASEAN Working Group on Disaster Management (AWGDM) Action Plan and ASEAN Joint Statement on



Translation into national plans

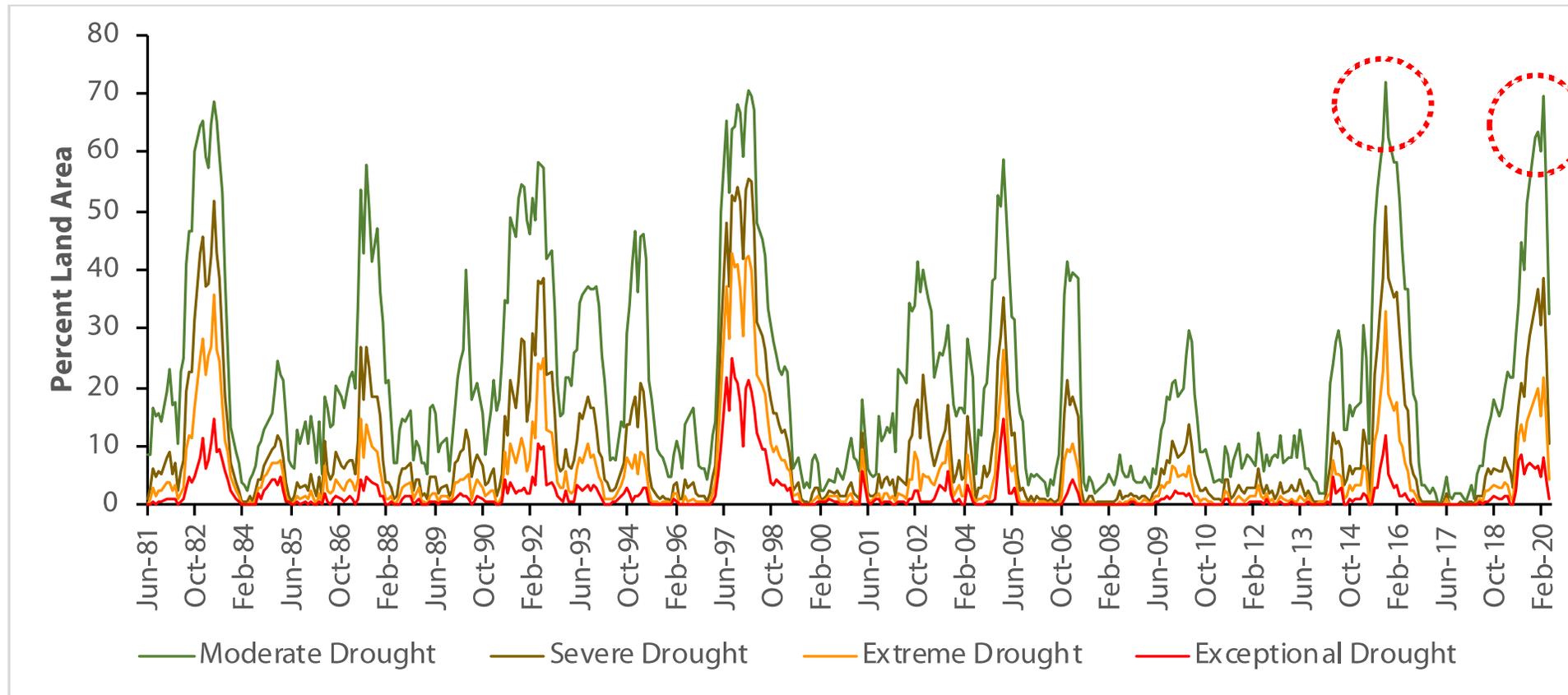
Use of satellite-derived rainfall datasets in the Report enabled the joint ESCAP-ASEAN team to:



- Overcome persistent challenge of lack of data - Satellite-derived rainfall data (monthly from GPCP and daily from CHIRPS) combined with rainfall data from other sources (merged dataset, including station data and modelled data)
- Present the first ever regionally standardized analysis performed for the ASEAN that provided the push for a collective regional response
- Use data available at the regional scale rather than national data sets, so that findings can be compared across all ASEAN countries
- Analyze meteorological data in conjunction with subnational datasets such as Subnational Human Development Index (SHDI) and Demographic Health Survey data on wealth, agriculture, and malnutrition

Drought as a shared transboundary challenge that merited a regional response: The strongest droughts since the great 1997/98 El Nino covering 70% of land area.

Spatial extent of drought across South-East Asia (June 1981 to April 2020) as per cent of total land area



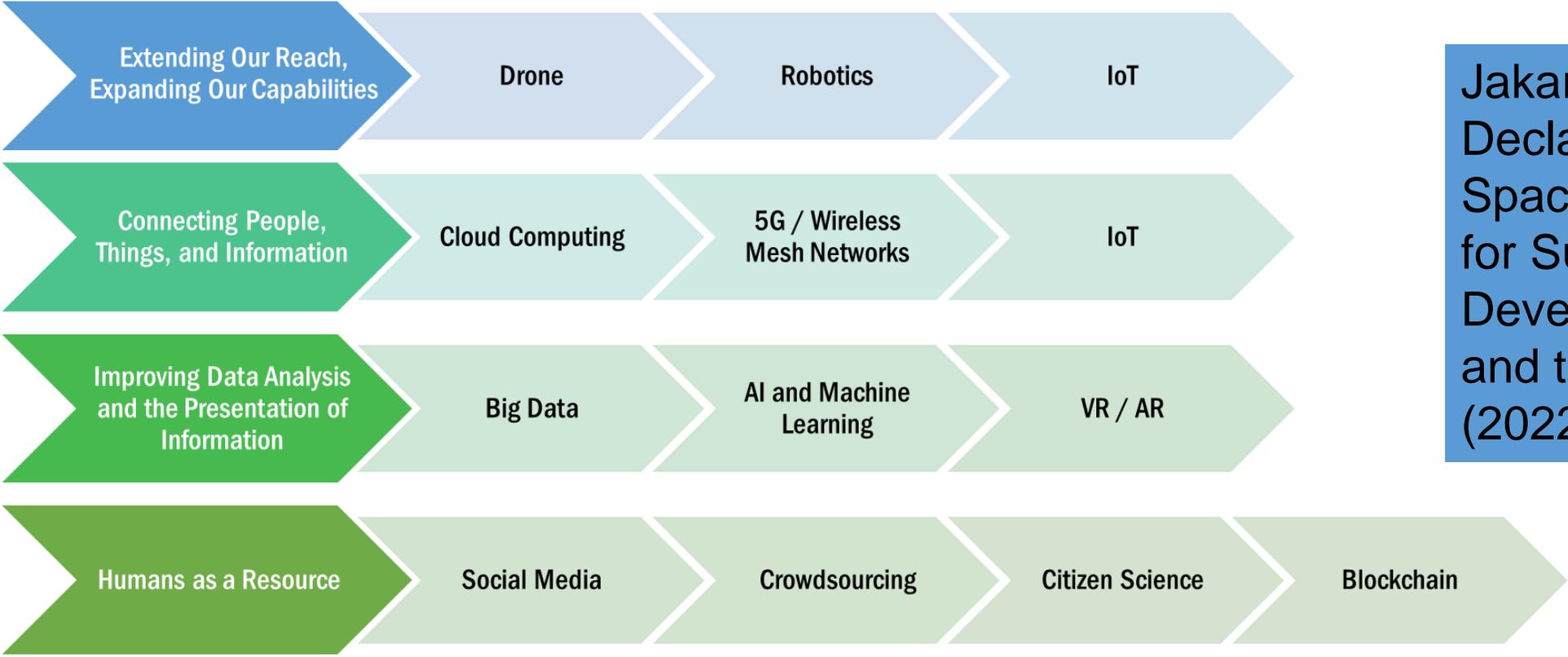
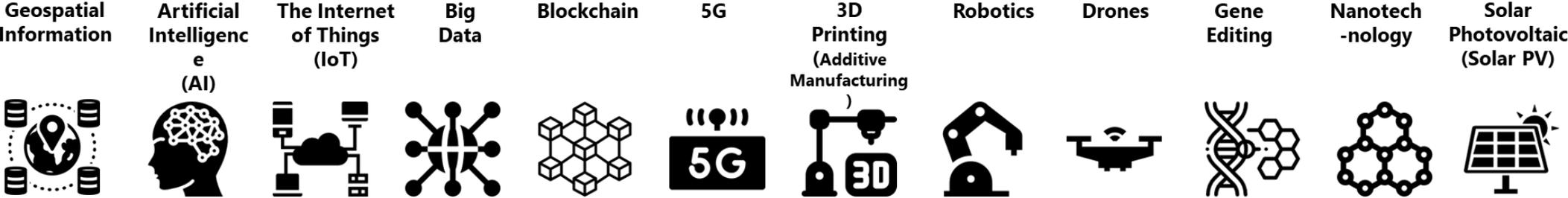
Climate-resilient agriculture in the Lower Mekong Basin (2018-ongoing)



- Develop a crop monitoring system combining ground-based information with satellite data
- Matching the temporal and spatial scale of information requirements for decision-making
- Mapping of decisions routinely made at farm-level (e.g. timing and location of planting) and by local institutions (up to provincial level) to minimize climate risk to rice crop
- Customized software in local language along with capacity development activities

In collaboration with partners, including GISTDA and the Chinese Academy of Sciences

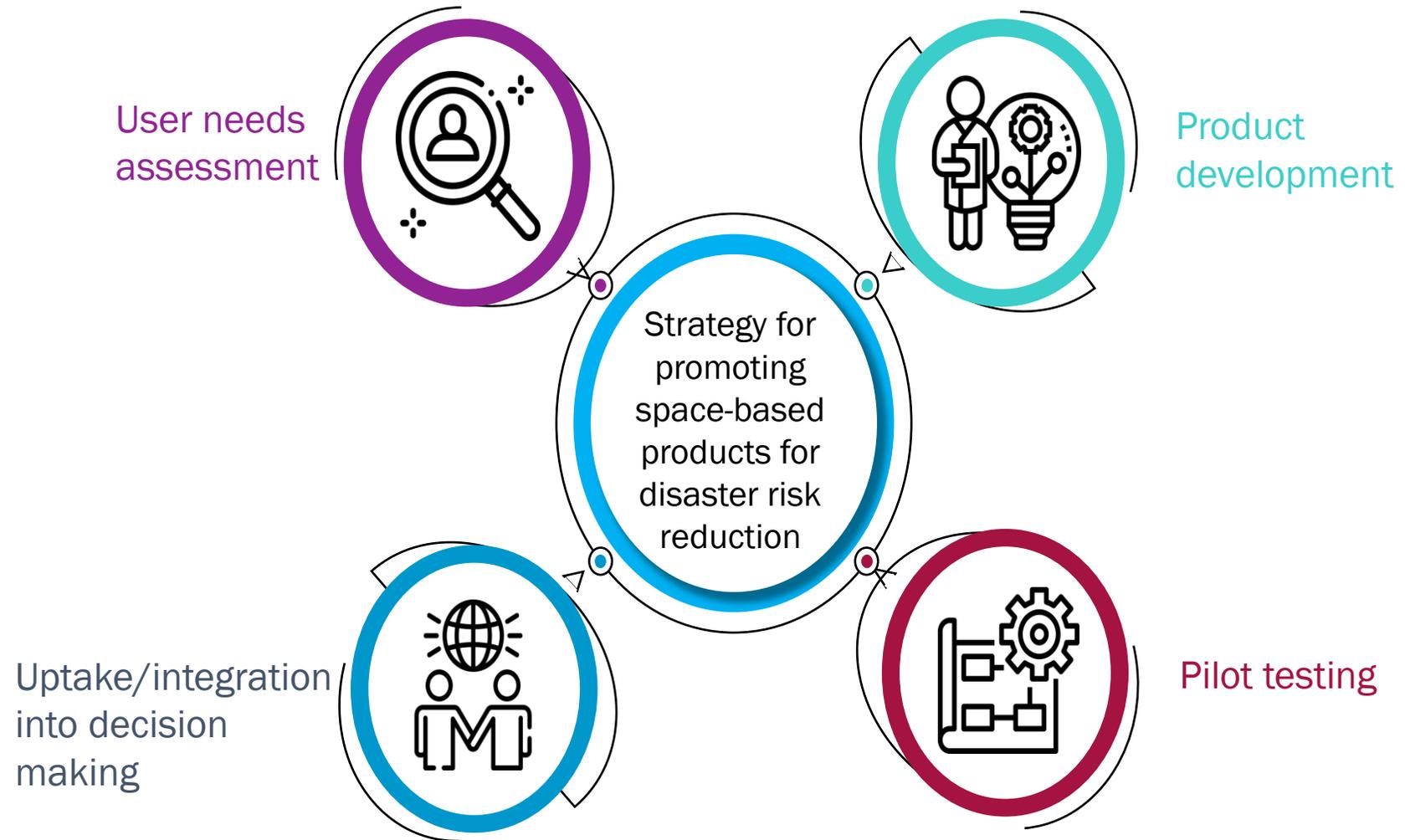
Space+ for our Earth and Future: Harness emerging technologies for disaster risk reduction



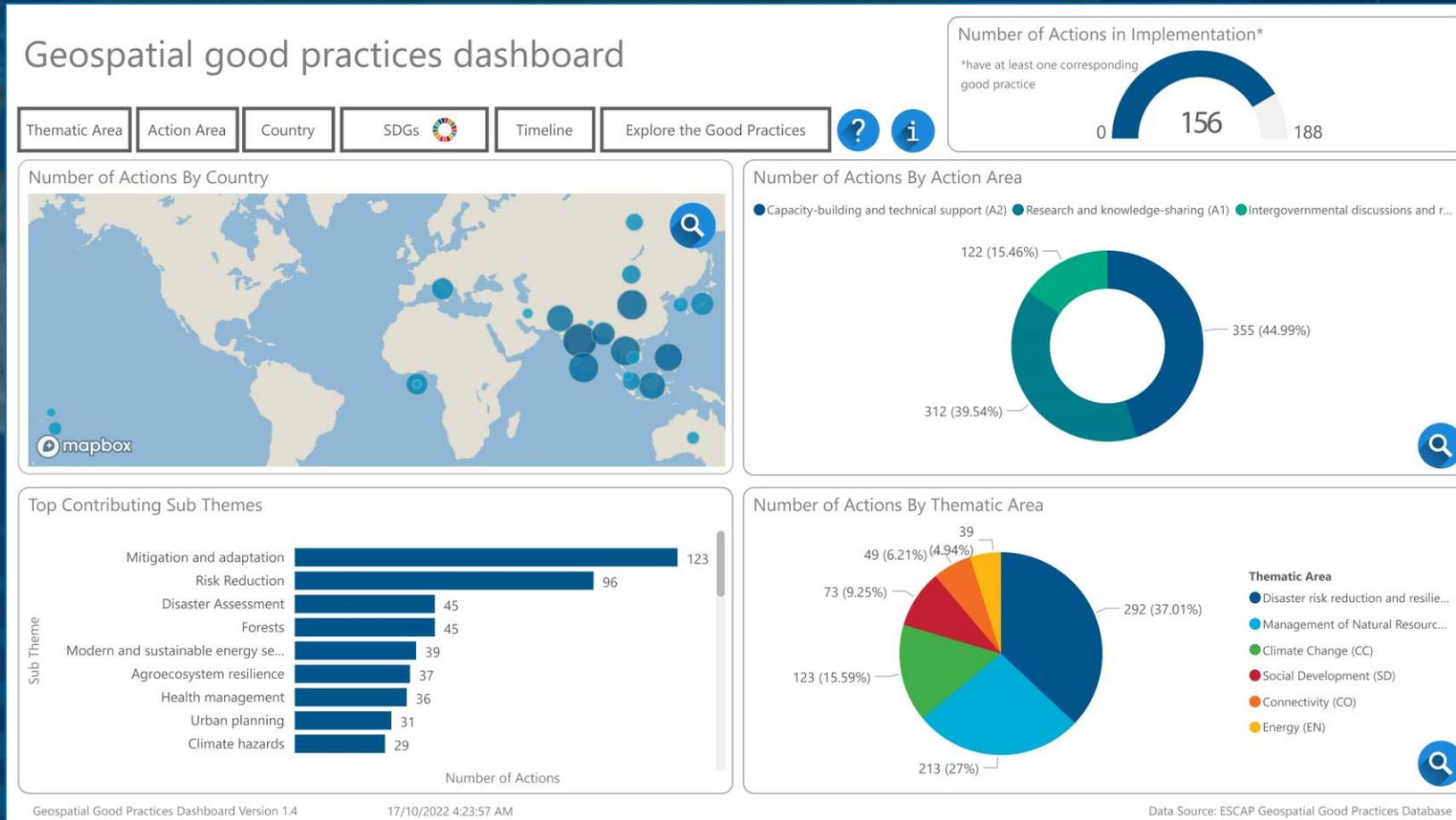
Jakarta Ministerial Declaration on Space Applications for Sustainable Development in Asia and the Pacific (2022)

Enhancing user uptake: What we can do more of?

- Understand user needs and decision-making context
- Tailor products accordingly – match spatial and temporal scale of user requirements to the extent possible
- Joint product development and demonstrations
- Moving from information to a package of “services”, including capacity building



Facilitating sharing of knowledge and good practices





**Geospatial Practices for
Sustainable Development in
South-East Asia 2022:
A Compendium**

THANK YOU