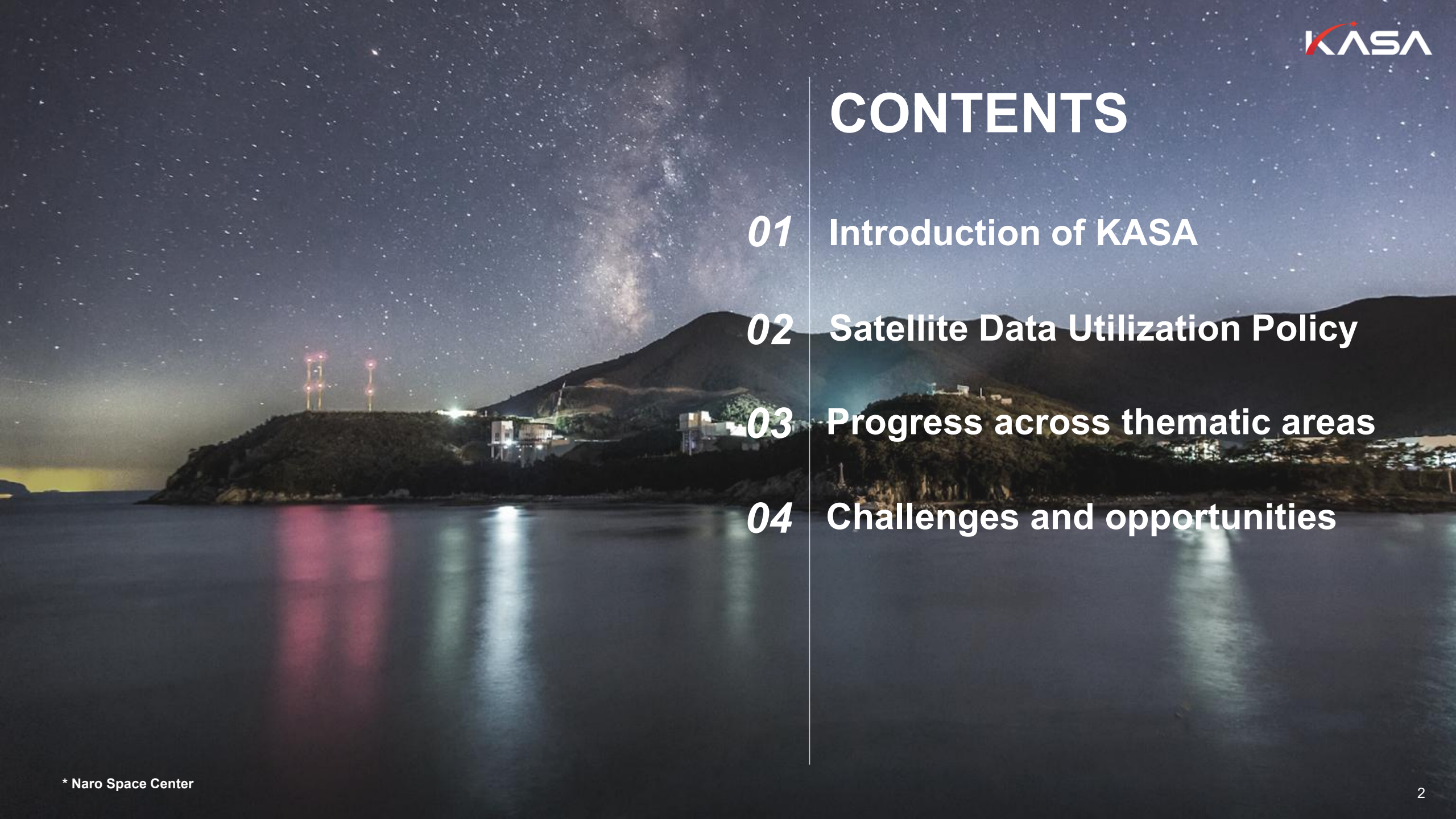


Country Report by the Republic of Korea

Soyeon Kim
Assistant Director, International Affairs Division

29th session of the ICC on RESAP (ICC-29)



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01 Introduction of KASA

02 Satellite Data Utilization Policy

03 Progress across thematic areas

04 Challenges and opportunities

* Naro Space Center

01

Introduction of KASA

01 Introdudction of KASA

Organizational Structure

Administrator

Affiliated Centers

Korea Space Weather Center
National Satellite Operations Center

Operating national LEO satellites

Vice Administrator

Vice Administrator of Mission Directorates

- **Planning & Coordination**
- **Aerospace Policy**
- **Aerospace Industry Policy**
- **Space Transportation**
- **Satellite**
- **Space Science &Exploation**
- **Aeronautics Innovation**
- **Mission Support Division**

- **International Affairs Division** — UNESCAP, GEO
- **Aerospace Service, Data & Application Division** — Satellite data policy, International Charter
- **Satellite Mission Design Program**
  Satellite Mission Assurance Program
  Korean Positioning System — Satellite Development Policy Strengthening capabilities

Subordinated Institutions

Korea Aerospace Research Institute (KARI)
Korea Astronomy and Space Science Institute (KASI)

National Satellite Operation and Utilization

Classification			Key tasks	Agency
LEO	Operation	Korea Satellite Operations Center	LEO satellites control and operation, and provide data	Korea AeroSpace Administration
	Utilization	National Satellite Operation and Application Center	Satellite data utilization and industry support	Korea AeroSpace Administration (KARI)
		National Land Satellite Center	Land management with CAS500-1 and 2 data	Ministry of Land, Infrastructure and Transport
		National Forest Satellite Information Utilization Center	Forest monitoring with CAS500-4 data	Korea Forest Service
		Agriculture Satellite Center	Agricultural monitoring with CAS500-4 data	Rural Development Administration
		Water Resource Satellite Center	Water resource monitoring with CAS500-5 data	Ministry of Environment (K-Water)
		Coast Guard Satellite Center	Monitoring, communication, search and rescue	Korea Coast Guard
GEO	Control	National Satellite Operation and Application Center	GEO satellite control, satellite data utilization support	Korea AeroSpace Administration (KARI)
	Acquisition Processing and Utilization	National Meteorological Satellite Center	Operation and utilization of the meteorological satellite	Korea Meteorological Administration
		National Ocean Satellite Center	Ocean monitoring with the ocean satellite	Ministry of Oceans and Fisheries
		Environmental Satellite Center	Air pollution monitoring with the environmental satellite	Ministry of Environment
	Utilization	Korea Ocean Satellite Center	Data production of the ocean satellite and research on utilization technology	Ministry of Oceans and Fisheries (Korea Institute of Ocean Science and Technology)

02

Satellite Data Utilization Policy

02 Satellite Data Utilization Policy

Evolution of Korea's Plans for Satellite Data Utilization

1st Satellite Data Utilization Plan (2014~2018)	2nd Satellite Data Utilization Plan (2019~2023)	3rd Satellite Data Utilization Plan (2024~2028)
- Vision: Satellite Data 3.0 – Maximize public benefits, foster creative space industry - Goals: Public sector use of satellite data, Creative industry ecosystem, Capabilities for multi-satellite era	- Vision: Smart satellite services for public safety and national innovation - Goals: Smart services, technology innovation, multi-mission satellites, advanced cooperation system	- Vision: Accelerating the space economy through data ecosystem & public value - Goals: Build a private-led satellite data ecosystem, Enhancing public value through satellite data

Key Shifts		
	Government-led Data supply Building capabilities National focus	**Private-led Service-driven applications AI-driven innovation Global cooperation**

02 Satellite Data Utilization Policy

Highlights of the 3rd Satellite Data Utilization Plan

Build a private-led ecosystem
Support R&D, start-ups, and market-friendly policies

Expand Contribution to public sector
Strengthen disaster and crisis response with satellite data

Strengthen cooperation and networks
Broaden domestic international exchanges and collaboration

03

Progress across thematic areas

03 Progress Across Thematic Areas

1) Disaster Risk Reduction and Resilience



3 GOOD HEALTH AND WELL-BEING

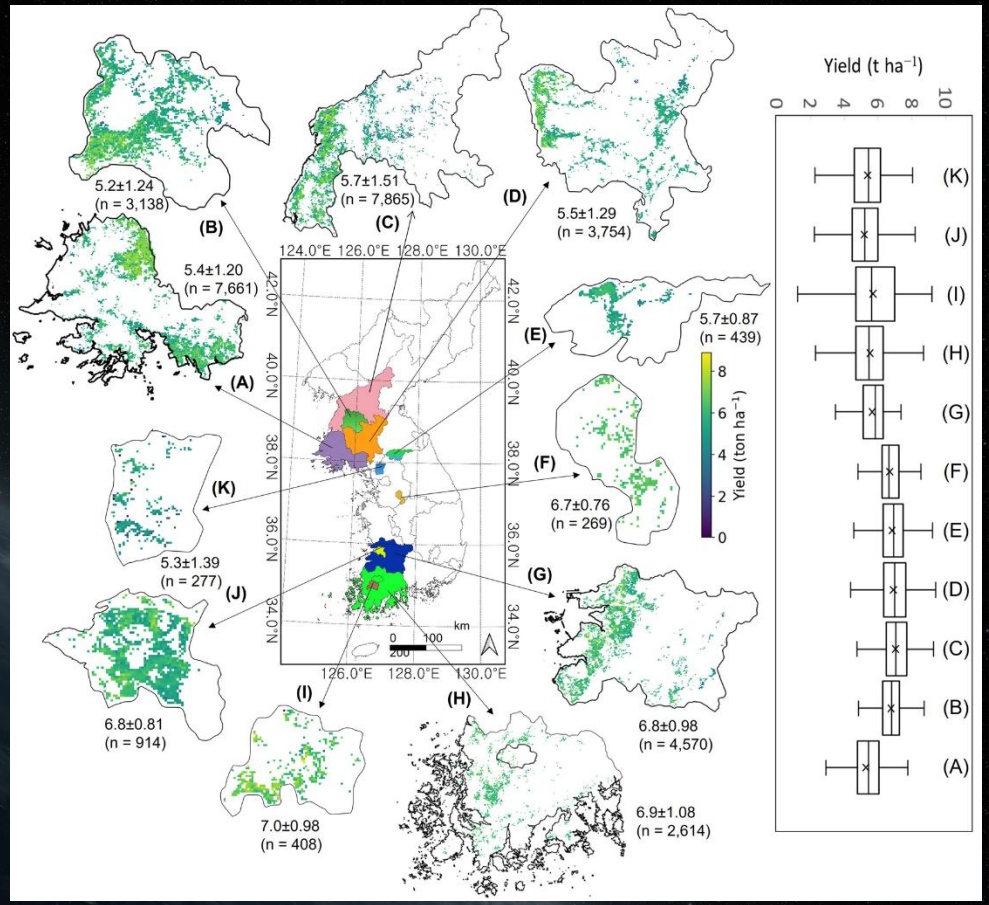
11 SUSTAINABLE CITIES AND COMMUNITIES

Detecting Wildfire and Estimating Damaged Area Using KOMPSAT-3 Image



Damage Analysis of Typhoon Noru Impact in Thailand Using KOMPSAT-3 (International Charter)

2) Natural Resource Management



2 ZERO HUNGER

Spatial distribution of simulated rice yields for 2022 in regions across the Korean peninsula

03 Progress Across Thematic Areas

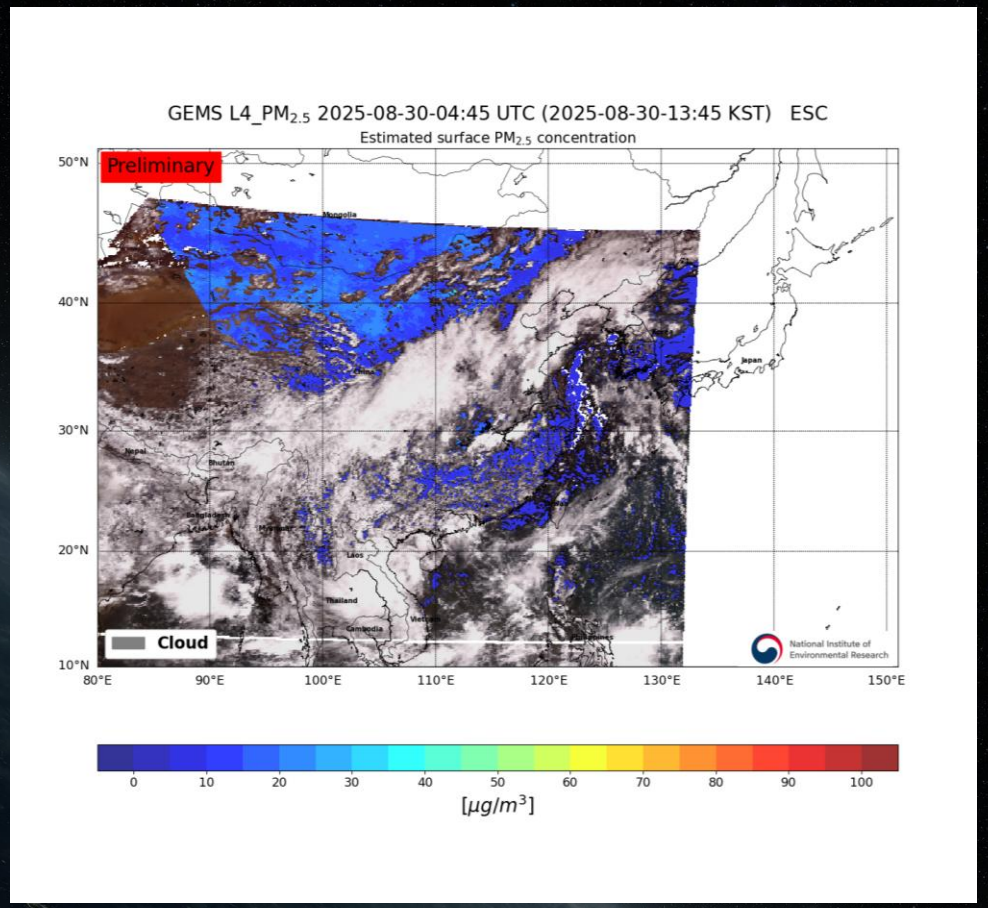
3) Social Development



11 SUSTAINABLE CITIES AND COMMUNITIES

Dam monitoring using KOMPSAT-3

4) Climate Change



13 CLIMATE ACTION

Estimation of Ground-Level PM2.5 Concentration
Captured by GEO-KOMPSAT-2B (GEMS)

04

Challenges & Opportunities

04 Challenges & Opportunities

Challenges

- Lack of Technology Diversity
- Lack of Data Interoperability
- Limited Data Utilization in Various Sectors

Opportunities

- Private-Sector Driven Ecosystem
- AI and Big Data Integration
- Expansion of Satellite Infrastructure
- Strengthening International Cooperation

04 Challenges & Opportunities



Korea will leverage satellite data for innovation at domestically and cooperation internationally

— contributing to sustainable development in Asia-Pacific and beyond


Thank you