

Regional Space Applications Programme for Sustainable Development and the SDGs

Space Applications Section
ICT and Disaster Risk Reduction Division
United Nations ESCAP

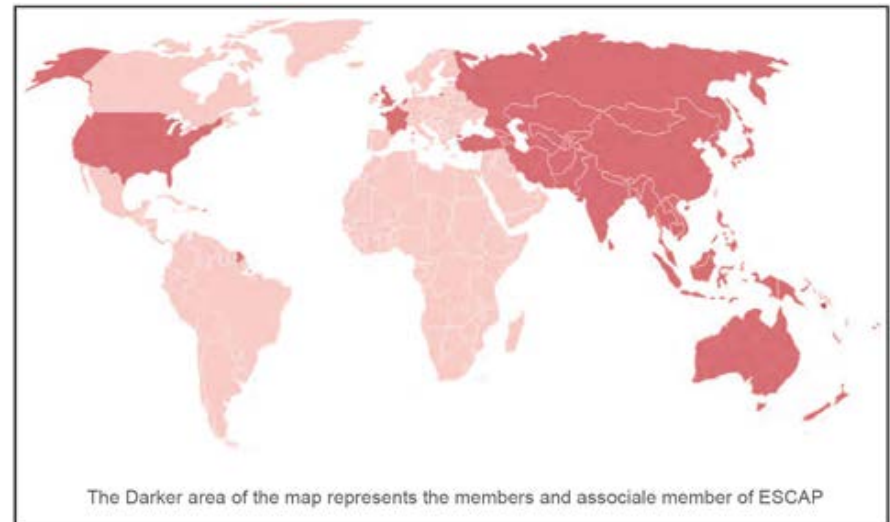


9th GEOSS
Asia-Pacific Symposium
11-13 January 2017
Tokyo, Japan

ESCAP and RESAP

- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- 62 member and associate member States
- ESCAP's Regional Space Applications Programme for Sustainable Development (RESAP) has been operating for around 22 years
- Covers 25 member States

Guided by Resolution 68/5 Asia-Pacific Plan of Action for Space Applications and GIS for Sustainable Development (2012–2017), though focus is primarily on disasters



RESAP member States

| | | |
|---|--|---|
| Australia - Department of Innovation, Industry, Science and Research | Japan - Ministry of Education, Culture, Sports, Science and Technology (MEXT) and JAXA | Bangladesh Space Research and Remote Sensing Organization (SPARRSO) |
| Indian Space Research Organization (ISRO) | Azerbaijan National Aerospace Agency (ANASA) | Fiji – Ministry of Foreign Affairs |
| Hong Kong Observatory | China - NRSC | Macao Economic Services |
| Nepal - Department of Forest Research and Survey | Bhutan - National Land Commission | Malaysia National Space Agency (ANGKASA) |
| Indonesia - National Institute of Aeronautics and Space (LAPAN) | Mongolia - Ministry for Nature, Environment and Tourism | Myanmar - Department of Meteorology and Hydrology |
| Russian Federation - Federal Space Agency (ROSCOSMOS) | Pakistan - Space & Upper Atmosphere Research Commission (SUPARCO) | Viet Nam National Program on Space Science and Technology |
| Vanuatu - Metrological and Geo-Hazard Department | Iranian Space Agency (ISA) | Singapore - Centre for Remote Imaging, Sensing and Processing (CRISP) |
| Republic of Korea - Ministry of Education, Science and Technology & KARI | Thailand - Geo-Informatics and Space Technology Development Agency (GISTDA) | |
| Sri Lanka - Arthur C. Clarke Institute for Modern Technologies Ministry of Technology & Research (ACCIMT) | Philippine Council for Industry Energy and Emerging Technology Research and Development (PCIERD) | |



Space Applications Section

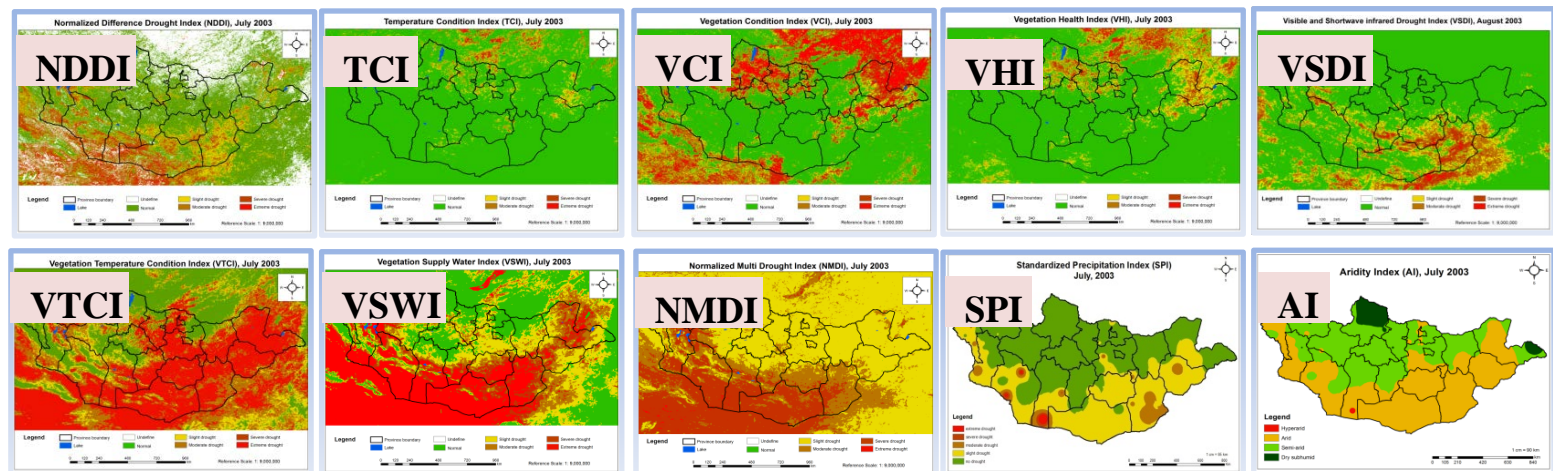
Within the ICT for Disaster Risk Reduction Division

Currently focuses on four main areas of work under the RESAP:

1. Timely provision of near real-time satellite imagery to disaster-affected countries
2. Operationalization of the Regional Cooperative Mechanism for Drought Monitoring and Early Warning
3. Skills and capacity to address existing gaps and emerging challenges
4. Institutional development through applications of emerging technology, knowledge products, standards and procedures

Regional Drought Mechanism

- Strengthen the capacity of drought-prone member to access and effectively utilize space applications and GIS for drought monitoring and early warning
- Build regional cooperation platforms for capacity building on drought management
- Complement drought monitoring capacity with seasonal forecasting for effective planning
- Build greater capacity of drought-prone member States to develop a long-term planning, climate adaptation and drought management approach through climate risk analysis



Capacity development

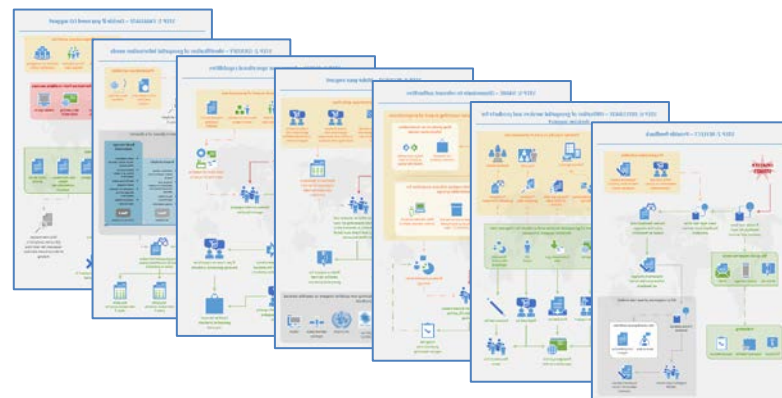
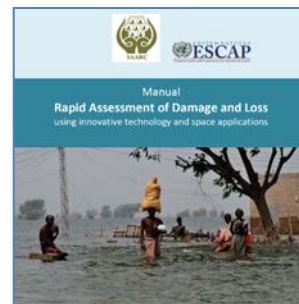
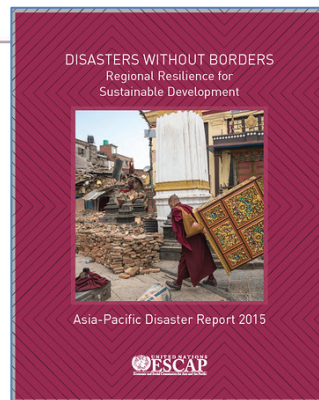
- Capacity development for member States through a series of **specialized programmes**
- Based on the **needs identified** through **surveys and the regional inventory** on space applications and GIS
- The focus areas include:
 - mainstreaming space applications into disaster risk management;
 - use of space and GIS in flood-risk mapping, drought monitoring and early warning;
 - facilitate the establishment and use of the geo-referenced information systems for disaster risk management (Geo-DRM) in CSNs
 - and technical advisory service in effective use of space and GIS for disaster management.

Capacity development

- Strengthening Multi-Hazard Risk Assessment and Early Warning Systems with Applications of Space and Geographic Information Systems in **Pacific Island Countries**
- 9 Month course in **CSSTEAP** Dehradun for **Central Asian Countries**
- Enhance the institutional capacity on remote sensing and GIS applications for disaster early warning and management for officials from national disaster management agencies in **developing countries in Asia and the Pacific**
- **Scholarship fund** with the Chinese University of Hong Kong (CUHK) for **MSc Earth System Science** at the Institute of Space and Earth Information Science (ISEIS)

Knowledge products, standards and procedures

- Asia-Pacific Disaster Report 2015:
Disasters without Borders
 - Chapter on right information,
right people, right time
- Rapid Assessment for Resilient Recovery (SAARC)
 - Now being developed for ASEAN region
- Procedural Guidelines for sharing
Space-based information during
Emergency Response in ASEAN
 - Now developing hazard-specific guidelines
as requested by member States



Changing global development landscape

Global frameworks:

- Sustainable Development Goals
- Sendai Framework for DRR
- Paris Agreement on Climate Change



Opportunities for RESAP:

- Existing Asia-Pacific Plan of Action for Space Applications and GIS for Sustainable Development (2012–2017) is coming to an end
- Need for a new Asia-Pacific Plan of Action for Space Applications (2018–2030)
- Request by member states to organise a 3rd Ministerial Conference on Space Applications in 2018

20th ICC on RESAP and the Asia–Pacific Space Leaders Forum

- The **20th Intergovernmental Consultative Committee (ICC) on Regional Space Applications Programme for Sustainable Development (RESAP)** took place from 30 October – 1 November 2016
- Practitioners from the space community discussed the potential role of RESAP among the new global development landscape
- **Asia–Pacific Space Leaders Forum** followed on 2 November 2016
- **Declaration** by Asia–Pacific Space Leaders on Applications of Space Technology to support implementation of the 2030 Agenda for Sustainable Development **adopted**
- Specific inputs to the Declaration of Asian Ministerial Conference on Disaster Risk Reduction, 2 – 5 November 2016, New Delhi

Vision for RESAP

The 20th ICC on RESAP suggested the following:

Pillars:

Disaster Risk Reduction and Resilience

- Disaster Risk Management
- Resilience for food security and agriculture

Environment and Natural Resources

- Urban Development
- Freshwater management
- Land Use and Ecosystem Services
- Coastal areas and fisheries
- Improving Air Quality and Monitoring the Atmosphere

Geo-spatial information for infrastructure and services

- Geospatial Information Management Infrastructure
- Health, Education and Social Services

Modalities of implementation:

Timely provision of near real-time satellite imagery

Skills and capacity to address existing gaps and emerging challenges

Institutional development through emerging technology, knowledge products, standards and procedures

Proposed timeline of activities

- Priority activities can be identified/outlined in the New Asia–Pacific Plan of Action for Space Applications (2018–2030).
- New Plan of Action (2018–2030) to be drafted in consultation with all member States, relevant stakeholders and other ESCAP divisions, during 2017.
- Draft Plan of Action (2018–2030) to be discussed during the 21st Intergovernmental Consultative Committee (ICC) on RESAP.
- Final Plan of Action (2018–2030) to be adopted at the Asia–Pacific Ministerial Conference on Space Applications in 2018 and/or Commission Session



Thank you

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