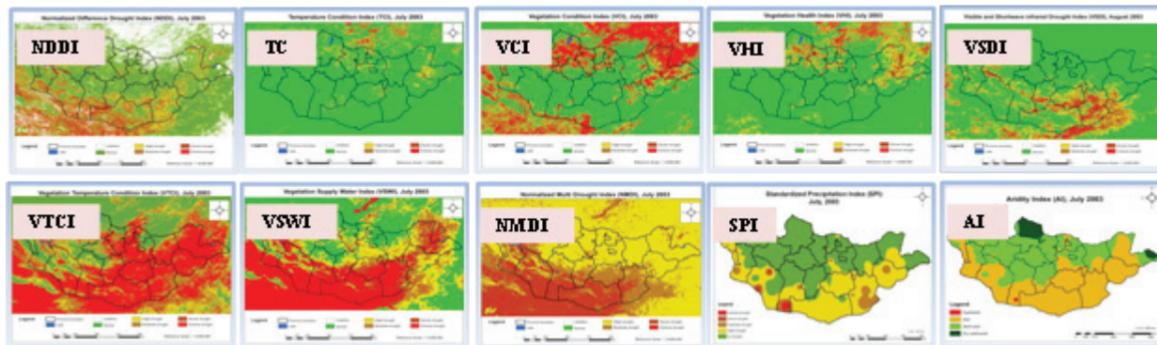


## Asia-Pacific Regional Drought Mechanism

Priority for Action 1: “Understanding disaster risk”  
 Priority for Action 4: “Enhancing disaster preparedness for effective response”



**Application field:** The ESCAP Regional Drought Mechanism enhances the capacity of governments to use space-based data for effective drought management by bringing experts from spacefaring countries together with those with experience in drought management. The Mechanism works by providing practical tools, products and services to help build developing countries’ capacity in various areas of drought management including monitoring and early warning, seasonal forecasts, longer term risk analysis, water catchment assessment and accounting, and other tools and services for managing and adapting to drought.

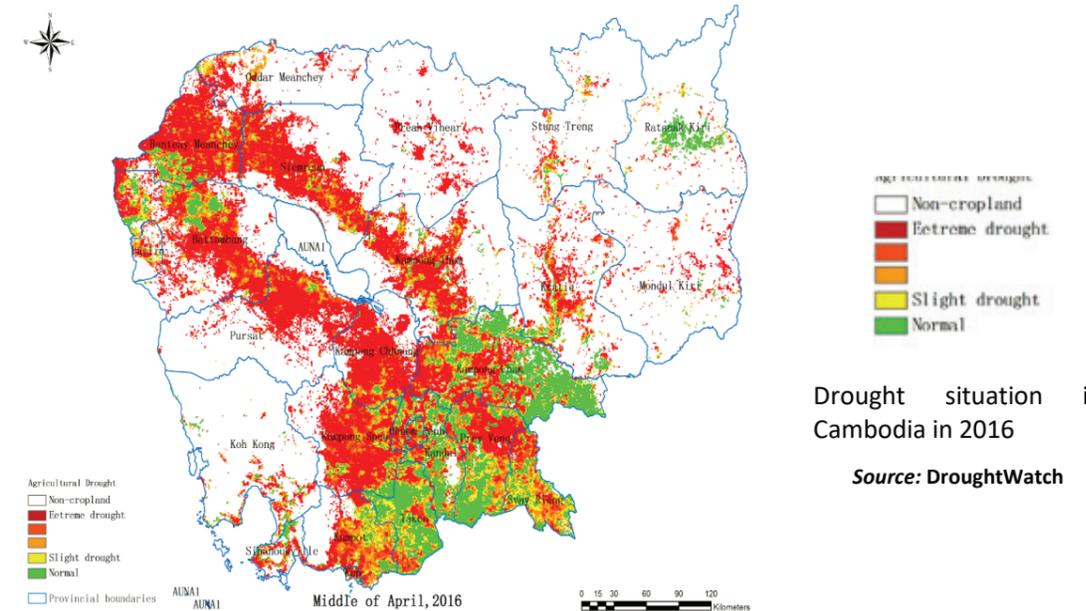
**Methodology:** The Regional Drought Mechanism enhances capacities for integrated analysis of space and in-season ground data and information, along with other tools for managing drought. Regional Service Nodes provide satellite imagery, information and services, as well as capacity development, are provided to pilot countries by national remote sensing centres from other countries and institutions in the region. Thematic and scientific communities are networked under common thematic areas to provide advice on drought management using various tools and services. Finally, pilot countries are selected upon request to participate as beneficiaries of cutting-edge science and technology.

**Key results:** Through regional cooperation, countries have developed tailored drought monitoring portals for early warning and are working towards integrating forecasts, water accounting systems and better data management for all tools.

**Innovative impact:** The Drought Mechanism seeks to facilitate a paradigm shift- from reactive responses towards proactive prevention measures; enhancing the capacity of beneficiaries at national and community levels to take informed, appropriate action for managing drought risk.

## Pilot Study on Agricultural Drought in Cambodia

**Application status:** ongoing in several pilot countries in Asia and the Pacific



Persistent and prolonged droughts in Cambodia are severely affecting agricultural production, specifically for rice. Cambodia is moving towards improving drought management through ESCAP’s Regional Drought Mechanism. Supported by China, a tailored drought monitoring system is being established through DroughtWatch at different scales using different earth observation data. The Government of Australia is working towards building a water accounting system for Cambodia, using its innovative tool Source. In addition, Australia, with support from Thailand, is also working towards supporting both of these tools by establishing a pilot DataCube for Cambodia to improve storage of pre-processed Earth observation data. Working with institutes such as the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), information can be shared before the start of the growing season through their Monsoon Forums. Additional partners, such as UNOSAT, are supporting capacity development on space applications.

Key publications include:

- Asia-Pacific Disaster Report 2015- Chapter 2: Drought the forgotten disaster
- El Nino advisories and technical papers
- Brochure on the Asia-Pacific Regional Drought Mechanism

<http://www.unescap.org/our-work/ict-disaster-risk-reduction/regional-space-cooperation-mechanisms-drought-monitoring-and-sustainable-development>

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