

ESCAP Regional Drought Mechanism

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



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Regional Drought Mechanism

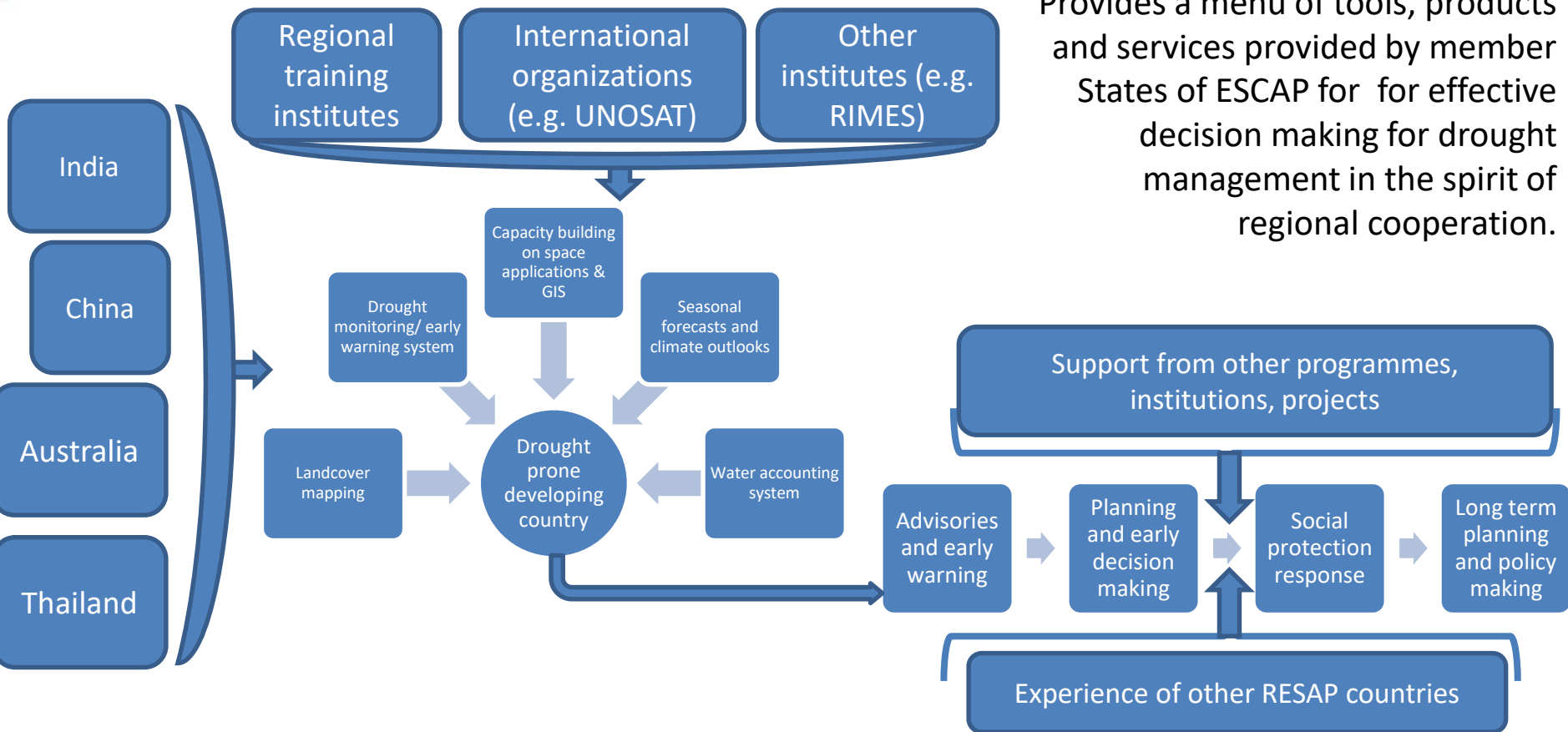
A **toolbox** of products, information and services, provided by various countries or institutions through **regional cooperation** to support drought-prone developing countries and **expand their capacity** to use these tools and manage drought

- Countries that have requested to join: Mongolia, Sri Lanka, Cambodia, Myanmar, Kyrgyzstan, Bangladesh, Afghanistan, Nepal
- Regional Service Nodes: China, India, Thailand and Australia, RIMES, UNOSAT, etc...

Long-term benefits

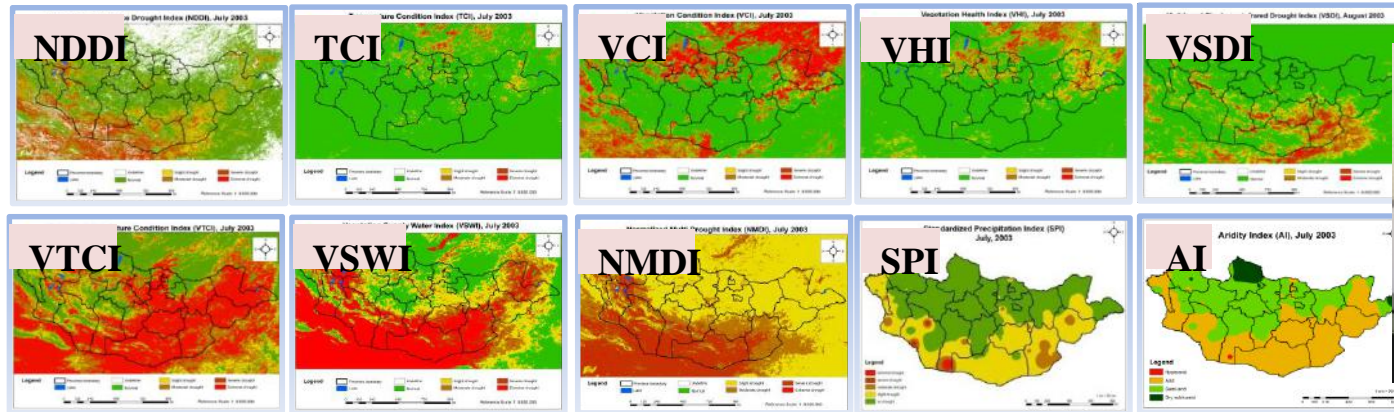
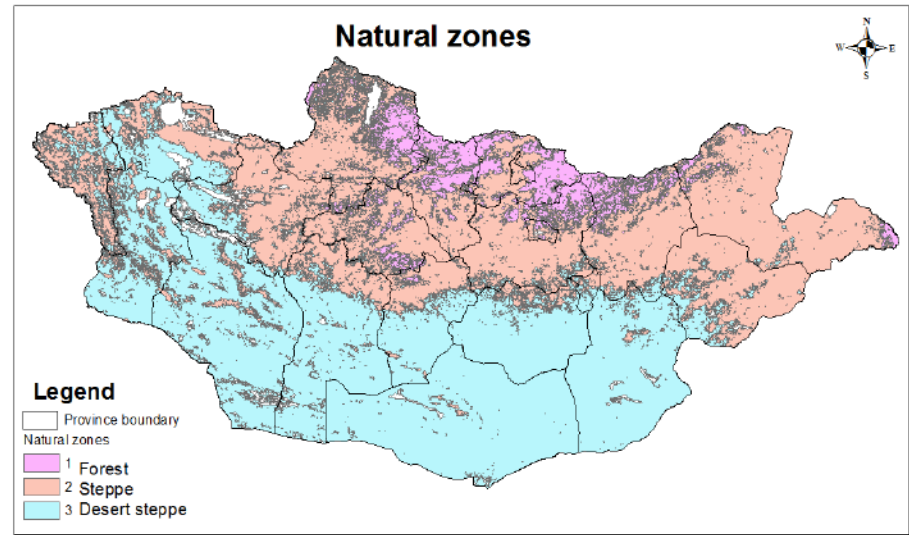
- Link in-season monitoring with forecasts and works towards long term drought management
- Monsoon Forum  Drought Mechanism
- Additional data, information and tools (e.g. water accounting)
- Experts from various countries committed to support
- Customized products for the national circumstances
- Tailored capacity building to utilize space information and applications
- With greater awareness, opportunities exist for other applications – other Ministries, expanding beyond space applications, etc.....

Regional Drought Mechanism



For example....

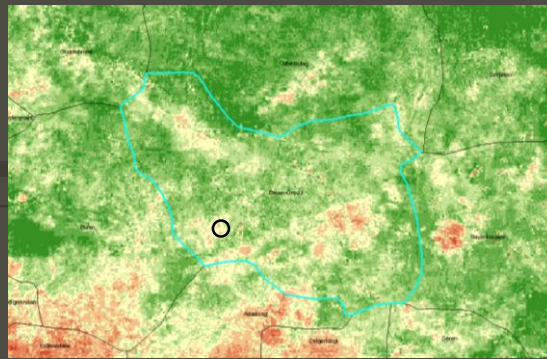
- Agro-ecological zones identified
- Indices tested
- Capacity building



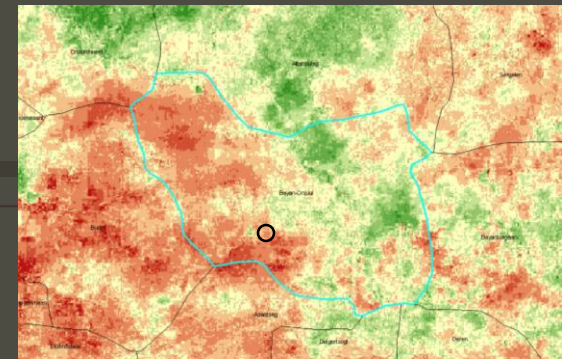
Drought Products Validation

biomass, CO2 and environmental parameter in 2009, 2010, 2011 field study at the Tuv, Dundgovi, Khentii aimags

VHI
2011
.Sep



VHI
2010
.Aug



2011.9.14

*Баян-Өнжүүл сумын төвөөс
өмнө зүг 60км.*

Хадат Толгой

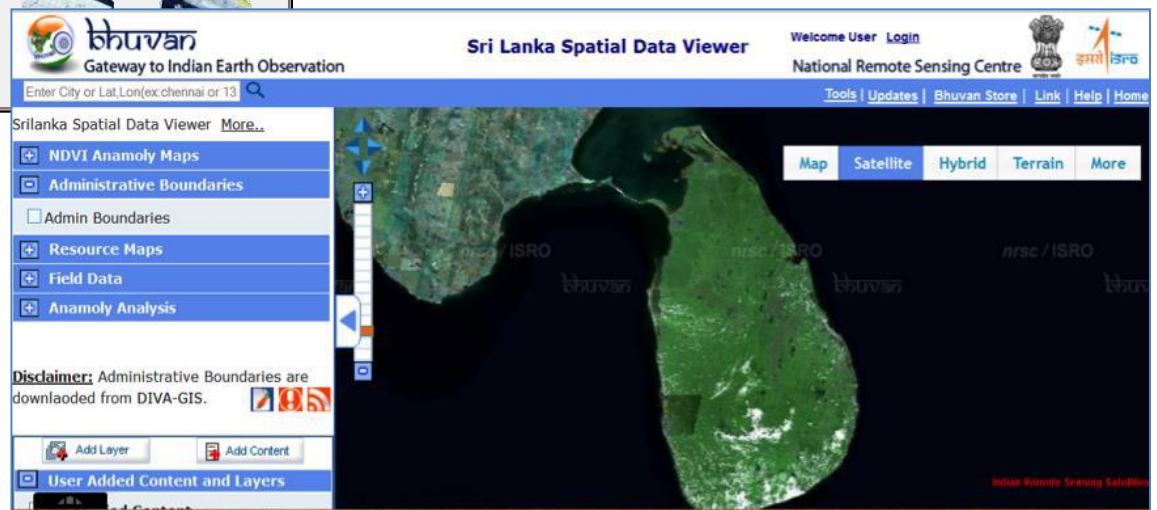


2010.8.18

For example....

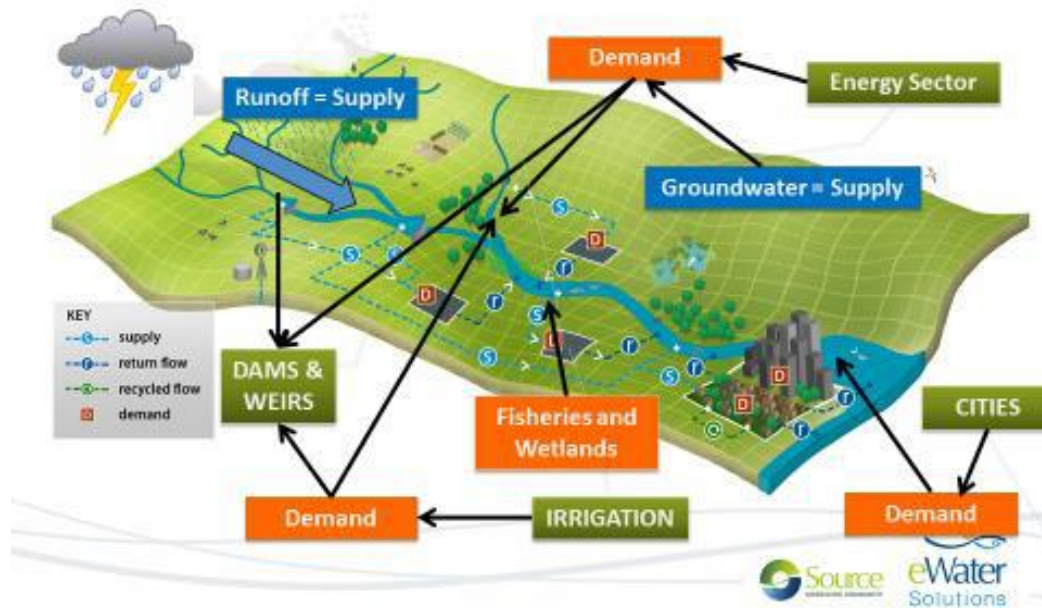


Tools and products customized to the country...

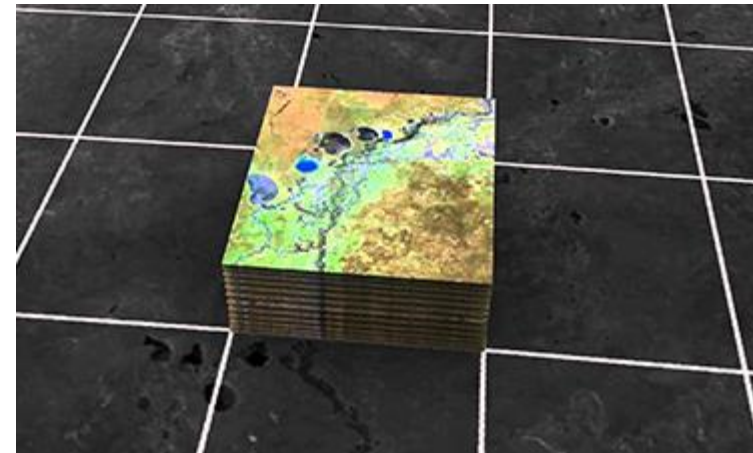


Adding options for longer term drought management

eWater Source – IWRM supply and demand of water quantity and quality - local to basin scale



eWater Source and
Geoscience Australia
DataCube



Mobile Smartphone - Field Data Collection (FDC)

- Mobile smartphone technologies for field data collection, online data transmission and geo-visualisation on Bhuvan platform.
- This has two parts
 - Device based solution for field data collection and upload to server
 - Server-end App to process data, validation and geo-visualization of archived data

Geo-visualization of Collected Data



Expansion to bring in other partners, tools and services

- Can complement work ongoing or proposed in the future on:
 - Crop monitoring
 - Agricultural advisories
 - Local ecosystem management
 - Landcover mapping
 - Policy development
 - Related issues (e.g. dust and sandstorms)
 - Etc....

Thank you

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