DROUGHT WEBINAR SERIES

LIVE WEBINAR

ASIA PACIFIC REGIONAL WEBINAR

"SPACE TECHNOLOGY FOR DROUGHT RISK MANAGEMENT"

Jointly organized by National Remote Sensing Centre (NRSC), Indian Space Research Organization (ISRO), International Water Management Institute (IWMI) and Sentinel Asia
19 – 20 July 2021

Drought is a serious hydro-meteorological disaster limiting agricultural production and impacting food security all over the world. Drought management is closely linked to sustainable agriculture and food security. Challenges in drought management are ever increasing because drought is the manifestation of complex interactions between weather, soil, crop and human actions. Data centric technologies like satellite remote sensing, GPS, field instrumentation and mobile coupled with new techniques of data analysis provide innovative knowledge products and information for achieving efficient and effective drought management.

Remote Sensing technology plays a vital role in drought detection, monitoring and impact assessments. With the availability of proven drought indices – NDVI, LSWI, SASI and RADAR backscatter derived information on soil moisture and rainfall available from multiple satellite systems in moderate spatial and temporal resolutions for real-time drought monitoring and early warning for timely action. Satellite based resources maps and high resolution satellite images are useful for development, implementation and impact assessment of long term drought management measures. Abundantly available satellite data, increasing network of weather observatories, mobile based fast and efficient field data collection systems, easily accessible advanced techniques of data analysis etc. signify huge scope for establishing digital agricultural ecosystem for drought management. Such a system would further strengthen agro-advisories, crop risk management, disaster relief, crop insurance and drought proofing strategies etc.

The 2-day training programme will focus on the overview of the role of Earth Observation technologies in Drought Risk Management. The objective of the programme is to appraise the participants from Sentinel Asia about the potential and current status of utilisation of EO technology for operational drought monitoring, in-season drought management, drought impacts assessments and long term drought management. Advances in drought assessment with new datasets and emerging techniques will also be covered.

The programme consists of Expert presentations, interactive sessions and panel discussion to make it more impactful. Scope for enhancing technology utilisation, need for customisation and tailor-made products and services, research gaps and data & information sharing opportunities will be identified and documented for future course of action towards establishing a regional cooperation mechanism for drought risk management.

Schedule

Day-1 (19 July, 2021; 10:00 HOURS TO 14:00 HOURS)

Inaugural Session

Welcome by Dr. V V Rao, Deputy Director RSA	NRSC	3 minutes
Introduction by participants		10 minutes
Remarks by Shantanu Bhatawdekar, Director, EDPO	ISRO	5 minutes
Remarks by Dr. Rachael Mcdonnell, DDG, IWMI	IWMI	5 minutes
Remarks by Sentinel Asia Representative and about the course	TBD	5 minutes
Remarks by Dr. Raj Kumar, Director, NRSC	NRSC/ISRO	5 minutes
Vote of thanks by Dr. K H V Durga Rao	NRSC	2 minutes
Tea Break		10 minutes

Technical Session - 1

Understanding drought and its management by Dr. Abhishek Chakraborty	NRSC	30 minutes
Drought monitoring indicators by Dr. C S Murthy	NRSC	55 minutes
Drought monitoring practices in India – recent examples by Dr. C S Murthy	NRSC	55 minutes
Drought monitoring system in South Asia by Sri. Giriraj Amarnath	IWMI	55 minutes

Day-2 (20 July 2021; 10:00 HOURS TO 14:00 HOURS)

Technical Session - 2

Recap of Day-1 by Dr. C S Murthy	NRSC	5 minutes
Agro-advisories system in India supporting farmers by Dr. K K Singh	IMD	55 minutes
Tea Break		10 minutes
Drought management platforms developed by Sri. Giriraj Amarnath	IWMI	55 minutes
Space Technology support to long term drought management	NRSC	55 minutes
Country Profile and Existing Drought Mechanism		
Brief presentations by participants		30 minutes
(3 presentations of 10 min. duration each)	TBD	
Open Discussion and way forward	NRSC/IWMI	30 minutes
Vote of Thanks by Dr. C S Murthy		