



C.S. Murthy, Ph.D
Scientist 'G' & Head
Agricultural Sciences and Applications
National Remote Sensing Centre (NRSC), ISRO, Hyderabad 500 037

25 years of experience in remote sensing and GIS applications in agriculture

Education

- M Sc (Agriculture)
- Ph.D in Remote Sensing Applications in Agriculture Water Management

Areas of Specialisation include:

- Crop mapping with multi-sensor and multi-resolution data
- Satellite based vegetation indices and geophysical products for crop stress detection
- Development of crop yield proxies
- Sampling techniques for improving crop yield estimation
- Impact assessment of abnormal weather events on crop lands
- Integrated approach for Agricultural drought assessment
- Composite indices for agricultural drought hazard, vulnerability and risk assessment
- Performance evaluation of irrigated command areas using satellite remote sensing data

Current interests

- Technology interventions in crop insurance
- Crop monitoring and surveillance at local to regional scales
- Smart sampling for crop yield estimation
- Geospatial Technologies in Precision farming
- Abnormal weather events and crop losses
- Crop intensification
- Non-parametric composite indices for crop assessment
- Downscaling of bio-physical parameters

Achievements

- Lead contribution to the crop insurance studies at NRSC
- Member of the Task Force on the Use of Technologies in crop insurance
- Key role in the development, operationalisation and institutionalisation of NRSC's flagship project - National Agricultural Drought Assessment and Monitoring System.

- Capacity building to south Asian countries on drought monitoring systems
- Member of the Core Committee for preparing National Drought Management Manual
- Worked with International Water Management Institute, Sri Lanka.
- ISRO Team Award Winner

Publications

- About 25 research papers in international journals. Contribution to book chapters. Participation and Presentations in international and national conferences.