Background

Agriculture was a major focus in the early development of remote sensing and today remains a major driver of global Earth Observation programmes. India, which started its remote sensing activity 50 years back, in 1969, with the famous coconut root wilt assessment experiment, has continued to develop its national agricultural remote sensing program and remains a leader in remote sensing applications for national development. The complexity, heterogeneity and the dynamic nature of agriculture around the world, presents a number of challenges for effective monitoring and assessment from space. Over the past fifty years, due to limited sensing capabilities the potential of global agricultural remote sensing was never fully realized. However, recent significant technological advances including: the increased availability of free and open moderate-resolution data in the optical, thermal and microwave domains; fine resolution data available from multiple sources; new analysis capabilities such as Artificial Intelligence, Deep Learning, Big Data Analytics, Cloud-computing; IoTs and UAVs, open new opportunities. Hence, Earth Observation is being increasingly used for operational applications in agriculture. Information derived from remotely sensed data and combined with other information, is being used to support decisions for agricultural development. This increased interest in remote sensing of agriculture has prompted more coordinated efforts, nationally, regionally and globally. To mark 50 years of remote sensing in India and to contribute to this international coordination, an international workshop is planned to review the status of **Earth Observation for Agricultural Monitoring,** *at global, regional and national levels, and to discuss and propose the future course of action.*

Themes of the Workshop

** Retrospective and Prospective of EO Applications in Agriculture (Special Session on* **50 years of Remote Sensing Programme in India***)*
** Advances in Crop Area Estimations*
** Yield Estimation: Global, Regional & Local scale*
** Agricultural Resources (Soil & Water)*
** Disasters in Agriculture*
** Agriculture and Climate*
** Agricultural LCLUC*
** Crop Risk Assessment and Crop Insurance*
** Agro Eco-system, processes and modelling*
** EO requirements for Agriculture*

Post-Workshop Tutorial

*The Workshop will be followed by 2-Days' Tutorial on "***Advances in Remote Sensing for Agriculture***", to be conducted at NRL Auditorium, IARI, New Delhi during 21-22 February, 2019. There will be 4 sessions (Daily 2 Sessions: FN & AN) of the tutorial. The sessions are:*

- *SAR for Rice (CESBIO)*
- *UAV Remote Sensing (NESAC & IARI)*
- *Satellite Observations of Fire (UMD & NASA)*
- *Machine Learning Tools (SAC,ISRO)*

Registration Fee

Regular Delegate	***INR 3000/USD 100***
ISRS Member	***INR 2500***
Full time Students	***INR 2000/USD 50***
Tutorial	***INR 1000/USD 50***

Registration can be done online through workshop website. The facility will be available soon.

Payment

The mode of payment for all transactions is through direct bank transfer to the Workshop account. Details will be provided on the website.

Important Dates

Important dates for papers to be submitted and published in ISPRS Archive (based on abstract review) will be as follows:

Abstract Submission - ***15th Oct 2018***
Abstract Acceptance - ***1st Nov 2018***
Full Paper submission- ***31st Dec 2018***

Venue

The Workshop is being conducted in Indian Agricultural Research Institute, New Delhi. A symbol of the country's rich past and thriving present and the National Capital of India, New Delhi is a city where ancient and modern blend seamlessly together. During February, the weather in Delhi will be very pleasant. (http://www.delhitourism.gov.in)

ISPRS WG III/10, GEOGLAM, ISRS
Joint International Workshop

on

Earth Observations for Agricultural Monitoring

FEBRUARY 18-20, 2019
NEW DELHI, INDIA

(http://www.ncfc.gov.in/isprs)

Organized by

ISPRS Working Group III/10
GEOGLAM
Indian Society of Remote Sensing

Supported by

Ministry of Agriculture & Farmers' Welfare
Indian Space Research Organization
South/Southeast Asia Research Initiative (SARI)
Asia-RiCE

Hosted By

Mahalanobis National Crop Forecast Centre, New Delhi
ICAR-Indian Agricultural Research Institute, New Delhi
Indian Society of Remote Sensing- Delhi Chapter

About Organizers:

ISPRS WG III/10

The International Society for Photogrammetry and Remote Sensing (ISPRS) is a non-governmental organization devoted to the development of international cooperation for the advancement of photogrammetry & remote sensing and their applications. It functions through various Commissions and Working Groups. The Working Group 10 of the Commission III deals with Agriculture and Natural Ecosystems Modeling and Monitoring.

GEOGLAM

GEOGLAM, the GEO Global Agricultural Monitoring initiative, was initially launched by the Group of Twenty (G20) Agriculture Ministers in June 2011, in Paris. The objective of GEOGLAM is to reinforce the international community's capacity to produce and disseminate timely and accurate projections of agricultural production at national, regional and global scales by using Earth Observation data.

ISRS

Indian Society of Remote Sensing (ISRS), established in 1969, with the main objective of advancement and dissemination of remote sensing technology in the fields of natural resources and environment by organizing seminars/symposia and by publishing journal (JISRS), bulletins, proceedings, etc. The Society has a membership of over 5150. ISRS is a member of the ISPRS. ISRS Delhi Chapter is one of the most active chapters of the Society.

MNCFC

Mahalanobis National Crop Forecast Centre (MNCFC) is a national centre under the Department of Agriculture, Coop. & Farmers' Welfare of Ministry of Agriculture & FW. The centre, established in 2012, works for space technology applications in agriculture, through various national level programmes.

ICAR-IARI

Indian Agricultural Research Institute (IARI), popularly known as Pusa Institute, is the leading institution for agricultural research, education and extension in the country. The Division of Agricultural Physics, IARI was partner to the country's 1st remote sensing experiment.

SARI

The goal of SARI (South/Southeast Asia Research Initiative) is to develop an innovative regional research, education, and capacity building program involving state-of-the-art remote sensing, natural sciences, engineering and social sciences to enrich Land Cover/Land Use Change (LCLUC) science in South/Southeast Asia.

Asia-RiCE

Asia-RiCE is the work of an ad hoc team of stakeholders with an interest in the development of an Asian Rice Crop Estimation & Monitoring (Asia-RiCE) component for the GEOGLAM initiative.

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