The Saline Agriculture Research Centre (SARC) at Institute of Soil and Environmental Sciences, a constituent institution of University of Agriculture, Faisalabad has always been a pioneer in offering high-quality education, carrying out world-class research and promoting technological advancement in the subject of soil, water and environment sciences. Soil salinity and water logging is a serious issue confronting irrigated agricultural system and is regarded as a serious threat to the Pakistan’s food security. It is estimated that 25% of the irrigated land in the province of Punjab and 40% of the irrigated land in the Sindh province are salt affected. Managing and controlling the salinity and water logging problem is a prerequisite for the long-term sustainability of irrigated agriculture and to confront food security related challenges. Therefore, there is a need for practical and cost-effective methodologies for assessing, monitoring and quantification of the spatial and temporal distribution of salt-affected soils. Such a system will assist a great deal the agricultural, water resources and natural resource managers in crafting appropriate measures for the implementation of land reclamation programs and its effective monitoring.

In recent years, the developed world has fully exploited the tremendous potential of satellite remote sensing and GIS especially its application in the in agriculture, forestry and water resources management. Majority of the natural resource managing agencies in the developed world are now routinely using remote sensing and GIS based monitoring tools. Comprehensive, reliable, cost effective and timely information on agricultural resources are very much necessary for a country like Pakistan whose mainstay of the economy is agriculture.

Satellite-based remote sensing platforms and their multi-spectral data offers several advantages and is an effective surrogate for overcoming the limitations associated with the conventional ground methods used to map and monitor soil salinity. A variety of remote sensing data, including aerial photos, video images, infrared thermography, visible and infrared multispectral, microwave and airborne geo-physical data, is available for salinity mapping and monitoring.

The proposed training course will equip Pakistani agricultural, soil scientist and irrigation resource managers to learn space age technologies and its applications in the field of soil and water resources assessment, periodic monitoring and evaluation of land reclamation programs. This training will immerse the participants in an interactive environment where they will acquire fundamental understanding of various remote sensing tools and techniques for land and water resources monitoring and agricultural crops assessment.

The training workshop will span over two full weeks with 5-6 hour study/training session in a day.

The participants are required to provide the
1) filled registration form
2) 2-3 page CV to register for the training before;

February, 3, 2014

The training registration fee (Rs. 1000 per person) will entitle the selected participants to a

- 15 days training at University of Agriculture, Faisalabad,
- Remote sensing training material, soft copy of relevant books and software
- 1 workshop attendance certificate by UAF
- Lunch and refreshments
- Field tours

The details of registration process, registration fee packages and payment methods are available in the attached flyers and Training registration form (given below).

Organizer
Remote Sensing in Agriculture

In the developed world satellite based remote sensing and GIS technologies are routinely used for the time and cost effective monitoring of land and water resources. Soil salinity and waterlogging is a serious issue confronting irrigated agricultural system and a serious threat to the Pakistan’s food security. The proposed training course will equip agricultural & irrigation resource managers to learn such spaceage technologies and its applications in the field of soil and water resources assessment, monitoring and their conservation. This training will immerse the participants in an interactive environment where they will acquire fundamental understanding of various remote sensing tools and techniques as a timely and cost effective metechnologies for monitoring, restoration and site-specific management of marginal saline lands for better agricultural production.

Partners/Sponsors

Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia

Higher Education Commission of Pakistan (HEC), Islamabad

Endowment Fund Secretariat (EFS), Uni. of Agriculture Faisalabad

Organizer

Saline Agriculture Research Centre, Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad, Pakistan
E-mail: sarcuaf@gmail.com
Tel +92 41 2635987
Fax +92 41 9201221
Web: www.uaf.edu.pk
www.salineagriculture.com

Training Workshop on
Remote Sensing for Monitoring Agricultural Crops and Assessing Soil Salinity
3-15 February, 2014

UNIVERSITY OF AGRICULTURE FAISALABAD, PAKISTAN
**Key Resource Persons**

**Dr. Waqar Ahmad**  
Principal Research Scientist &  
Research Lead Spatial Informatics,  
Centre for Environment and Life  
Sciences, Perth, Australia

**Dr. M. Umar Khatak (invited)**  
Professor, Department of  
Geographical Information System,  
National University of Sciences and  
Technology, Islamabad, Pakistan

**Mr. Hamid Khan**  
Chairman, Department of  
Geographical Information, University  
of Punjab, Lahore.

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**Saline Agriculture Research Centre (SARC)**

Saline Agriculture Research Centre is the pioneer institute meant for the development and advancement of ‘Saline Agriculture’ in Pakistan. SARC was established at University of Agriculture, Faisalabad, Pakistan in 1987, keeping in view the importance and scope of ‘Saline Agriculture’ in Agro-environmental conditions of Pakistan. The establishment of SARC at UAF boosted the work on Saline Agriculture and scientists at SARC accomplished many projects independently and in collaboration with various national and international organizations like ODA (Dfid), BOSTID (USA), EU, ACIAR (Australia), AusAID, UNDP, IWASRI and PARC.

- Rehabilitation of salt affected lands
- Exploiting saline soils and water resources for profitable farming system

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**Participant Qualification**

The target participant for the training are professionals and researchers involved in monitoring or management of agriculture crops, land, water and other natural resources. M.Sc (Hons) / M.Sc in relevant subject is the required qualification.

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**Format**

Training will consist of daily lectures, practical, weekly tests and field tours. The daily timings of Training will be 9:30 a.m to 2:30 p.m. Tea and lunch will be provided by the organizer.

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**Registration Fee**

National Participants= 1500 Pak Rs.  
International Participants = 50 US $
**Two Weeks Training on**

**Remote Sensing for Monitoring Agricultural Crops and Assessing Soil Salinity**

**3-15 February, 2014**

University of Agriculture, Faisalabad, Pakistan

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**REGISTRATION FORM**

*(Deadline for Registration: 25 January, 2014)*

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*For national participants = 1500 Pak Rs. per person
For international Participants = 50 US$ per person

**IMPORTANT INSTRUCTIONS:**

Completed registration form with fee should reach before **25 January, 2014** at the following address;

**Officer Incharge,**
Saline Agriculture Research Centre,
Institute of Soil and Environmental Sciences
University of Agriculture, Faisalabad, Pakistan, 38040.
Email: sarcuaf@gmail.com

**FOR QUERIES**

Dr. Zulfiqar Ahmad Dasti
Ph# +92-41-9200161-70 Ext. 2916; +92-41-2435987
Email: sarcuaf@gmail.com
Website: www.salineagriculture.com