# Climate Resilient Saline Agriculture: Sustaining Livelihood Security

Date: 21-23 January 2017

## Organised by

Indian Society of Soil Salinity and Water Quality, Karnal (Haryana) S. K. Rajasthan Agricultural University, Bikaner (Rajasthan) ICAR-Central Soil Salinity Research Institute, Karnal (Haryana)

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Name (Block letters)

rofession Designation		
Organization		
Mailing Address		
	City	
State	PinCode	
Phone with Code: Office	Residence	
Mobile	Fax	
E mail		
Are you a member/ life me Salinity and Water Quality?	mber of the Indian Society of Soil Yes/No	
Broad Area and Title of the Pa	aper	
Accompanying person, if an	y:	
Name		
Details of registration fees: An	nount(Rs)	
Demand Draft No	Date	
Name of the Bank/Branch_		

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For registration, submission of abstracts and for any other queries, please contact

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For all logistics and enquiries related to the Seminar at Bikaner the participants may contact

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Dr. Rameshwar Lal Meena, Organising Secretary, ICAR-CSSRI, Karnal (Haryana)

# 5th National Seminar

on

# Climate Resilient Saline Agriculture: **Sustaining Livelihood Security**

21-23 January 2017











## **Organised** by

Indian Society of Soil Salinity and Water Quality, Karnal S.K. Rajasthan Agricultural University, Bikaner ICAR-Central Soil Salinity Research Institute, Karnal

## Hosted by

Swami Keshwanand Rajasthan Agricultural University Bikaner – 334 006 (Rajasthan)



## Preamble

With a total geographical area of 329 million hectare (M ha), the arable land of India constitutes only 142 M ha. It is supposed to support about 18 per cent of world population. With no immediate respite from the burgeoning population pressure may be exerted on this limited arable land as food requirement of the populace would increase manifold. Moreover, large areas are highly vulnerable to droughts, floods, cyclones and chemical degradation in the form of salinity/sodicity. The later problems are further compounded as a result of poor/marginal quality ground water for irrigation. Since the climate change is now a reality, the sustainability of agriculture is further threatened as the frequency of occurance and extent and degree of problems are bound to increase adversely impacting the food security of the nation. On the positive side, the technological advancement in the field of agriculture helped us to produce more food-grains from a nearly stagnant cultivable area over a couple of years. The food-grain production of 196.8 million tonnes (M t) in 2000-01 to 265 M t in 2013-14 at an average of about 5 M t per ha per annum is a laudable achievement. On the contrary, the projected demand of food-grains at 345 Mt in 2030, can only be achieved through increase in production at the rate of more than 6 Mt per annum from the same or even shrinking arable land due to increasing diversion of prime lands for non-agricultural sectors. Environmental degradation in the form of declining soil fertility, lower ground water tables, rising salinity/ sodicity, and degradation of irrigation water quality, are other serious challenges that calls for advancements in climate smart agriculture. Enhancing the resilience of Indian agriculture against natural disasters and climate change is the need of the hour. Under these situations, any horizontal expansion in agriculture through the reclamation of degraded lands would be a resource for further increase in food production. For example, around 2 M ha area reclaimed so far by adopting chemical and engineering approaches is contributing more than 15 M t to the national food basket. With the impending climate change, many second generation problems are likely to crop up leading to decline in yields and emergence of resodification/secondary salinisation in some areas. Mitigating strategies for sustainable management of climate smart agriculture is required to ensure livelihood security to millions of farmers mainly living in rural India depending on agriculture for their livelihood. Water, another critical resource for agriculture is also finite and therefore, on per capita basis is decreasing over the years. Deterioration of surface and groundwater resources due to natural and anthropogenic factors has also proliferated with spatial and temporal multiplication of the occurrence of poor quality waters. To address these issues as well as to share the experiences of researchers, planners and policy makers, the Indian Society of Soil Salinity and Water Quality has planned to organize 5th National Seminar on "Climate Resilient Saline Agriculture: Sustaining Livelihood Security". It is planned to bring researchers, planners, farmers and developmental personnel on a common platform to evolve comprehensive and holistic recommendations on diagnostic, reclamation and management/preventive/precautionary options for sustainable productivity from problematic soil and poor quality water under changing climatic scenario.

# **Scientific Programme**

The following broad areas have been identified for discussions during the deliberations in the National Seminar.

- Modern tools and techniques for diagnosis and prognosis of salt affected soils and poor quality waters.
- 2. Challenges in reclamation and management of salt affected soils.

- 3. Advancements in remediation and management of poor quality waters
- 4. Climate resilient approaches for enhancing agricultural productivity.
- 5. Multiple stress tolerance in biological systems.
- 6. Knowledge initiatives and policy dimensions.

Special Session on Western India: There would be a special session on dryland agriculture and secondary salinization in Indira Gandhi Nahar Pariyojana (IGNP).

## **Submission of Papers**

Themes of the seminar broadly includes different aspects for climate resilient saline agriculture including salinity/sodicity/water quality/biotic/abiotic stresses/ drought and other relevant discussions. While invited articles would be presented through oral presentations, the voluntary papers would be presented through oral or poster presentations.

## **Invited Papers**

Theme based scientific papers are being invited by the ISSSWQ.

## **Voluntary Papers**

Papers for oral/poster presentation will be accepted from intending participants. Interested participants are requested to send abstract of oral/poster paper(s) on any subject related to above mentioned broad categories of themes. The abstract should be of full one page (500 words) in single space and typed in English (MS Word format). The abstract may be submitted through email and/or by post along with a soft copy. Abstracts will be peer reviewed. While sending abstract(s), mention the serial number and title of broad area listed above under which it should be included. Publication of full paper and presentation of oral/poster papers will be subject to registration. Not more than two abstracts will be accepted from a single registered participant as a senior author. Awards will be given for the best poster presentation under two different categories. The editorial board would also consider good quality papers for publication in the forthcoming issues of the society journal "Journal of Soil Salinity and Water Quality", provided that the senior author is a life member of the society.

# **Important Dates**

Submission of Abstract	31 October 2016
Acceptance of Abstract	10 November 2016
Submission of full length paper	30 November 2016
Acceptance of full length papers	15 December 2016
Seminar dates	21-22 January 2017

### Venue

The seminar will be held at S.K. Rajasthan Agricultural University, Bikaner (Rajasthan). Bikaner is a historical and fourth largest city of Rajasthan founded by Rao Bika situated in the middle of Thar desert and is well connected by rail and road from Delhi, Jaipur and Agra. The weather at Bikaner during January is fairly cold. Heavy woollens are recommended for this period.

## Registration

All participants are required to register in advance as per the schedule and fee given below. Fee for participation may be sent through Crossed

Demand Draft/ Multicity Cheque in favour of "Indian Society of Soil Salinity and Water Quality" payable at Karnal (Haryana). Registration fee may also be transferred directly/electronically through NEFT/RTGS with intimation to Organising Secretary on following details: Account No. 30451467955, IFS Code: SBIN0000665, State Bank of India, Main Branch, Karnal (Haryana).

Participants	Details of Registration Fees (in Rs.)	
	Upto 25 <sup>th</sup> Dec. 2016	After 25 <sup>th</sup> Dec. 2016
Delegates	3000/-	4000/-
Students/ Farmers	1500/-	2000/-
Industry representatives	10000/-	12000/-
Accompanying persons	1500/-	2000/-

The registration form or its photocopy and full length papers along with demand draft may be sent latest by 25<sup>th</sup> December 2016 to Dr Rameshwar Lal Meena, Organising Secretary, 5th National Seminar, ISSSWQ, ICAR-Central Soil Salinity Research Institute, Karnal-132001 (Haryana). Soft copy may be sent at issswq2008@gmail.com, rlmeena69@gmail.com. Registration form can also be downloaded from the CSSRI website: www.cssri.org/issswq.

Note: Registration fees once paid is not refundable or adjustable against any other person.

## **Sponsorship**

Sponsorship for the Conference are invited from different organizations, professionals, manufacturers and suppliers of instruments, equipments, chemicals, glassware, plasticware, software suppliers and contractors etc. as per following.

Sponsorship Category	Sponsorship Amount (Rs.)	Free Delegates
Platinum	30000/-	3
Gold	20000/-	2
Silver	15000/-	1

The Platinum sponsor will get free advertisement in banners, posters and souvenir (Full page colour). Gold sponsor will get free advertisement in banners, posters and souvenir (Full page B&W). Silver sponsor will get free advertisement in banners, posters and souvenir (Half page B&W). In addition to above, sponsorship for Conference Lunch and Dinner are invited separately.

## Accommodation

Limited accommodation would be arranged in the guest houses of S.K. Rajasthan Agricultural University, Bikaner, ICAR-CIAH, Bikaner .Besides, a range of hotel accommodation is available at reasonable rates. The hotel accommodation could be arranged on request and payment basis.

### **Post Seminar Tour**

The post seminar tour will be arranged to the historical places in and around Bikaner (Junagarh Fort, Lakshmi Niwas Palace and Karni Mata Temple) on payment basis.