# NATIONAL ADVISORY COMMITTEE

In an Mark

Dr Trilochan Mohapatra	Secretary, DARE & DG, ICAR, New Delhi
Dr JS Samra	Ex-CEO, NRAA, New Delhi
Dr Ashok Dalwai	CEO, NRAA, New Delhi
Dr VN Sharda	Ex-member, ASRB New Delhi
Dr Arvind Kumar	VC, RLBCAU, Jhansi
Dr US Gautam	VC, BUAT, Banda
Prof. SK Rao	VC, RVSKV, Gwalior
Dr PK Bisen	VC, JNKVV Jabalpur
Prof. JV Vaishampayan	VC, BU, Jhansi
Dr Sushil Soloman	VC, CSAUT, Kanpur
Dr RK Mittal	VC, SVBPUAT, Modipuram
Dr NS Rathore	VC, MPUAT, Udaipur
Dr JS Sandhu	VC, SKNAU, Jobner
Dr DC Joshi	VC, AU, Kota
Dr SK Patil	VC, IGKV, Raipur
DrAK Sikka	Head, IWMI, New Delhi
DrAK Singh	DDG (Agril. Extension), ICAR, New Delhi
DrAAlagusundaram	DDG (NRM), ICAR, New Delhi
Dr SK Chaudhari	ADG (S&WM), NRM Division, ICAR, New Delhi
Dr S Bhaskar	ADG (AAF&CC), NRM Division, ICAR, New Delhi
Dr Sreenath Dixit	Theme Leader, ICRISAT Development Centre (IDC) ICRISAT, Hyderabad
Dr GR Rao	Director, TFRI, Jabalpur
Dr Vijay Kumar	Director, ICAR-IGFRI, Jhansi
Dr RK Tiwari	Director, ICAR-CAFRI, Jhansi
Dr AR Sharma	Director (Research), RLBCAU, Jhansi
Dr Anil Kumar	Director (Education), RLBCAU, Jhansi
Dr P Chandran	Director, ICAR-NBSS&LUP, Nagpur
DrASPanwar	Director, ICAR-IIESR, Modipuram
DrAK Patra	Director, ICAR-IISS, Bhopal
Dr Maharani Din	Director, ICAR-CIAF, Bhopal
Dr PK Singh	Director ICAR-DWR Jabalour
Dr VK Bhatia	Director ICAR-IISR Indore
Dr OP Yaday	Director ICAR-CAZRI Jodhnur
Dr G Ravindra Chary	Director, ICAR-CRIDA, Hyderabad
Dr PC Sharma	Director ICAR-CSSRI Karnal
Dr SK Ambast	Director ICAR-IIWM Bhuhaneswar
Dr NP Singh	Director, ICAR-IIPR Kanpur
Dr. laadish Sinah	Director, ICAR-IIVR Varanasi
Dr DK Aganwal	Director, ICAR-IISS Mau
Dr AD Pathak	
Dr Shalendra Rajan	Director ICAR-CISH Lucknow
Dr Abdul Samad	Director, ICAR-CISH, Edeknow
Dr Gonall al	Director, CAR NRCSS Aimor
Dr Oupai Lai	Head ICAR CSSRIPS Lucknew
	Pagianal Director ICDAE South Asia Dragger
	NASC, New Delhi
Dr Anupam Mishra	Director, ICAR-ATARI, Jabalpur
Dr Atar Singh	Director, ICAR-ATARI, Kanpur
Dr Lakhan Singh	Director, ICAR-ATARI, Pune
Sh. CP Tripathi	CEO, SLNA, Lucknow
Dr SN Murthy	Incharge, Regional Ayurveda Research Institute, Jhansi

DADE & DO LOAD N

#### **ORGANIZING COMMITTEE** Patron Dr PR Oiasv

1 duon	Director, ICAR-IISWC, Dehradun							
President & Chairman	Dr PK Mishra							
	President, IASWC & ex-Director, ICAR-IISWC, Dehradun							
Vice-President &	: Dr NK Sharma							
Co-Chairman(s)	Head, SS&ADivision, ICAR-IISWC, Denradun							
	: Dr OPS KNOIA							
Secretary General	<ul> <li>DrD Mandal</li> </ul>							
Secretary General	Secretary IASWC Debradun							
Organizing Secretary	Dr RS Yadav							
	Head, ICAR-IISWC, Research Centre, Datia							
Co-Organizing	: Dr Dev Narayan							
Secretary	Pr. Scientist, ICAR-IISWC, Research Centre, Datia							
	: Dr Rajeev Ranjan							
	Scientist, ICAR-IISWC, Research Centre, Datia							
	Dr Mukesh Kumar Meena							
	Scientist, ICAR-IISWC, Research Centre, Datia							
	Dr. Amit Kr Singh							
	Scientist, ICAK-IGEKI, Jnansi							
	Dr. Asna Kam Scientist ICAD CAERI Ibansi							
	Dr Vogeshwar Singh							
	Professor RI BCALL .lhansi							
Coordinators	Dr Ambrish Kumar							
00010111111	Pr. Scientist, ICAR-IISWC, Dehradun							
	: Dr Gopal Kumar							
	Sr. Scientist, ICAR-IISWC, Dehradun							
	: Dr AC Rathore							
	Pr. Scientist, ICAR-IISWC, Dehradun							
	: Dr Dinesh Kumar							
	Scientist, ICAR-IISWC, Research Centre, Datia							
	: MrBD Kushwaha							
<b>^</b>	TO, ICAR-IISWC, Research Centre, Datia							
Conveners	Dr RK Singh, Head, ICAR-IISWC, RC, Kota							
	Dr DR Dubey, Head, ICAK-IISWC, KC, Agia							
	DrMMadhu Head ICAR-IISWC, RC, Koraput							
	Dr SL Patil Head ICAR-IISWC, RC, Ballary							
	Dr P Kannan, Head, ICAR-IISWC, RC, Ooty							
	Dr Ramesh Sinoh. Pr. Scientist. ICAR-CAFRI, Jhansi							
	Dr SR Kantwa, Pr. Scientist, ICAR-IGFRI, Jhansi							
Members	Dr PK Rathore, Head, KVK, Datia							
	: Sh RN Sharma, DDA, Datia							
	: Dr AK Roy, PC, AICRP, ICAR-IGFRI, Jhansi							
	: Dr RV Kumar, Head, GSM Division, ICAR-IGFRI, Jhansi							
	: Dr Khem Chand, Head, SS Division, ICAR-IGFRI, Jhansi							
	Dr Sunil Tiwari, Head, CP Division, ICAR-IGFRI, Jhansi							
	: DrAK Mishra, Head, PAR Division, ICAR-IGFRI, Jhansi							
	Dr PK Pathak, Head, FM&PH I, ICAR-IGFRI, Jnansi							
	Dr Sai Prasad, Head, ICAK-IAKI KS, Indore							
	DrSAbmad Haad CLDivision ICAP ICEPT Ibansi							
	DrAK Handa Dr Scientist ICAD-CAERI Ihansi							
	Dr Inderdev Pr. Scientist ICAR-CAFRI Jhansi							
	Dr RP Dwivedi Pr Scientist, ICAR-CAFRI, Jhansi							
	Dr P Sharma. Pr. Scientist. ICAR-IGFRI, Jhansi							
Swachh Bharat Abhiyan								
an	ADDRESS FOR CORRESPONDENCE							
स्वक्त पारत	Organizing Secretary, RCSSJ-2020							
एक कदम स्वच्छला का आर ICAR-I	ICAR-Indian Institute of Soil & Water Conservation,							
Research Centre - Datia – 475 661, Madhya Pradesh.								

Mobile: 07651871980 E-mail: rcssj2020@gmail.com; cswcrtidatia@rediffmail.com



# Organized by Indian Association of Soil and Water **Conservationists, Dehradun, Uttarakhand**

In Collaboration with **ICAR-Indian Institute of Soil & Water Conservation Research Centre, Datia, Madhya Pradesh** 

**ICAR-Indian Grassland & Fodder Research Institute Ihansi, Uttar Pradesh** 

**ICAR-Central Agroforestry Research Institute** Jhansi, Uttar Pradesh

Rani Laksmi Bai Central Agricultural University Jhansi, Uttar Pradesh

> **Range Management Society of India** Jhansi

> > Indian Society of Agroforestry Jhansi

**Final Circular** 

# BACKGROUND

Soil and water are the key natural resources and basic inputs sustaining the life on the earth. Over the years, there has been a drastic change in land use and rainfall pattern especially increased intensity leading to increased runoff, leaving little for ground water recharge. Increased runoff also erodes thus degrades the soil, hampering its fertility and productivity. The continuous degradation and ever increasing demand of natural resources in the population dense country like India are major constrains in achieving food security and social equality. NITI Aayog's recent report, 'Composite Water Management Index', underscores the looming threat of India's water crisis. Its current proportions are severe; about 0.2 million people die every year due to inadequate access to water—and are set to become worse under projected climate change. Further, "by 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual six per cent loss in the country's GDP".

Soil security and improved water availability have been considered the keys to achieve sustainable development goal through land degradation neutrality. Fortunately the numerous and subtle linkages between soil, water and sustainable development has been well perceived and reflected in several national policies of recent past. The National Water Policy (2012), *inter-alia*, advocate rain water harvesting, conservation of water and emphasize the augmenting the availability of water through direct use of rainfall. Sustainable Development Goals (SDG) 6 deals with all aspects of water availability, access and its use, and urges all nations to "Ensure availability and sustainable management of water and sanitation for all". Ministry of Jal Shakti, Govt. of India, has also an ambitious plan of providing piped water connections to every household '*Har Ghar Ko Nal Se Jal*' in India by 2024.

Water not only has a basic function in maintaining the integrity of the natural environment but it is also a key driver of economic and social development, including health, gender equality, resilience, inclusive cities, life below water, terrestrial ecosystems, and peaceful and inclusive societies.

With long-term average rainfall of 1,160 mm, which is though the highest in the world for country of comparable size, India struggles to fulfil even the current need. However, there is huge potential for rainwater harvesting which could enhance its water storage, which is currently 209 m<sup>3</sup> per capita compared to developed countries, such as USA (2,192 m<sup>3</sup>), Canada (25,337 m<sup>3</sup>) and Australia (3,223 m<sup>3</sup>). Skewed and concentrated and non uniform rainfall makes the task ever challenging.

The poor water availability and land degradation is more challenging in some areas including the Bundelkhand region which comprises seven districts each from Madhya Pradesh and Uttar Pradesh supports about 18.3 million populations, out of which about 79.1 per cent lives in rural areas. The region is complex, diverse, rainfed, risky, under invested, vulnerable, socio-economically heterogeneous, ethnically unique, agrarian and backward relative to other regions. It is a hard rock area with limited or inadequate ground water resources, lacks infrastructure, access to improved technologies, markets and inputs with low productivity. Historically, Bundelkhand region of both the states used to have one drought in 16 years in 18<sup>th</sup> and 19<sup>th</sup> centuries, which increased by three times during the period 1968 to 1992 and the frequency has further increased in the recent past. The available traditional infrastructures including ponds tanks and Haveli systems are grossly insufficient in the present scenario of climate change. Soil and water conservation technologies including water harvesting, IFS, agroforestry, grassland and fodder management etc. on integrated watershed approach have successfully demonstrated that impediments in enhanced and sustainable farm production can be avoided.

National Water Policy, Niti Ayog, SDGs, National Commission for Integrated Water resource Development, and National Water Mission, *inter-alia*, emphasizes the harvesting and conservation of rainwater to augment the supply of water for drinking and irrigation. Looking at the crisis, futuristic challenging scenarios and national aspirations, it is pertinent to bring relevant technologies developed across the country through deliberations at national fora involving farmers as the prime stakeholders.

Indian Association of Soil and Water Conservationists (IASWC) has started to provide farmers-scientists interface for technology development and application under the conceptual framework of ICAR initiated "FARMER FIRST" programme through organizing national & regional conferences. In series of such conferences, during February 03-05, 2020, National Conference on "Resource Conservation for Soil Security and Jalshakti: Farmers Perspective in Bundelkhand (RCSSJ-2020)" is being organized for different stakeholders' especially of Bundelkhand region at ICAR-IISWC, Research Centre, Datia, Madhya Pradesh.

This farmers participation conference is anticipated to provide an effective platform for innovative farmers to represent farming communities in their respective areas and share their experiences, constraints, and expectations from researchers and policy makers *vis-à-vis* presentation from researchers and policy makers on various issues directly related to farmers livelihood so that ready information is available that can be effectively communicated through famers to farmers mode. The interactions and deliberations in the conference shall form recommendations and a policy framework for sustaining soil security and Jalshakti for higher and sustained farm production in the country in general and the region in particular. With this backdrop, the conference will highlight on the following broad and sub themes-

#### Theme I: Status, challenges & scope of conservation of natural resources

- i) Status and potential of natural resources management in Bundelkhand
- ii) Conservation of natural resources for nutritional & environmental security

#### Theme II: Soil & water conservation for doubling farmers' income

- i) Strategy and issues in doubling farmers' income
- ii) Conservation agriculture for adaptation and mitigation to climate change
- iii) Organic agriculture for conservation of farm resources

#### Theme III: Watershed approach: Key to Jalshakti & development of Bundelkhand

- i) Status, impacts and potential of watershed approach for soil & waters security
- ii) Irrigation water management practices for climate smart agriculture
- iii) Planning, implementation and evaluation issues in watershed programme

# Theme IV: Agroforestry & integrated farming system for biodiversity,soil & water conservation

- i) Status, challenges and potential of biodiversity in Bundelkahnd
- ii) Agroforestry & water conservation practices for conserving biodiversity
- iii) Research, extension and policy issues in adoption of agroforestry
- iv) IFS modules for biodiversity, soil security, Jalshakti and livelihood
- Theme V: Grassland & fodder management practices for sustaining farm income
  - i) Grassland and fodder practices for soil and water security
  - ii) Rehabilitation of degraded land through grasses
- Theme VI: Technology transfer, socio-economic & policy issues for mitigation of drought
  - i) Institutional mechanism & policy issues for secured livelihood
  - ii) Issues & road map for technology transfer on Soil Security & Jalshakti

#### **MODE OF FARMERS PARTICIPATION**

As farmers are key stakeholder under National Agriculture Research Programme (NARS) programme, innovative and forward farmers will be the key speakers during different sessions, in addition to lead invited speakers from academic, researcher or administrative fraternity. The agencies/institutions, who are involved in dissemination of technologies and direct contact with the farming community in the region are requested to nominate innovative/progressive farmers, who have significantly contributed in adoption and development of conservation based diversified production system through various soil and water conservation interventions, integrated watershed management, agroforestry, organic and integrated farming system, rainwater harvesting and utilization *etc.* Standard format for nominating farmers should be used. Selected farmers will be invited for presenting benefits derived from adoption of technology. Active and successful farmers harvesting the worth of science will be felicitated during the conference.

# CALL FOR PAPERS: EXCLUSIVELY FROM RESEARCHERS/SCIENTISTS/ STUDENTS/TECHNICIANS/POLICY PLANNERS (POSTER PRESENTATION)

The conference offers a good opportunity for researchers and academicians to interact directly with farmers of the Bundelkhand region and similar agro-climatic conditions for mutual understanding and interaction on the issues and communicate their achievements and recommendations for wider adoption and overall benefit to the farming system. Abstracts of original research work in thematic areas of the conference not exceeding 300 words (MS word, Times New Roman, 12-font size) must reach by due date along with the registration form and payments details of registration fee. Abstracts can be submitted through email (*rcssj2020@gmail.com*). Full length paper may be prepared as per the latest guidelines of Indian Journal of Soil Conservation available at our website www.iaswc.com. Mode of presentation of the selected abstracts will be selectively oral but mainly through poster presentations. Oral presentation should be of practical importance to the farmers. Awards will be given for the best oral and poster presentation on each theme areas.

#### **Guidelines for Poster Presentation**

The entire poster must be mounted on a 36"x50" foam-core board/hard board. A poster displaying your poster title, name and affiliation should be positioned at topcentre of the board. Text of the poster should be readable from 5' distance. Lettering for the title should be large (at least 70 point font). Use all capital letters for the title. Keep the text brief. The numerical data should be presented in the form of graphs. Data may be presented in small table-form. Limit the text to about one-fourth of the poster space and use "visuals" (graphs, photographs, schematics, maps, etc.) to describe the "content".

## **REGISTRATION FEE**

Delegates	₹4,500/-
Students and Participating Farmers	₹ 1,000/-
Invited Farmers	Nil

All the participants are required to be registered for the conference by filling-up the Registration Form which is enclosed herewith and also available on the website www.iaswc.com. Submit the filled registration form along with registration fee in the form of draft/multi-city cheque or online Bank transfer receipt on or before January 30, 2020 in favour of "Organizing Secretary, RCSSJ-2020" payable at Datia along with the registration form. The students are required to produce a valid identity card/certificate for availing the student discount.

#### For Registration fee, payable through ET, Account details are as follows:

Account Name	:	Organizing Secretary, RCSSJ-2020
Account No.	;	38760017053
IFS Code	:	SBIN0004542
MICR Code	÷	475002003

Bank : State Bank of India, ADB, Datia-475661 (M.P.)

#### ACCOMMODATION

A range of suitable accommodation is available in Datia and adjoining Jhansi for the participants and their spouse. Necessary accommodation will be arranged for the selected farmers and invited speakers. On request, accommodation for registered participants having sent their travel plan shall be arranged on payment basis in the nearby guest houses and hotels on first come-first served basis. Delegates may also book accommodation as per need at their own. Delegates are requested to send their travel plan in advance to enable us to make accommodation arrangements.

### **HOW TO REACH DATIA**

Datia is well connected by rail traversed by West Central railway and road traversed by NH-75 of North-South Corridor. Nearest railway station is Datia. It is about 30 km from Jhansi railway station and about 70 km from Gwalior. The nearest airport is Gwalior.

#### **IMPORTANT DUE DATES**

Last date of Abstract submission	:	January 20, 2020
Intimation of acceptance of abstracts	:	January 25, 2020
Submission of full length papers	:	February 02, 2020
Conference dates	:	February 03-05, 2020