

National Conference

Resource Conservation for Soil Security and Jalshakti: Farmers Perspective in Bundelkhand (RESSI-2020)

February 03-05, 2020

Venue ICAR-IISWC, RC - Datia (M.P.)











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 Jhansi, Uttar Pradesh



ICAR-Central Agroforestry Research Institute Jhansi, Uttar Pradesh



Rani Laksmi Bai Central Agricultural University Jhansi, Uttar Pradesh

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 m³ per capita compared to developed countries, such as USA (2,192 m³), Canada (25,337 m³) and Australia (3,223 m³). 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 18th and 19th 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

- 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 top-centre 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 31 December, 2019 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 form Gwalior. The nearest airport is Gwalior.

IMPORTANT DUE DATES

IIII OITIAITI DOLDATILO		
Last date of Abstract submission	:	October 25, 2019
Intimation of acceptance of abstracts	:	November 05, 2019
Submission of full length papers	:	December 05, 2019
Conference dates	:	February 03-05, 2020

NATIONAL ADVISORY COMMITTEE

Dr Trilochan Mohapatra Secretary, DARE & DG, ICAR, New Delhi

Ex-CEO, NRAA, New Delhi Dr JS Samra

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 VC, JNKVV Jabalpur Dr PK Bisen

Prof. JV Vaishampayan VC. BU. Jhansi

Dr Sushil Soloman VC, CSAUT, Kanpur

VC. SVBPUAT. Modipuram Dr Gava Prasad

Dr NS Rathore VC, MPUAT, Udaipur

Dr JS Sandhu VC. SKNAU. Jobner Dr DC Joshi VC, AU, Kota

Dr SK Patil VC, IGKV, Raipur

Dr AK Sikka Head, IWMI, New Delhi

DDG (Agril. Extension), ICAR, New Delhi Dr AK Singh

DDG (NRM), ICAR, New Delhi **Dr A Alagusundaram**

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 Viiav Kumar Director, ICAR-IGFRI, Jhansi

Dr Anil Kumar Director, ICAR-CAFRI, Jhansi

Dr AR Sharma Director (Research), RLBCAU, Jhansi Dr Anil Kumar Director (Education), RLBCAU, Jhansi Director, ICAR-NBSS&LUP, Nagpur Dr SK Singh

Dr AS Panwar Director, ICAR-IIFSR, Modipuram Dr AK Patra Director, ICAR-IISS, Bhopal Dr Maharani Din

Director, ICAR-CIAE, Bhopal Dr PK Singh Director, ICAR-DWR, Jabalpur Dr VK Bhatia

Director, ICAR-IISR, Indore Dr OP Yadav Director, ICAR-CAZRI, Jodhpur

Director, ICAR-CRIDA, Hyderabad Dr G Ravindra Chary Dr PC Sharma Director, ICAR-CSSRI, Karnal **Dr SK Ambast** Director, ICAR-IIWM, Bhubaneswar

Dr NP Singh Director, ICAR-IIPR, Kanpur Dr Jagdish Singh Director, ICAR-IIVR, Varanasi Dr DK Agarwal Director, ICAR-IISS, Mau

DrAD Pathak ICAR-IISR, Lucknow Dr Shalendra Rajan Director, ICAR-CISH, Lucknow Dr Abdul Samad Director, CIMAP, Lucknow Director, ICAR-NRCSS, Ajmer Dr Gopal Lal Head, ICAR-CSSRIRS, Lucknow Dr VK Mishra

Regional Director, ICRAF-South Asia Program, Dr Javed Rizvi

NASC, New Delhi

Dr Anupam Mishra Director, ICAR-ATARI, Jabalpur Dr Atar Singh Director, ICAR-ATARI, Kanpur

Sh. CP Tripathi CEO, SLNA, Lucknow

Dr SN Murthy Incharge, Regional Ayurveda Research Institute, Jhansi

ORGANIZING COMMITTEE

Patron Dr PR Ojasvi

Director, ICAR-IISWC, Dehradun

President & Chairman: Dr PK Mishra

President, IASWC & ex-Director, ICAR-IISWC, Dehradun

Vice-President & Co-Chairman(s) Dr NK Sharma

Head, SS&A Division, ICAR-IISWC, Dehradun

Dr OPS Khola

Head, ICAR-IISWC, Research Centre, Chandigarh

Secretary General

Dr D Mandal Secretary, IASWC, Dehradun

Organizing Secretary:

Dr RS Yadav

Co-Organizing

Head, ICAR-IISWC, Research Centre, Datia

Secretary

Dr Dev Narayan 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

Coordinators

Dr Ambrish Kumar

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

Mr BD Kushwaha

TO, ICAR-IISWC, Research Centre, Datia

Conveners Dr RK Singh, Head, ICAR-IISWC, RC, Kota

> Dr SK Dubey, Head, ICAR-IISWC, RC, Agra Dr PR Bhatnagar, Head, ICAR-IISWC, RC, Vasad Dr M Madhu, Head, ICAR-IISWC, RC, Koraput Dr SL Patil, Head, ICAR-IISWC, RC, Ballary

Dr P Kannan, Head, ICAR-IISWC, RC, Ooty Dr Ramesh Singh, Pr. Scientist, ICAR-CAFRI, Jhansi

Dr SR Kantwa, Pr. Scientist, ICAR-IGFRI, Jhansi

Memhers Dr PK Rathore, Head, KVK, Datia

Sh RN Sharma, DDA, Datia

DrAK 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 Dr AK Mishra, Head, PAR Division, ICAR-IGFRI, Jhansi

Dr PK Pathak, Head, FM&PHT, ICAR-IGFRI, Jhansi

Dr Sai Prasad, Head, ICAR-IARI RS, Indore

Dr SP Singh, Head, CPRS RS, Gwalior

Dr RK Tiwari, Pr. Scientist, ICAR-CAFRI, Jhansi Dr AK Handa, Pr. Scientist, ICAR-CAFRI, Jhansi

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





ADDRESS FOR CORRESPONDENCE

Dr R S Yadav

Organizing Secretary, RCSSJ-2020 ICAR-Indian Institute of Soil & Water Conservation, Research Centre - Datia - 475 661, Madhya Pradesh. Mobile: 07651871980

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