

Promoting cooperation and collaboration to establish a platform for, and legacy of, long-term partnerships and dialogue between Indian and UK water researchers, water policy-makers and water businesses.

# Water Resource Management & Supply in Central India

**USER ENGAGEMENT INITIATIVE** 

28<sup>th</sup> February – 2<sup>nd</sup> March 2019

"Knowledge exchange conferences targeted towards specific stakeholders to present the latest in water security science and technology"

Venue: Indian Institute of Science Education and Research (IISER), Bhopal Madhya Pradesh. India

India-Lead: Dr. Pankaj Kumar, IISER Bhopal

UK-Lead-1: Dr. Sumit Sinha, University of Leeds

UK-Lead-2: Dr. Alexandre Gagnon, Liverpool John Moores University

A Ministry of Earth Sciences, Govt. of India and Natural Environment Research Council virtual joint centre. Hosted by the Indian Institute of Tropical Meteorology, Pune (India) and the Centre for Ecology & Hydrology (UK)









## Water Resource Management & Supply in Central India: User Engagement Initiative

#### **Background**

The IUKWC supports the translation and communication of outcomes from India-UK water research to users via its directed User Engagement Initiatives (UEI). Focused on translating the results of India-UK science into policy/operational practice, UEIs are designed to bring together scientists with policy makers, regulators or commercial companies to support either:

- The translation and communication of India-UK water security science to users;
- Collect input on stakeholder-needs for future research and innovation.

#### **Need for Engagement with Stakeholders:**

Regional Water Policy and Management Bodies in India

To support the transfer of science into water management and policy, regional water managers need to have a thorough understanding of potential of evolving scientific knowledge as well as its limitations. There is a need for dialogue exchange between stakeholders at different scales of water resource management to better understand needs at user end and derive cross-sectoral solutions.

Engagement between regional stakeholders and scientists helps foster understanding of the hierarchy and functions of various governmental and non-governmental organisations, the flow of information amongst these actors and their motivations, needs and expectations related to engagement with the research community.

#### Scope

This event aims to address the key scientific needs of the water resource management and supply sector in Central India. The region demonstrates a complex water nexus with high growth-rates in the industrial, agricultural, and energy sectors, as well as escalated domestic water demands. Furthermore, under a changing climate, in the last couple of decades the region has witnessed continuous warming and a decline in precipitation, (though not significant). These demands and variation in climate have a distinct impact on the regional hydrological balance. The efficient management of the water resources in the region requires accurate information on water availability in monsoon and non-monsoon seasons including consideration of surface and groundwater supplies. The challenge for the policy makers and governmental institutions is to meet the water demands of these growing sectors in the face of changing climate in a sustainable manner, without adversely impacting the environment. This initiative aims to improve understand the hydrology and water management systems in the region; so as to help in the design of a scientifically and socially sound strategy to better monitor and manage water resource in the region.

### The specific water resources management sectors which will be addressed through this initiative include:

- Water resource and supply management for agriculture;
- Water resource and supply management for domestic and industrial uses;
- Water resource and supply management for Energy.



#### The stakeholder groups of focus for this event are:

Organizations at a State/District level who are responsible for the development of water
policy and the management of freshwater issues. These Stakeholders, connect policy makers
with implementers and regulators; they are responsible for identification and interpretation
of available scientific knowledge (hydro-climatic services), recognizing its utility and
facilitate its dissemination at local level while ensuring adherence to legal and policy
devices.

Examples include: State environment officers, State environmental agencies, State water boards, municipalities, inter-municipal bodies, river basin authorities, regional environment development agencies, NGOs, CSR organisations, etc.

#### **Event structure**

The UEI will take the form of a three day workshop which will communicate relevant joint India—UK scientific outputs to state level stakeholders. In addition presentations from selected stakeholders will improve understanding of how scientific outputs are used in water management and policy.

#### **Expected outputs**

This UEI will help build user feedback mechanisms and lead to publication of an IUKWC Water Brief on the application of science and technology to address water related problems in different sectors and related user feedback

#### **Expectations of scientific researchers**

Researchers attending the event from the UK and India are expected to effectively engage with Stakeholders in order to:

- demonstrate the utility of their previous joint India–UK research in freshwater monitoring;
- represent the current capabilities of their research area more widely, conveying information about potential benefits and utility for stakeholders;
- ensure delivery of presentations in a simple and applied manner and, where possible, provide practical demonstrations of tools/equipment/findings;
- explore ideas for future coproduction of scientific outputs.

#### **Expectation from Stakeholders**

Stakeholders attending the event are expected to:

- communicate current and future science and technological needs in facilitating improved water resource management and supply;
- present current use of scientific outputs in freshwater monitoring and convey their limitations;
- interact with scientists on best methods to address the above needs and explore ideas for collaboration.



#### **Contact**

For further information on this initiative please free to contact IUKWC or the event leads

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For information on IUKWC and its activities visit: <a href="www.iukwc.org">www.iukwc.org</a> or write to us at: <a href="mailto:info@iukwc.org">info@iukwc.org</a>