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Water Centre

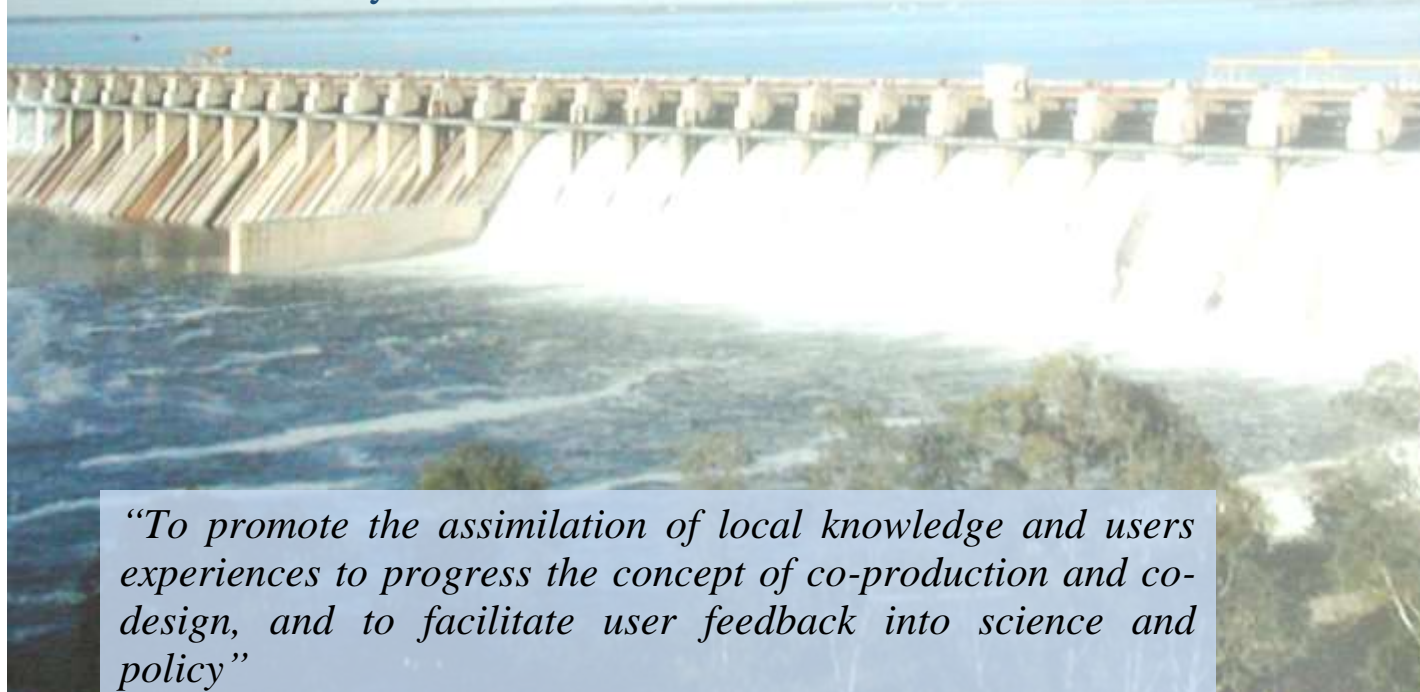
भारत-यूके
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Promoting cooperation and collaboration to establish a platform for, and legacy of, long-term partnerships and dialogue between Indian and UK water researchers, water policy-makers and water businesses.

Water Resource Management & Supply in Central India

GRASSROOTS FIELD EXPOSURE INITIATIVE (GFES)

25th – 27th February 2019



“To promote the assimilation of local knowledge and users experiences to progress the concept of co-production and co-design, and to facilitate user feedback into science and policy”

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Ministry of Earth Sciences
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Water Resource Management & Supply in Central India: Grassroots Field Exposure Initiative

Background

The IUKWC supports the collaboration between India-UK researchers and the end users of water science in the early stages of research design via Grassroots Field Exposure Sessions (GFES). These sessions promote the assimilation of local knowledge and users' experiences into science, helping progress the concept of co-production and co-design of research, technology and policy. They also aim to gather user-feedback to improve on existing science and promote co-design of future activities.

Need for engagement with grassroots stakeholders:

There has been an increasing interest amongst policy makers in India to interact with scientists and harness research outputs in decision-making to concretize future planning, especially in natural resource management. Given this scenario, there have been an appreciable increase in development of policies backed by scientific inputs. However, a major gap is perceived with respect to the utility of scientific (and the resulting policy) outputs at ground-level. This can be attributed to the dearth of knowledge amongst the scientific community regarding key needs of ground level stakeholders and absence of user feedback mechanisms. Furthermore, there is a lack of accessible mechanisms to support co-design of trans-disciplinary research, which effectively bring together water scientists with ground level actors in sectors such as energy, agriculture, urban and rural water management, disaster management and industry. To achieve this transfer of information, grassroots-level stakeholders need to have a thorough understanding of the potential of evolving scientific knowledge, as well as, involved risks and limitations. This IUKWC event plans to address these limitations with a specific focus on:

- Building cross-sectoral collaborations to understand the dynamic interactions across the water-energy-food nexus;
- Transforming science into catchment management solutions.

Scope:

The event aims to address the key scientific needs of the water resource management and supply sector in Central India, from the point of view of the grassroots level. The region demonstrates a complex water nexus with a high growth-rate of industrial, agricultural, and energy sectors, as well as escalated water demands. Further, under 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. Efficient implementation of adaptation measures, to counter the spatiotemporal variation in demand and supply of water, warrants a closer examination of various hydrological fluxes and states at diverse spatial scales. Any adaptation measure for the efficient management of the water resources in the region would require accurate information about water availability in monsoon and non-monsoon seasons, surface and groundwater supply, groundwater recharge potential, stream-flow, and river runoff, amongst others.

Every sector needs enough supply of water to meet its demands; the challenge for the policy makers and the governmental institutions is to meet the water demand of these growing sectors in the face of changing climate in a sustainable manner, without adversely impacting the environment. The current



initiative aims to be an intervention to fully understand the hydrology and water management system in the region from the point of view of the grassroots manager and user; this can be immensely helpful in designing a scientifically and socially sound strategy to better monitor and manage water resource in the region.

The specific sectors in WRM planned to 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/ stakeholders at a district / block level responsible for the development of water policy and the management of freshwater issues
- Water resource dependent communities

Examples include: Taluk level water supply departments, irrigation departments, farmers associations, crop advisories, NGOs, Urban planning and management departments, industries and power plant managers.

Event structure:

This event is planned to be a community-, as well as, a field-based approach, for a team of scientists (both UK and India) to gain indepth understanding of the issues associated with ground-level water management and the current level of uptake of scientific outputs. It will involve visits to different sites and interactions with key stakeholders, including local communities.

Expected outputs

The key aim of this GFES is to expose the scientific team to issues faced by stakeholders at a ground level. The specific expected outputs of the GFES are:

- Grassroots Knowledge Exchange/Capacity Building Brief, part of the IUKWC water brief publication series, which will provide an overview highlighting the key lessons from the session, co-authored by all participating scientists and select stakeholders.
- Annual Exposure Outlook Article: Contributions to an article on current session with a cross-sectoral approach to be published by the IUKWC.
- Short Film: A film portraying the time spent by scientists interacting with stakeholders from the field, and key messages from different stakeholders.

Expectation of scientific team members

Scientific team members are expected to effectively engage with Stakeholders in order to:

- demonstrate the utility of their previous joint India–UK research; the team members are welcome to bring posters of any specific technology (in diagram form preferably) for ease of demonstration to stakeholders;
- represent the current capabilities of their research area more widely, conveying information about potential benefits and utility for stakeholders;
- explore ideas for coproduction of scientific outputs.

Expectation of Stakeholders

Stakeholder participating in the GFES are expected to:

- communicate current use of scientific outputs in freshwater monitoring and convey their limitations;
- communicate current and future science and technological needs in facilitating improved water resource management and supply;
- 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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