Integration of managed aquifer recharge and water-food nexus in higher education

Principal Investigators:

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Institutions involved: Names of all collaborating institutions

1. Indian Institute of Technology Roorkee (IIT Roorkee, India)

2. Hochschule für Technik und Wirtschaft Dresden – University of Applied Sciences (HTW Dresden, Germany)

Short Project Summary: Brief overview of the project's aims, focus areas, or methodology

The resolution of rapid groundwater depletion in India needs multifaceted approaches such as Managed Aquifer Recharge and Water-Food nexus. However, most higher education institution (HEI) programs are inadequate to address the issue. We plan to integrate HTWD's expertise in Managed Aquifer Recharge and River Bank Filtration with IITR's expertise in Water-Food nexus. This collaboration plans to (i) research a case study site in North India and (ii) concurrently develop and offer courses and webinars, which thematically integrate Water-Food nexus and Managed Aquifer Recharge, to PG students and PhD researchers in IITR collaboratively with HTWD.

Expected Outcomes: Key goals, impact areas, or potential deliverables

This project aims to (i) identify a suitable site for RBF for irrigation water supply (ii) conduct a scientific study on integration of MAR into WF nexus in South Asian context focused on review, feasibility analysis, and site identification, and (iii) conduct a two-week PG-course "Managed aquifer recharge and modelling of water-food nexus" to be delivered by joint team from HTWD and IITR at IIT Roorkee.