



*Water Innovation Hubs and Smart Water Monitoring to promote Indo-German cooperation*

Project presentation  
M.Sc. Marc Beckett, Dr. Marius Mohr  
09.03.2021

Supported by:



based on a decision of the German Bundestag

# Overview |

## AQUA-Hub

*Water Innovation Hubs and Smart Water Monitoring for fostered Indo-German cooperation*

💧 **Duration**

*10/2020 – 09/2022*

💧 **Project Reference**

*16EXI4021A*

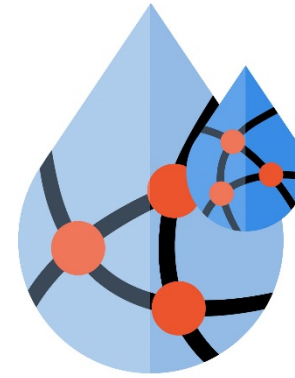
💧 **Funding:**

*294.093 € (Total cost: 321.213 €)*

💧 **Programme**

*Export Initiative for Environmental Technologies*

*by the Federal Ministry for the Environment,  
Nature Conservation and Nuclear Safety*



# AQUA-Hub

Supported by:

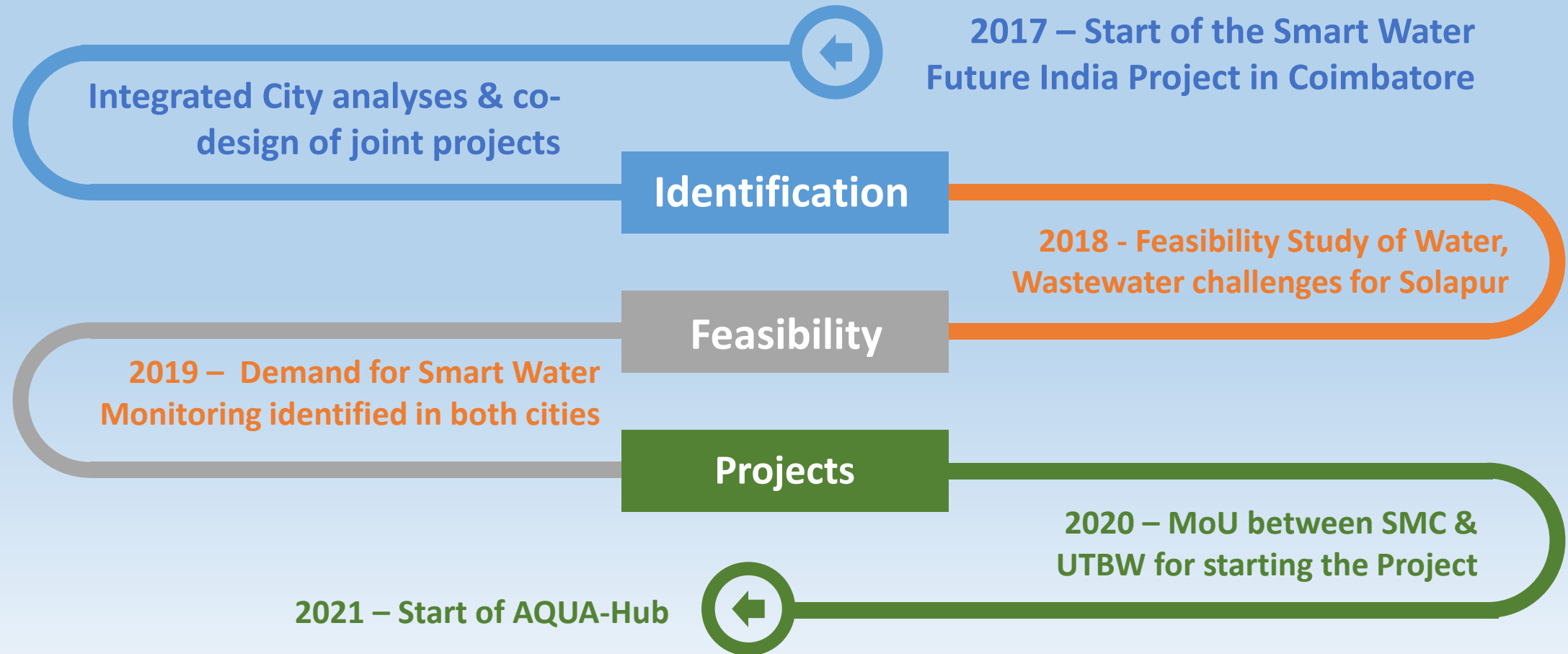


Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety



based on a decision of the German Bundestag

# | Background



# Smart Water Future India |

- Coimbatore selected as Smart City by central government
- One of three smart cities supported by Germany
- Greatest challenges identified in fields of mobility and water infrastructure
- Germany: many solutions in water management, but not always fitting for situation in India
- New approach: integrated solutions, not focusing on only one sector (e.g. nexus water, energy, food)



Supported by:

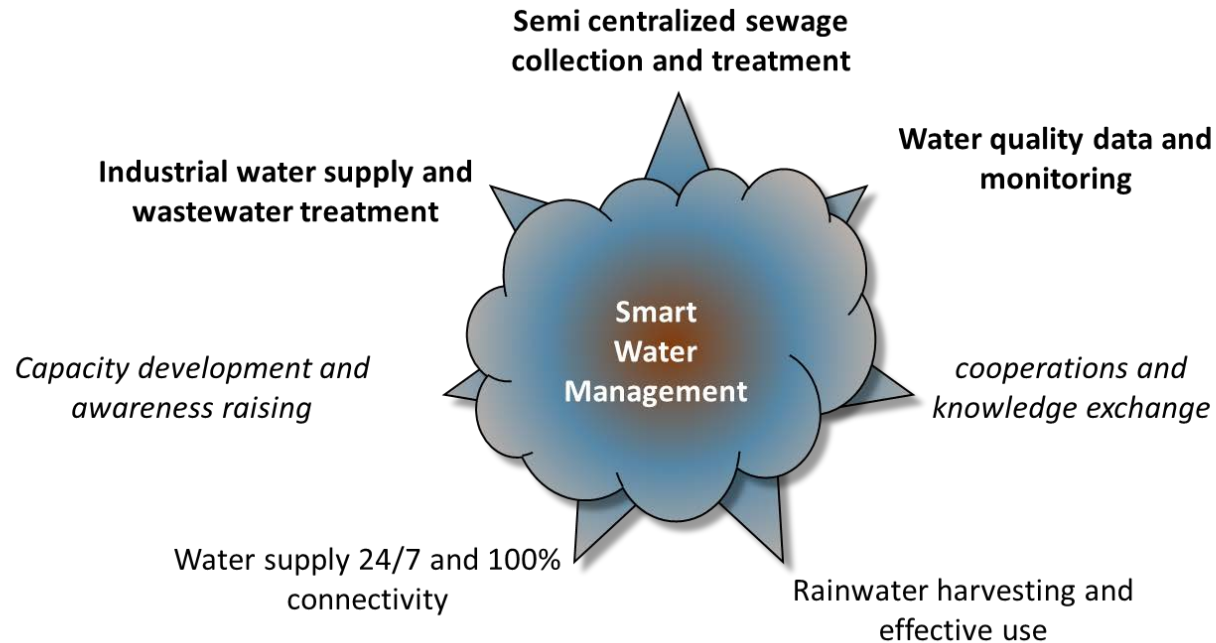


Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety



based on a decision of the German Bundestag

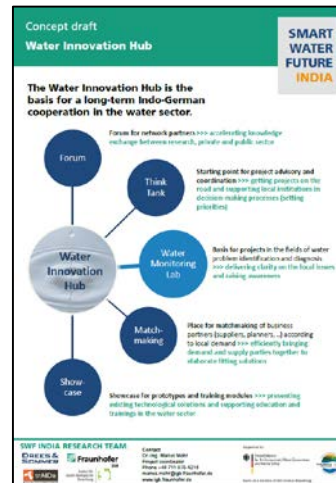
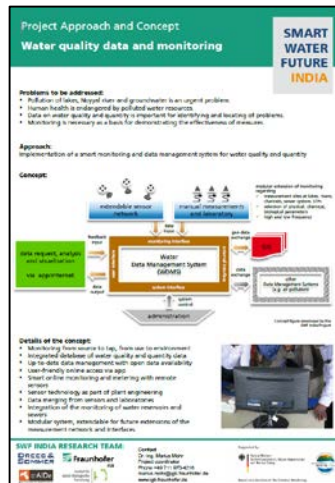
# | Background



➤ Joint project identification

➤ Water Innovation Hubs

➤ Smart Water Monitoring Project





# Solapur|

- Feasibility study funded by UTBW & Baden Württemberg
- City Analysis Conducted in 2018
  - ❑ Visit of infrastructure sites
  - ❑ Data collection & evaluation
- Stakeholder Workshops in 2019
  - ❑ Co-Design of projects
  - ❑ representatives from public & private sector

Conclusion:  
Smart Water Monitoring Project



“Strong local partners are the basis for our engagement in India”

“Better information and access to technical solutions is needed”

“For SMEs it is challenging to maintain close relationships required to be successful on the Indian Market”



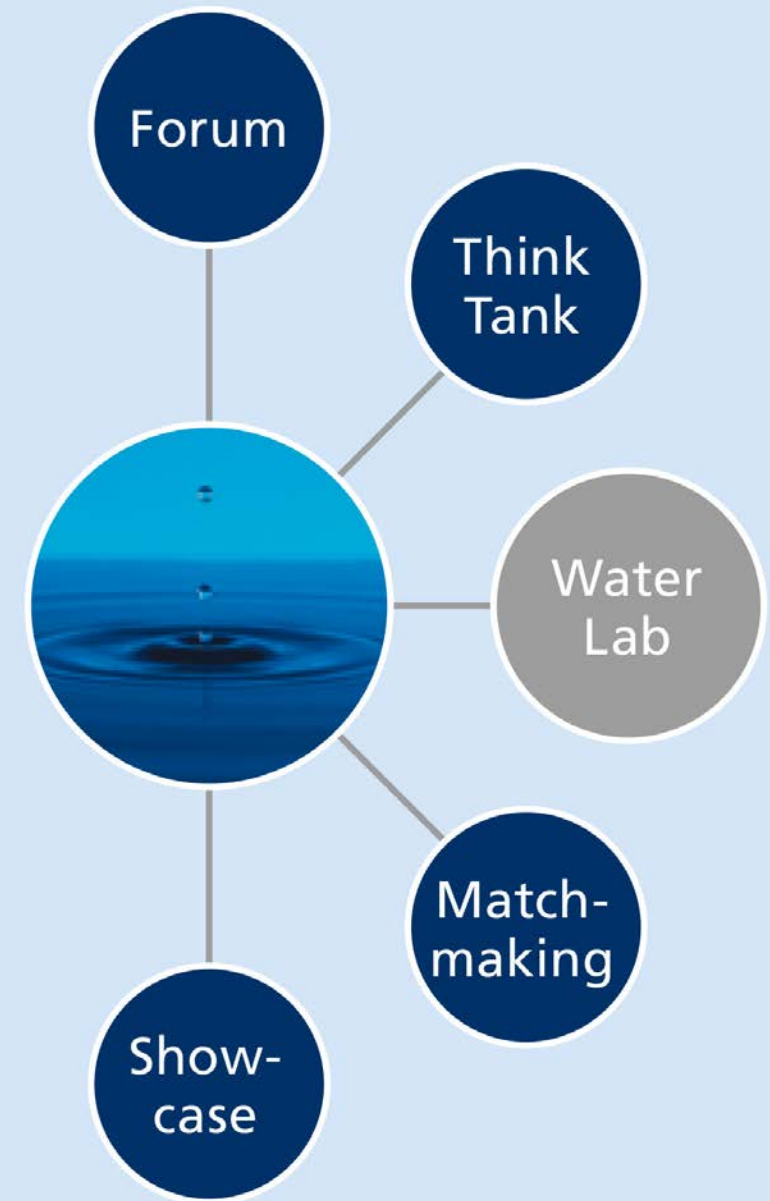
“We would like to see more demonstration projects realised”

“We need more information about the situation on the ground”

“We need solutions not technologies”

# Objectives |

- Establishment of Water Innovation Hubs in CMB & SOL
- Increase cooperation & exchange between Indian & German stakeholders
- Increase Access to Water Technologies “Made in Germany”
- Promote innovation & adaptation of technologies to become solutions
- Develop a sustainable business model for the Water Innovation Hubs





# Approach |

- Establish presence on the ground with Local HubManagers
- Network with local stakeholders to identify current trends and demands
- Present potential solutions from Germany to the local stakeholders
- Matchmaking and Business Opportunities
- Accelerate communication via Website, Newsletter, Social media and (online) events





# Smart Water Monitoring Project | Solapur



ONLINE

LAB



## Flow Monitoring

- Raw water Q

## Quality Monitoring

- pH
- Turbidity
- Elec. Conductivity
- Temperature

## Photometric

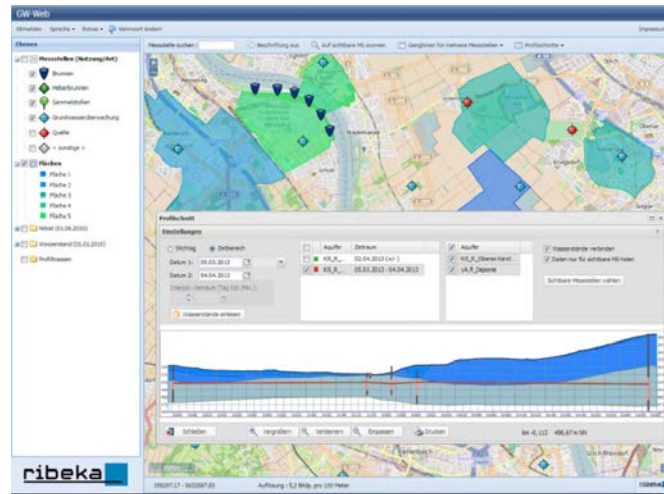
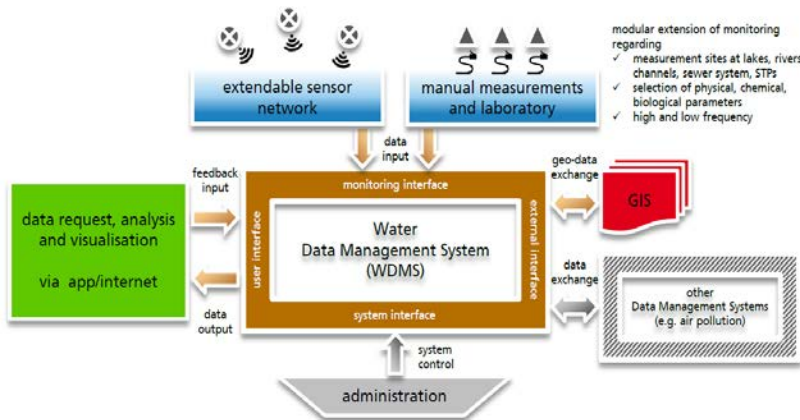
- Heavy metals  
e.g. Ar, Cd ...
- NO<sub>3</sub>-
- Cl



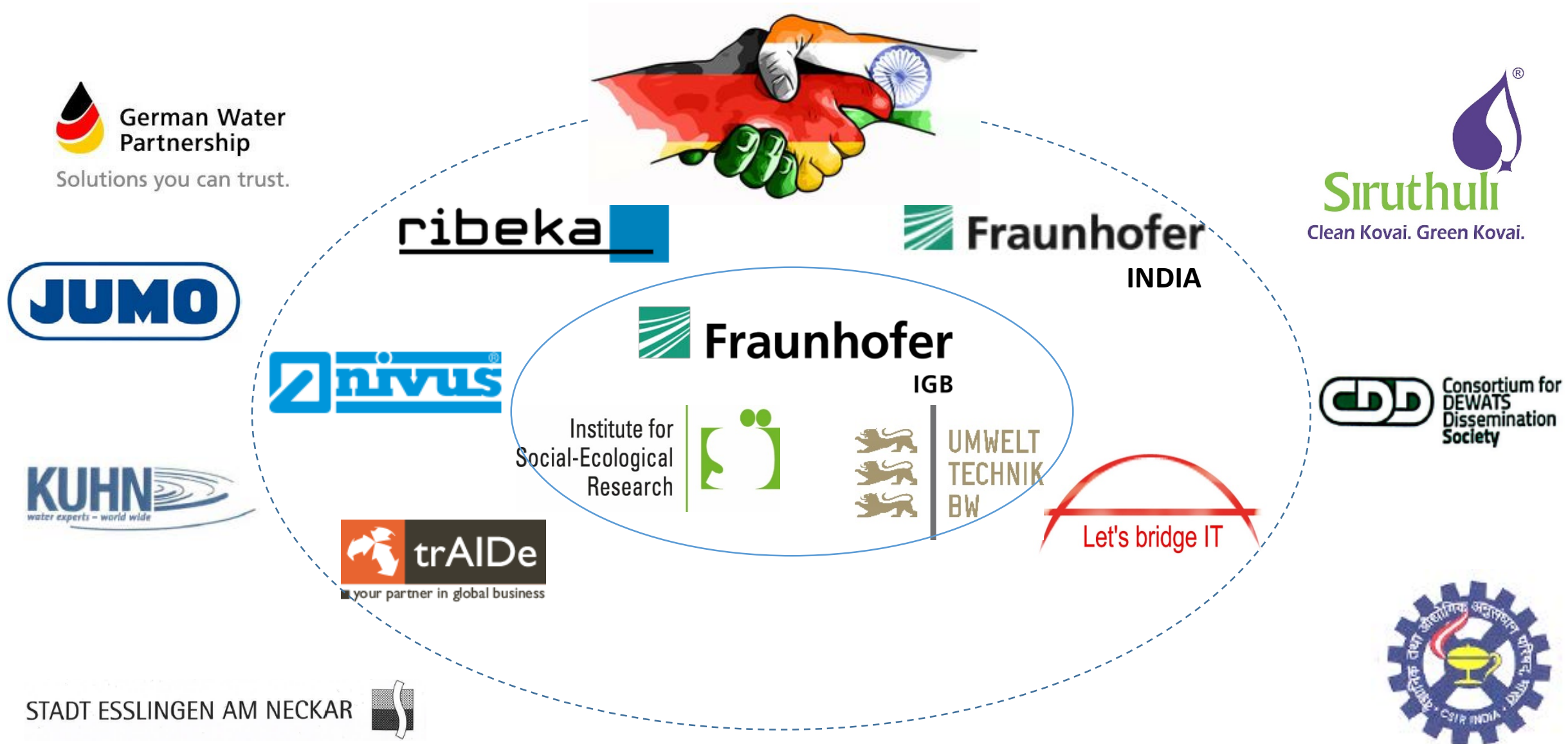


# CMB | Smart Monitoring

- Objective: Increase data availability for strategic planning and communication
- Close collaboration with the respective agencies
- Establish Online Water Monitoring at Local Lakes
- Collect Data in Cloud as input for water management software
- Monitor water quality and quantity over time and develop measures to improve water quality



# Partners & Network







# | Further Initiatives

- [Morgenstadt Global Smart Cities](#)
  - International Climate Initiative by BMU
  - Climate smart urban development in Kochi, Piura (Peru) and Saltillo (Mexico)
- [ShowCasePlant India](#)
  - Feasibility study for transforming a Wastewater Treatment plant into a showcase plant for demonstration and training



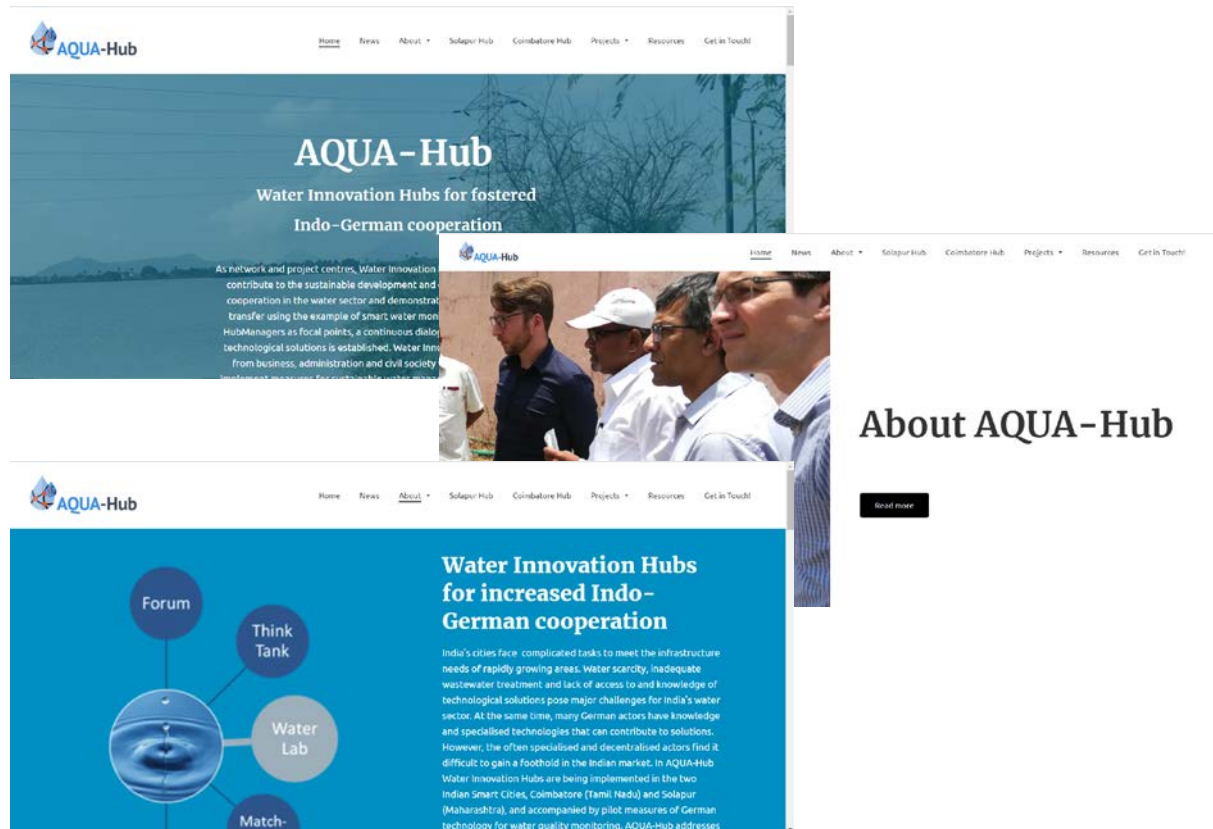
# Get involved |

- Join a growing Indo-German network of water professionals
- Find partners for your activities
- Share your experiences and develop project ideas with network members
- Collaborate on implementation projects



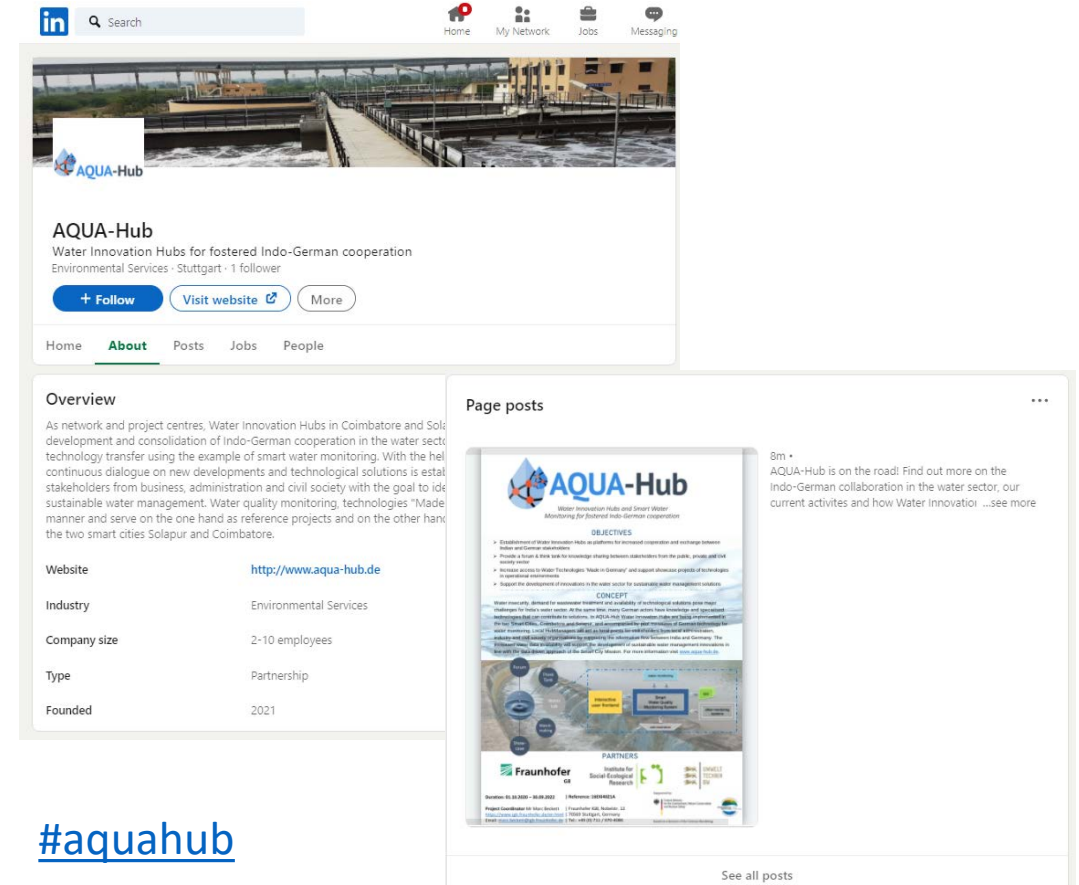
# Connect with us!

## Website



[www.aqua-hub.de](http://www.aqua-hub.de)

## LinkedIn



[#aquahub](https://www.linkedin.com/company/aquahub)



# Contact

**Marc Beckett**  
**Project Coordinator**

Innovation Field Water Technologies and Resource Recovery  
Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Nobelstraße 12 | 70569 Stuttgart | Germany  
Office: +49 711 970-4086 | Mobile: +49 177 64 33 241

Mail: [marc.beckett@igb.fraunhofer.de](mailto:marc.beckett@igb.fraunhofer.de)

Web: <https://www.igb.fraunhofer.de/en.html> | [www.aqua-hub.de](http://www.aqua-hub.de)

