

## Water: A global challenge

Two-thirds of the world's population already live in regions where water shortages are a regular occurrence. Decades of overuse and pollution have damaged global water resources, and now population growth, rising water consumption and climate change are adding to the pressure – with serious consequences for people, ecosystems and the economy.

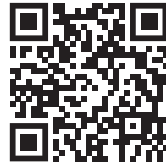
The United Nations have highlighted the global importance of water with Sustainable Development Goal 6 (SDG 6): By 2030, everyone should have sustainable access to clean drinking water and adequate sanitation, and water-related ecosystems should be protected as a natural resource for life.

## Global Resource Water (GRoW)

To help achieve SDG 6, the German Federal Ministry of Education and Research (BMBF) has launched a funding measure entitled Global Resource Water (GRoW). Comprising 12 cooperation projects, GRoW unites experts from over 90 institutions active in research, business, and practice. Their aim, using some 40 case studies worldwide, is to develop innovative ways of increasing good governance in the water sector.

GRoW ensures close links between local and global action: As well as devising new methods to establish the present status and future development of global water resources and consumption, the projects are also developing decision support systems for sustainable water resource management at the local and regional level. To ensure that the results are applied over the long-term, social frameworks receive special attention. The projects incorporate relevant actors early on into their development work, and apply results to demonstrate outcomes.

For the latest information, please visit our website:  
[www.bmbf-grow.de/en](http://www.bmbf-grow.de/en)



An Initiative of the German Federal Ministry  
of Education and Research

# GRoW

WATER AS A GLOBAL RESOURCE

## Global analyses and local solutions for sustainable water resources management

### Contact

#### Project Management Agency Karlsruhe (PTKA)

Dr Leif Wolf  
Karlsruhe Institute of Technology (KIT)  
Hermann-von-Helmholtz-Platz 1  
76344 Eggenstein-Leopoldshafen  
Germany  
Email: [leif.wolf@kit.edu](mailto:leif.wolf@kit.edu)  
Tel.: +49 (0)721 608 28224

#### GRoWnet Networking and Transfer Project

Annika Kramer, Theresa Lorenz and Dr Sabine Blumstein  
adelphi research gGmbH  
Alt-Moabit 91  
10559 Berlin  
Germany  
Email: [grownet@adelphi.de](mailto:grownet@adelphi.de)  
Tel.: +49 (0)30 8900068 281



©FOTOS: Suriya99/Shutterstock, Luiz Ferreira/Shutterstock,  
Theewaterskloof/GlobeDrought,

SPONSORED BY THE



Federal Ministry  
of Education  
and Research



## Networking and transfer

The GRoW projects are supported by GRoWnet, a **networking and transfer project** run by adelphi. GRoWnet actively promotes networking between the research projects, identifies synergies and makes them usable. By working on cross-cutting topics, collaborating, and transferring research results to policymakers and practitioners, we achieve new insights and create new stimuli for global implementation, water policy and water research.

GRoW is overseen by a **steering group** made up of the research project coordinators and representatives from development cooperation, policymaking and business.

The early-warning, information and management systems that are currently being developed within GRoW are especially relevant **to practitioners** working in areas such as administration, consultancy and manufacturing. The systems also include technical innovations for using remote sensing data, for sensor systems and for sustainable production methods. The expected decision-making aids will be based on both global and local models and measurements, and will use new methods for regionalising data.

More details are available on the **GRoW website** ([www.bmbf-grow.de/en](http://www.bmbf-grow.de/en)) and on the individual project websites.



## GLOBAL WATER RESOURCES

**ViWA** – Virtual Water Values: Multiscale monitoring of global water resources and options for their efficient and sustainable use  
**Coordinator: Professor Wolfram Mauser, LMU, Munich**

**SaWaM** – Seasonal water resources management for semi-arid areas: Transferring regionalized global information into practice  
**Coordinator: Professor Harald Kunstmann, KIT, Garmisch-Partenkirchen**

**MedWater** – Sustainable management of politically and economically highly relevant water resources in hydraulically, climatically and ecologically highly dynamic carbonate groundwater aquifers of the Mediterranean  
**Coordinator: Professor Irina Engelhardt, TU Berlin**

**MuDak-WRM** – Multidisciplinary data acquisition as the key for a globally applicable water resource management  
**Coordinator: Dr Stephan Fuchs, KIT, Karlsruhe**

**GlobeDrought** – A global-scale tool for characterising droughts and quantifying their impact on water resources  
**Coordinator: Dr Stefan Siebert, University of Göttingen**



## GLOBAL WATER DEMAND

**InoCottonGROW** – Innovative impulses reducing the water footprint of the global cotton-textile industry towards the UN Sustainable Development Goals  
**Coordinator: Dr Frank-Andreas Weber, RWTH Aachen**

**WELLE** – Organizational water footprint – local measures in global value chains  
**Coordinator: Professor Matthias Finkbeiner, TU Berlin**

**WANDEL** – Water resources as important factors in the energy transition – conditions needed at the local and global level  
**Coordinator: Dr Martina Flörke, University of Kassel**

## GOOD GOVERNANCE IN THE WATER SECTOR

**Trust** – Sustainable, fair and environmentally sound drinking water supply for prosperous regions with water shortage: Developing solutions and planning tools for achieving the Sustainable Development Goals using the river catchments of the region Lima/Peru as an example  
**Coordinator: Christian León, University of Stuttgart**

**STEER** – Increasing good governance for achieving the objectives of integrated water resources management  
**Coordinator: Professor Claudia Pahl-Wostl, Osnabrück University**

**iWaGSS** – Integrated water governance support system  
**Coordinator: Professor Karl-Ulrich Rudolph, IEEM gGmbH, Witten**

**go-CAM** – Implementing strategic development goals in coastal aquifer management  
**Coordinator: Professor Hans Matthias Schöniger, TU Braunschweig**