

Groundwater Solutions Initiative for Policy and Practice (GRIPP) Value proposition



Photo: David Brazier/IWMI

Our planet's predominant freshwater resources are held underground - as groundwater in aquifers.

The use of groundwater has increased uncontrollably. Since 1950, our use of groundwater has increased by 300%. This has brought huge basic and derived social and economic benefits to global society. Groundwater has unmatched importance in providing water and food security. It underpins health benefits and climate resilience, especially in semi-arid regions. Yet, the resource remains widely misunderstood, seriously undervalued, is often poorly managed and, in most cases, is inadequately protected.

Human exploitation of groundwater resources has accelerated in many countries since the twentieth century. This has been due to the massive expansion of unregulated irrigated agriculture and urban water supply. Changes in the way we use land has also impacted both the quantity and quality of available groundwater resources.

Serious concerns about groundwater resource sustainability, water quality degradation, and impacts on ecosystems and habitats that depend on, or which supply, groundwater are very real.

Yet, in many parts of the world, groundwater remains underdeveloped as a sustainable water resource. Groundwater still holds the promise of significantly contributing to sustainable socioeconomic growth.

Groundwater often plays a crucial role and offers valuable fit-for-purpose solutions.

It is:

- **An underpinning source of livelihoods for farmers**
- **A basis for urban and industrial growth**
- **An important climate resilience solution**
- **An integrated water storage option when managed conjunctively with surface water**
- **A critical contributor to terrestrial and aquatic systems, their biodiversity and water quality**
- **Often the only water resource available to the poorer parts of society and displaced people**

However, it is under increasing threat. Achieving water security and resilience from groundwater requires far greater support for its protection and sustainable management.

The Groundwater Solutions Initiative for Policy and Practice (GRIPP) aims to bring expert knowledge and multi-level collaboration to achieve sustainable groundwater management. It will do this with the overriding goal of achieving:

Sustainable groundwater management for livelihoods, food security, climate resilience and economic growth

GRIPP intends to implement better groundwater governance by supporting more effective institutional partnerships and practices. It will do this through the provision of support to local, basin, national and regional agencies.

To maximize the benefits from groundwater, better links to surface water management are needed. As water scarcity increases in many parts of the world, better use of groundwater and surface water will be essential to minimize social conflicts and migration, deal with wider land degradation challenges, and support food security objectives.

Isolated success stories in groundwater management are a source of inspiration, but major investment and commitment to concerted action are required to bring these to scale. We are unlikely to achieve the United Nations Sustainable Development Goals (SDGs) by 2030 without significant use and sustainable management of groundwater resources.

GRIPP is a global, efficient, professional and responsive network of partners with local and regional experience. They are focussed on the hot spot regions of groundwater use in many countries.

GRIPP is presently implementing demand-driven action research, and co-implementing evidence-based management and adaptation approaches to groundwater-related risks with stakeholders around the world.

Value proposition

GRIPP is:

1. An independent, open, global consortium of partners subscribing to the GRIPP objectives of sustainable groundwater management.
2. A timely and appropriate mechanism to strengthen groundwater attention in the implementation of the 2030 Agenda for Sustainable Development, the Paris Agreement, the Framework for Action on Groundwater Governance, and the Sendai Framework for Disaster Risk Reduction.
3. A coordinating and convening platform of transdisciplinary organizations that ensures timely and state-of-the-art responses and advice on emerging groundwater-related risks.
4. An active knowledge hub to support the development of strategic plans and programs; to collate and share information and experiences on contemporary integrated groundwater management; and to mobilize sustainable groundwater management in the water-energy-food nexus.
5. A responsive partnership to ensure agile and effective implementation of cooperative activities.
6. Led by the International Water Management Institute (IWMI), with its proven strong capacity for applied research on groundwater in developing countries.

GRIPP is convened by the **International Water Management Institute** (<http://www.iwmi.cgiar.org/>) IWMI provides the GRIPP Coordinator and hosts the Secretariat for the GRIPP network. Currently GRIPP has the following partners:

- **Africa Groundwater Network** (<http://www.agw-net.org>)
- **American Ground Water Trust (AGWT)** (<https://agwt.org/>)
- **American Water Resources Association (AWRA)** (<http://www.awra.org>)
- **Association of Water Well Drilling Rig Owners and Practitioners (AWDROP)** (<http://awdrop.org/>)
- **Center for Advanced Water Research (CAWR)** (<https://www.ufz.de/cawr/>)
- **Institute for Global Environmental Strategies (IGES)** (<http://www.iges.or.jp/en/>)
- **International Association of Hydrogeologists (IAH)** (<https://iah.org/>)
- **International Groundwater Resources Assessment Centre (IGRAC)** under the auspices of the **United Nations Educational, Scientific and Cultural Organization (UNESCO)** and the **World Meteorological Organization (WMO)** (<http://www.un-igrac.org/>)
- **International Rainwater Harvesting Alliance (IRHA)** (<http://www.irha-h2o.org>)
- **International Union for Conservation of Nature (IUCN)** (<http://www.iucn.org/>)
- **KickStart International** (<http://kickstart.org>)
- **MetaMeta** (<http://metameta.nl/>)
- **National Centre for Groundwater Research and Training (NCGRT)** (<http://www.groundwater.com.au/>)
- **National Ground Water Association (NGWA)** (<http://www.ngwa.org/>)
- **Robert B. Daugherty Water for Food Global Institute, University of Nebraska** (<http://waterforfood.nebraska.edu>)
- **Skat Consulting Ltd. (Skat)** (<http://www.skat.ch>)
- **Smart Water Metering Inc.** (<http://smart-water-metering.com>)
- **Sun Yat-sen University (SYSU)**, Department of Water Resources and Environment, School of Geography and Planning (<http://www.sysu.edu.cn/2012/en/>)
- **The Nature Conservancy (TNC)** (<http://www.nature.org/>)
- **University of Strathclyde (US)**, Civil and Environmental Engineering (<https://www.strath.ac.uk/engineering/civilenvironmentalengineering/>)

GRIPP currently receives financial support from:

- **CGIAR Research Program on Water, Land and Ecosystems** (<https://wle.cgiar.org/>)
- **CGIAR Research Program on Policies, Institutions and Markets** (<http://pim.cgiar.org/>)

Signed by GRIPP Core Group:



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Further information

IAH Strategic Overview Series: <https://iah.org/knowledge/learning-resources>

Groundwater Governance – A Global Framework for Action: <http://www.groundwatergovernance.org/>

SPRING – Managing groundwater sustainably: <https://portals.iucn.org/library/node/46216>

Groundwater Solutions Initiative for Policy and Practice (GRIPP)

The Groundwater Solutions Initiative for Policy and Practice (GRIPP) is an IWMI-led initiative designed to co-develop solutions to the challenges of sustainable groundwater development. GRIPP aims to strengthen, expand and connect current groundwater-related initiatives by forging new partnerships, sharing solutions, scaling-up successes and filling knowledge gaps. The initiative is targeted at the groundwater-dependent, food-producing regions of the world, particularly in low-income and emerging economies. Through dynamic partnerships, GRIPP informs, promotes and adapts tested technologies, and innovative policy and institutional approaches, in order to achieve the Sustainable Development Goals (SDGs) related to climate resilience, food security, livelihoods and sustainable water management. <http://gripp.iwmi.org>

International Water Management Institute (IWMI)

The International Water Management Institute (IWMI) is a non-profit, scientific research organization focusing on the sustainable use of water and land resources in developing countries. It is headquartered in Colombo, Sri Lanka, with regional offices across Asia and Africa. IWMI works in partnership with governments, civil society and the private sector to develop scalable agricultural water management solutions that have a real impact on poverty reduction, food security and ecosystem health. IWMI is a member of the CGIAR System Organization, and leads the CGIAR Research Program on Water, Land and Ecosystems (WLE). www.iwmi.org



GRIPP Partners



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