

# Groundwater Governance

It goes without saying that groundwater is an essential natural resource to sustain life. However, increased water demand and pollution threaten groundwater availability. In order to share groundwater resources equitably among nations, regions, consumers per sector and generations and to maintain the groundwater availability and quality, informed decisions need to be made about allocation and protection of groundwater resources.

Simply speaking, groundwater governance is about decision-making on groundwater, involving individuals and/or organized entities at various levels. For instance, a farmer may decide to increase groundwater abstraction required for irrigation and a water authority department may decide to introduce land use restrictions for aquifer protection. Groundwater related decisions are taken in 'action arenas', structured by sets of nested, formal and informal rules, mechanisms and arrangements that are designed, agreed upon, applied and enforced on these various levels.

Access to information is crucial in the groundwater action arenas. IGRAC facilitates and promotes free flow of groundwater information and knowledge. Information sharing needs to cover all the problem facets: hydrogeological, socio-economical, institutional, ecological, etc. We strongly believe that sharing of groundwater information and knowledge internationally is instrumental to improve approaches to the assessment and management of groundwater resources.

Groundwater governance becomes increasingly important (and complicated) when groundwater is shared across borders. Often, rules in place to develop and manage groundwater vary significantly across administrative borders. This mismatch can create groundwater management problems and even lead to conflicts.

Since 2003, IGRAC provides an independent content and process support to assessment of internationally shared aquifers. Among others, IGRAC contributed to the formulation of the UN International Law Commission draft articles on transboundary aquifer management. These articles act as a basis for bi- or multilateral agreements on transboundary aquifer management.



IGRAC stresses the importance to base groundwater management decisions on facts. Understanding of users' needs, preferences, capacities and the rules in place, complement groundwater system characteristics. Ultimately, people do not base groundwater decisions on hydrogeological parameters but on net benefits of groundwater and land use. To increase the value of such decisions, the economic valuation of groundwater use should be included.

IGRAC also developed a serious game where players learn to use shared groundwater resources more optimally. The use is then based on appropriate rules on information sharing, pumping regimes and how to deal with free riders.

IGRAC is looking forward to participate in groundwater governance projects and initiatives and to contribute to better groundwater use and protection.



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