

Comparative Study of Ownership Regimes for Groundwater Resources

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Abstract

The regulation of groundwater resources in many nations around the globe is not well-developed and lags behind the domestic governance of surface water resources. As a result, these subsurface resources are often subject to unfettered extractions, uses, and contamination. A main challenge in developing sound regulations for these hidden resources is the lack of a clear ownership regime. Where groundwater ownership is undefined or unclear, it makes regulatory implementation and enforcement challenging since no one is identified as accountable for the use, management, or exploitation of the resource, or for negative consequences that might ensue. It also makes it difficult to identify the party responsible for violations of law. This is true regardless of whether the country is an island nation or continent-based nation.

In this project, we surveyed the groundwater ownership regime in ten jurisdictions on five continents. The purpose of the project is to ascertain and evaluate commonalities and differences among those ownership systems. The goal for the project is to highlight the different options employed by various nations, as well as provide countries who seek to improve or amend their own groundwater ownership regimes with examples and practices that could inform their own approaches.

Preliminary assessment indicates that while the countries included in the project constitute a small sample size, the surveys offer unique insight into the variations of groundwater ownership approaches and mechanisms. Among others, they evidence disparate ownership models that include private ownership, public ownership, and non-ownership of groundwater while in nature. Some jurisdictions allow the transfer of the ownership of groundwater, others allow only the transfer of the right to use the resource, and still others prohibit any transfer of rights. The surveys also evidenced a wide array of institutional mechanisms related to groundwater ownership at the national, provincial, and local levels, as well as varying degrees of acceptance of customary practices of indigenous communities.

While none of the countries included in this survey are island nations, the results of this project could be equally informative. Since both island and continental nations have groundwater residing in their subsurface, both require a regulatory regime to manage the resource, including an approach to the ownership of the groundwater. We firmly believe that the results of this project will be of great interest for island communities interested in developing or improving their groundwater legal regime.

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