Applicability of water markets across the globe

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Water scarcity is one of the most high-impact global risks. Supply enhancement, such as the construction of dams and desalination plants, was the main approach used to counter water scarcity throughout the 20 th century. This approach produced enormous benefits, but also had environmental costs associated with facility development. Consequently, increasing attention has focused on measures that complement the traditional approach, promoting the efficient use of a fixed amount of water rather than seeking new supplies. A water market is a representative “soft path” measure that can provide adequate incentives for users to use water resources efficiently. It has received the attention of academics and policy-makers, but there is no global view on their applicability. We present the global distribution of potential nations and states where water markets could be instituted in a legal sense, by investigating 296 water laws internationally, with special reference to a minimum set of key rules: legalization of water reallocation, the separation of water rights and landownership, and the modification of the cancellation rule for non-use. We also suggest two additional globally distributed prerequisites and policy implications: the predictability of the available water before irrigation periods and public control of groundwater pumping throughout its jurisdiction. This study provides a foundation for emerging research toward the sustainable management of water resources across the globe.

Keywords: water scarcity, soft-path measure, water law

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