

Editorial Note on the Special Issue on Integrated Water Resources Management

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Integrated Water Resources Management (IWRM) is an important concept within the domain of Water Governance. Water management has traditionally a focus on water techniques and maintenance. This more narrow approach however is replaced by the IWRM concept, focusing more on the need to integrate different aspects and aims with respect to water resources.

IWRM has become dominant in scientific and political debate on water policy and governance. Despite this dominant position in practice, IWRM has not been studied much in comparative way. A cross-country comparative research approach is even more lacking.

This special issue aims to develop theories on IWRM as part of the family of Water Governance Approaches, knowing in advance that comparing between different countries, cultures and governance languages is not an easy endeavor. A cross-country comparative research requires comparable starting points about what is considered IWRM (and what not), how to approach IWRM (from what conceptual angle and theoretical framework) and which methods to use to study it (selection or mix of quantitative and qualitative research methods).

Building up joint theories on IWRM and Water Governance also demands building up a scientific community that is willing and able to put time and energy into jointly developing these common starting points. This special issue represents such an attempt.

It is inspiring to see the emergence of a scientific community of scholars from different countries from six different continents over the globe that is interested in and willing to contribute to this challenge of comparative water governance research. This community is in its building phase and the special issue editors therefore call this comparative study to IWRM a first phase scientific laboratory: the first results of the cross-country cooperation are presented generating interesting patterns of concept evolution and patterns of interdependency between crucial variables and aspects. At the same time, it indicates that for more full-fledged comparative study on IWRM further work is needed.

This special issue provides appealing results from various countries, like Argentina, Australia, Czech Republic, Poland, England, Wales, Hungary, Luxembourg, The Netherlands, Singapore, South Africa, Sweden, and United States. It provides the opportunities to read about IWRM developments in a variety of (political and governmental) contexts. In their introduction on the country oriented contributions the special issue editors Lubell and Edelenbos draw several overall conclusions from their comparative laboratory.

Especially with regard to integrated management, the core concept of IWRM a number of interesting insights are presented. The special issue editors distinguish three types of integration, representing different kinds of boundaries between subsystems in the water governance system, which have to be spanned. The first one is the multifunctional boundary between different elements of the water system

of water chain itself (integration of watershed functions). The second one is the boundaries between the water authorizes and the societal users (integration of civic engagement with governmental and political action). The third distinction represents the institutional boundaries between governmental authorizes on different levels and within one level (integration of different governmental organizations and agencies at the same but also different geographic levels). These boundaries appear to be relevant in every governance systems, even if the institutional arrangements substantially deviate. It also became clear that crossing and spanning these boundaries is a challenge difficult to solve. They urge for a variety of analysis and skills, not always available. All organizations tend to move back within their own domain, if special actions to organize integration are stopped.

The special issue indicates that some countries are well skilled in societal integration (because of the decentralized way of governing), but are at the same time less skilled in realizing integration of functions, within the water systems as well as with other domains outside the water system. This leads to a future research agenda for IWRM that will pay more attention to trade-offs and synergies between the three types of integration. Special attention is needed for the way different decentralization-centralization configurations support or prevent integrated management approaches. .

In the next generation of IWRM approaches, able to generate integration more easily and with less transaction costs, it probably will be the case that water still is considered as one of the primary principles, but no longer as the prime organizing principle for integrated management. Dealing with resources as mutual important, not only reflects the ambitions of a holistic and integrated approach strongly, but also will enforce the boundary crossing skills considerably. Managers no longer are held responsible for defending their core task, they are also held responsible for the joint core tasks of generating integrated approaches and joint solutions.

In each country, Integrated Resources Management is in different stages of development, and there is no ultimate stage that has to be reached. The ongoing evolution of the IWRM approach, adaptive to the need for more integrated solutions, is crucial. Only this dynamics will create the robust Water Governance needed. IWRM is an important step in this adaptive walk, a walk in which the additional skills of managers will focus on synchronizing between local water needs, hydraulic control, water pollution and socioeconomic and ecological function. Integration is not a stage that can be reached, but a dynamic process. This calls for a new way of approaching and studying IWRM across the globe.