2018 - 2023

CERIS: Civil Engineering Research and Innovation for Sustainability

Water governance in a context of scarcity and insularity

Summary

Over the course of the past century, the relationship between humankind and water has resulted in continuous improvement in the quality of life and well-being of people through improved access to water of sufficient quantity and quality to satisfy the various needs for this resource, but has also simultaneously caused the progressive degradation of its quality on an overall, global level. The process of making the right decisions at an opportune time, taking into consideration various different and, at times, antagonistic interests and equating the unequal power relations that exist among interested parties, is managed, within the sphere of water governance, through the creation and implementation of policy, institutional and governance instrument frameworks.

The identification and categorization of water problems in the country permitted the identification of the most compromised water-related functions within the current context, and for which water governance has been unable to find a satisfactory solution. Regardless of the continued existence of these problems, 143 relevant measures for water governance developed in the country between the years 1972 and 2017 were identified. These measures constitute the central elements of the present thesis, and include, among others, the laws, decrees, executive orders, administrative regulations, judicial rulings and other political and institutional declarations related to the governance of water resources at various different levels in society, with both a regional and national scope (islands and the archipelago as a whole). These are measures related to the performance of the functions and responsibilities associated with the supply of water and sanitation, the management of water resources, natural disaster risk reduction and the manner in which these responsibilities are allocated to the specific public or private entities meant to deal with them. The definition of policies for the sector, strategic planning and the setting of priorities, inter-sectorial coherence, the operation and maintenance of services, regulation, oversight and data and information sharing are among the objects of analysis and exploration of interconnections in the present thesis through the measures establishing them and their respective performance. The analysis of these measures was carried out by way of pro-water grids - in other words, the analysis of measures by de-aggregating the contributions thereof to the principles of water governance they aim to establish, and the respective governance indicators to which they are directed. This grid framework brings together the two central instruments of the present thesis, namely the OCDE framework of principles for water governance and the OCDE framework of governance indicators, as well as the variables of territorial scope, temporal dynamics and agency associated with each measure. Based on the pro-water grid data, the relative importance of each principle was established attributed by the number of interventions (measures) undertaken geared toward the establishment thereof, and the commutative ratio between the framework's principles was analyzed. The objectivity of the measures making up the framework was assessed and proposed as a proxy for the relative ease or difficulty of their implementation.

Considering the fact that the existence of the measures in and of itself does not constitute the attainment of the expected benefits of proper water governance, the expert judgment method was used in order, on the one hand, to evaluate the pertinence of the governance frameworks proposed for the Cabo Verdean context, given that these are often cases of the transfer of international initiatives to very different territorial contexts characterized in a singular way by water resource management conditioning factors. On the other hand, and for the first time in Cabo Verde, an evaluation was carried out of the level of implementation of water governance principles and indicators in the country. The conjugation of these two water governance approach methods led to the definition of the conceptual model of analysis and performance optimization of water governance that takes into account the interconnection between the various parts thereof and has the ability to generate orientations for the introduction of improvements that may be associated with the current elements of the framework. The framework allows the successes and failures of governance to be identified, integrating the conditions of water scarcity, insularity and financial fragility.

Keywords

Water governance, principles and indicators, pro-water grid, water resource scarcity, insularity, Cabo Verde.



PhD student Larissa Helena Ferreira Varela

PhD program

Climate Change and Sustainable Development Policies (IST, University of Lisbon)

Supervisor

Francisco Nunes Correia (CERIS, IST, University of Lisbon)

Co-supervisor

Amarilis Varennes e Mendonça (ISA, University of Lisbon)

Period

2015-2019

Funding

Instituto Camões