

Water Security, Evolution and Challenges in Transboundary Basins

Maria C. Donoso¹

Abstract

Water is a security asset to all nations of the world. Attaining water security is not a straightforward process, but a challenging path that requires the development and implementation of participatory governance schemes which are innovative, visionary and dynamic. The challenges in the pursuit of water security can be particularly difficult to tackle in regions where the available water resources are shared by two or more countries. However, there are more than 260 transboundary river basins and 600 aquifers. In many of these transboundary basins or aquifers, none or limited formal agreements or institutional relationships exist between the parties to govern the use of these shared water resources. Furthermore, as water resources degrade or become stressed due to increased demand, the competition for their use is also increased, which in turn could result in raising tensions and increasing the likelihood of conflict, thus impeding water security in the basin. Notwithstanding, water issues can be an important means of bringing communities and countries together, strengthening regional integration, and providing a stabilizing influence in regions. The presentation introduces the concept of water security, and its evolution. The challenges of attaining water security in transboundary water basins are analyzed as it relates to quantity, quality, and security per-se. The progress of the 2030 UN Agenda will be presented in reference to transboundary waters security and international water cooperation over shared basins.

Keywords: Water security, Transboundary rivers, 2030 UN Agenda, International water cooperation

¹ UNESCO Chair on Sustainable Water Security, Institute of Environment, Florida International University. Email: mcdonoso@fiu.edu