Climate Change in the Levant and North Africa Region: an assessment of implications for water resources, regional state of awareness and preparedness, and the road ahead

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Climate change is now a well-documented fact. It is acknowledged by scientists and governments world-wide and is considered to be already on its way. The LNA (Levant and North Africa) region is one of the most affected regions and most vulnerable to climate change. The questions remain though, 'are we ready?' 'What is currently known about the issues relating to climate change, and their potential impacts on water resources?' 'How much information do the differing sector of society, including researchers, policy makers, civil society activists have on this issue?' 'What is the state of readiness in our institutional framework to avert this impending disaster?'

These are the questions this study is trying to answer. In attempting to do so, the author has put together a chart of a preliminary road map for action. The study findings and recommendations have been presented in open discussions and deliberations with colleagues in an effort to improve our understanding of, and readiness for climate change and its impact on water resources.

The climate of the LNA region is shaped not only by global circulation systems, but also by its highly complex and sharply variable topography. The region is characterized by rainless and hot summers and mild winters, and is affected by the North Atlantic Oscillation (NAO). A set of 20 General Circulation Models (GCM) have classified the LNA region as the top region that will undergo severe aridification.

Climate change first took to the headlines in 1998, when the international media began to pick up on it. With the improvement of local media and increased awareness, climate change has become a more widely spread and known topic in the LNA region. Yet despite this surge of public awareness, research in the region is still lacking. Climate change is not a research priority, but there has been a significant amount of collaboration between different institutions throughout the region and with organizations and research institutes from outside the region.

This paper focuses on the water governance in the region (Jordan, Lebanon, Palestine, and Syria) and the different stakeholders involved.

Assaf identifies a general disconnect between researchers and policy makers, but at the same time points out the realization of this disconnect and how policy institutes such as IFI are working to reduce that gap. The civil society, according to Assaf, is one of the most actively engaged players in the climate change arena.

Water scarcity and water conflicts are given priority in the LNA region, yet climate change, which will majorly exasperate the problem, is not on the priority list.

To tackle the shortages in resources and deal with climate change at the same time, governments should design strategies that take into consideration the vulnerability of resources to climate change and the possibilities to adapt. The way to achieve this is to enhance research, enhance awareness through media and civil society on climate issues, manage population growth, and develop water planning and management strategies.