

**The impact of drought measures:**

*A network-based approach within the Flemish Leie Basin of Belgium.*

The climate change manifests itself in the form of increasingly frequent and severe hazards, posing significant challenges across diverse sectors. As a result, significant changes in the climate system have transformed the global environment since 1950. These changes lead to a range of effects, highlighting the vulnerability of both natural and human systems to climate change. Droughts, in particular, exhibit distinct characteristics that distinguish them from other hazards. Unlike isolated events, droughts unfold over extended periods, gradually accumulating impacts over a prolonged timeframe and persisting for considerable durations. Furthermore, droughts often engender non-structural repercussions across large geographical areas and are influenced by human activities. As water management entails conserving water through efficient resource allocation, infrastructure development, and resilience strategies, it directly plays a pivotal role in adapting to drought impacts and ensuring resilient water use during periods of water scarcity. Therefore, the structure, responsibilities, and measures taken by organisations active in water management must be clear.

Given the increasing occurrence and severity of droughts, it is crucial to obtain an understanding of its components and their interactions. Therefore, the purpose of the current study is to combine the “Water Resilience Assessment Framework” (WRAF) and the “Actor-Relational Approach” (ARA), within a network analysis, to visualise a drought system within its complexity, and evaluate the impacts of the active measures that are implemented to strengthen us against droughts.