



Quantitative Story Telling: Initial steps towards bridging perspectives and tools for a robust nexus assessment

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This communication will present the advancement of an innovative analytical framework for the analysis of Water-Energy-Food-Climate Nexus termed Quantitative Story Telling (QST). The methodology is currently under development within the H2020 project MAGIC - Moving Towards Adaptive Governance in Complexity: Informing Nexus Security (www.magic-nexus.eu). The key innovation of QST is that it bridges qualitative and quantitative analytical tools into an iterative research process in which each step is built and validated in interaction with stakeholders. The qualitative analysis focusses on the identification of the narratives behind the development of relevant WEFC-Nexus policies and innovations. The quantitative engine is the Multi-Scale Analysis of Societal and Ecosystem Metabolism (MuSIASEM), a resource accounting toolkit capable of integrating multiple analytical dimensions at different scales through relational analysis. Although QST may not be labelled a data-driven but a story-driven approach, I will argue that improving models per se may not lead to an improved understanding of WEF-Nexus problems unless we are capable of generating more robust narratives to frame them. The communication will cover an introduction to MAGIC project, the basic concepts of QST and a case study focussed on agricultural production in a semi-arid region in Southern Spain. Data requirements for this case study and the limitations to find, access or estimate them will be presented alongside a reflection on the relation between analytical scales and data availability.