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Authors
Pluchinotta, Irene Pagano, Alessandro Giordano, Raffaele Tsoukiàs, Alexis

Description

Water management is a controversial environmental policy issue, due to the heterogeneity of interests associated with a shared resource and the increasing level of conflict among water uses and users. Nowadays, there is a cumulative interest in enhancing multi-stakeholder decision-making processes, overtaking binding mercantile business, in water management domain. This requires the development of dynamic decision-aiding tools able to integrate the different problem frames held by the decision makers, to clarify the differences, to support the creation of collaborative decision-making processes and to provide shared platforms of interactions. In literature, these issues are faced by concepts such as Ostrom's action arena and Ostanello-Tsoukiàs' interaction space (IS). The analysis of the interactions structure and of the different problem framing involved are fundamental premises for a successful debate for the management of a common-pool resource. Specifically, the present paper suggests a dynamic evolution of the IS, highlighting its criticalities. It develops an alternative perspective on the problem, using a System Dynamics Model (SDM), exploring how different actions can influence the decision-making processes of various stakeholders involved in the IS. The SDM has been implemented in a multi-stakeholders decision-making situation in order to support water management and groundwater protection in the agricultural systems in the Capitanata area (Apulia region, Southern Italy).

Publication date
2018

Publisher
Journal of Environmental Management

Thematic Tagging
Ecosystems, Energy, Food (Nexus) Gender Youth
Language English
View resource

Related IWRM Tools

Tool

Shared Vision Planning and Collaborative Modelling

C2.02

Source URL:
https://gwptoolbox.org/resource/system-dynamics-model-supporting-decision-makers-irrigation-water-management