



PRACTICE ABSTRACT

Digitalisation: Needs and Impacts

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SUSTAINABLE WATER MANAGEMENT IN TRIKALA, GREECE

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The Sustainable Water Management Living Lab operates in a region with no water scarcity issues in most parts of it. The amplitude of water resources in the region can cover the agricultural and everyday needs of citizens. However, local authority representatives have realised that the current water management practices are sub-optimal and inadequate to ensure a mid-long term sustainable use of water resources for the region. Therefore, *'How to better manage water resources for the benefit of both, farming purposes and the everyday needs of the citizens?'* was jointly approved as the focal question for the purpose of this Living Lab.

Living Lab Sustainable Water Management
Key Digital Technologies Smart Water Metering Systems, Remote Sensors
Keywords Water, sustainability, smart, rural
More info: https://desira2020.eu/trikala-greece/

The workshops conducted in the scope of this Living Lab engulfed a diverse group of stakeholders representing regional water management agencies and local administrative units, facilitated the identification of the main water management problems and the assessment of primary needs to ensure better management practices of water resources.

The most prevalent needs highlighted:

- Increase of the collaboration between the regional water management authorities
- Reduce the fragmentation of roles and responsibilities in monitoring and management of water supplies
- Need for a revised regional/national regulatory framework
- Increase the level of public awareness for sustainable water management practices
- Emphasise on the adoption of digital tools to increase administrative coordination and raise public awareness.



Water is a resource of high importance for the region of Trikala, as water streams directly affect both the primary sector (agriculture, animal husbandry) and the tertiary sector (tourism) as well as the recreational activities and the overall wellbeing and sanitation of the citizens in the prefecture. The Social-Cyber-Physical system examined inside the scope of this Living Lab engulfs the main water related natural and physical entities (irrigation network, main rivers, water streams, farming & livestock related entities) of the region, and examines their interplay with the societal actors and administrative institutions. It also tries to identify the impact of the adopted digital tools and services (water measurement sensors, data gathering repositories, data exchange platforms) for best water management practices. To date, a small magnitude of impacts has been generated from digitalisation in relation with improving the management of water resources in the region in respect of both agricultural needs at farm level and public authority and local community levels. The Municipality of Trikala has managed to keep a steady progress over the past years towards the adoption of smart services for the improvement of daily life of citizens, water management in the region however is still an area where the local authorities should put greater focus on.

