

Insights of Decentralization Concept for Upscaling the Water Quality in Remotely Rural Areas, Case Study: the Delta of the Danube River.

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Abstract

The current study provides an assessment of the manner that needs to be considered to improve the water quality in rural areas and camp sites by using decentralized technologies. Therefore, different technologies were investigated and the worldwide aspects of water supply services were examined. Subsequently, an insight into the economic importance of water decentralization concepts was provided, followed by a description of the features of the most reliable developments regarding the decentralized technologies for the treatment of surface water or ground water for drinking purposes. A practical water decentralization concept based on the development of a strategy able to identify the most effective soft technology regarding the economic and technical characteristics was carried out so as to support the urgent need of improving drinking water quality in the rural most affected areas in Crete Island. Conclusions were drawn as to what kind of decentralized concepts would be most suitable to enable the communities from rural areas and camp sites to develop their individual systems for improving water quality and add value to both communities and environment.

Keywords: Camping Sites; Economic Value; Environmental Value; Water Quality.

1. Introduction