

# Implementing Socially Acceptable Nature-Based Solutions in Europe

Ramazan Sari<sup>1</sup>

Department of Technology, Management and Economics  
Technical University of Denmark  
Lyngby, Denmark  
ramsa@dtu.dk

Ugur Soytaş

Department of Technology, Management and Economics  
Technical University of Denmark  
Lyngby, Denmark  
uguso@dtu.dk

Dilge Guldehen Kanoglu-Ozkan  
Middle East Technical University  
Earth System Sciences  
Ankara 06800, Turkey  
dilge.kanoglu@metu.edu.tr

Aysen Sivrikaya

Department of Economics  
Hacettepe University, Ankara, Turkey  
aysens@hacettepe.edu.tr

## Abstract

Re-introducing nature into urban areas (i.e., nature-based solutions) is a challenging but vital task for climate change mitigation and adaptation. However, the impact and effectiveness of nature-based solutions (NBS) are contingent upon the social acceptability of implemented measures. This study uses a dynamic and adaptive social acceptance framework that shows how data-driven science can inform the integration of NBS into cities while also ensuring that the public embraces these solutions. We apply the framework to four different cases: METU Forest in Ankara, Turkey; Tisza River Bank in Szeged, Hungary; Forest Garden in Alcalá de Henares, Spain; and Quarries in Milan, Italy. The results of the social acceptance models, which use primary data collected from these four cities, indicate that the key factor affecting trust, which in turn drives social acceptance, is procedural fairness. Perceived risks and benefits are two common drivers that directly affect social acceptance across the four case studies. Other direct or indirect drivers of social acceptance vary across case studies. These results have

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<sup>1</sup> Presenting Author

important implications for urban planners who want to utilize NBSs to improve climate resilience in urban areas.