

Assessing Local Authorities' Interest in Addressing Urban Challenges through Nature Based Solutions in Romania

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Abstract : Contemporary global environmental challenges must be primarily addressed at local levels. Cities are under continuous pressure as they must ensure high quality of life levels for their citizens and at the same time to adapt and address specific environmental issues. Innovative solutions using natural features or mimicking natural systems are endorsed by the scientific community as efficient approaches for both mitigating climate change effects and the decrease of environmental quality and for maintaining high standards of living for urban dwellers. The aim of this study was to assess whether Romanian cities' authorities are considering nature-based innovation as solutions for their planning, management, and environmental issues. Data were gathered by applying 140 questionnaires to urban authorities throughout the country. The questionnaire was designed for assessing local policy makers' perspective over the efficiency of nature-based innovations as a tool to address specific challenges. It also focused on extracting data about financing sources and challenges they must overcome for adopting nature-based approaches. The gathered results from the municipalities participating in our study were statistically processed, and they revealed that Romanian city managers acknowledge the benefits of nature-based innovations, but investments in this sector are not on top of their priorities. More than 90% of the selected cities have agreed that in the last 10 years, their major concern was to expand the grey infrastructure (roads and public amenities) using traditional approaches. When asked how they would react if faced with different socio-economic and environmental challenges, local urban managers indicated investments nature-based solutions as a priority only in case of biodiversity loss and extreme weather, while for other 14 proposed scenarios, they would embrace the business-as-usual approach. Our study indicates that while new concepts of sustainable urban planning emerge within the scientific community, local authorities need more time to understand and implement them. Without the proper knowledge, personnel, policies, or dedicated budgets, local administrators will not embrace nature-based innovations as solutions for their challenges.

Keywords : nature based innovations, perception analysis, policy making, urban planning

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