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Between Global Data and Local Living Quality: *Risks and possibilities for improving uGBI*

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As cities grow and face increasing ecological and social challenges, integrating urban green-blue infrastructure (uGBI) is essential for enhancing resilience and quality of life. However, despite its proven benefits, the adaptive capacity of uGBI depends mainly on contextual aspects. Among these are morphological and climate aspects, governance challenges, land-use regulations, and socio-cultural factors. Developing global knowledge for these locally embedded policies is sometimes successful, but it might also lead to pitfalls and trade-offs, particularly in low-middle-income countries (LMICs). Improving international cooperation and knowledge exchange on the science-policy interface could enhance the effectiveness of these policies.

Recently, different mapping methodologies have been proposed to bridge local and global knowledge to arrive at better-informed uGBI policies. In this paper, we will compare ecosystem, heritage, and landscape approaches to uGBI to identify how mapping methodologies can contribute to more balanced and sustainable urban development. These methodologies will be compared by reviewing their theoretical focus and research objectives, use of data (qualitative or quantitative), relationship to everyday practices, and connection to planning institutions. Their application in LMICs is of specific interest here.

This research contributes to the ongoing discourse on sustainable urban development by clarifying the critical obstacles that hinder uGBI implementation. The paper will contribute to RUGBIS research, a collaboration of PBL, TUD, and VU.