

Eco-Infrastructures: A Multidimensional System Approach for Urban Ecology

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Abstract : Given the potential devastation associated with future climate change related disasters, it is vital to change the way we build and manage our cities, through new strategies to reconfigure them and their infrastructures in ways that help secure their reproduction. This leads to a kaleidoscopic view of the city that recognizes the interrelationships of energy, water, transportation, and solid waste. These interrelationships apply across sectors and with respect to the built form of the city. The paper aims at a long-term climate resilience of cities and their critical infrastructures, and sets out an argument for including an eco-infrastructure-based approach in strategies to address climate change. As these ecosystems have a critical role to play in building resilience and reducing vulnerabilities in cities, communities and economies at risk, the enhanced protection and management of ecosystems, biological resources and habitats can mitigate impacts and contribute to solutions as nations and cities strive to adapt to climate change.

Keywords : ecology, ecosystem, infrastructure, climate change, urban

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