Resilience in Urban Landscapes: Meeting the Challenges of Rapid Global Urban Transformation

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For the first time in history, a majority of people live in cities, and urbanization is expected to add almost 2 billion new urban residents by 2030. In developing countries that are urbanizing rapidly, the number of urban poor will increase dramatically, potentially further deteriorating local ecosystems, fouling drinking water, polluting the air, and causing rapid land cover changes. In developed countries, urbanization will continue to increase the ecological footprints of residents, impacting regional and global ecosystems. There is growing awareness that cities affect almost every ecosystem on Earth and are increasingly vulnerable to environmental change. In dealing with these immense challenges, resilience theory offers three interesting aspects: the issue of thresholds effects, drivers and responses in the social and ecological system, and issues of scale. Urban resilience maybe conceptualized through four perspectives or domains: (i) Governance networks; (ii) Metabolic flows; (iii) Social dynamics; and (iv) Built environment. All problems, actions and decisions in the urban landscape should be addressed through these four domains/perspectives and might generate new insights for urban policy and planning for sustainable development.