

Title: Global change in the urban century

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Early in the 21st Century, the human population has crossed a threshold: more people now live in cities than in rural environments. In the Urban Century cities will continue to play important roles as both drivers and responders to global environmental change. For the five major types of globally prevalent environmental change—land use and cover change, altered biogeochemical cycles, climate change, altered hydrosystems, and loss of biodiversity—human activities associated with urban areas in some cases drive local change but have limited global reach and for others, the ultimate source of global change can be traced to urban areas with their concentrations of human productive and consumptive activities. This talk will focus on altered biogeochemical cycles and hydrosystems, drawing examples from the author's research in a desert city of the southwestern USA. An ecosystem approach to understanding the connections between city dwellers and local to regional to global scales offers a framework for finding solutions and making choices that promote urban sustainability.