research highlights

URBAN AGRICULTURE

Reality on the ground

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Credit: Carolyn Cole / Contributor / Los Angeles Times / Getty

Urban planners and food experts have talked up the possibility of introducing and expanding controlled environment agriculture (CEA) in cities to reduce the carbon impacts, 'food miles' and inequalities in current industrial agriculture by using forms of vertical, hydroponic and/or rooftop farming to grow crops.

However, these potential beneficial impacts of CEA are based on a large set of assumptions about urban contexts, according to Wylie Goodman and Jennifer Minner at Cornell University; such contexts include the location and size of the plots of land used for CEA, the types of agriculture used, whether the farms are commercially or institutionally oriented, and how much the workers are paid. Using New York City as a case study, they find that while existing CEA operations do produce above-average crop yields compared to the nation as a whole, and there is enough land for CEA in the city itself to supply New Yorkers' needs for leafy greens, the produce from commercial operations are so expensive as to preclude low-income communities from benefitting from CEA, while farm labourers are unlikely to be paid a living wage. The positive social outcomes of urban agriculture depend not only on its physical form, such as greenhouses or rooftops, but also whether it is for-profit or nonprofit.

Ryan Scarrow

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