

Urban Agriculture for Sustainable Cities: Using Wastewater and Urban Wetlands as Resource

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Abstract : This paper deals with the concept of ecologically engineered system for sustainable agriculture production with the view of sustainable cities development. Sustainable cities offer numerous eco-services to its inhabitants, and where, among other issues, wastewater nutrients can be considered to be a valuable resource to be used for a sustainable enhancement of urban agriculture in wetlands. Existing cities can be transferred from being only consumer of food and other agriculture product into important resource conserving and sustainable generators of these products. The review provides the food production capacity through introduction of wastewater into urban wetlands, potential for nutrient recovery and ecological engineering intervention to reduce the risk of food contamination by pathogens. Finally, we discuss the potential nutrients accumulating in our cities, as an important aspect of sustainable urban development.

Keywords : ecological engineering, nutrient recovery, pathogens, urban agriculture, wetlands

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