



## **Greening the city with multifunctional urban agriculture: a framework for land use management based on the case of Beijing**

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Though great efforts have been made on agricultural land conservation against urban sprawl, substantial agricultural lands continue to be lost around the world. Some researchers even doubt whether agricultural lands should be preserved in urban area considering the conflicts between agricultural activities and urban population. The concept of “Urban Agriculture” provides an alternative view to address the problem. It claims that agriculture in and around the city can provide multiple benefits to urban populations, including landscape amenity, education, recreation, waste recycling, the supply of local fresh food and others. Urban agriculture should be an integrated part of urban system, contributing to self-sufficient and resilient urban communities. However, not all agricultural forms are necessarily multifunctional and beneficial, making it more complicated to recognise urban agriculture in city planning. Appropriate land use management and improvement of agricultural practices based upon the delivering mechanism of agricultural functions to societies are needed. Many cities in developing countries now come into a second stage of urbanisation emphasizing primarily on greening the city. Ignorance of the multifunctionality of agriculture has led to an even accelerated loss of agricultural lands. The objective of the study is trying to build a framework for land use management integrating multifunctional urban agriculture for those cities based upon a case study of Beijing. Beijing is the capital city of China. It is a typical example of the Chinese cities or even Asian cities. This study gives a dynamic analysis of the change of land use, agricultural multifunctionality and related policies in Beijing through the period of 1960-2015, to reveal the change of political consideration of agricultural functions and the reasons, as well as its influences on land use management. Finally, a framework is provided to integrate the multifunctionality of agriculture into land use management for the purpose of greening the city.

Keywords: urban agriculture; multifunctionality; land use; policy; framework; Beijing