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### Farm Life in the City - A Taxonomy for Smart Urban Agriculture

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# Farm Life in the City

## A Taxonomy for Smart Urban Agriculture

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**Abstract.** With more than half of the global population living in cities, current food production has reached sustainability limits. Urban agriculture has moved from an issue at the edge of public discourse to its center to feed future city dwellers. However, cities are hostile for terrestrial life, jeopardizing the availability of important primary resources, such as air, water, or soil. While smart technologies on traditional farms have accelerated the past years (e.g., autonomous tractors), we know little about their potential and applicability in urban areas. Until today, we have little theoretical insights into smart urban agriculture. We offer a multi-layer taxonomy of smart urban agriculture technologies that contributes to the descriptive knowledge in this field while also elucidating the impact on the transformation of cities towards sustainability.

**Keywords:** smart city, smart urban agriculture, urban agriculture, smart farming, sustainability.

*The peer-reviewed full version is available upon request*