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Landscape Dimension in the Built Environment: The Spatial Operative of An Integrated MicroAgricultureUnit

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# Landscape Dimension in the Built Environment:

# The Spatial Operative of An Integrated MicroAgricultureUnit


## Abstract

The rapid urbanization creates an increased demand for food supply and security in urban system. The imminent risks stemmed from climate change appeal for a greater effort in an overhaul of the customary practices in the planning and management of the urban systems. Urban centers should accommodate the growing need for green infrastructure and edible landscape; options such as farming alternative has gained interest as a possible solution to the urban-scape and the food production stability for the urban inhabitants. This article presents the systemic approach to building integrated agriculture unit prototype's design thinking and proposed a prototype model allowing the locality and place to be incorporated into the design framework. The research concludes that: (1) in line with human-nature connection and raising its priority level within both design research and design practice should consider the environmental, social, economic and spatial criteria for the design thinking exploration; (2) the design results in a flexible system model of the micro building integrated agriculture unit, allowing the units to fit either indoor or outdoor, as a probable solution suited for the locality and the increasing demand for edible greens; (3) indoor units need further study in integration with the indoor climate control and automation as well as added indoor air purification and sensor functions. (4) Prototype units should be capable of providing locally available edible production and social well-being for the urban system.


Keywords –Systemic Design Thinking;Integrated Agriculture Unit; Micro Unit Prototype; Landscape Infrastructure; Spatial Operative.