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A REVIEW STUDY ON VERTICAL FARMING TECHNOLOGY

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ABSTRACT

In vertical farming, crops are produced inside, under artificial conditions of light and temperature. Crops are cultivated inside, under artificial circumstances of light and temperature. It aims at greater productivity in fewer areas lately, the application of Vertical Farming into cities has grown. Vertical farming is a growing vegetable vertically using modern agricultural techniques, which integrates the design of building and farms all together in a high-rise building within the cities. This technology has to be apparent both in the agricultural method and architectural technology combined, however, nothing has been written on the technology of Vertical Farming. In this research, technology as one of the key component of Vertical farming is addressed and evaluated using qualitative method. In the first, identifying current and prospective VF projects in Europe, Asia, and America from 2009 to 2016. Then a complete literature examined on technology and methods that are utilized in VF projects. The research materials were generated from 62 distinct sources from 2007 to 2016. The technologies provided may be a guide for implementation development and planning for creative and agricultural industries of Vertical Farming in cities. In reality, it may serve as a foundation for assessing future agriculture and architecture together. The integration of food production into the urban areas had been viewed as a link to the city and its inhabitants. It simultaneously helps to decrease poverty, contributes to food safety, and improves contextual sustainability and human well-being.

KEYWORDS: *Agriculture, Food Production, Farming, Technology, Vertical Farming.*

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