



## Urban Horticulture: Sustaining Horticulture in Cities

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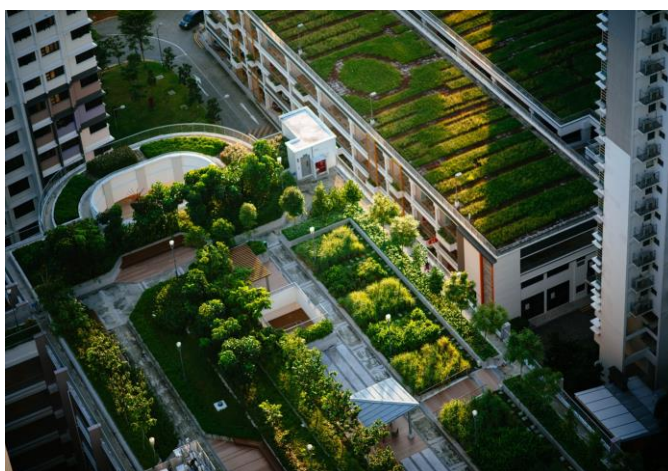
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### INTRODUCTION

Urban horticulture is the study of the relationship between horticultural crops and the urban environment. Traditionally, urban horticulture has been dominated by backyard gardeners, community gardeners, and small-scale commercial growers in urban and peri-urban spaces. Residents can benefit from urban horticulture because growing plants in a city create a source of food, flowers, and other plant resources that don't have to be shipped from far-away farms. Plants grown within an urban garden include food plants like fruits, vegetables, and herbs, as well as medicinal plants and decorative floral plants.



### ADVANTAGE OF URBAN HORTICULTURE

Horticulture is a practical and applied science, which means it can have a significance in our daily lives such as:-

- Effective for environmental pollution and waste Management
- Ensures Food Supply and Sustainability
- Food Security
- Improvement of Climate and Microclimate
- Conservation of Biodiversity
- Source of Recreation and Reduction of

- Gender Inequality
- Self-Reliance and Land Management of Cities
- Public Health

### Production practices

- **Community Gardens:** Community gardening is known as the collective cultivation of plants on a shared area by a group of community members. These gardens are located in urban environments and can be located in various areas of a city, and are usually owned or managed by the municipality.
- **Terrace gardening:** is a type of gardening that involves growing plants in raised beds on a terrace, rooftop, or other outdoor space with limited or no access to ground soil. In a terrace garden, plants are grown in beds filled with soil or other growing media, and are often irrigated and fertilized using hand-held watering cans or drip irrigation systems.
- **Window gardens:-** A garden window or greenhouse window is a type of fenestration constructed as an exterior projection from a building, providing display space in the window. As the name suggests, small potted plants are often displayed in a garden window.
- **Container plantings:** Container gardening is when plants are grown in containers such

as pots rather than into the ground. Container gardening is for urban areas where having an actual garden is not possible. It is space-efficient and mobile, so it can be arranged to fit wherever you choose to set up your garden. The beauty of container gardening is that you can reuse old containers around your home for your garden, so it's budget and environmentally friendly.

- **Meditation gardens:** A meditation garden is a space that welcomes you into a state of mind, bringing peace and solace. It is a dedicated area that you want to go to for healing, meditating, practicing yoga, boosting your energy, or finding relaxation. Meditation gardens often go hand in hand with Zen and healing gardens as they all serve the same purpose. These gardens are gaining popularity with hospitals, schools, public gardens, and private residences.
- **Home Gardening or Kitchen Gardening:** Kitchen garden is the growing of fruits and vegetables at the backyard of house by using kitchen waste water. Otherwise called as Home garden or Nutrition garden or Kitchen gardening or Vegetable gardening. Advantages of Kitchen garden : Supply fresh fruits and vegetables high in nutritive value.



## Challenges of Urban Horticulture

- **Limited Space, Infinite Creativity**

The most apparent challenge of urban gardening is the limited space available. Embrace your creativity and explore various vertical gardening techniques to make the most of your space. Utilize walls, railings, and even ceilings to hang planters and create stunning green displays.

- **Sunlight Scarcity**

Sunlight is the life force of plants, and in the city's concrete landscape, it can be scarce. Identify the sunniest spots in your space and choose plants that thrive in low-light conditions for shadier areas. Additionally, consider investing in energy-efficient grow lights to supplement natural sunlight and keep your plants thriving day and night.

- **Soil Quality Woes**

Though urban soil may not be the best for gardening, fear not! Choose container gardening or raised beds so you can manage the soil. Add organic debris and compost to the soil to improve its quality and provide your plants the nutrients they require to thrive.

- **Watering Woes**

Watering can be challenging in an urban environment, especially for those with busy schedules. Embrace self-watering systems, drip irrigation, or install rainwater harvesting solutions to ensure your plants stay hydrated without constant attention.

- **Pests and Pollinators**

Urban environments attract pests, but don't reach for harmful chemicals just yet! Embrace natural pest control methods like companion planting, neem oil sprays, or introducing beneficial insects to keep unwanted visitors at bay. For

pollinators, attract bees and butterflies with native plants that provide nectar and habitat.

- **Managing Microclimates**

In the city, microclimates are common, creating areas with varying temperatures and humidity levels. Observe these microclimates in your garden and choose plants that are best suited to each area. Adaptability and observation are key to your urban gardening success.

- **Noise and Air Pollution**

City pollution can challenge the health of your plants. Combat air pollution by selecting air-purifying plants like spider plants and peace lilies. To mitigate noise, create natural sound barriers with tall plants or bamboo screens to create a peaceful haven within the bustling cityscape.

- **Building a Strong Community**

Urban gardening can be a solitary pursuit, but it doesn't have to be. Join local gardening groups, participate in community gardening projects, or initiate gardening events to connect with like-minded individuals. Building a strong gardening community provides support, knowledge sharing, and a sense of camaraderie.

- **Time Management**

Busy urban lifestyles often leave little time for gardening. Opt for low-maintenance plants, create a garden schedule, and enlist the help of friends or family to ensure your garden thrives even amidst a hectic schedule.

- **Embrace Sustainable Practices**

In the city, space and resources are precious. Embrace sustainable practices like composting, rainwater harvesting, and upcycling materials for garden projects. These eco-friendly habits not only benefit

your garden but also contribute to a greener, more sustainable city.

### CONCLUSIONS

Urban horticulture has positive effects on social, economic, food, and ecological sustainability within cities. It increases community livelihood, saves energy, sustains the environment, and improves health through fresh food supplies in urban environments. It also

offers recreational and aesthetic value to urban landscapes and individual homeowners. During the pandemic conditions of COVID-19, it offers a more consistent food supply, prevents markets disruptions, increases food scarcity, and helps with stabilizing food prices. In addition, urban horticulture can help people become physically stronger and spiritually enriched; it can be considered a key component to promoting public health.