



From Pavements to Produce: Exploring the Urban Farming Movement in India

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Food security in India is a significant concern due to its large population, varying agricultural conditions and socio-economic challenges. Urban agriculture refers to the practice of cultivating, processing and distributing food within urban and peri-urban areas. It involves growing crops, raising animals and producing food products in urban settings, often on small plots of land or in non-traditional spaces such as rooftops, balconies, vacant lots and vertical structures. Urban agriculture encompasses a wide range of activities, from small-scale backyard gardens and community gardens to commercial urban farms and innovative techniques such as hydroponics, aquaponics, aeroponics and rooftop farming.

Urban agriculture has gained popularity worldwide due to several reasons:

- **Food Security and Access:** Urban agriculture helps increase local food production, reducing dependence on distant rural sources and improving access to fresh, healthy food for urban populations, especially in underserved communities or "food deserts."
- **Environmental Sustainability:** By producing food in cities, urban agriculture reduces the carbon footprint associated with long-distance transportation and decreases pressure on rural land, water, and other natural resources. It can also contribute to urban greening, improve air quality and mitigate urban heat island effects.
- **Community Development:** Urban agriculture creates opportunities for community engagement, social interaction and skill-building. It fosters a sense of ownership, enhances social cohesion and provides spaces for education, recreation and cultural activities.
- **Economic Opportunities:** Urban agriculture can generate income and employment opportunities, particularly in areas with high unemployment rates. It promotes entrepreneurship, local market development and the potential for value-added food processing and distribution.
- **Waste Reduction and Resource Efficiency:** Urban agriculture can utilize organic waste materials, such as compost or wastewater, as valuable inputs for soil enrichment or nutrient cycling. It promotes circular economy principles by closing the loop on nutrient and waste management.

Despite its many benefits, urban agriculture faces challenges, including limited access to land, soil contamination, zoning restrictions, lack of technical knowledge and financial constraints. Overcoming these challenges requires supportive policies, urban planning frameworks that integrate agriculture, access to training and resources and partnerships between stakeholders, including governments, communities, non-profit organizations and private enterprises. Urban agriculture in India has witnessed several successful initiatives that have contributed to food security, environmental sustainability and community development.

Delhi Smart Urban Farming Initiative: The partnership between the IARI and the Horticulture unit of the Environment Department, Government of National Capital Territory of Delhi, was facilitated by the Development Commission of Delhi (DDC) to create and implement the Smart Urban Farming Initiative of the Delhi Government.

Mumbai's Dharavi Urban Farming Project: In the heart of Mumbai's Dharavi slum, one of Asia's largest slums, a community-led urban farming project has transformed open spaces and rooftops into productive gardens. Initiated by NGOs like the SNEHA (Society for Nutrition, Education and Health Action) and supported by local residents, the project has created opportunities for growing vegetables, herbs, and medicinal plants. The project not only provides fresh and affordable produce to the community but also improves nutrition and enhances the overall well-being of residents.

Bangalore's Green Path: Bangalore, known as India's Silicon Valley, is also witnessing a rise in urban agriculture initiatives. One such success story is the Green Path, a community-driven initiative that transformed a barren plot of land into a vibrant urban farm. The project focuses on organic farming, permaculture techniques and composting. It provides training programs and workshops to promote sustainable farming practices, and the produce is sold through weekly farmers' markets, promoting local food systems and community engagement.

Hyderabad's Farming the City: The Farming the City project in Hyderabad focuses on transforming underutilized urban spaces into productive gardens and green spaces. Led by individuals and community-based organizations, the initiative promotes organic farming, vertical gardening and hydroponics. It not only improves access to fresh produce but also promotes urban biodiversity, water conservation and waste management. The project has inspired many residents to take up urban agriculture, contributing to a more sustainable and resilient city.

Chennai's My Green Terrace: My Green Terrace is a successful rooftop gardening initiative in Chennai. It promotes organic farming and vertical gardening techniques to maximize space utilization. The project provides training, resources and support to individuals and communities interested in rooftop gardening. Through this initiative, residents have been able to grow their own food, reduce their carbon footprint and create greener and cooler urban environments.

Starting from 2021, **Bihar** has been promoting terrace gardening in five smart cities by providing subsidies for the costs associated with inputs.

These success stories highlight the potential of urban agriculture in India and demonstrate how it can positively impact food security, environmental sustainability and community well-being. They serve as inspiring examples for individuals, communities and policymakers to embrace and expand urban agriculture initiatives across the country.

Conclusion

In summary, urban agriculture plays a vital role in creating sustainable and resilient cities by improving food security, environmental sustainability, community well-being and economic opportunities. It offers innovative solutions to transform urban spaces into productive landscapes that reconnect people with the food they consume and the natural systems that sustain them.

References

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