

UPSC PREPARATION

Urban Farming

Producing or growing food in a city or other heavily populated areas is known as Urban farming. It refers to agricultural practices in urban and their peri-urban areas. It increases the availability of food for people in need by supporting and encouraging the establishment of gardens on unused land and space.

Latest context: The Delhi government will launch a campaign to promote urban farming, under which people will be encouraged to grow vegetables and fruits in their houses.

What is Urban Farming?

Urban Farming is also known as urban agriculture. It means growing crops and raising small livestock or milk cows in small areas like vacant plots, gardens, verges, balconies and containers. It provides a source of food and income for urban dwellers. The products thus produced can be used for their own consumption or sale in neighbourhood markets.

Some Common Methods Used in Urban Farming

Urban Farming methods can be implemented in apartment buildings and condos, on top of rooftops, next to restaurants and other businesses, in backyards, at schools etc. Some common methods of urban farming are

- **Vertical Farming:** In Vertical Farming, food crops can be cultivated easily in urban areas by planting in vertically stacked layers in order to save space and use minimal energy and water for irrigation.
- **Hydroponics:** It is a way to skip the soil, sub in a different material to support the roots of the plant, and grow crops directly in nutrient-rich water. There are multiple approaches to designing hydroponic systems, but the core elements are essentially the same.
- **Aquaponics:** It represents the relationship between water, aquatic life, bacteria, nutrient dynamics, and plants that grow together in waterways all over the world. Taking cues from nature, aquaponics harnesses the power of bio-integrating these individual components: Exchanging the waste by-product from the fish as a food for the bacteria, to be converted into a perfect fertilizer for the plants, to return the water in a clean and safe form to the fish.
- **Shipping Container Farms:** Container farming is the growing of plants in shipping containers instead of planting them in the ground. Both edible, as well as non-edible plants, can be grown in containers. Container farming lessens the problem of soil-borne diseases and eliminates weeds. This type of gardening allows for easier monitoring of moisture, temperature, and sunlight.

- **Rooftop Farming:** The practice of cultivating food on the rooftop of buildings is referred to as rooftop farming.
- **Backyard Gardens:** It is the practice of utilizing any kind of space in the backyard to grow and produce your own food.

Importance of Urban Farming

- Provides food security and financial security to urban dwellers.
- It empowers people who are unemployed, underemployed, laid off, malnourished, have unhealthy diets, suffer from hunger or food insecurity.
- It helps people to move from stagnant, difficult conditions to vibrant, healthy and productive lifestyles.

Benefits of Urban Farming

The following are the benefits of urban farming

- **Business Growth:** Urban farming helps stimulate the local economy through job creation, income generation, and the growth of small businesses.
- **Job Creation:** Urban farms can offer them valuable skills and education in addition to a steady source of income to many unemployed, even if it is seasonal work.
- **Urban Redevelopment:** Unused lands and wastelands can be used for cultivation purposes. It creates more green space and reduces pollution. Areas with community gardens and urban farms also increase property value.
- **Health and Wellness:** Urban farming creates fresh produce closer to where it's ultimately consumed. Food from urban farms is far more likely to be perfectly ripe, more nutritious, and produced in season.
- **Less Food Waste:** People produce only what they need. This reduces food wastage to a large extent.
- **Low Investment:** Urban farming requires less space, and initial infrastructure and setup costs. The installation cost is very low when compared to traditional farming.
- **Water Conservation:** The usage of methods like hydroponics, aquaponics etc. allow them to use less water.