

# URBAN PLANNING IN A SUSTAINABLE WAY

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The present human population is experiencing rapid urban sprawl. 68% of the world's population is projected to be urban by the year 2050. Megacities are emerging, and with the overall growth of the world's population, cities are facing challenges with their social systems, natural resource management, housing, transport, and infrastructure, to name a few.

Urban greening refers to public landscaping and urban forestry projects that create mutually beneficial relationships between city dwellers and their environments, in short, it means making urban areas green

Numerous benefits come with urban green planning. Residents get the opportunity of exposure to nature, urban biodiversity is well maintained and protected, environmental hazards like air and noise pollution are reduced in the residential areas, repercussions of extreme weather conditions like floods, heatwaves, and extreme rainfall are mitigated, quality and status of urban living is enhanced, health and well being of residents is improved.

Environmental awareness has led to sustainable area planning of cities. Cities are being built with features like LEED-certified buildings, carbon offsetting, urban forestry, reduced air pollutant output, open-space infrastructure, and green roofs.

Studies show that individuals prefer to pay more rent and live in buildings with a green cover or which are green-certified. Cities are now supporting growing urbanization with green buildings. These buildings take up a lesser land area compared to traditional grey infrastructure and depict the potential for the survival of plants and animal communities alongside humans.

Urban planning has evolved over the years, and tall buildings are being designed infused with vegetation. Such ideas are top-notch as they integrate ecosystem services with the urban planning of cities. The Bosco Verticale in Milan, Italy, is a prominent example of such a building.



Figure 1 Green buildings, Source: ESA Business Applications: Online

Urban ecology practiced rightly has led to species preservation. Trees are monitored, protected, and their habitats are mapped, which has resulted in increased transpiration rates and increased biomass production in the urban area.

**Here are some ways by which Urban Planning can be followed sustainably:**

## 1. Promoting Urban agriculture

By mapping out agricultural land in an urban area, we can combat the problems of long supply chains and high CO<sub>2</sub> emissions while transporting food from rural to urban areas. Food distribution becomes easy, and people can access nutritious food in the cities.



Figure 2 Urban green spaces, Source: Inhabitat Pinterest: Online

## 2. Reducing and managing food waste

Urban areas solely; are responsible for 70% of the global food supply. Poor food planning, loose packaging, improper storage, and cultural practices have led to food waste piling up in city landfills. In the landfills, the waste decomposes and generates methane, which is a harmful Greenhouse gas.

## 3. Building green spaces

Green spaces improve air quality, mitigate city temperatures, reduce the heat island effect, reduce surface runoff, encourage physical activity and health, and also boost the aesthetic appeal of the city. Green urban spaces like large landscaped parks act as the “lungs of the city.” Green corridors, green roofs, green facades further strengthen the city’s green landscape.

## 4. Connecting cities with nearby rural areas

Cities are heavily dependent on their adjacent rural areas for the labor force, food transport, water, and food waste disposal. Urban planning can be done to incorporate urban and large rural areas and interconnect them to enjoy varied ecosystem services.

### References:

1. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/342289/Urban-Green-Spaces\\_EN\\_WHO\\_web3.pdf](https://www.euro.who.int/__data/assets/pdf_file/0010/342289/Urban-Green-Spaces_EN_WHO_web3.pdf)
2. <https://www.ansgroupglobal.com/blog/importance-urban-greening>

Many projects are being actively taken up by different organizations and nations to implement urban greening plans. One such initiative is taken up by London, called the “London urban greening plan.” The plan enunciates the aim to increase the amount of surface area greened in the Central Activities Zone by 5% by 2030, and a further 5% by 2050. The plan also highlights London’s aim to plant an extra two million trees in the city by 2025. These plans were introduced in hopes of reducing the local temperatures of the city after London faced a major heatwave in 2003 that led to the death of over 600 individuals in the city.

In recent times, various other urban green infrastructures like living walls and green roofs are being introduced. Urban greening has the potential to combat climate change and offer an eco-friendly lifestyle to urban citizens.

Urban ecology uses green infrastructures and green planning to embrace nature and design cities that are sustainable and made for the future. We must work with nature, inculcate the native ecosystems, enjoy the ecological productivity that nature has to offer, and see our cities change for the better.