

Urban forests: A promising solution for a healthier and more sustainable environment

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“The mulberry tree spreads its lust greenery wide across the vast courtyard. At noon, faint rays of sunlight would penetrate through the thick mulberry leaves, painting dots of sunny flowers on the yard, mesmerizing those passing by.”

—In “Dream”; [The Kingfisher Story Collection](#) (2022)

[SCIENCE COMMUNICATION]

As global temperatures rise and extreme weather events become more frequent, the focus on urban trees is intensifying. Research highlights their crucial role in mitigating climate change, improving public health, and providing significant economic benefits [1].

Urban trees function as natural air conditioners, cooling the air and surrounding surfaces, thereby reducing the “urban heat island” effect—a phenomenon where cities experience higher temperatures than surrounding areas due to heat-absorbing infrastructure. This cooling effect directly benefits human health by lowering the risks associated with rising temperatures, such as increased mortality and morbidity from cardiovascular, pulmonary, and renal diseases [2,3]. Globally, an estimated 356,000 lives are lost annually due to heat stress [4].

Beyond health benefits, urban trees offer significant environmental advantages. During photosynthesis, they absorb carbon dioxide, a major greenhouse gas, and release oxygen. This process not only purifies the air but also helps combat climate change.

Economically, urban trees present numerous opportunities. By shading buildings and reducing the need for air conditioning, they can significantly lower energy consumption and costs. Research shows that increased tree cover can reduce energy demand for indoor cooling by 2.3% to 90%, depending on the study [5].



Illustration. Urban trees in Ho Chi Minh City (Source: Dan Tri)

Given these benefits, urban reforestation—the process of planting trees in urban areas—is increasingly recognized as a crucial nature-based solution that contributes to a healthier and more sustainable environment.

The escalating climate crisis and its adverse impacts on human health necessitate immediate action. Investing in urban forests is not only an environmental strategy but also an investment in public health and economic well-being. By prioritizing urban reforestation

efforts, we can create greener, cleaner, and healthier cities for current and future generations. Developing an eco-surplus culture among urban residents can improve public support and generate the necessary financial resources for urban forest development [6,7].

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