

Healthy Parks

Healthy People **Central**

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Urban planning and the importance of green space in cities to human and environmental health

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Cities are comprised of more than just buildings and people. The most “liveable” cities – and some of the world’s most famous cities – are as known for their open space as they are for their culture. Hyde Park in London, Central Park in New York, the Bukit Timah Nature Preserve in Singapore, Phoenix Park in Dublin... all are attractions in their own right for inhabitants and visitors alike.

Open space in urban environments provides many advantages: formal and informal sport and recreation, preservation of natural environments, provision of green space and even urban storm water management. Thus green space must be a key consideration in urban planning if the health of a city and its people are both considered important. A new, broader view of parks has also recently been emerging. This new view focuses on how policymakers, practitioners, and the public can begin to think about parks as valuable contributors to larger urban policy objectives, such as job opportunities, youth development, public health, and community building.

As the world’s cities continue to grow, continuing to value green space in cities is vital: but is also a challenge, particularly in developing nations where there is pressure for space, resources and development.

What is urban planning?

Urban planning is a relatively new profession that has arisen from concerns for health and maintaining wellbeing through averting diseases and illnesses associated with overcrowding, poor sanitation, and exposure to environmental pollution.

The way cities and neighborhoods are designed affects whether or not it is easy for people to walk, cycle, participate in active recreation, use public transport, and interact with neighbors and their community. It is believed that urban planning decisions have a key role to play in combatting growing levels of obesity and helping prevent lifestyle-related diseases through facilitating physical activity and positive mental health. In 2007, for the first time in the history of humanity, more than half the world's population was living in cities. Urban populations are expected to increase by 1.5 billion over the next 20 years, while the number of "megacities" will double. By 2015 the UN predicts that there will be 358 "million cities" with one million or more people and 27 "mega-cities" of ten million or more. Much of this growth will happen in developing countries.

There is a growing body of research showing a connection between human health and wellbeing and the design and structure of towns, cities and regions. Research in this emerging field is now being undertaken by several sectors including medical, health promotion, recreational studies, urban studies and planning and transport planning research.

Benefits of green space in cities

There are numerous health benefits associated with access to public open space and parks. Access to vegetated areas such as parks, open spaces, and playgrounds has been associated with better-perceived general health, reduced stress levels, reduced depression and more.

According to the World Health Organization, physical inactivity is a major public health risk. In Australia, nearly half of all Australians do not meet even the 30-minute daily physical activity recommendations. One study found that people who use public open spaces are three times more likely to achieve recommended levels of physical activity than those who do not use the spaces. Users and potential users prefer nearby, attractive, and larger parks and open spaces (Wolf, 2008).

Thus, improving access to public open space has the potential to increase levels of physical activity, and to have mental health benefits and reduce healthcare and other costs.

Urban parks also contribute environmental benefits. A network of parks and open spaces that include protected natural lands, ecological reserves, wetlands, and other green areas is critical to providing healthy habitats for humans, wildlife and plants in these densely built places. Natural landscapes are vital to preserving regional ecosystems amid growing cities.

Parks also help create human and energy efficient cities that can help slow global warming. Linear parks and open spaces make compact living attractive and viable. Trail networks link individual parks, making them easier to bike and walk. Old rail lines can be transformed into greenways, and gardens planted on rooftops maximize limited space and curtail greenhouse gas emissions. Every tree helps fight global warming by reducing the amount of greenhouse gases in the atmosphere and help cool cities.

In the US, an evaluation of the largest 85 cities in the country (population of 57.2 million) found the health savings from parks was an estimated \$3.08 billion. The environmental savings are significant as well. Trees and vegetation in urban parks offer lower cost, natural solutions for addressing storm water runoff and air pollution. One major city, Philadelphia, experienced \$16 million in annual public cost savings as a result of storm water management and air pollution reduction, according to a 2008 report by the Trust for Public Land Center for City Park Excellence.



Creating sustainable cities

There is a growing interest in defining a trajectory for water/climate transition based on a shared vision of what our future relationships with water could look like. Whether these visions are articulated as 'sustainable', 'integrated', 'sensitive' or all three, the focus is the future roles of water in the lives of citizens and in the economy and how those roles fit in the shape of urban development.

The term 'water sensitive cities' (WSC's) has emerged as a useful way to encapsulate the still somewhat fuzzy concepts of an ideal relationship between people, governance, built environment, infrastructure, living ecosystems, resource use (e.g.. energy) and water. It potentially serves a practical purpose – allowing people to share and compare their understanding about emerging water strategies in a way that can help to orient and integrate disparate efforts to deal with challenges. The explicit focus on an urban context is due to cities housing most of the world's people and being the origin of significant impacts on the natural environment. Furthermore, cities are the predominant source of technical and social innovation – performing an important role as drivers or leaders of wider change.

Another factor is the growing focus on a local or regional food economy. The movement for local and regional food – alongside demand for ethical and sustainable food production practices – is growing rapidly, both in Australia and around the world. In North America, Japan, the United Kingdom and other parts of Europe, it has grown so rapidly that it is possible to speak of a still young but maturing ‘creative food economy’.

In many regions, this has been the most dynamic and innovative sector of the food economy for the past two decades, ‘comprised mainly of specialty, local, ethnic and organic food-processing firms that are thriving in response to consumers’ demands for high-quality, local, fresh, ethnic and fusion cuisine’. Demand for local and regional foods is especially strong, driven in part by the ‘dissociation between traditional large firms and the local consumer base’, itself a consequence of a globalized food system that seems to produce ‘food from nowhere’. In this context, cities that encompass or are close to agricultural resources – and related green space – are important.

Developing nations

According to the UN population surveys, India is likely to have 700 million rural poor moving to cities by 2050.

With 45,000 plant and nearly 90,000 animal species, India is considered one of the world’s most mega-diverse countries. Experts suggest continued growth in its urban population could lead to enormous loss of biodiversity. Yet, the country has yet to demonstrate serious planning efforts to address the impact of increased urbanization on the environment.

China, Indonesia, and South Africa – three additional mega-diverse developing countries – are also confronted with a similar situation, where urban planners haven’t incorporated environmental concerns in development.

This isn’t the case in all developing nations. Brazil, home to more than 56,000 plant species, has taken the lead in setting new trends in urban planning. Its “green city” Curitiba has demonstrated that urban planning can be environmentally friendly. Curitiba’s population of 1.8 million consumes 23 per cent less fuel per capita than the Brazilian national average. The city has 16 parks, 14 forests, and over 1,000 green public areas shared by its residents.

Beyond park planning... and beyond the park

Gil Penalosa, long-time advocate for more active cities and director of Canadian organization 8-80 Cities says:

“Successful public places around the world are successful not just because of the design but also because of the management. That’s not just cutting the grass and picking up the garbage. The bigger part of management is how to involve the community in the parks. We need to think of parks more as outdoor community centers where we need to invest in uses and activities so they can fulfill their potential. When we improve parks, we’re really improving quality of life.”