

# Biodiversity for Cities and Slums



Convention on  
Biological Diversity



UNITED NATIONS  
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## FAST FACTS

### URBAN POPULATION

Since 2007 the number of people in cities is believed to have exceeded half of the world's population. By 2050 this is expected to rise to 86% in the more developed and 67% in the less developed regions of the world.

### INFRASTRUCTURE

An estimated USD 6 trillion (around 10% of global GDP) is annually spent on infrastructure, mostly in or for cities, and that could reach USD 10 trillion in 2015. Early changes in the patterns of these investments can have a lasting impact on ecosystems and people.

### SOCIOECONOMIC CONTEXT

Most future urban expansion will occur in areas of low economic and human capacity, which will constrain the capacity and resources for proper management of biodiversity and ecosystem services.

### URBAN EXPANSION

Urban expansion is occurring fast in areas adjacent to biodiversity hotspot and faster in low-elevation, biodiversity-rich coastal zones than in other areas.

more information:

[www.cbd.int/en/subnational](http://www.cbd.int/en/subnational)  
[secretariat@cbd.int](mailto:secretariat@cbd.int)

## Ecosystems and Urban Poverty Reduction

Nowhere is the demand for ecosystem services greater than in cities, due to the large and increasing number of people now residing in urban areas. Furthermore, the wealth that cities attracts results in the intensive use of resources and production of waste. Nevertheless, cities offer a profound **array of possibilities for more efficient lifestyles**.

Ecosystem services relied upon by citizens are produced mostly outside cities, and often at great distances beyond national and even continental borders, thanks to extensive and effective modern supply lines. The urban poor are privy to many ecosystem services only to the extent that they can exchange money for them. Better management of, and access to, some basic locally-produced ecosystem services, however, could **reduce poverty and increase food security** in cities.

Slums are typically built on marginal land, vulnerable to natural risks such as **floods, fire and landslides**. Although the rate of slum growth is decreasing globally and the proportion of

urban populations living in slums has decreased from 39 to 32 per cent between 2000 and 2010, the absolute number of slum dwellers has grown considerably and is expected to continue doing so. Again, **ecosystem services can moderate these effects**. For example, the conservation or restoration of vegetation helps to maintaining slope stability and prevent landslides.

Cities, especially when they develop without formal planning, affect biodiversity through direct encroachment on ecosystems through straightforward land-use change, for example in the form of spontaneous housing development and its associated services and infrastructure. A number of actions are required in order to deal with the formidable issues of informal expansion and ecological degradation. **Ecosystem-based solutions** offer the opportunity to deal with both at the same time. Based on local challenges, a number of local governments are taking steps in this direction.



United Nations Decade on Biodiversity



Nairobi National Park, 7 kilometers from the center of Nairobi, is renowned for its wildlife. More than 100 species of mammals and 400 species of birds occur in the park.

## STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

Cities are not traditionally thought of as an important focus area for biodiversity conservation. However, considering that most people and the vast majority of political and corporate power reside in cities, this is a grave misconception. Studies show that the physical separation experienced by city-dwellers leads to a psychological separation from nature – people care less about biodiversity when they are not exposed to it. People in cities need to care about nature and to vote green if we are to have any chance in stemming the tide of biodiversity loss. Preserving nature in cities is therefore a key mechanism for the conservation of nature everywhere, and for success of the Strategic Plan of the CBD.

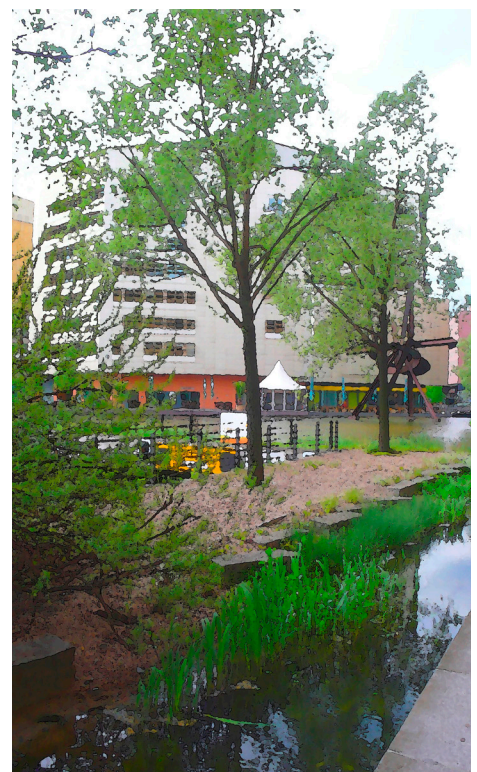
### Leading by example

- **Havana in Cuba** has, out of necessity, become a **leader in urban agriculture**. Starting in the early 1990s, agricultural land reform, reduction of petroleum access and adoption of biological fertilizers and pest controls have brought about a vibrant culture of sustainable food production. Besides the immediate benefit of improved food security, health and income have improved. The agriculture program and related animal husbandry and supporting areas (seeds, organic manure, technical education, etc) are the source of over **350,000 new jobs**.

- The Environmental Management Department of **eThekweni Municipality, South Africa**, has initiated the **'Working for Ecosystems'** program to alleviate poverty through jobs skills training for women, youth and the disabled

in environmental management work. Additionally, eThekweni has established a **medicinal plant nursery** and extension programs to combat over-harvesting in the wild and support the sustainable future of those whose livelihoods depend on medicinal species.

- In **Nueva Vizcaya, the Philippines**, an innovative move from a traditional watershed management approach to the country's first watershed co-management model was piloted in the Lower Magat Forest Reserve in 1998. A Memorandum of Agreement between the local government units of Nueva Vizcaya, the Department of Environment and Natural Resources, individuals, associations, cooperatives and corporations to **protect and manage the watershed** in partnership with local communities.



Example of urban planning near Postdamer Platz, Berlin. © Dider Babin