



PRESS RELEASE

Biodiversity Conservation can Improve Human Health in World's Growing Cities, says UN assessment

Integrating Ecosystems into Urban Planning Can Deliver Major Economic Benefits and Reduce Environmental Damage

Hyderabad (India), 15 October 2012 – Global urbanization will have significant implications for biodiversity and ecosystems if current trends continue, with knock-on effects for human health and development, according to a new assessment by the United Nations Convention on Biological Diversity (CBD).

The assessment, which draws on contributions from more than 123 scientists worldwide, states that over 60 percent of the land projected to become urban by 2030 has yet to be built. This presents a major opportunity to greatly improve global sustainability by promoting low-carbon, resource-efficient urban development that can reduce adverse effects on biodiversity and improve quality of life, it says.

The *Cities and Biodiversity Outlook* is the world's first global analysis of how projected patterns of urban land expansion will impact biodiversity and crucial ecosystems.

The world's total urban area is expected to triple between 2000 and 2030, with urban populations set to double to around 4.9 billion in the same period. This urban expansion will draw heavily on water and other natural resources and will consume prime agricultural land.

"The way our cities are designed, the way people live in them and the policy decisions of local authorities will define, to a large extent, future global sustainability," said Braulio Dias, Executive Secretary of the CBD.

"The innovation lies not so much in developing new infrastructural technologies and approaches but to work with what we already have. The results often require fewer economic resources and are more sustainable," he added.

The report states that urban expansion is occurring fast in areas close to biodiversity 'hotspots' and coastal zones. In rapidly urbanizing regions, such as large and mid-size settlements in sub-Saharan Africa, India and China, resources to implement sustainable urban planning are often lacking.

"More than half the global population already resides in cities. This number is projected to increase, with 60 percent of the population living in urban areas by 2030," said Achim Steiner, UN Under-



Secretary General and Executive Director of the United Nations Environment Programme. “This report makes a strong argument for greater attention to be paid by urban planners and managers to the nature-based assets within city boundaries. Sustainable urban development that supports valuable ecosystems presents a major opportunity for improving lives and livelihoods, and accelerating the transition to an inclusive green economy,” he added.

Cities are also increasingly recognized for their role in supporting plant and animal species and diverse ecosystems. For example, over 50 percent of Belgium’s floral species can be found in Brussels, while 65 percent of Poland’s bird species occur in Warsaw.

Urban green spaces perform important ecosystem services, such as filtering dust, absorbing carbon dioxide from the air and improving air quality. Data from the United Kingdom shows that a 10 percent increase in tree canopy cover in cities may result in a 3-4°C decrease in ambient temperature, thus reducing energy used in air conditioning.

Urban biodiversity also delivers important health benefits. Studies have shown that proximity to trees can reduce the prevalence of childhood asthma and allergies. Sustainable urban planning, which addresses biodiversity issues along with other priorities such as poverty alleviation, employment, and housing, can bring positive effects for health and the environment.

“Cities need to learn how to better protect and enhance biodiversity, because rich biodiversity can exist in cities and is extremely critical to people’s health and well-being,” said Professor [Thomas Elmqvist](#) of the Stockholm Resilience Centre and Scientific Editor of the report.

The *Cities and Biodiversity Outlook* highlights a wide range of successful initiatives by cities, local authorities and sub-national governments in both developed and developing countries.

In Bogotá, Colombia, measures such as closing roads on weekends, improving the bus transit system and creating bicycle paths resulted in increased physical activity among residents, and a reduction in greenhouse gases emissions.

The report also provides detailed analyses of regional urbanization trends and their impact on biodiversity and ecosystems.

Asia:

- The region will be home to almost half the world’s increase in urban land over the next 20 years. The most extensive changes will occur in India and China.
- India’s growing urban clusters (such as the Mumbai-Delhi industrial corridor) are likely to transform entire regions, with significant impacts on habitat and biodiversity.
- Loss of agricultural land to urbanization, combined with insufficient planning for food supply lines, places a severe constraint on future food security for India’s growing population.
- Lifestyle changes in India due to urbanization may decrease pressures on forests due to less use of fuelwood and charcoal.
- In China, urban areas are increasingly encroaching on protected areas.

Africa:

- Africa is urbanizing faster than any other continent, and most population growth will occur in cities of less than 1 million people. These cities often have weak governance structures, high levels of poverty and low scientific capacity regarding biodiversity.
- Low levels of formal employment in cities places high dependency on the provision of ecosystem services (e.g. water and food production) from areas either within or close to city limits.

Latin America and the Caribbean

- The number of cities in the region has grown sixfold in the past 50 years.
- Urban sprawl caused by housing for low-income residents often occurs in important areas for biodiversity and ecosystem services, such as wetland or floodplains. These are mistakenly considered to be of marginal value by planners.

Europe and North America

- In Europe, the current urbanization level is 70-80 percent, and urban growth in recent decades has mostly been in the form of land expansion rather than population growth.
- Many European and North American cities have exhibited trends of shrinking and/or shifting patterns of population in central parts of the cities, coupled with sprawl in outer suburbs and exurban areas.

The *Cities and Biodiversity Outlook* demonstrates how urban areas can play a central role in achieving 20 key biodiversity goals (known as the Aichi Biodiversity Targets) which were agreed upon in 2010 by parties to the Convention on Biological Diversity.

For example, the restoration or 'greening' of ex-industrial sites or brownfield land by city authorities can support efforts to achieve Aichi Target 15, whereby 15 percent of degraded ecosystems are restored by 2020.

Cities can also help prevent extinction of known species (Aichi Target 12) through research and investment by zoos, aquaria and museums, many of which are managed by city authorities.

The *Cities and Biodiversity Outlook* was produced by the Secretariat of the CBD in partnership with the Stockholm Resilience Centre (SRC) and Local Governments for Sustainability (ICLEI). The Secretariat of the Convention on Biological Diversity operates under the United Nations Environment Programme (UNEP). The full report can be downloaded at www.cbd.int/subnational/partners-and-initiatives/cbo.

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Notes to Editors

About the UN Convention on Biological Diversity

Opened for signature at the Earth Summit in Rio de Janeiro in 1992, and entering into force in December 1993, the Convention on Biological Diversity is an international treaty for the conservation of biodiversity, the sustainable use of the components of biodiversity and the equitable sharing of the benefits derived from the use of genetic resources. With 193 Parties, the Convention has near universal participation among countries. The Convention seeks to address all threats to biodiversity and ecosystem services, including threats from climate change, through scientific assessments, the development of tools, incentives and processes, the transfer of technologies and good practices and the full and active involvement of relevant stakeholders including indigenous and local communities, youth, NGOs, women and the business community. The Cartagena Protocol on Biosafety is a subsidiary agreement to the Convention. It seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. To date, 162 countries plus the European Union have ratified the Cartagena Protocol. The Secretariat of the Convention and its Cartagena Protocol is located in Montreal. For more information visit: www.cbd.int.

About the Stockholm Resilience Centre

Stockholm Resilience Centre is an international research partner which provides scientific insights on the interactions between humans and nature. It departs from an ambition to better understand the profound imprint humans have on nature and ideas on how to deal with the resulting challenges through enhancing social-ecological resilience. One strategic area of research is urban social-ecological systems, looking at how cities can better integrate biodiversity and ecosystem services into their planning and management.

The centre also helps facilitate dialogues with policymakers and practitioners from all over the world, and contribute with innovative ideas to improve collaboration and learning between stakeholders at local, regional and national level. It has a particularly respected role as a facilitator for dialogue in the areas of governance and sustainable use of biodiversity in both a rural and urban context.

About Local Governments for Sustainability (ICLEI)

Established in 1990, ICLEI - Local Governments for Sustainability is the world's leading association of cities and local governments dedicated to sustainable development. This powerful movement of 12 mega-cities, 100 super-cities and urban regions, 450 large cities as well as 450 small and medium-sized cities and towns in 84 countries promotes local action for global sustainability and supports cities to become sustainable, resilient, resource-efficient, biodiverse, low-carbon; to build a smart infrastructure; and to develop an inclusive, green urban economy. The ultimate aim is to achieve healthy and happy communities.

ICLEI's international Cities Biodiversity Center, located in the middle of a global biodiversity hotspot in Cape Town, South Africa, has since 2006 been working with local governments worldwide in efforts to improve biodiversity management and to share their successes and lessons. This has led to a strong partnership with the Secretariat of the CBD, to strengthen advocacy for biodiversity at, and by, the levels of local and subnational government in support of the implementation of the Convention.

About the United Nations Environment Programme (UNEP)

Established in 1972, UNEP is the voice for the environment within the United Nations system. UNEP acts as a catalyst, advocate, educator and facilitator to promote the wise use and sustainable development of the global environment. UNEP works with a wide range of partners, including United Nations entities, international organizations, national governments, non-governmental organizations, the private sector and civil society.

UNEP work encompasses assessing global, regional and national environmental conditions and trends; developing international and national environmental instruments; strengthening institutions for the wise management of the environment; facilitating the transfer of knowledge and technology for sustainable development; and encouraging new partnerships and mind-sets within civil society and the private sector. For more information, visit: www.unep.org