



Science in the City

Building Participatory Urban Learning Community Hubs
through Research and Activation





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SUSTAINABLE CITIES: WHY THEY MATTER

60
per cent
of the
world's
population
will live
in cities
by 2030



11 SUSTAINABLE CITIES AND COMMUNITIES



Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically. With the number of people living within cities projected to rise to 5 billion people by 2030, it's important that efficient urban planning and management practices are in place to deal with the challenges brought by urbanization.

Many challenges exist to maintaining cities in a way that continues to create jobs and prosperity without straining land and resources. Common urban challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing, declining infrastructure and rising air pollution within cities.



11 SUSTAINABLE CITIES AND COMMUNITIES



Rapid urbanization challenges, such as the safe removal and management of solid waste within cities, can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty. One such example is an increase in municipal waste collection. There needs to be a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more.

What's the goal here?

To make cities inclusive, safe, resilient and sustainable

Why?

The world is becoming increasingly urbanized. Since 2007, more than half the world's population has been living in cities, and that share is projected to rise to 60 per cent by 2030. Cities and metropolitan areas are powerhouses of economic growth— contributing about 60 per cent of global GDP. However, they also account for about 70 per cent of global carbon emissions and over 60 per cent of resource use.



What are some of the most pressing challenges that cities face today?

Inequality is a big concern. Over 1 billion people live in slums and this number keeps rising. The levels of urban energy consumption and pollution are also worrying. Cities occupy just 3 per cent of the Earth's land, but account for 60-80 per cent of energy consumption and 70 per cent of carbon emissions. Many cities are also more vulnerable to climate change and natural disasters due to their high concentration of people and location so building urban resilience is crucial to avoid human, social and economic losses.

I live in a city but I'm not affected by any of these issues. Why should I care?

All these issues will eventually affect every citizen. Inequality can lead to unrest and insecurity, pollution deteriorates everyone's health and affects workers' productivity and therefore the economy, and natural disasters have the potential to disrupt everyone's lifestyles



What happens if cities are just left to grow organically?

The cost of poorly planned urbanization can be seen in some of the huge slums, tangled traffic, greenhouse gas emissions and sprawling suburbs all over the world. Slums are a drag on GDP, and lower life expectancy. By choosing to act sustainably we choose to build cities where all citizens live a decent quality of life, and form a part of the city's productive dynamic, creating shared prosperity and social stability without harming the environment.

Is it expensive to put sustainable practices in place?

The cost is minimal in comparison with the benefits. For example, there is a cost to creating a functional public transport network, but the benefits are huge in terms of economic activity, quality of life, the environment, and the overall success of a networked city.



What can I do to help achieve this goal?

Take an active interest in the governance and management of your city. Advocate for the kind of city you believe you need. Develop a vision for your building, street, and neighbourhood, and act on that vision. Are there enough jobs? Can your children walk to school safely? Can you walk with your family at night? How far is the nearest public transport? What's the air quality like? What are your shared public spaces like? The better the conditions you create in your community, the greater the effect on quality of life.





**2 BILLION
PEOPLE**

**DO NOT HAVE ACCESS
TO WASTE COLLECTION
SERVICES**

**1 OUT OF 4 URBAN RESIDENTS
LIVE IN SLUM-LIKE CONDITIONS (2018)**



**ONLY HALF (53%) OF URBAN RESIDENTS HAVE
CONVENIENT ACCESS TO PUBLIC TRANSPORT (2018)**

 500 METRES  1,000 METRES

CONVENIENT ACCESS MEANS RESIDING WITHIN 500 M WALKING
DISTANCE OF A BUS STOP/LOW-CAPACITY TRANSPORT SYSTEM
AND 1000 M OF A RAILWAY OR FERRY TERMINAL



**9 OUT OF 10 URBAN
RESIDENTS
BREATHE POLLUTED AIR**



150 COUNTRIES

HAVE DEVELOPED

**NATIONAL URBAN
PLANS, WITH ALMOST
HALF OF THEM IN THE
IMPLEMENTATION
PHASE**

Facts & Figures

- Half of humanity – 3.5 billion people – lives in cities today and 5 billion people are projected to live in cities by 2030.
- 95 per cent of urban expansion in the next decades will take place in developing world
- 883 million people live in slums today and most of them are found in Eastern and South-Eastern Asia.
- The world's cities occupy just 3 per cent of the Earth's land, but account for 60-80 per cent of energy consumption and 75 per cent of carbon emissions.
- Rapid urbanization is exerting pressure on fresh water supplies, sewage, the living environment, and public health
- As of 2016, 90% of urban dwellers have been breathing unsafe air, resulting in 4.2 million deaths due to ambient air pollution. More than half of the global urban population were exposed to air pollution levels at least 2.5 times higher than the safety standard.



Goal 11 Targets

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

Goal 11 Targets

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.A Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

11.C Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

Links

- [UN-HABITAT](#)
- [UN Environment Programme : Cities – investing in energy and resource efficiency](#)
- [UN Environment Programme Climate Neutral Network](#)
- [UN Environment Programme: Cities and Climate Change](#)
- [UN Population Fund: Urbanization](#)
- [ICLEI – Local Governments for Sustainability](#)





To find out more about Goal #4 and the other Sustainable Development Goals, visit:

<http://www.un.org/sustainabledevelopment>

