

World's biggest city database shines light on our increasingly urbanised planet

February 13 2018



Credit: Adobestock

The JRC has launched a new tool with data on all 10,000 urban centres scattered across the globe. It is the largest and most comprehensive database on cities ever published.

With data derived from the JRC's Global Human Settlement Layer (GHSL), researchers have discovered that the world has become even

more urbanised than previously thought.

Populations in urban [areas](#) doubled in Africa and grew by 1.1 billion in Asia between 1990 and 2015.

Globally, more than 400 cities have a [population](#) between 1 and 5 million. More than 40 cities have 5 to 10 million people, and there are 32 'megacities' with above 10 million inhabitants.

There are some promising signs for the environment: Cities became 25% greener between 2000 and 2015. And although air pollution in urban centres was increasing from 1990, between 2000 and 2015 the trend was reversed.

With every high density area of at least 50,000 inhabitants covered, the [city centres](#) database shows growth in population and built-up areas over the past 40 years. Environmental factors tracked include:

- 'Greenness': the estimated amount of healthy vegetation in the city centre
- Soil sealing: the covering of the soil surface with materials like concrete and stone, as a result of new buildings, roads and other public and private spaces
- Air pollution: the level of polluting particles such as PM2.5 in the air
- Vicinity to protected areas: the percentage of natural protected space within 30 km distance from the city centre's border
- Disaster risk-related exposure of population and buildings in low lying areas and on steep slopes.

The data is free to access and open to everyone. It applies [big data analytics](#) and a global, people-based definition of cities, providing support to monitor global urbanisation and [the 2030 Sustainable](#)

[Development Agenda.](#)

The information gained from the GHSL is used to map out population density and settlement maps. Satellite, census and local geographic information are used to create the maps.

Background

The city centres database is showcased for the first time today at the 9th annual World Urban Forum in Kuala Lumpur.

The World Urban Forum was created by the United Nations Human Settlements Programme in 2002 to examine rapid urbanisation and the impact this has on the population, communities, economy and climate.

The JRC has organised training at this year's event, on open data and tools for the New Urban Agenda as well as monitoring urban development with the GHSL database.

The JRC also provides expert input to discussions at the Forum on the global definition of cities.

In the frame of the Better Knowledge Pillar of the Urban Agenda for the EU, the Commission also promotes the development of analytical tools such as the JRC's [Urban Data Platform](#) and [Territorial Dashboard](#).

These online platforms enable a wide range of stakeholders to explore future urban and regional scenarios. The tools are being expanded to cover other global regions beyond Europe, including Africa.

Provided by CORDIS

Citation: World's biggest city database shines light on our increasingly urbanised planet (2018, February 13) retrieved 16 July 2024 from <https://phys.org/news/2018-02-world-biggest-city-database-increasingly.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.