Urban Greenspaces

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Overview

Urban green spaces are known for improving conditions in urban cities in reducing air pollution, and promoting overall well-being of city dwellers mental and physical health.

The following analysis investigates the relationship between urban greenspaces and Human Development Index (HDI) levels, exploring the question if more developed countries have more urban greenspaces.

Results

- Differences between countries NDVI and HDI levels
- Cities with higher HDI levels tend to have more urban greenspaces

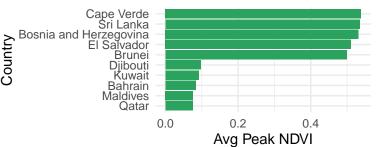
Data

Global Greenspace Indicator Dataset by Jennifer Stowell from Boston University.

This is a global dataset that tracks how much greenspace exists in over 1,000 cities around the world from 2010 to 2021. It includes both absolute and population-weighted peak and annual NDVI (Normalized Difference Vegetation Index) values. This is a satellite-based indicator of how green an area is.

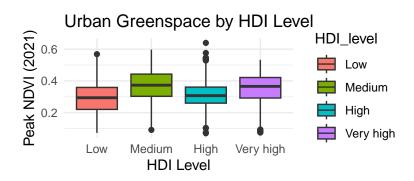
- NDVI values range from 0 to 1
- Higher values = more vegetation

Top and Bottom Countries by NDVI (2021)



Show Data on a Key Measure

Population weighted annual maximum NDVI and HDI from 2021.



Digging Deeper

NDVI rate and HDI level

data: peak_weight_2021 by HDI_level

Kruskal-Wallis Rank Sum Test

- chi-squared = 88.064
- df = 3
- p-value < 2.2e-16