

# **World Cities Report 2024**

For Prelims: <u>UN-Habitat</u>, <u>Humid Climate</u>, <u>Greenhouse Gas Emissions</u>, <u>Cyclone</u>, <u>Green Gentrification</u>, <u>UN General Assembly</u>, <u>Urbanisation</u>, <u>Inequality</u>, <u>Methane</u>, <u>Landfills</u>, <u>Urban Heat Island Effect</u>, <u>Electric Vehicles</u>, <u>Green Roofs</u>, <u>Urban Forests</u>, <u>Urban Planning</u>, <u>Green Bonds</u>.

For Mains: Contribution of cities in global warming. Role of cities in tackling global warming.

#### Source: DTE

## Why in News?

Recently, the <u>UN-Habitat</u> has released the **World Cities Report 2024: Cities and Climate Action.** 

 The report highlighted that the cities are among the largest contributors to greenhouse gas emissions, yet they face disproportionately severe impacts of climate change.

## What are the Key Findings of the World Cities Report 2024?

- Temperature Increases: By 2040, nearly two billion people in urban areas will experience a
  0.5°C rise in temperature.
  - 14% of cities are expected to transition to drier climates while at least 900 cities could transition to more <u>humid climates</u>, especially tropical ones.
- Sea-Level Rise: By 2040, over 2,000 cities in low coastal areas, many under 5 metres above sea level, will expose more than 1.4 billion people to higher risks from sea-level rise and storm surges.
- **Disproportionate Impact**: Urban areas are disproportionately affected by **climate change** but are also **significant contributors** to <u>greenhouse gas emissions</u> (GHGs) making them more vulnerable to **climate shocks** like **floods and** <u>cyclones</u>.
- Investment Gap: To build climate-resilient systems, cities need an estimated USD 4.5 to USD 5.4 trillion per year. However, current financing stands at just USD 831 billion, highlighting a massive funding shortfall.
- **Riverine Flooding: Flood exposure** in cities has grown significantly, increasing **3.5 times faster** than in rural areas since 1975.
  - By 2030, 517 million people in cities will be exposed to <u>riverine flooding</u>, representing 14% of the global urban population.
- **Decline of Green Spaces:** Urban green spaces have significantly declined from 19.5% in 1990 to **13.9%** in 2020 contributing to both environmental and social challenges in cities.
- Increased Vulnerability: Informal settlements (slums) are key drivers of vulnerability, as they are often located in flood-prone, low-lying, or precarious areas.
  - Lack of protective infrastructure, and legal recognition make them more exposed to climate impacts and unable to invest in upgrades due to eviction fears.
- **Green Gentrification:** Some climate interventions, like the creation of parks, have resulted in <u>green gentrification</u> leading to **displacement of underprivileged communities.** 
  - Gentrification means a low-income neighborhood changes due to an influx of wealthier

residents and businesses, leading to rising property values and rents.

#### **UN-Habitat**

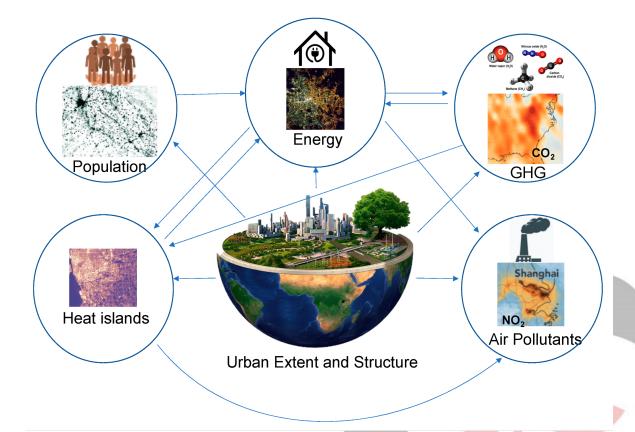
- Mandate: Established by the <u>UN General Assembly</u>. UN-Habitat focuses on promoting socially and environmentally sustainable urban development.
- Global Focal Point: It serves as the key agency within the UN system for <u>urbanisation</u> and human settlement issues.
- Core Mission: Aims to create inclusive, safe, resilient, and sustainable cities and communities, reducing inequality, discrimination, and poverty.
- **Global Presence**: Operates in over **90 countries** to promote transformative change in urban areas through knowledge sharing, policy advice, and technical assistance.
- **Strategic Approach (2020-2023 Plan):** Emphasises a holistic and integrated strategy to address 21st-century urban challenges.
- Four Main Roles:
  - **Think**: Engages in normative work, research, capacity-building, policy formulation, and setting global standards.
  - Do: Offers technical assistance and crisis response projects to support sustainable urbanisation.
  - **Share**: Mobilises advocacy, communication, and outreach to inspire change in development plans and investments.
  - Partner: Works with governments, intergovernmental bodies, civil society, academia, and the private sector to address urbanisation challenges.

## How Urban Areas Contribute to Global Warming?

- Energy Consumption: Urban areas account for 71 to 76% of CO2 emissions from global final energy use due to concentration of energy-intensive industries, transportation, and highdensity residential and commercial buildings.
  - Urban lifestyles tend to be energy-intensive, with high demand for electricity, heating, and cooling systems in buildings.

Vision

- Industrial Activities: Factories and power plants that burn fossil fuels, contributing to the release of various GHGs, including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).
- Land Use Changes: Clearing land for housing, infrastructure, and industrial developments reduce the Earth's ability to absorb and store carbon.
  - The growth of urban land areas is projected to more than **triple between 2015 and 2050** which will lead to <u>deforestation</u> and <u>habitat destruction</u>.
- Waste Generation and Landfills: As organic waste decomposes in <u>landfills</u>, it releases methane, a greenhouse gas with a <u>global</u> warming potential many times greater than CO<sub>2</sub>.
- **Urban Heat Island Effect**: Cities, particularly those with large areas of **concrete**, **asphalt**, **and buildings**, absorb and retain heat more than rural areas, creating the <u>urban heat island effect</u>.



## How Cities are Affected by Global Warming?

- Heatwaves: Global warming is causing an increase in global temperatures and the frequency of heatwaves. E.g., Heatwaves are becoming more severe in India.
- **Urban Heat Islands (UHIs)**: UHIs are metropolitan areas significantly warmer than surrounding regions due to heat-absorbing surfaces and energy use.
- **Coastal Flooding:** As temperatures rise, glaciers and ice sheets melt, adding water to the oceans and causing sea levels to rise.
  - This inundates coastal areas, displaces communities, and disrupts ecosystems.
- **Wildfire Season**: Wildfire season has been prolonged and intensified due to warming temperatures and long-term drought, increasing the risk of fires.

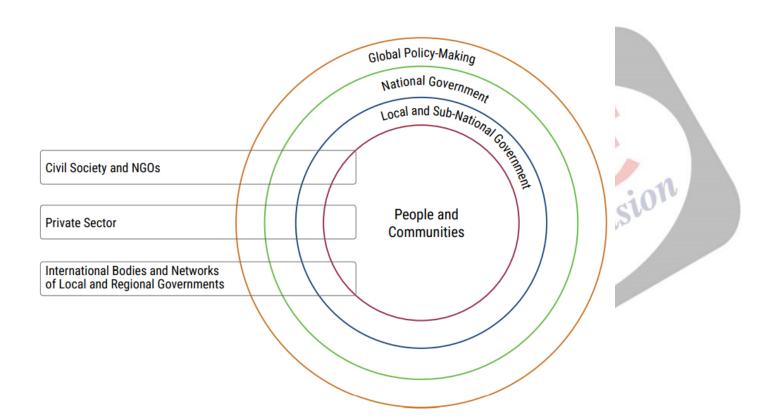
## What are India's Initiatives to Tackle Warming in Urban Areas?

- Smart Cities
- AMRUT Mission
- Swachh Bharat Mission-Urban
- Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME)
- Green Energy Corridor (GEC)]

## **Way Forward**

- Resilient Infrastructure: Infrastructure plays a central role in reducing GHGs, responsible for 79% of total emissions and is key to meeting 72% of SDG targets.
  - Infrastructure should be designed to withstand climate impacts and address the social and environmental factors that heighten community vulnerability.
- **Green Energy:** Electrification of public transport and the promotion of <u>electric vehicles</u> reduce the **carbon footprint** of personal and mass mobility.

- **Diverse Financing Mix**: To bridge finance gaps, well-structured **loans** and **credit facilities** can help cities invest in long-term climate solutions.
  - **Affordable financing models,** including **climate-friendly loans** and <u>green bonds,</u> that can help cities secure the capital needed for climate projects.
- Urban Carbon Sinks: Cities can offset emissions by investing in nature-based solutions such as green roofs, urban forests, and parks that absorb carbon dioxide.
  - Compact <u>urban planning</u> reduces **urban sprawl**, cutting the need for extensive travel and associated emissions.
- Circular Waste Management: Effective waste management practices, such as recycling and composting, prevent methane emissions from landfills.
- Whole-of-Society Approach: Vertical coordination between government levels and horizontal coordination across sectors and stakeholders is key to ensuring consistent, inclusive, and effective climate action.



- Strengthening Local Capacities: Local governments are best positioned to develop tailored, locally appropriate solutions as they understand the specific challenges and needs of their communities.
  - Encouraging lifestyle changes, such as opting for walking, biking, and carpooling over private vehicle use, can further reduce demand.

### Conclusion

The World Cities Report 2024 underscores the urgent need for cities to address climate change impacts, highlighting both their vulnerability and contribution to global warming. Effective solutions require resilient infrastructure, green energy, and circular waste management, supported by diverse financing and localised actions to create climate-resilient and inclusive urban environments.

#### **Drishti Mains Question:**

Q. Discuss how urban areas contribute to global warming and the measures required to mitigate their impact.

## **UPSC Civil Services Examination, Previous Year Question (PYQ)**

#### **Prelims:**

#### Q.Consider the following statements: (2021)

Statement 1: The United Nations Capital Development Fund (UNCDF) and the Arbor Day Foundation have recently recognized Hyderabad as 2020 Tree City of the World.

Statement 2: Hyderabad was selected for the recognition for a year following its commitment to grow and maintain the urban forests.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement 1 and Statement 2 are correct and Statement 2 is the correct explanation for Statement 1
- **(b)** Both Statement 1 and Statement 2 are correct but Statement 2 is not the correct explanation for Statement 1
- (c) Statement 1 is correct but Statement 2 is not correct
- (d) Statement 1 is not correct but Statement 2 is correct

#### Ans: (d)

#### Q.Consider the following statements: (2021)

- 1. 'Right to the City' is an agreed human right and the UN-Habitat monitors the commitments made by each country in this regard.
- 2. 'Right to the City' gives every occupant of the city the right to reclaim public spaces and public participation in the city.
- 3. Right to the City' means that the State cannot deny any public service or facility to the unauthorised colonies in the city.

#### Which of the statements given above is/are correct?

- (a) 1 only
- **(b)** 3 only
- (c) 1 and 2
- (d) 2 and 3

#### Ans: (c)

# Q.With reference to the role of UN-Habitat in the United Nations programme working towards a better urban future, which of the statements is/are correct?(2017)

- 1. UN-Habitat has been mandated by the United Nations General Assembly to promote socially and environmentally sustainable towns and cities to provide adequate shelter for all.
- 2. Its partners are either governments or local urban authorities only.

3. UN-Habitat contributes to the overall objective of the United Nations system to reduce poverty and to promote access to safe drinking water and basic sanitation.

## Select the correct answer using the code given below:

(a) 1, 2 and 3

**(b)** 1 and 3 only

(c) 2 and 3 only

(d) 1 only

Ans: (b)

## **Mains**

**Q.**The frequency of urban floods due to high intensity rainfall is increasing over the years. Discussing the reasons for urban floods, highlight the mechanisms for preparedness to reduce the risk during such events. **(2016)** 

PDF Refernece URL: https://www.drishtiias.com/printpdf/world-cities-report-2024