Urban Planning and Climate

This editorial is based on ["Climate in the City"](#) *which was published in Indian Express on 12/04/2022. It talks about the impact of poor urban planning on climate change.*

For Prelims: Urbanisation, Climate Change, IPCC's Latest Report, AR6 Report, Greenhouse Gas Emissions, Environmental Impact Assessment (EIA), Sustainable Development Goals, UN New UrbanAgenda

For Mains: Climate change and urbanisation, Concerns regarding urban infrastructure, Better urban planning for a sustainable future

India is witnessing one of the largest urban growth spurts in history. However, three-quarters of the infrastructure that will exist in cities by 2050 is **yet to be built.** This presents Indian cities with an unprecedented **opportunity to look at urban planning** and development through a long-term **strategic lens to enable economic, environment and social impact.**

We cannot afford development that is not sustainable in our climate crisis-risked times. The **IPCC's latest report** suggests that smart **urban planning** **can mitigate the effects of climate change.**

What does the IPCC's AR6 say about Cities and Climate Change?

About Urban Growth

- **The 21st-century will be the urban century,** defined by a massive increase in global urban populations.
    - About 55% of the world's population lived in cities in 2018 - this figure is expected to jump to 68% by 2050 with **Asian and African cities seeing the biggest increases.**
- As per the **IPCC AR6 Report (Part - II)**, cities will be worst hit due to intense heat, vanishing green spaces.
    - Rising urbanisation means the world has to ensure climate-resilient development if it is to hit net zero. Climate-friendly urban policies would also improve public health by reducing air pollution.

Cities' Emission Scenario

- Cities in 2020 were responsible for **up to 72% of global greenhouse gas emissions (up from 62% in 2015).**
    - For the world to have a chance of limiting global warming to within 1.5℃ of pre-industrial levels, cities need to act fast and financing would need to be boosted significantly

- Aggressive climate action could bring city emissions to net-zero by 2050 but failing to act could instead see urban emissions double in that time.
  - The IPCC report also found urban infrastructure and activities caused about two-thirds of today's global emissions. However, it also means that cities can potentially solve two-thirds of the problem.

What are the Issues Regarding Urban Infrastructure?

- **Climate Non-Friendly:** Urban infrastructure development results in high economic value-add but often leads to unequal and inequitable growth.
  - Negative externalities such as air and water pollution, climate change, flooding, and extreme heat events impinge on the economic value of urban infrastructure.
  - The houses are built without ventilation, using building materials that do not provide insulation and with architectural design that does not work with nature - the climate crisis will exacerbate these risks.

- **Age-Old Planning Techniques:** Town and country planning acts in India have largely remained unchanged over the past 50 years, relying on techniques set up by the British.
  - Cities still create land use and regulatory control-based master plans which, on their own, are ineffective in planning and managing cities.
  - Several city-centric issues such as **air pollution**, urban flooding, and droughts exist as obstacles in holistic development of urban India all of which point to infrastructural shortcomings and inadequate planning.
- **Procedural Delays and Lax Implementation:** Master plans face prolonged delays in preparation, sanctioning and implementation. They lack the mandate for integration with other sectoral infrastructure plans and largely remain as wishlists.
  - Often a static, 'broad-brush' approach is taken towards cities that have dynamic fine-grained structures and local specificities. In most cases, the rate of implementation is quite low.
  - Even with provisions of rainwater harvesting, sustainable urban drainage systems, etc, in regulatory mechanisms like the Environmental Impact Assessment (EIA), adoption at user end as well as enforcement agencies remains weak.

What can be the Way Forward?

- **Synchronised Economic Planning and Climate Action:** India's hierarchical system of cities — from mega cities which are the drivers of innovation and economic growth to smaller towns which support local and regional economies and ensure linkages to the rural hinterlands — requires targeted economic development planning and positive climate action.
  - Research has shown if cities are developed as compact and climate-resilient centres, then infrastructure investments can produce more economic gain over time with minimal climate impact whilst ensuring equitable growth.
- **Strategic Design and Development:** Globally, cities are moving to the practice of developing strategic plans and projects along with local area plans.
  - A set of **strategic projects that have the potential to trigger growth** in the region, to achieve the vision, can be identified through a negotiated process
  - The projects shall be designed and developed in the context of land that can be made available and **capital resources that are possible to be raised**
  - **Strategic plans should be developed every five years** to increase a city's competitiveness and help it achieve its strategic goals with respect to sustainability and economic development by identifying key projects to be implemented.
- **Plans for Local Areas:** These plans should be developed to **ensure the health, safety and welfare of citizens** through public participation, contextualising local challenges, needs and ambitions, while supporting the overall objectives of the master plan.
  - Cities should also aim to mainstream the use of spatialised social, economic and environmental data to **create robust links across the urban- rural continuum.**

- **Rethinking the Approach for City Development:** For India to accomplish its **Sustainable Development Goals** and the United Nations' New Urban Agenda, the government has to revisit,

rethink, and reshape the way it plans and manages the country's settlements and the connecting networks among them.

- The need is **not just to mitigate GHG emissions fast,** but also to undertake development in ways in which we can **"manage" the added risks of the deadly impacts of the climate crisis.**

  Cities need to be viewed as places of several cultures and generators of employment opportunities and the natural environments within and surrounding them need to be protected too.

Conclusion

Plans are about people and not just physical spaces. Building consensus around future growth and development, with a focus on climate action, economic and social integration, is crucial. Such a participatory process is what will help build a **vibrant, inclusive and liveable urban India.**

> *Drishti Mains Question:*
> "By the time India turns 100, nearly half the population will be living in urban areas. Hence, it is imperative to not only nurture India's mega cities but also facilitate tier-2 and tier-3 cities to gear up for a sustainable and climate-friendly future". Comment.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. Consider the following statements:

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. 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)

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